scripts, the Japanese and Yi systems are both alive and flourishing. They are also both of special interest as distinctive examples of the category of pure syllabic scripts.

Japanese

The development of writing in Japan is a good illustration of the partial truth of Gelb's dictum that foreigners have been able to introduce variations in scripts whose inventors remained stuck in their old ways. It is an even better illustration of the fuller truth that even foreign innovators have seldom been able to make a complete break with the past. Akkadian and other disciples of the Sumerians only partially liberated themselves from the mixed phonetic and semantic symbols taken over from their mentors. The Japanese disciples of the Chinese were likewise only partially able to free themselves from the overwhelming influence of their preceptors.

When the Japanese first encountered the idea of writing, about 400 A.D., the Chinese had already been exercising this arcane art for close to two millennia. About a century and a half after their initial exposure to Chinese writing, the Japanese began to learn about Buddhism. The tenets of this new and appealing religion, which spread rapidly after its introduction in the middle of the sixth century, were presented in a huge body of material, written in Chinese, that was later brought to Japan. Buddhism provided an added spur to the Japanese acquisition of book-learning.

In this endeavor the Japanese were aided by the Koreans. Because their closer proximity to China had earlier exposed them to Chinese writing, the Koreans were able to serve as intermediaries in introducing books and Buddhism and as tutors to their island neighbors.

The Japanese developed a positive passion for all aspects of Chinese writing. They borrowed indiscriminately over long periods of time and from different areas of China. From the fifth to the seventh centuries they borrowed chiefly from the Shanghai area, and from the seventh to the tenth, and again in the thirteenth, chiefly from the capital area in northwest China. In these later periods, if not earlier, it is likely that the speech of these two areas was, as it is now, as far apart as French and Spanish, perhaps even further. Given this fact, plus the inevitable changes that take place in pronunciation of all languages over time, the Japanese ended up borrowing various Chinese pronunciations which they tried to adapt to their own speech habits.

Because Japanese has always had many fewer different syllables than Chinese, never more than about a hundred (Martin 1972:87; Miller 1967:194), many distinctions are lost in the borrowing. Thus seven characters that are now transcribed in Chinese as *shao, xiao, shang, zheng, sheng, xiang, song* are all pronounced *shō* in modern Japanese. Such approximations to the original sounds of Chinese are called *Sino-Japanese pronunciations*.

Since Chinese words, and the characters which represented them, were pronounced differently in different parts of China, in the course of the transition to Japanese they often acquired more than one Sino-Japanese pronunciation. Thus a character representing the Chinese word for 'bright' was read as *nyō* in imitation of the Shanghai pronunciation and as *mei* after that of northwest China.

Noting that a word in their native language might have a meaning similar to a word in Chinese, the Japanese sometimes associated still another reading, that of the native word, with the character that had already been borrowed with a Sino-Japanese reading. Thus the Chinese character for *shān* 'mountain' was read as *san* in Sino-Japanese and as *yama* in rendering the native word for 'mountain.'

Initially the Japanese took over not only the Chinese characters but the whole of the writing system—that is, what is now known as classical Chinese. The oldest extant Japanese book, the *Kojiki* or *Record of Ancient Matters,* which was completed in 712, is partially written in this classical literary style, or in as close an approximation of the style as the still uncertain Japanese scribes could get.

In reading classical Chinese texts (*kanbun,* from Chinese *hanwen* 'Chinese writing'), the Japanese sometimes approached a text approximately as the Chinese themselves would, that is, following the Chinese grammatical order and perhaps pronouncing the characters in the Sino-Japanese fashion. But they also devised techniques in which they read a classical text as if it were Japanese. This included mentally changing the word order (e.g., Chinese subject-verb-object) to Japanese subject-object-verb and applying conventional native readings to the characters. This procedure is similar to our use of a literal translation to render a Latin text, as in the following example:

Gallia	est	omnis	divisa	in	partes	tres
2	3	1	4	5	7	6
Gaul	is	all	divided	into	parts	three

A better analogy would be the reverse situation—Caesar rendering an English text in his native language and adding Latin case endings.

In the course of writing about things Japanese, the scribes faced the perennial problem faced by borrowers of foreign scripts, namely how to apply these alien symbols to the representation of indigenous sounds. The Japanese learned, especially from their reading of Buddhist literature written by Chinese, that the Chinese had encountered a similar problem in rendering religious terms expressed in Sanskrit and related languages. The Chinese had solved the problem by applying the phonetic values of Chinese characters to represent the sounds of the foreign terms. They approximated the Sanskrit word *bhikshu* 'monk' with two characters which are now transcribed as *biqiu* in Mandarin Chinese but had an earlier pronunciation something like *pji-kiəŭ* (Sansom 1928:10–12; Karlgren 1940:566, 994).

The *Kojiki* exhibits the dual use of characters in their phonetic and semantic values. In part of the text the characters appear as meaningful units arranged like classical Chinese but with occasional lapses into Japanese grammatical usages. Embedded in this rather awkward more or less classical Chinese text are Japanese personal names such as Susa and Suga that are rendered by characters used as purely phonetic symbols. The phonetic use of characters was also applied to the writing of whole songs and direct quotation of speeches (Kōno 1969:118–122; Miller 1967:32).

The Japanese referred to Chinese characters as *kanji,* their approximation of the pronunciation of the Chinese term *hanzi* 'Chinese characters.' When they used the characters to represent the sounds of their own language, they referred to the symbols as *kana.* This term is usually explained as meaning 'borrowed names,' meaning by this that the characters were borrowed to perform a phonetic function (Sansom 1928:23). This explanation is questioned in a recent article which traces the etymology of the term to a thirteenth-century word meaning 'unit' and referring to "a name for Chinese graphs which had been reduced to their smallest recognizable shapes" (Unger 1980). The use of Chinese characters as kana became more and more common as the Japanese increasingly attempted to write not only occasional names or words but whole texts in their own language. The first great anthology of Japanese verse, the *Man'yōshu* or *Collection of a Myriad Leaves,* which was compiled about half a century after the *Kojiki,* is written in large part in Chinese characters used as kana (Sansom 1928:23).

The Japanese probably learned about the phonetic use of Chinese

characters from the Koreans who, having been in contact earlier with the Chinese, where the first to become acquainted with the Chinese practice of using characters for their phonetic value in rendering Buddhist terms. The Koreans had also attempted to apply the same principle to their own language. There was thus considerable precedent available to the Japanese as they sought to use Chinese characters to represent their own sounds.

One of the practices common to both the Japanese and Korean writing systems was that of writing characters in smaller size when used to show particles and inflectional endings. This marked the beginning of the practice, which was more fully developed later, of distinguishing the "functional" elements from the more "conceptual" words which were written in a larger size (Yamagiwa 1969:242).

In the initial stages of using Chinese characters for their phonetic value, there was no uniformity about which symbols represented which sounds. This chaotic situation slowly gave way before tendencies toward standardization, that is, always representing a particular sound with the same symbol, and toward simplification, reducing the complexity of the individual characters.

The result of these tendencies was the development in the ninth century of two simple syllabaries that later came to be called *hiragana* 'Easy Kana' and *katakana* 'Side Kana.' (*Kana* sometimes becomes -*gana* in compound words.)[10] Each syllabary consisted of close to four dozen symbols, which we can conveniently refer to as syllabograms, to represent the syllabic sounds that the early Japanese considered to be the basic sounds of their language.

Originally the main distinction between the two syllabaries was the use of hiragana for informal writing and of katakana for more formal works such as official documents, histories, and lexical works (Miller 1967:124). Today hiragana is the more commonly used syllabary, and katakana serves roughly the same functions as our italic type. It is used especially often in writing terms borrowed from foreign languages (Sansom 1928:41–46).

The hiragana symbols are derived from the cursive form of Chinese characters, that is, from forms that are written hastily and summarily, with about as much deviation from the ideal as one sees in some prescriptions dashed off by our doctors. The katakana symbols are derived from a part, usually a side, of a character in its usual printed form. A few examples of each are given here:

Chinese character	Hiragana	Katakana	Transcription
仁	に	ニ	ni
保	ほ	ホ	ho
加	か	カ	ka

It took a long time for the kana syllabaries to evolve into their present standardized form. Originally there were several hiragana and katakana symbols for each syllable. There were, for example, some 300 hiragana symbols to represent 47 syllables (Sansom 1928:42). Some syllables appear not to have been distinguished initially. In the eleventh century a diacritic was created to represent what the Japanese, following Chinese usage, called "impure" sounds. These consisted of voiced sounds, which are represented by two slanted dittolike lines placed to the top right of a syllabic sign. In the twelfth century a symbol was created to represent a final *n* sound, which counts as a separate syllable in Japanese. In the sixteenth century what the Japanese called "half-impure" sounds, a group of five *p*-initial syllables, were represented by a small circle[11] placed in the same position as the diacritic for voicing (Kokugogakkai 1966:622, 750–751, 758). The function of the two diacritics can be illustrated as follows:[12]

ho bo po
ほ ば゛ ば゜

A major standardization of the kana symbols occurred in the nineteenth century when standard forms were carefully and deliberately selected by reformers. They now number 46.

Japanese as spoken today is considered to have 105 or 113 syllables, depending on the dialect taken as standard. If we accept the smaller figure, there are still more than twice as many syllables as there are syllabic signs. While it would have been a very simple matter for the Japanese to develop syllabaries with a one-to-one correspondence between sound and symbol, they instead reduced the number of symbols needed by various techniques, of which only the two principal ones are noted here.

One of these, already mentioned above, is the use of the "impure" and "half-impure" diacritics, which together did away with the need

for almost two dozen signs. The other, more important, device, which saves almost three dozen signs, is a variation of what I have called the "syllable-telescoping technique" in discussing Sumerian, Chinese, and Mayan. The variation developed by the Japanese, who may have gotten the basic idea from the Chinese *fǎnqiè* technique discussed earlier, is more restrictive; most of the occurrences can be summarized and illustrated as follows:

$$C(i) + yV = CyV$$
$$ki + yo = kyo$$

The first syllable in the formula is limited to the 11 syllables that consist of a consonant followed by the vowel *i*. The second syllable is limited to those consisting of the semivowel *y* followed by either *a*, *o*, or *u*. The telescoping of the syllables is now normally indicated by writing the second symbol in smaller than usual size, as indicated in the following comparison:

$$ki + yo = kiyo \qquad ki + yo = kyo$$

A further adaptation of this technique resulted in the telescoping of the two syllables *ku* + *wa* to *kwa*.

The actual number of syllabic symbols used by the Japanese has varied historically depending on exactly what sounds are represented and whether or not different symbols are used for the same sound performing a special function, such as representing a case ending. In the past, many graphic variants were used to represent the same syllable. Today 46 signs are in common use, though there is a certain amount of individual variation. The hiragana and katakana forms of the signs are shown in figure 21.

These signs are transcribed in various ways. The two main systems of *rōmaji* (romanization) are the "New Official System," adopted by the Japanese government, and the "Hepburn System," the system best known to foreigners, named after an American missionary doctor.

In creating the syllabaries the Japanese were clearly influenced by the Chinese idea of syllabic writing and by the specific forms of the symbols used in that writing. But they were also influenced by the phonological structure of their own language. The simple structure of the syllables, and the extensive concatenation of syllables to form polysyl-
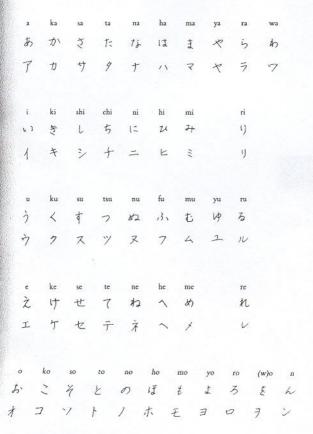
a	ka	sa	ta	na	ha	ma	ya	ra	wa
あ	か	さ	た	な	は	ま	や	ら	わ
ア	カ	サ	タ	ナ	ハ	マ	ヤ	ラ	ワ

i	ki	shi	chi	ni	hi	mi		ri	
い	き	し	ち	に	ひ	み		り	
イ	キ	シ	チ	ニ	ヒ	ミ		リ	

u	ku	su	tsu	nu	fu	mu	yu	ru	
う	く	す	つ	ぬ	ふ	む	ゆ	る	
ウ	ク	ス	ツ	ヌ	フ	ム	ユ	ル	

e	ke	se	te	ne	he	me		re	
え	け	せ	て	ね	へ	め		れ	
エ	ケ	セ	テ	ネ	ヘ	メ		レ	

o	ko	so	to	no	ho	mo	yo	ro	(w)o	n
お	こ	そ	と	の	ほ	も	よ	ろ	を	ん
オ	コ	ソ	ト	ノ	ホ	モ	ヨ	ロ	ヲ	ン

Figure 21. Japanese Kana Syllabaries
The 46 syllabic kana symbols (hiragana above, katakana below) which, augmented by two special diacritics and by a technique of combining two symbols to represent one syllable, comprise a relatively simple way of writing the 105 or 113 syllables of standard Japanese. The symbols are transcribed in the *rōmaji* or romanization system best known to non-Japanese, Hepburn romanization.

labic words, favored representing the language with a simple set of syllabic signs. It has been argued that an orthography based on an alphabetic system would not necessarily be superior to one based exclusively on kana (Cheng 1975).

It is an ironic fact, however, that while the Japanese developed a system of sound representation that was almost perfectly suited to their language, they ended up with one of the worst overall systems of writing ever created. This came about because of the Japanese inability, or refusal, to make a clean break with the characters that had been the source of their inspiration in the first place. Instead they combined Chinese characters with Japanese syllabograms, that is kana and kanji, in a way that closely parallels the equally clumsy Akkadian adaptation of the Sumerian symbols. Indeed the parallels are so close that we can say that Japanese is to Chinese as Akkadian is to Sumerian.

In the modern mixed script developed by the Japanese the main words, very roughly speaking, tend to be written in kanji, and the secondary items, such as case endings, in kana. The vast number of words taken over from Chinese, which now constitute more than half of the total vocabulary, are almost always written in kanji and are always read in some version of the Sino-Japanese pronunciations mentioned earlier. Some characters are also given a reading, as noted earlier in the case of *yama* 'mountain,' corresponding to the native word with a meaning similar to that of the Chinese original. Some thousand or so characters, out of an earlier total of about 7,000 in general use, had such native readings. Chinese characters are further used to represent the roots of Japanese verbs, in which, as will be noted below, they often do not even correspond to morphemes.

In contrast to Chinese, whose root words are invariable, the Japanese language, in common with other "agglutinative" languages like Korean and Manchu and related languages of northeast Asia, tacks on a succession of affixes to the basic root. In the writing system these additions are represented by kana symbols added to the kanji root.

Some of the complexities resulting from the potpourri of Chinese and Japanese sounds and symbols can be illustrated by the changes rung on the relatively simple character with the original meaning in Chinese of 'to eat; food' and an early pronunciation something like *dź'iək* (Karlgren 1940:921). The character has been taken over into Japanese in its original meanings and with the Sino-Japanese pronunciations SHOKU, JIKI, and SHI. It is also used in the representation of different words, including the indigenous word for 'to eat,' namely

taberu. (I am following the conventional practice of indicating Sino-Japanese pronunciations with capitals and native pronunciations with lowercase letters.) Let us first note the following pair of nominal expressions:

食道 *SHOKUDŌ* 'esophagus' (literally *SHOKU* 'eat' + *DŌ* 'road')

食過 *tabesugi* 'overeating' (literally *tabe* 'eat' + *sugi* 'exceeding')

The first term is borrowed from Chinese. The second term is a purely indigenous expression. There is nothing in the appearance of the characters to distinguish native from foreign or to indicate how the terms are to be pronounced.

In its generalized use in the meaning 'to eat' the main kanji we are discussing occurs in combination with kana symbols to indicate the various inflections. These are extensive. Here are a few examples:

食べ	*tabe* '(will) eat [and. . .]'
食べる	*taberu* 'eats'
食べた	*tabeta* 'ate'
食べます	*tabemasu* 'eats/will eat'
食べられる	*taberareru* 'will be/get(s) eaten'
食べない	*tabenai* 'doesn't/won't eat'
食べたい	*tabetai* 'wants to eat'
食べさせる	*tabesaseru* 'makes eat/feeds'
食べよう	*tabeyō* 'let's eat'

The essence of the mixed system of writing will perhaps become clearer if we adapt the procedure to English, using the Chinese character for the basic word 'eat' and our ordinary letters for amplifications of the word, as follows:

to 食

食 ing

食 er

食 en

食 s

食 ible

Note that in the preceding Japanese examples involving the verb 'to eat,' the Chinese character represents only the indigenous sound *ta*, which is not even a morpheme, whereas in the nominal expressions presented earlier it had either the native pronunciation *tabe* or the Sino-Japanese pronunciation *SHOKU*.

The examples that have been cited here are among the simpler illustrations of the mixed use of kanji and kana. There are many more complexities that we need not go into here, since it is already apparent that a particularly troublesome problem in Japanese mixed writing is how a particular Chinese character is pronounced in a given context. Even the erudite encounter difficulties in this area. For the public at large the problem is so great that a special tactic has been resorted to in popular publications such as newspapers and magazines. These have adopted the practice of attaching to every kanji small kana symbols (*furigana*) to represent the sound. The symbols are placed to the right of the character in vertical writing and above a character in horizontal writing, as illustrated in the following renderings of the surname Kindaichi:

金 kin   kin   da   ichi

田 da

一 ichi   金   田   一

The need to resort to such an expedient has led one of the foremost authorities on Japanese to the following assessment of the writing system: "One hesitates for an epithet to describe a writing system which is so complex that it needs the aid of another system to explain it. There is no doubt that it provides for some a fascinating field of study, but as a practical instrument it is surely without inferiors" (Sansom 1928:44).

It is precisely this inferior system which has dominated Japanese writing despite the existence of a simpler system of syllabic signs. The literate elite which from the beginning has set the intellectual tone for Japanese society is notorious for its addiction to preciosity in this as in

many other areas. A writing system that was complicated enough to begin with even became the subject of word games and deliberate obscurity of style.

There was, to be sure, some writing in the simpler kana script, but in general it was considered of secondary importance. The early (eleventh century) masterpiece of Japanese literature *The Tale of Genji* was written almost entirely in kana. It is significant that the author was a woman, as such much less inhibited by macho constraints that ranged from the one extreme—disdain for book-learning—to the other—sinological pedantry and obscurantism.

The complicated hybrid system of Japanese writing served well enough when it was required only to meet the limited needs of the feudal society that characterized Japan up until recent times. But in the nineteenth century, as Japan attempted to cope with the modern world that was pressing against it, thoughts turned to doing something about the system of writing.

Considerable attention was paid initially to the possibility of abandoning Chinese characters completely and writing only either in kana or in some form of romanized writing. Debate in this area focused particularly on the social and cultural aspects of such a drastic change. There was also widespread discussion regarding the technical feasibility of writing in a purely phonetic script. Advocates of such a move demonstrated that the characters were not indispensable by extensive publication which dispensed with them completely. Publication in rōmaji included treatises in the field of mechanics and aeronautics, novels by the popular writer Natsume Sōseki, translations of the Bible and books by H. G. Wells and Robert Louis Stevenson, and many other works. There was an equally impressive group of publications in kana (Hall 1949:377).

Demands for "language reform" that were based on practical considerations were voiced by people who spanned the political spectrum. Broader considerations were advanced by advocates of greater democracy and social reform, especially in the decades preceding World War II, evoking strong opposition from reactionary elements. In the twenties and thirties scores were arrested for belonging to linguistic societies advocating reform of the writing system. Saito Hidekatsu, the editor of two journals devoted to the subject, was arrested in 1938 and died in prison the following year (Hall 1949:19).

In the spring of 1946 a United States Education Mission that included some of the most distinguished American educators was sent to

advise General Douglas MacArthur on educational policy. One of its major recommendations was replacing characters with rōmaji. In advancing this recommendation the mission stressed the social and political as well as linguistic aspects of the reform. There appears to have been considerable public support for such a move, but the entrenched bureaucracy, heartened by the failure of MacArthur to support the recommendation, rejected such a drastic change (Hall 1949; DeFrancis 1947).

Instead a limited change, for which planning had been going on since the 1920s, was instituted. It placed primary emphasis on reduction in the number of Chinese characters to be used in general publication, together with simplification and regularization of kana spellings. Before the war newspapers maintained a font of some 7,500 kanji, actually almost double that number if we count pieces of type which combined kanji with furigana. The government recommended a limitation to 1,850 kanji, later increased to 1,945, the abandoned kanji being replaced by kana. The regulations that have been adopted apply mainly to official documents, mass publications such as newspapers, and textbooks. They do not apply to private communication (e.g., correspondence), nor to the areas of science and technology, literature, and book publishing in general. There is no limit to the number of characters that can be used in these areas (Neustupný 1984:57). However, in actual practice, many characters have been dropped, and many antiquated usages have been abandoned.

At the same time the practice of indicating the pronunciation of kanji by writing furigana alongside the characters has been considerably reduced. Much depends on the preference of individual publishers. Although largely discontinued in newspapers, the supplementary symbols are used in varying degrees in some books for children, in many literary works aimed at a mass audience, and in all sorts of publication if a particular kanji presents a special problem. In the last case it is also a common practice to indicate the reading of the character with parenthetical kana placed after the ambiguous kanji.

The current situation is one in which the kanji-cum-kana mixed system appears to dominate the writing scene to the complete exclusion of any possibility of the exclusive use of either kana or rōmaji. The appearance may be deceptive, however. It is true that what is officially promoted by the government, and what seems to be exclusively used by those who set the intellectual tone of society, is the mixed script. Moreover, it is unquestionable that kanji, in comparison to the gener-

ally denigrated kana and rōmaji scripts, have a prestige value in that their mastery defines an individual's level of *kyōyō*, a concept combining the ideas of education, cultivation, and refinement (Brown 1987). Despite all this, one observant student of the Japanese linguistic scene has noted the existence of small but persistent groups which continue to advocate a move toward rōmaji, further limitations on kanji, and other measures aimed at the simplification of the writing system (Unger, personal communication, 6/23/87).

And even though the mixed script continues to dominate publications that most strike the eye, rōmaji and kana play a not inconsiderable role in several areas. Most telex messages are conveyed in rōmaji, the rest in kana. Telegrams are sent exclusively in katakana. All reading matter prepared for the blind is in Braille-dot equivalents for the kana symbols, which means, incidentally, that reading is easier for the blind than for the sighted (Unger 1984:103–104, 201). Bank statements and gas and electricity bills are all in kana. Both of the simple scripts are widely used in signs, shop names, and other areas. Katakana is also used in connection with the massive borrowings from other languages (especially English as *the* language of prestige), resulting in an influx that may alter the whole balance of the Japanese language.

The advent of computers and word processors is also playing a role. Although these can output kanji as well as kana, the preferred inputting of kanji is via kana or rōmaji. That is, the Japanese typically type the kana or rōmaji equivalent of the kanji expression they wish to print out, see on the screen the various kanji that share the transcription, and then press a key to select the desired kanji. This means that the Japanese are getting less and less practice in writing characters.

And less writing means weakened command of kanji. Control over this difficult script was never very firmly established among the population as a whole, and in the postwar period has become even more problematic (Unger 1987, 1988). In 1980 Sato Hideo, head of a research unit in the Ministry of Education, estimated that while most Japanese probably retain recognition knowledge of the 1,945 kanji in general use, on the average they remember how to write only about five hundred (Sato, personal communication, 1980).

All this raises the possibility of a future with a continued emphasis on kanji-cum-kana as the writing of prestige, but with actual reliance on kana and rōmaji on an increased scale that may eventually, in a few generations, result in the demise of the traditional system of writing.

Yi

The little-known Yi syllabary shown in figure 22 deserves special attention as the best example of a "pure" syllabic system because of its one-to-one correspondence between syllabic sound and syllabic representation.

The system is the creation of the Yi people, a minority nationality in southwest China who in 1978 were estimated to number over 4,800,000 people. Of these, 3,000,000 were said to be scattered throughout the province of Yunnan and another 400,000 in Guizhou. The largest single concentration, about 1,100,000, was located in the Liangshan (Cool Mountain) Yi Autonomous Prefecture in Sichuan (ZSM 1981:296). The 1982 census showed an overall increase in population to five and a half million. Most of these Yi people live in areas demarcated as autonomous regions: 3 autonomous prefectures and a dozen autonomous counties (Hu Qingjun 1986).

The Yi were originally known to the Chinese, and to the foreigners who first came in contact with them, by the pejorative name *Lolo*. One explanation for the name is that it derives from the Chinese pronunciation of the Yi word for "spirit box," an object of considerable importance in the people's shamanistic religion (Dreyer 1976:292). Another explanation is that the name meant something like "vagabond" or "bandit" (Eberhard 1982:76, 103). The Chinese characters used to render the name were originally composed with the "dog" determinative. After the Chinese Communists encountered this minority group in the course of their Long March, they forbade the use of the term Lolo as part of a conciliatory policy that included replacing the "dog" determinative with that for "human being" in names for minority peoples (Dreyer 1976:118, 292).

After coming to power in 1949, the Communists proceeded cautiously in their efforts to transform Yi society. The society presented special difficulties because it was based on a slave system in which almost half the people were enslaved by a powerful noble class comprising 5 percent of the population and by a commoner class making up the rest. In 1956, after carefully laying the groundwork, the Chinese gradually began to introduce measures which ended slavery and altered the class structure of Yi society (Winnington 1959).

In the same year, as part of an overall policy of aiding minority peoples to improve their writing systems or to create new ones if these did not already exist, a number of teams was formed, and 700 people,

Figure 22. Yi Syllabic Writing
A syllabary of 819 signs standardized in 1975 from the thousands of centuries-old symbols used by the Yi people of southwest China. It is the basis of Yi writing in schools, publications, and other areas. Reprinted with permission from John DeFrancis, *The Chinese Language: Fact and Fantasy* (Honolulu: University of Hawaii Press, 1984), p. 28.

including Chinese linguists and members of 20 nationalities, began a comprehensive study of the various minority languages. Out of this effort came the reform of the Yi system of writing (PR 1958:16–17).

The Yi language that forms the basis of the writing belongs to the Tibeto-Burman branch of the Sino-Tibetan family of languages. It has six dialects that differ significantly. One dialect has been estimated as having 813 different syllables counting tones (Chen Shilin 1979: 243) and another 700—or only 180, not counting tones (Février 1948:83).

The syllable structure is very simple. Typically, all syllables consist of at most a single consonant plus a vowel and a tone. There are no consonant clusters and only a small number of diphthongs. Tone aside, Yi and Japanese are almost on a par in the simplicity of their syllable structures. They differ, however, in the number of items that can fill the CV slots. Yi has a much richer repertoire of consonants (almost four dozen) and vowels (ten or so). These are in addition to tones, which appear to vary in number from four to seven (Ramsey 1987: 254–255; DeFrancis 1984a:28, 291).

In deciding which form of the language to adopt as the basis for reforming the script, the working team was guided by the general principle of selecting "the dialect used by the greatest number of people, spoken over the largest area, and reflecting the general direction of development of the language" (Ma Xueliang 1962:25). This led to the selection of a variety of the language spoken in the northern part of the Cool Mountain region in Sichuan (Li Min 1979:305).

The task of devising a standardized writing system for this spoken norm had to cope with the conglomeration of symbols already in existence among the Yi people. Although it has been suggested that these symbols may have come into being as early as the thirteenth century (Pelliot 1904:154–155), their actual origin is unclear. It is most likely that the *idea* of writing was derived from the Chinese, whose southward push had placed them in contact with the Yi-inhabited areas since the beginning of the unified Chinese empire in the third century B.C. Chinese inspiration is also suggested by the fact that the Yi chose to develop a syllabic script rather than one based on the alphabetic principle that had long since been adopted by all their neighbors except the Vietnamese, that is, by the Tibetans, Laotians, Burmese, and Thai. This, however, is the full extent of the influence that may have been exercised by Chinese writing, for the Yi symbols bear no resemblance to those of the Chinese.

The earliest extant examples are some genealogical stone inscriptions that date from the sixteenth century (d'Ollone 1912; Ma Xueliang 1981). Later manuscript materials that have survived include songs, legends, and accounts of various social practices. In the main, however, they are concerned with religious matters—divination, prayers, and sacrifices. Most of this material was composed and jealously guarded by a group of hereditary shamans called *pimo* (Young 1935–1936). In recent years efforts have been made to sift through and translate some of the more than one thousand manuscript items that have been found to date (Hu Qingjun 1986:501).

The script used by the *pimo* comprised syllabic signs that a Qing dynasty source has likened to tadpoles (Li Min 1979:304). Many of the symbols were idiosyncratic, created deliberately as a kind of secret writing. While any one individual probably used only a limited number of symbols, the total number has been variously estimated as exceeding 8,000 and even 10,000 (Li Min 1979:305; Ma Xueliang 1981:14).

In attempting to reduce this chaotic mass to a serviceable script, the language workers, basing themselves on the spoken norm mentioned above, were guided by the further principle that "one symbol should have only one sound, and one sound should have only one symbol." This procedure led to the creation and official adoption in 1975 of the "Yi Writing Standard Scheme" consisting of 819 symbols—756 to represent the Yi language itself, and another 63 to transcribe loanwords, mainly from Chinese (Li Min 1979:305; Hu Tan, personal communication, 1983).

The system was formally introduced into the school system starting in 1978. It has also come to be widely used in the publication of books, newspapers, and other materials (Chen Shilin 1979). Apart from works printed in the Cool Mountain area itself, there are also publications from the Sichuan Nationalities Press, including such miscellaneous items as bilingual (Yi and Chinese) conversation texts, bilingual studies of Yi grammar, and assortments of artistic forms of the Yi symbols.

A transcription system based on the Latin alphabet has also been created for the Yi language by the Chinese linguist Chen Shilin. Of the four tones, the first is represented by final *t,* the second is unmarked, the third is represented by a special ligature, and the fourth is represented by final *p.* This system, which has undergone repeated changes, is used only to transcribe the system of syllabic signs.

The number of symbols comprising the syllabic script makes it the largest standardized syllabary ever created. Its great size contradicts a thesis propounded by Gelb regarding the application of what he calls "grammatology," that is, the study of writing systems, to the field of decipherment. In a given system of writing, he says, it is easy to count the number of different graphemes, or signs with distinctive features. From this he concludes:

> The teachings of grammatology tell us that a writing consisting of about sixty graphemes should represent a syllabary. Similarly, if the number of counted graphemes reaches several hundred, it is safe to assume in the light of grammatology that the underlying writing represents a logo-syllabic system [Gelb 1974:302–303].

The number of counted graphemes in the Yi syllabary reaches the uniquely large figure of over eight hundred, but for all that the system is unquestionably syllabic, not what Gelb calls "logo-syllabic," since the symbols are purely phonetic.

The notion that a syllabary must have only a limited number of symbols is shared by most students of writing, including Sampson, who contends that only "a few dozen" are to be found in phonemic and syllabic scripts (1985:145). Perhaps the existence of the Yi syllabary of 819 signs will help shake the dogmatic belief that Chinese cannot possibly be a syllabic system of writing because of its even more numerous and far less reliable phonetic symbols.

The Yi system of writing also contradicts another idea of Gelb's which he emphasizes with italics: *"All syllabic writings are either identical with, or simplified from, the respective syllabaries of the word-syllabic writings from which they are derived"* (1963:162). In the first place, the assumption that all syllabic systems are derived from "word-syllabic" systems is untrue. Gelb classifies Chinese as a "word-syllabic" system, and while it is true that the Japanese syllabaries were derived from Chinese symbols, the Yi syllabary was influenced only by the Chinese idea of syllabic writing, and not by the form of the graphs. Gelb's thesis is all the more surprising since he is quite aware that Sequoya developed his syllabary on the basis of the letters of the English alphabet (1963: 206–207).

Apart from the extraordinary number of Yi symbols, another distinctive feature of the system is the incorporation of the tone within the syllabic sign. That is to say, unlike the Vai syllabary, which marks

tones—when they are indicated at all—by separate external symbols (Scribner and Cole 1981), the Yi system has distinctly different symbols for syllables with different tones. If the practice had been adopted of using separate diacritics to represent tones, in the fashion of the Vai system and of various transcription systems of Chinese (as in *mā, má, mǎ, mà*), the number of basic syllabic signs could have been reduced to around 300. But such a simplification was rejected in favor of what was apparently the well-established practice of using a single sign to represent all the elements, including tone, that enter into the makeup of Yi syllables.

This handling of tone representation, together with the size of the syllabary and the close correspondence between sound and symbol, combine to make the Yi system of writing the most outstanding example of the category of "pure" syllabic scripts.