

SOME DEPARTURES FROM STRICT PHONEMIC REPRESENTATIONS¹

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The learning of Chinese has, for years, been regarded as a matter that requires some special skill. At present there are still many people who have not been reached by the results of modern linguistic research and therefore they still look upon the learning of Chinese with the same attitude that Confucius had for the supernatural. When he was asked to give his opinion concerning it, Confucius said, "Respect it; stay away from it." Surprisingly enough, one can even find unintelligible statements made by a linguist concerning Chinese. In 1947 in his A Message to the Linguist's Congress, Felice Rovai said,

One must remember that I, Felice Rovai, speak a little Italian, somewhat more English, a little Portuguese and some Spanish. I do not speak French or any other language and that is why I have chosen to reproduce the sounds of other languages, but one must understand that I can only reproduce the sounds made by the human vocal organs and the clearer they are the better I can reproduce them without effort, but I find that in Chinese they have many sounds which are not made by the human vocal organs. Such sounds I cannot record in writing and neither is it possible to reproduce them and that is understood.²

Aside from the obvious ridiculousness involved in the quoted passage, the traditional attitude, which confuses learning to speak with learning to read and to write, is mainly responsible for this frowning upon the learning of Chinese. Anyone who has had any contact with the Chinese people in China is aware of the high illiteracy of the Chinese people. But as far as the

¹This paper was read at the Fifth University of Kentucky Foreign Language Conference, April 24-26, 1952.

²Rovai, Felice, A Message to the Linguist's Congress, Oakland, California, 1947, p. 31.

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speaking of the language is concerned, Bloomfield said in his book, Language, in 1933,

Tesnière, estimating the numbers round the year 1920, names Chinese as the largest speech-community, with 400 million speakers, but the term Chinese, denotes a family of mutually unintelligible languages. Doubtless one of these, North Chinese, has today more native speakers than any other language. But I know no estimate of their number.³

The latest information is that given by John de Francis. His estimate is that approximately 348,500,000 people in China speak Mandarin.⁴ It is evident that to speak a language and to read and write that same language are two entirely different propositions.

No one would deny the fact that Chinese is difficult to read, not to say to write. According to Bernhard Karlgren, a Chinese written symbol is made up of two parts: the determiner and the phonetic. The determiner specifies the category to which the word is grouped. For example, symbols for trees usually have "wood" as their determiner, and those for bodies of water usually have "water" as their determiner. The phonetic of the symbol usually gives the pronunciation. That is, symbols with the same phonetic often share the same pronunciation. This happy state of bliss, however, does not come to a person until he has already acquired the knowledge of enough symbols to be able to identify such common denominators. Yet anyone who is learning Chinese and is sincerely interested in a deep understanding of the Chinese people and their patterns of culture has to face the problem of learning the written symbols, be the record in the literary style or in the colloquial style. According to Y. R. Chao, compared to the vast body of Chinese literature written in the literary style, the amount of existing colloquial literature is negligible, even though in increasing degree the written colloquial literature has come to

³ Bloomfield, Leonard, Language, Henry Holt and Co., New York, 1933, p. 44.

⁴ De Francis, John, Nationalism and Language Reform in China, Princeton University Press, 1950, p. 196.

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stay.⁵ The problem that still remains is that even the small amount of colloquial literature is written in Chinese ideographs. The use of a constructed orthography in alphabetized symbols provides no ready key to unlock the civilization of China. And yet the use of an alphabetized script seems the easiest way to solve the problem of illiteracy in China or for those learning to speak Chinese as a foreign language especially when their native language uses the same alphabetized script. If this is true, the question of what symbols are to be used is of vital importance.

Before we discuss what symbols we can use to the best advantage, we must first ask ourselves what some of the functions of orthography are. First, writing records experience which each generation can pass on to the next in a cumulative way. Second, it relays messages when direct discourse is not possible. Third, it records what is said for further study or committing to memory by the same person or others. Orthography is an instrument by which we capture experiences through the ear and the hand for the mind to retain by the use of the eye. Therefore any effective system of orthography must be what is the easiest for the writer and the reader. Otherwise, orthography ceases to function to its fullest as a means to facilitate the process of learning.

The problem raised in this article is the matter of a constructed orthography of Mandarin Chinese for foreign speakers whose native language is Mid-Western American English. Needless to say, the alphabet that is used in English can no longer be called a completely accurate representation of the sounds. However, consistency can be found to a large extent. Therefore, in using an alphabet to represent Chinese for such speakers, several things must be borne in mind. The first one is that within possible limits, the same symbols be used consistently to represent the same meaning-distinguishing features or phonemes. It is difficult or almost impossible to use a different symbol to represent every different non-meaning-distinguishing feature or phonetic difference. Besides, over-elaboration in the use of symbols will only mean an unneces-

⁵Chao, Yuen Ren, Mandarin Primer, Harvard University Press, 1948, p. 8.

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sary burden for beginners. The second one is to avoid over-economy in the use of symbols. In other words, sounds that are grouped by theoretical linguists as submembers of the same phoneme and therefore can be represented by one symbol but which cause confusion in oral production should be represented by different symbols in order to avoid such confusion. Third, the use of the same symbol to represent not only a certain sound but also another feature, like tone, should be discouraged. Fourth, it is always advisable to avoid the use of certain symbols to represent a specific sound in Chinese when this same symbol may represent another sound in student's native language. When a symbol must be used to represent a specific sound in the student's foreign language, and this symbol represents another sound in the student's native language, explanations must be given and exercises be provided for the students to acquire an oral control of the difference. But it is most important, if at all possible, not to use a certain symbol to represent one sound in the foreign language while this same symbol represents a different sound in the student's native language if both sounds are found in the student's native language. For example, si is often used to represent [ʃi] in Chinese while both [s] and [ʃ] as in see and she are present in English.

Recent studies in linguistics show remarkable achievements in grouping sounds with phonetic differences into phonemes. As far as the technique used in such theoretical work is concerned, it has almost reached its stage of perfection. However, the use of the results of such theoretical analysis in application has not been totally satisfactory. The grouping of the submembers into the smallest number of phonemes is extremely economical and convenient for those who have had linguistic training. It is also easy for them to understand why they are so grouped and what the submembers are. But for those who are learning the language for production but who have not had any linguistic training, such economy is often a hindrance rather than a help. Those whose native language uses an alphabet usually have some way, not always consistent, of representing the sounds of their own language. Submembers of a phoneme in one language may be separate phonemes in another. If one symbol is used to represent all the

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submembers which are separate phonemes in another language, students usually pronounce the sound according to the way it occurs in their native language. English speaking students in Mandarin Chinese classes at the University of Michigan were given si and were emphatically told and repeatedly drilled on the fact that in Mandarin Chinese si must be pronounced as [ʃi], because in Mandarin Chinese the sound s is never followed by the sound i. But when they saw si, they would very often pronounce it [si] instead of [ʃi]. Such a phenomenon is mainly due to the fact that in their native language there is a distinction between [si] and [ʃi]. For example: sealed and shield, seed and she'd, etc. Students who were given shi to pronounce as [ʃi] have never pronounced shi as [si]. If constructed orthography is to facilitate the process of learning, it seems only logical to eliminate such confusions as the one given above.

What then should the profitable procedure of constructed orthography be? Meaning-distinguishing sounds which are taken as similar sounds in the student's native language and the foreign language are to be represented by the same symbols. When a sound in the foreign language is not found in the student's native language, the symbol used for it should be one that represents a similar sound in the student's native language. When a symbol is used in this way, drills must be provided with the point of the phonetic difference as the center of focus. An outstanding example is the palatal series: [j(i)], [ch(i)], and [sh(i)] and the retroflex series: [j̣], [cḥ], and [sḥ] in Mandarin Chinese contrasted with the /j̣/, /č̣/, and /ṣ̌/ sounds in English. One does not find the palatal series or the retroflex series in English. That is, the English sounds, /j̣/ in jeep, /č̣/ in cheap, and /ṣ̌/ in sheep are not pronounced with either retroflexion or palatalization. In Mandarin Chinese whenever any one of the three sounds is produced, it is either retroflexed or palatalized. As far as the distribution of the two series is concerned, the palatal series is always followed by the [i] sound and the retroflex series is never followed by the [i] sound. In other words, the retroflex series and the palatal series are in complementary distribution. Such distribution causes no trouble in constructed orthography.

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Example 1:	Retroflex series	Palatal series
	j	ji
	ch	chi
	sh	shi

The following method has been used in classrooms and has proved very successful. The teacher puts on the blackboard three English words: shrew, true, and (s)trew and three Chinese words: shū, chū, and jū. He goes on and explains that in English the tongue is not in the [r] position when sh [ʃ], t [t'], and (s)t t are produced in the given words. In Chinese, the tongue is in the [r] position at the same time that sh [ʃ], ch [tʃ] and j [tʃ] are produced. The teacher contrasts the following pairs with repetition.

Example 2:	English (without retroflexion)	Chinese (with retroflexion)
	shrew	shū
	true	chū
	(s)tr <u>ew</u>	jū

Then production is called for to contrast the English with the Chinese.

Next the teacher puts on the blackboard three English words: shin, chin, and (unvoiced) [j] gin and three Chinese words: shīn, chīn, and jīn. He goes on and explains that in English the tongue is not flattened when sh [ʃ], ch [tʃ], and unvoiced g j in the given words are produced. In Chinese when sh [ʃ], ch [tʃ], and j [tʃ] are produced the tongue is flattened. He contrasts the following pairs with repetition.

Example 3:	English (without palatalization)	Chinese (with palatalization)
	shin	shīn
	chin	chīn
	(unvoiced) [j] gin	jīn

After the students have mastered the difference between the English and the Chinese concerning retroflexion and palatalization, the teacher proceeds to the following exercise.

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Example 4:	Column 1 (Chinese)	Column 2 (Chinese)
	shāng	shīāng
	chāng	chīāng
	jāng	jiāng

He begins the exercise by asking the following questions and he should receive approximately the following answers. A satisfactory conversation ought to be something like the following.

Teacher: Do you curl your tongue to the [r] position when you produce sh, ch, and j in column 1?

Students: Yes.

Teacher: Why?

Students: They are not followed by i.

Teacher: Do you flatten your tongue when you produce sh, ch, and j in column 2?

Students: Yes.

Teacher: Why?

Students: They are followed by i.

Then drills are conducted with retroflexion and palatalization as the center of focus, with words such as those given in example 4.

The teacher puts the following exercise on the blackboard.

Example 5:	Column 1 (Chinese)	Column 2 (Chinese)
	shāi	shīā
	chāi	chīā
	jāi	jiā

Teacher: Do you flatten your tongue when you produce sh, ch, and j in column 1?

Students: No.

Teacher: But they are followed by i.

Students: They are not immediately followed by i.

Teacher: What do you do to your tongue when you produce sh, ch, and j in column 2?

Students: Curl it back.

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Teacher: What do you do to your tongue when you produce sh, ch, and j in column 2?

Students: Flatten it.

Teacher: How do you know that you must flatten your tongue to produce sh, ch, and j in column 2?

Students: They are immediately followed by i.

While such exercises should enable any student to remember the distribution of any phonetic difference, however, the habit of slipping back into the patterns of one's native language is so great that, if in a constructed orthography such points can be avoided, they ought to be avoided.

A constructed orthography in any language should emphasize this specific point: how practical can it be? If the purpose of the constructed orthography is to help students to record language, then what is easiest for the students ought to be the criterion. Points at which students are going to make predictable errors ought certainly to be avoided. In Mandarin Chinese, if the system used in the constructed orthography gives too much trouble to the students due to many rules and regulations concerning spelling, then perhaps it would be just as profitable, if not more so, for them to learn the Chinese ideographs directly. In this way, at least, whatever the students suffer through is a direct instrument toward the future understanding of the culture of the people whose language they are learning to speak. For under any circumstance, constructed orthography is only a stepping stone. However, no good language teacher who has had up-to-date practical linguistic training would approve of learning to speak Chinese and learning to read it at the same time. If the purpose of constructed orthography in Chinese is to eliminate the problems involved in learning to speak and to read at the same time, it seems best to make the instrument of recording sounds easy for the students even at the sacrifice of strict phonemic representations.

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