

As long as names foreign to a country are written in a variation of the writing system of its own language, total agreement between the donor country's written forms and the written forms used by the receiver country will be achieved by the receiver country if all diacritical marks and modified letters or characters of the donor language are faithfully reproduced.

For example, English language names need merely be copied by Czech and Polish users, whereas Czech and Polish names can be kept in their original form by English-language users only if such un-English Czech symbols as "č", "á", "ř" and "ů" and such un-English Polish symbols as "ą", "ł", "ś" and "ź" are faithfully copied. On the other hand, Czech and Polish users must in their turn reproduce such French symbols as "à", "â" and "ç" if their revisions of French names are to maintain identity with the original written forms.

As a further example, Iranian users of Arabic names need merely copy them as they are, since no letters occur in the writing of Arabic that do not occur in Persian. Arabic users of Persian names, however, would have to copy carefully the diacritical marks of the specifically Persian letters "pe", "che", "zhe" and "gāf" if they wished to maintain the integrity of the original Persian written forms.

When a country has to use names from a writing system other than its own,<sup>2</sup> it is faced with the necessity of using either a transliteration system, that is, a one-to-one substitution of graphic symbols, or a transcription system, that is, a one-to-one substitution of symbols representing the sounds of the donor language.

In practice, the use of transliteration is indicated when the receiver language is written by means of an alphabet and the alphabet of the donor language represents a good phonemic notation for that language.

The use of transcription is indicated when the donor language's alphabet is not one in which letters correspond

to the language's phonemes or when the receiver language is not written alphabetically; for example, Chinese.

In transliteration, the existence of graphic distinctions which the receiver alphabet does not have necessitates the use of diacritical marks so that there may be a one-to-one correspondence between donor and receiver graphs. For instance, since Persian has four letters representing the "z" sound, diacritical marks must be devised to differentiate the four (cf. the z-graphs "z", "z", "z" and "z" in the BGN/PCGN<sup>3</sup> system for Persian).

In transcription, the existence in the donor language of individual sounds or classes of sounds that the receiver language does not have necessitates the use of diacritical marks to account for all the sounds of the donor language. (cf. in the BGN (Modified Wade-Giles system for Chinese) the distinction between "chu" and "chü", "ch'u" and "ch'ü", "hu", and "lü" and "yu" and "yü").

As far as possible, in both transliteration and transcription, diacritical marks should be used in such a way that classes of sounds or contrasts such as that between short and long vowels will be systematically distinguished (cf. in the BGN/PCGN Arabic system the contrast by means of the cedilla of the nonvelarized consonants "d", "h", "s", "t" and "z" and the corresponding velarized consonants "ḍ", "ḥ", "ṣ", "ṭ" and "ẓ" and also the contrast by means of the macron of the short vowels "a", "i" and "u" and the corresponding long vowels "ā", "ī" and "ū").

Theoretical considerations such as those brought forward above cannot always determine the nature of a transliteration or transcription system, especially when systems already in use have almost universal currency within a country or throughout a writing system area. Nonetheless, they are of great value in the evaluation or improvement of existing systems and should always be kept in mind when new systems are worked out.

<sup>2</sup> See discussion of writing systems in *United Nations Conference on the Standardization of Geographical Names*, vol. 1 (United Nations publication, Sales No.: E.68.1.9), p. 22.

<sup>3</sup> Board of Geographic Names/Permanent Committee on Geographic Names.

## ROMANIZATION OF CHINESE CHARACTERS FOR PLACE NAMES

### Paper presented by the United States of America\*

The China Topographic Service and the United States Army Map Service have combined their efforts to produce a manuscript entitled "Modified readings of Chinese characters for place names Romanization based on the modified Wade-Giles system", which will be published soon. It represents an important step forward in research on Chinese geographical names in that it largely eliminates the need for English-speaking persons to consult Chinese lexical works, many of which are not readily available and most of which do not give an accurate description of the pronunciation of their entries.

English-speaking nations have relied almost exclusively on the Wade-Giles system for the transcription of Chinese, and sources utilizing this system have generally used the Romanization appearing in the Giles dictionary. The Giles dictionary was based essentially on Mandarin

pronunciation. The *Kuo-yin Ch'ang-yung Tz'u-hui* (*Manual of Chinese national Romanization of frequently used characters*, Shanghai, 1932), which uses basically the same pronunciation but with some modifications, has been designated by all Chinese Governments since its publication as the official standard for the pronunciation of Chinese.

Using this official and national standard pronunciation, we are able to assign Roman-letter equivalents to Chinese characters that accurately reflect the segmental phonemes that appear in the pronunciation of these characters, for which the Wade-Giles system is adequate. Thus, while the Romanization used in the Giles dictionary is inadequate for national standardization, its sound-to-symbol system is adequate.

It is this current sound-to-symbol relationship that is important in *Modified readings of Chinese characters for place names Romanization based on the modified Wade-Giles system*. Implicit in its publication is the assumption

\* The original text of this paper, prepared by G. F. Beasley, Office of Geography, Department of the Interior, appeared as document E/CONF.53/L.29.

that place names are to be pronounced and thus Romanized in accordance with the national standard rather than in accordance with their local or dialectal pronunciation. The changes involved are illustrated below.

Character	Gloss	Romanization	
		Giles	CTS-AMS
港	harbour	chiang	kang
堤	dike	ti	t'i
綠	green	lü	lu
浮	float	fu	fou
熱	hot	jo	je
溪	rivulet	ch'i	hsi

The publication is divided into three sections. The first section is a syllabary in alphabetical order. All characters having the same Romanization are placed under the appropriate syllable. The second section is a character list with Romanizations according to the Wade-Giles system. The characters are arranged according to the 214 radicals and additional stroke count. The third section is a lexicon giving glosses for the variant readings of characters contained in section one. An example is shown below.

Character	Romanization	Gloss
乾	ch'ien	"a surname" or, when in combination with "-k'un", male and/or female
	kan	
兒	erh	"son"
	ni	"a surname"

This section is essential in determining what pronunciation and thus what Romanization is accurate for a character in any given name. This assumes, of course, that the characters in the name in question are morphemically distinctive. Included among the glosses are statements as to whether or not a character is used in Chinese phoneticizations of non-Chinese names. This in many instances resolves problems that cannot be resolved through a

semantic and grammatical analysis of the substantive portion of the name.

The publication is not without deficiencies, a fact which is understandable in the light of the enormous corpus of names that must be considered to produce a comprehensive listing. Some of these deficiencies may be eliminated before final publication. Although the omission of obsolete readings and characters that do not occur in geographical names is an advantage, some characters that do occur in geographical names and were not found in the Giles dictionary or Chinese dictionaries such as "Kuo-yü-tz'u-tien", "Tz'u-hai", "Tz'u-yüan" are still absent from the list. Also missing are many short forms and simplified characters (*chien-t'i-tzu*) in use on all mainland Chinese maps. Where included, these characters are entered not according to the characters or radicals from which they are derived, but according to the initial stroke in the character. For instance, the character for "door" (Romanized "men") is itself a radical numbered 164 of the 214 radicals. There are eight strokes in this character (radical). The simplified variant has but three strokes and is listed not as a radical, but as a character under the radical which is identical with its first stroke, radical 3. All simplified characters formed with the simplified radical 164 are also listed under radical 3. Thus two systems of arranging characters are used and character variants such as "men" are listed in separate sections of the character list.

Since the publication is a joint Chinese-United States effort, it is regrettable that the glosses in section II are provided only in Chinese, at times in a quite abbreviated and cryptic manner. However, since a knowledge of research methods used in Chinese lexical works is a prerequisite for using the "Modified readings of Chinese characters . . ." the translation of these glosses is possible for the non-Chinese user.

In summary, the new joint Chinese-United States publication will be an invaluable reference work for research on Chinese geographical names. The publication will make available in one volume the great majority of characters found in geographical names. It will provide the user with Romanizations of these characters according to the standard national pronunciation and according to the various morphemic identities represented by the characters. These facts alone make the work greatly anticipated by researchers in Chinese geographical names and cause its shortcomings to seem small indeed.

## COLLECTION AND TREATMENT OF GEOGRAPHICAL NAMES IN LIBYA

### Paper presented by Libya\*

In 1954, the Governments of Libya and the United States agreed to co-operate in mapping a large part of Libya. The programme involved maps at 1:50,000 scale for the coastal region and at 1:250,000 scale for the area north of 29°N. The maps, covering approximately 170,000 square miles, were published as AMS [Army Map Service] series P 761 and P 502 respectively.

Field operations began in 1956, after aerial photography was flown and the logistics to support topographic units in the area were arranged. An interesting and productive method for collecting and classifying geographical names in the field was introduced in these operations. We believe it contributed significantly to toponymic processes

and promises an extended use in the mapping of other areas.

Several difficulties have plagued the collection, verification and transliteration of geographical names in Arab areas, among them the scarcity of sources from which place and feature names can be extracted and the physical cultural and political obstacles to obtaining correct names at the site. Names sources are usually deficient in quantity for large-scale mapping and in authenticity for any purpose; communication between the foreign cartographer and the native informant usually falls short of complete understanding; the toponymist who tries to retrace names which have been transcribed from the original language into another usually loses something in the process.

The method used in the Libyan project was designed to

\* The original text of this paper appeared as document E/CONF. 53/L.32.