FROM VALUE TO FACT: THE EMERGENCE OF PHONOLOGY AS A PRECISE DISCIPLINE IN LATE IMPERIAL CHINA*

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The emergence of phonology as a key discipline during the Ch'ing dynasty was closely tied to the triumph of precise empirical techniques of philological analysis, championed by participants in the evidential research movement, over Neo-Confucian moral philosophy. In phonology, such applications stressed the reconstruction of archaic finals through an examination of ancient rhyme schemes. In the late eighteenth century, significant steps were taken to investigate archaic initials as well. Such pioneering studies established the foundations of modern Chinese linguistics and at the same time provided Western linguists with much of the necessary data and tools needed to refine earlier reconstructions of ancient Chinese phonology.

INTRODUCTION

During the Sung (960–1279) and Ming (1368–1644) dynasties, the goal of Confucian literati was the cultivation of moral perfection. Their ideal was a life of intense and unremitting effort, a life they felt would successfully emulate the ancient sages. After 1644, however, this ideal was taken less and less literally. The Ch'ing dynasty (1644–1911) heirs of these fervent groups of Neo-Confucians were members of a secular academic community, which encouraged original and critical scholarship.

For the Neo-Confucians, the Confucian Canon had been the repository of moral truth that transcended time and place. The reaction of Ch'ing textual scholars against the unquestioned authority of the Classics was most evident in their precise studies in linguistics, astronomy, mathematics, geography, and epigraphy. Seventeenth- and eighteenth-century scholars applied these fields of research to verify or controvert important elements of the Confucian legacy. They were dissatisfied with the unverifiable moral ideals that pervaded the Sung-Ming vision of antiquity.¹

Many were alarmed, however, by the possible heterodox implications of such exact scholarship. In a revealing letter written in 1668 to his hometown friend Ku Yen-wu¹ (1613–82), Kuei Chuangb (1613–73) noted:²

In your previous letter you wrote that you were concentrating on phonology. You have already completed books [on this subject], but I have not yet seen them. However, a friend told me in some detail that in your discussion of rhymes you necessarily emphasize the most ancient, saying that Confucius could not help making mistakes [in pronunciation]. These words are startling for people to hear. Because of such statements, it seems to me that as your scholarship broadens your eccentricities will deepen. In the future it will not be limited to rhymes. If your other discussions are anything like the discussion of phonology, won't they also [be regarded] as the [expression of] unrealistic and odd opinions?

Ku intended no impiety. When he contended that Confucius in transmitting the Classics could not help

¹ See my “The Unravelling of Neo-Confucianism: The Lower Yangtze Academic Community in Late Imperial China” (Unpublished Ph.D. dissertation, University of Pennsylvania, 1980), passim.
but pronounce the words in the dialect of his time and locality. Ku was attempting to reconstruct the way the sages themselves had spoken the words now contained in the Classics. His goal was the clarity and purification of the Chinese language, which would in turn induce a purity of thought and restore the classical ordering to the world. Ku explained:

To summarize the ten divisions of ancient pronunciation, I prepared the Table of Ancient Pronunciation in two chapters. As a result, the six Classics are now readable. The books by various pre-Han (206 B.C.–A.D. 220) masters all contain [phonetic] variations, but the variants are not extreme. Heaven by preserving these writings has demonstrated that the sages will one day return and restore the pronunciation of today to the clarity and purity of ancient times.

To achieve his goals, Ku Yen-wu stressed a rigorous analysis of historical changes in the pronunciation of Chinese characters that appeared in the Classics. In this effort, he was one of the pioneers of an emerging k'ao-cheng [evidential research] movement, a movement that emphasized the importance of phonology. Chiang Yung-d (1681–1762) went even further than Ku Yen-wu. He rejected the idealized vision of research that Ku still shared to an important degree with his Neo-Confucian predecessors. Chiang approached his research of rhymes and ancient pronunciation as an interesting technical project and not as a means to an ideal socio-political end. In fact, the editors of the definitive Ssu-k' u ch' uan-shu [Complete Collection of the Four Treasuries (in the Imperial Library)], which was completed in the 1780’s, agreed with Chiang on the status of ancient rhymes. The past they argued could not be revived intact by reconstructing ancient pronunciation. A crucial transition point had been reached in Confucian scholarship.

Reemphasis on phonology during the Ch’ing period was inseparable from the growth of auxiliary disciplines such as epigraphy, bibliography, collation, and forgery detection. Techniques used in these fields became essential tools in the more formal disciplines of textual criticism, historical geography, historical linguistics, and mathematical astronomy. Evidential scholars viewed such formal disciplines as fields of research where k'ao-cheng methods could be applied to discrete bodies of knowledge.

Relying on systematic gathering of materials that they would then critically scrutinize and in certain cases even quantify, Ch’ing scholars combined evidential research methods with data collection and organization. Liang Ch‘i-ch‘ao, for example, has estimated that Ch‘ien Ta-hsin’ (1728–1804) recorded over one hundred items in his notation book before he attempted to shed new light on the phenomenon of labiodentals (ch‘ing ch‘un-yin) recorded in ancient Chinese texts. Ch‘ien presented his data within a systematic discussion of ancient pronunciation (see further below).

Moreover, during the Ch‘ing period, there was noticeable progress in k’ao-cheng fields of inquiry. Such progress was possible because evidential scholars, unlike their Sung and Ming predecessors, stressed research topics that lent themselves to cumulative results. Accompanying this sense of the continuity of academic progress was a quest for originality. Although new discoveries had been praised during earlier dynasties, novelty became an explicit aim during the Ch‘ing period. The pressure to “discover what our predecessors had not yet discovered” (fa ch‘ien-jen so wei fa) was felt at all levels of k‘ao-cheng studies. Research on Chinese phonology was perhaps the most visible area in which the cumulative nature of textual scholarship was revealed and proven to Ch‘ing scholars.

PRE-CH‘ING LINGUISTIC RESEARCH

During the Han dynasty, Hsu Shen’ (58–147) had prepared the first systematic treatment of the Chinese written language in his Shuo-wen chieh-tzu [Analysis of Characters As An Explanation of Writing] which

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5 See my “The Unravelling of Neo-Confucianism,” chapters 2 and 5.


7 For examples of such praise, see Ssu-k‘u ch‘uan-shu tsung-mu, 11/25a, 11/27b, 14/4b, 14/6a, 14/29a, 40/20b, 41/34b, 42/34a, 42/43a, 42/53a, 106/10b, 106/17a, 106/26b, 106/47a, 106/50b, 107/18a, 107/23b. These citations are only a brief sample taken from the Documents, Philology, and Astronomy and Mathematics subsections.
he presented to the throne in 121 A.D. Hsu arranged 9,353 different characters according to 530 radicals (pu-shod), a system that with subsequent modification remained the basis of organization in most Chinese dictionaries. Not only did Hsu Shen provide the orthography of the archaic form for each character, he also specified the phonetic element for the vast majority of characters (over 80%) that were formed as phonetic compounds (hsieh-sheng). The Shuo-wen became the definitive statement of the six rules (liu-sha) governing the formation of Chinese characters. From the end of the Later Han dynasty (25–220) until the Northern Sung (960–1127), Hsu's research was accepted as the final authority in paleography and etymology.

Study of ancient phonology continued during the Han when Cheng Hsuan (127–200) recognized that contemporary and ancient forms of pronunciations differed. However, many scholars of the Han through T'ang (618–906) dynasties were unable to explain why certain words in the Poetry Classic and other classical texts no longer rhymed in expected places. They began to force the rhyme by emending characters so that the proper rhyme sequence was reestablished. Ignoring the possibility that the text had been correct and that the pronunciation of certain words subsequently had diverged, scholars introduced arbitrary changes into the Classics solely on the basis of rhyming criteria.

A byproduct of Buddhist translation work from Sanskrit into Chinese after the fall of the Han dynasty in A.D. 220 was a Chinese phonetic system for the transcription of foreign proper names. In this system, every foreign work was divided into syllables, each represented by a Chinese character. In addition, Chinese syllables were subsequently transliterated by separating them into two parts, the initial sound and the remainder represented by two characters, e.g., jia and chou as the transcription for yu—the first character represents the initial consonant ([y]) and the second represents the remainder of the syllable (-[ou]). Known as fan-ch'i'eh [syllabic transcription], this system became the basis for a precise investigation of phonetics during the T'ang dynasty.

Using this phonetic system, Lu Fa-yen (ca. A.D. 600) compiled a rhyming dictionary entitled Ch'ieh-yun [Rhymes Indicated by Syllabic Transcription], which gave the pronunciation of characters in fan-ch'i'eh. Later, Lu Te-ming (556–627), in his seventh-century etymological and phonological reference book entitled Ching-tien shih-wen [Explanations of the Classics], which was based on some fourteen classical texts, reconstituted from more than 230 different classical commentaries the pronunciation of the Han, Wei (220–64), and Six Dynasties (265–589) periods, giving each syllable in fan-ch'i'eh transcription. In addition, Lu acknowledged that ancient and modern rhymes were not equivalent.

Ch'en Peng-nien (961–1017) revised and enlarged Lu Fa-yen's rhyming dictionary, titling the result the Kuang-yun [Expansion of Rhymes]. The latter was the best known rhyme dictionary of the Sung period. It contained 26,194 characters arranged under four classical tonal categories. Within each tone, words were further divided into rhymes and then classified according to homophonic groups. Pronunciation in fan-ch'i'eh and meaning were included for all characters. Ch'en's dictionary was prized by Ch'ing phonologists because it faithfully preserved the phonological system of the sixth century A.D.

<table>
<thead>
<tr>
<th>Table 1. The Six Types of Characters</th>
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<tr>
<td>1. CHIH-SHIH: simple ideographs, e.g., shang [above] and hsia [below].</td>
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<td>2. HSIA-NG-HSING: pictographs, e.g., shan [mountain], which was originally shan.</td>
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<td>3. HSIIEH-SHENG: phonetic compounds, e.g., chi-ang [Yangtze River] made up of the water radical for meaning and the phonetic element for sound.</td>
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<td>4. HUI-L': compound ideographs, e.g., “sun” (jih) “moon” (yueh) to form “bright” (ming).</td>
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<td>5. CHUAN-CHU: extant characters used for new words by extension of meaning, e.g., pu [cloth] for “money.”</td>
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<td>6. CHIA-CHIEH: borrowed characters, e.g., wan [scorpion] also used to mean “myriad” because of the same pronunciation.</td>
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Wang An-shih's (1021–86) influential *Tzu-shuo* [Explanation of Characters] represented a pivotal position in Sung philological and linguistic research. Although Wang An-shih made some effort to trace the archaic forms of characters, for the most part he attempted to reduce all graphs to words formed as ideographic compounds. Wang saw the *hui-i* rule of character formation (see Table 1 above) as the key to textual analysis. He contended that Hsu Shen's phonological derivations were arbitrary and unnecessary to understand the meaning of a character. Instead, Wang An-shih argued that by analyzing all the characters that made up a complex graph and by understanding the meaning of each component, one could determine the precise meaning of the whole.9

Wang An-shih's ahistorical structural approach depended on an imaginative observation of and inference from the makeup of the characters themselves. This orientation represented a clean break with the legacy of Hsu Shen's methodology, which was rooted, although at times perilously, in the historical analysis of paleography, etymology, and phonetics. Not recognizing the phonetic elements of such characters, Sung scholars often juggled the structure of the graphs in order to come up with plausible etymologies. The cumulative efforts of earlier philologists to reconstruct accurate etymologies based on historical evidence were overlooked. However, limitations in Wang's approach were recognized by scholars who dealt with characters that were formed through phonetic, not ideographic, rules. Cheng Ch'iao (1104–62), for example, in a monograph on the six rules of character formation, analyzed 24,235 graphs, of which 90% were phonetic compounds, 7% ideographs, and only 3% pictographs.10

Renewed interest in phonology grew out of the rigorous rhyming requirements in Chinese poetics. During the twelfth century, Chu Hsi (1130–1200) and his followers emphasized the notion of *hsieh-yrn* [rhyming pronunciation], whereby they attempted to force the rhymes of the Poetry where the words no longer rhymed. Chu Hsi's approach was drawn in part from his predecessor Wu Yu's (fl. ca. 1124) reconstruction of ancient pronunciation. Wu Yu, however, in his eleventh-century *Yun-yrn* [Restoration of Rhymes] had tried to reconstruct the ancient pronunciation of words on the principle that the rhyme should reappear without arbitrarily emending characters. Wu divided ancient rhymes into nine categories and thereby placed the study of ancient rhymes and pronunciation on firm ground.

**PHONOLOGY AS A PRECISE DISCIPLINE**

Wu Yu's perspective gained increasing sophistication during the Ming dynasty through the phonetic research carried out by Cheng Hsiang (1488–1559). Following Wu Yu's approach, Yang Shen attempted to reconstruct the pronunciation of the pre-Ch'in (221–207 B.C.) period by classifying ancient rhymes and examining their changes over time. The breakthrough, however, came with the 1616 publication in Nanking of Ch'en Ti's *Mao-shih ku-yin k'ao* [Examination of Ancient Pronunciation in the Mao Recension of the Poetry].11

With the help of Chiao Hung (1514–1620), who encouraged him to focus on the Poetry in order to reestablish ancient phonetics, Ch'en Ti, by means of a systematic arrangement of rhyming words, determined with a fair degree of accuracy the ancient pronunciation for several hundred rhyming words. In order to demonstrate what the ancient pronunciations were and how words originally rhymed, Ch'en listed all the instances he could gather from the Poetry itself, and then followed this proof with all the corroborating evidence from what he considered to be contemporary or only slightly later sources. The former he called *pen-cheng* [internal, lit., "basic," evidence] and the latter *p'ang-cheng* [external, lit., "subsidiary," evidence]. By applying a rigorous historical methodology, Ch'en Ti brought together all known instances of particular rhyme to show that they all pointed to a given reading.

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Chiao Hung seems to have been acquainted with Matteo Ricci's (1552–1610) works on Latin alphabetic writing translated into Chinese. This connection has been thought by some as evidence for Western influence on Ch'en Ti's phonological research. Other contemporaries of Ch'en Ti also recognized the advantage of the Latin alphabet for the transcription of Chinese sounds. Influenced by the scientific contributions made by the Jesuits, Liu Hsien-t'ing (1648–95), for example, recognized the advantages of the Latin alphabet for the transcription of sounds and the importance of Sanskrit for phonological research. The Ssu-k'u ch'üan-shu editors indicated that after Ricci's alphabet system was introduced, the polymath Tai Chen (1724–77) contended that it was originally plagiarized from the Chinese fan-ch'ieh system. This critique was part of Tai's attempt to argue that various astronomical and mathematical notions introduced from Europe were all of native origin. The editors rejected Tai's argument and pointed out that Tai had failed to realize that phonology had also become an independent specialty in Hsi-yü [the western regions].

We might note that the fan-ch'ieh transcription system did not give absolute pronunciation. It could only show how ancient readings were grouped homophonically and not how to reproduce what they sounded like at a given time. Absolute pronunciation, although impossible to reproduce definitively, was more closely approximated by an alphabet. An alphabet at least limited the range of possibilities. It is unclear, however, how many Ch'ing scholars had mastered an alphabetic language well enough to grasp this point.

Wu yü's and Ch'en Ti's research proved to Ch'ing scholars such as Ku Yen-wu and Chiang Yung that what had been termed "rhyming pronunciation" during the T'ang and Sung dynasties was a poor excuse for emending characters. More importantly, Ch'en Ti showed them that the ancient rhyming system could be recovered through precise analysis and research. The inferior success of Sung scholars in linguistic research was seen in large part as a result of their lack of a rigorous methodology. Ch'ing scholars recognized that the remarkable achievements of recent scholarship in phonetics were a product of the conscious application of precise methods of analysis. Evidential scholars now realized how various types of evidence could be brought to bear on phonetic transformations. Ku Yen-wu sadly noted that the hsieh-yun theory not only had caused ancient rhymes to be lost but, because of arbitrary emendations, had also resulted in the loss of the original text. In his Yun-pu cheng [Corrections to the Restoration of Rhymes] and Yin-hsueh wu-shu [Five Books on Ancient Pronunciation], Ku consciously picked up where Wu Yü and Ch'en Ti had left off and made further discoveries in ancient pronunciation. Extending the inquiry from the Poetry, Ku included the pronunciation of the other Classics as external evidence for the ancient rhyming system in the Poetry. He divided the rhyming system into ten major divisions. Summarizing Ku's contribution, the Ssu-k'u ch'üan-shu editors maintained that Ku was instrumental in "discovering the guidelines" (fa chi'i chi) and "definitive theories" (ting lun) needed for the study of ancient rhymes.

It had been recognized generally by the seventeenth century that the phonetic element of each character was the decisive element in establishing its meaning. Ch'ing philologists rejected the speculative conclusions that Wang An-shih and other Sung scholars had introduced in their glosses for the meanings of ancient characters. The consensus of scholarly opinion was that the hui-i rule had played a very limited role in the formation of Chinese characters. The overwhelming majority of graphs had been composed on the basis of phonetic rules and not ideographic combinations. A system of analysis known as chiia-chieh-tzu [characters formed through phonetic borrowings] was employed not only to reconstruct ancient phonology but, more importantly, to decipher the ancient meaning of characters by means of ancient phonology.

The investigation of ancient script was shown to be a hopeless proposition unless one took into account the archaic pronunciation of the characters. Bernhard Karlgren has explained:

Ch'ing Period (Taipei: Cheng-wen, 1972), pp. 233, 423–24, 522, and Ssu-k'u ch'üan-shu tsung-mu, 41/15a–15b. For further discussion, see Sivin, “Copernicus in China,” Colloquia Copernica (Warsaw), 11 (1973): 91ff, and Ssu-k'u ch'üan-shu tsung-mu, 42/32b–33b. I would like to thank Nathan Sivin of the University of Pennsylvania for his information and help on these issues.

11 Chang Shih-lu, pp. 263–67. See also Ssu-k'u ch'üan-shu tsung-mu, 42/42a–43a, 44/49a, and Ma Yu-tsaio, "Tai Tung-yuan tui-yü ku-yin-hsueh te kung-hsien" [Tai Chen's Contribution to the Study of Ancient Pronunciation], Kuo-hsueh chi-k'an, II, 2 (December 1929): 207–08.

12 Dictionary of Ming Biography (N.Y.: Columbia Univ. Press, 1976), pp. 182–83. See also Eminent Chinese of the
It was the great phonetic similarity, sometimes homophony of large groups of monosyllabic words that gave rise to the principle of phonetic loans (ch'ien-ch'iien), the character for one word being applied, as a loan, to a totally different word that was identical or similar in sound, a principle which in its turn, by the elucidating addition of determinatives ("radicals"), led to the creation of the great, even dominating category of characters known as hsieh-sheng, phonetic compounds, consisting of one "Radical" and one "Phonetic."

Although phonetic compounds formed the majority of characters in Ch'in and Han times, during the Chou dynasty (1122–221 B.C.) borrowed characters had been very common and phonetic compounds somewhat rarer. That is, characters were borrowed without adding radicals, or sometimes by adding radicals that did not ultimately become standard. If the ancient pronunciation of a character could be reconstructed, its ancient (and not its present) meaning could be restored—hence the centrality of phonetic research in Ch'ing philological studies. Phonology became a systematic vehicle to "restore the past."

Ch'ing evidential scholars gradually developed a more sophisticated notion of how the phonetic element operated in the formation of complex characters. By introducing the notion of yu-wen\textsuperscript{14} (the right side of a graph (theory)), scholars were able to demonstrate that the right-hand side of a character, which according to the simple view of the phonetic element was supposed to supply only the sound of the character, also provided a clue to its meaning, although not in the same way that Wang An-shih had argued (e.g., chien\textsuperscript{15} means "small," and hence ch'ien\textsuperscript{15} means "shallow water," ch'ien\textsuperscript{15} means "small metals," i.e., copper coins, and similarly chien\textsuperscript{5} means "small note," i.e., letter, etc.).\textsuperscript{14}

In the eighteenth century, Chiang Yung took issue with some elements in Ku Yen-wu's phonological research. Chiang carefully examined the more than three hundred poems in the Poetry and compared his findings with the pronunciation used during the Chou and Ch'in dynasties; he then took into account more recent examples of pronunciation and rhyme. With a wider body of Chou and Ch'in dynasty data to build on, Chiang Yung was able to increase Ku Yen-wu's ten divisions of rhymes to thirteen. The Su-k'u ch'iian-shu editors pointed out that Chiang's contributions brought the ti'ao-t\textsuperscript{6} (systematic organization) of ancient rhymes to its most precise form until later improvements.\textsuperscript{15}

In his analysis of the relation of the four tones to ancient pronunciation, Chiang Yung carefully noted Ku Yen-wu's claim that Confucius has transmitted the Changes using the dialect of his own time and place. Following up this point, Chiang recognized that tonal and phonetic transformations depended on place and individual variations, in addition to undergoing the vicissitudes of time. Having historicized pronunciation, Chiang then transformed Ku Yen-wu's overly rigid notions of phonetic changes. Arguing that in antiquity the number of written characters, i.e., ideographs and pictographs, was limited, whereas the number of spoken words, i.e., sounds referring to things, objects, concepts, etc., was unlimited, Chiang theorized that all characters had had sounds attached to them but many sounds had not yet had characters devised for them. Chiang saw this situation as the fundamental linguistic, dare one say transformative, dynamic whereby, through a system of borrowed characters, oral discourse generated a phonetically derived written language. Chiang's recognition of the priority of the spoken language explained why so few characters were pictographs and ideographs. The same phenomenon can be discerned in the transliteration of Sanskrit names and words from India in medieval China and from Europe (e.g., Ou-lo-pa\textsuperscript{6} for "Europe") in more recent centuries.\textsuperscript{16}

Although Chiang accepted much of Ku Yen-wu's analysis, he rejected its underlying intentions. Ku had seen language as a moral, social, and political tool. If


\textsuperscript{15} Su-k'u ch'iian-shu tsung-mu, 42, 47b–52a, and Ma Yu-tsao, "Tai Tung-yuan," pp. 208–09.

\textsuperscript{16} Su-k'u ch'iian-shu tsung-mu, 44, 50a–50b.
the ancient language employed by the sage-kings could be reconstructed, then Ku thought the ideal institutions and manners of antiquity could be restored as well. Chiang, however, noted that although both he and Ku had made considerable headway in reconstructing ancient pronunciation, it would be impossible to restore fully the ancient language. Chiang’s historicist analysis thus prevented him from accepting Ku Yen-wu’s ideal vision of language as a tool to revive the past. The tie between fact and value was severed from its classical moorings.

Further research carried out in the eighteenth century brought phonology to the state of a rigorous discipline. Tuan Yü-ts’ai (1735–1815) employed the Shuo-wen as a systematic tool for dividing rhymes into more precise categories. Adding for new divisions, Tuan increased the number of Chiang Yung’s divisions from thirteen to seventeen. K’ung Kuang-sen (1752–1829) divided ancient rhymes into eighteen and twenty-six divisions respectively. Analysis of rhymes became more and more refined.

Although Tuan Yü-ts’ai was Tai Chen’s disciple, Tuan had published a number of treatises on phonetics while Tai was still carrying out research on the subject. In a famous reply to Tuan, Tai Chen rejected Tuan’s seventeen divisions and explained why he had increased the number of rhyming divisions first to twenty and then to twenty-five. Summarizing Ku Yen-wu’s and Chiang Yung’s research, Tai advised Tuan Yü-ts’ai on methodology. Tai saw his own research as an attempt to add to the growing precision of phonological studies. He wrote: “Master Ku [Yen-wu] pioneered the study of ancient pronunciation. Mr. Chiang [Yung] and I merely have continued [Ku’s research] and added precision to it.”

Similar patterns of development occurred in the study of tones and their historical changes. Both Tai Chen and Ch’ien Ta-hsin made important contributions to this field. Kinoshita Tetsuya recently has contended that Tai Chen focused his phonetic research not on ancient pronunciation per se, to which he nonetheless made important contributions, but rather on sheng-leib’ [types of sounds] that were the basis of both ancient and modern pronunciation. Seeing remarkable resemblance between ancient and modern rhymes, Tai rejected Ch’en Ti’s and Ku Yen-wu’s absolute bifurcation between the two. Rather than just delimit ancient and modern rhymes, Tai Chen employed the classification of rhyming words to discuss language at a higher level of linguistic significance. Tai contended that although there were changes in the pronunciation of words over time, the types of sounds remained remarkably constant. This phenomenon was due, Tai thought, to the natural limitations of the human voice (tzu-jan c,hih chieh-hsien”) that made the production of only certain sounds possible. Pronunciation then was dependent not only on place, time and person, it was also dependent on the structural nature of the human voice. These latter elements were shared by ancient and modern speakers.

Phonological research in the late eighteenth century was turning away from the almost completely reconstructed field of ancient rhymes toward the relation of tones to pronunciation. The nature of sound production itself became an object of inquiry, and it was in this context that Ch’ien Ta-hsin’s research on labiodentals was understood. Occurring in a section entitled “Ku wu ch’ing ch’ung-yin shuo” [The Theory That The Ancients Lacked Labiodentals], Ch’ien was extending Tai’s analysis into sophisticated new directions.

Because the reconstruction of ancient Chinese phonology had been so closely tied to ancient rhyming criteria, some Chinese scholars had focused on reconstructing archaic finals. Work on archaic initials by Ch’ien Ta-hsin and others in the late eighteenth century indicates that such studies were also making considerable progress before Bernhard Karlgren initiated his pioneering studies on archaic initials early this century.
We overlook at our peril the development of the systematic study of language in China. As in the West, the history of linguistics in China presents an interesting analogy to the evolution of empirical methods of verification in the natural sciences. The development of language study and the emergence of historical and comparative linguistics are not uniquely Western achievements. Ch'ing evidential scholars in particular established the foundations of modern Chinese linguistics. We can still see traces of that influence in present-day Chinese linguistics.20


GLOSSARY

a) y b) y c) t d) zh e) j f) k g) h h) x i) w j) y k) u l) a m) n n) n o) o p) m q) q r) r s) s t) t u) u v) v w) w x) x y) y