Problems and Methods in Chinese Linguistics

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PROBLEMS AND METHODS IN CHINESE LINGUISTICS

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I feel greatly honoured to have been invited to deliver the 24th George Ernest Morrison Lecture in Ethnology, which marks the thirtieth anniversary of the foundation of this memorial.

Unlike many of the previous Morrison lecturers I never met Dr Morrison. Through his writings I have gained the impression of a remarkable man, a man of two countries — Australia and China — who, without losing his own identity, was able to learn to understand and love a people and a culture vastly different from his own.

Through his writings on various aspects of life in China which bear the impress of true tolerance and understanding, Dr Morrison gained China much sympathy and many friends. In this way he reciprocated the generosity and the kindness of the Chinese people who — in his own words — 'deal gently with strangers from afar'.

When I first read Dr Morrison's writings I was greatly impressed by his absolute acceptance of the Chinese social conventions. Many of these conventions have been the subject of popularized descriptions in the western world. But the greatest of them all — the Chinese language — is rarely described and analysed outside the lecture rooms of universities.

It is with a certain diffidence that I now proceed to lecture on Problems and Methods in Chinese Linguistics. Linguistics is not a popular subject;
this is no doubt partly due to the lack of instruction in this important discipline in secondary schools and in many universities both in this country and overseas.

One of the aims of general linguistics is to describe individual languages in terms of their own structures. The procedures which form the basis of the descriptive technique are controlled by a theory of language. Any study, therefore, of the concrete manifestations of an individual language will draw on, and contribute to, our understanding of the general principles underlying this theory.

There is no one ready-made and universal theory of language to control the various procedures of analysis applied in general linguistics. But regardless of their differences all modern schools of linguistics define a language in more or less identical terms: a language is an organized system of arbitrary vocal symbols by which members of a community co-operate and interact; the elements of the system are defined by their mutual opposition, and by their functions relative to each other, and not by factors outside the system.

It is necessary to distinguish between the concrete manifestations of speech and the underlying abstract units of which the concrete manifestations are a reflection. This basic dichotomy between a concrete and an abstract level may be best described with reference to speech sounds and phonemes.

Utterances are made up of speech sounds. A speech sound can be described with reference to what it sounds like or in terms of how it is produced by the speaker. The accuracy of the description will obviously depend upon the training and the experience of the analyst. A phonetician who investigates the phonetics of a Northern Mandarin dialect may describe the initial consonant in [pà] 'father' as a voiceless and unaspirated bilabial stop. He may add a note to his description, stating that this consonant sounds like, or is the same as the bilabial initial consonant in French [pəʁ] 'father'. Any two sounds which may be identically described in terms of phonetics are said to be instances of the same speech sound.

The eminent Swiss linguist Ferdinand de Saussure (1857-1913) once said: 'Ce qui importe dans le mot, ce n'est pas le son lui-même, mais les différences phoniques qui permettent de distinguer ce mot de tous les autres, car ce sont elles qui portent la signification.'\(^1\) The significant sound system of a given language is therefore not merely a set of speech sounds; it is an organized system of patterns, a network of differences between sounds. While it is possible to define a speech sound more or less precisely in terms of articulatory or acoustic phonetics, the elements of a given phonological system or network cannot be defined positively in terms of what they are, but only

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\(^1\) Ferdinand de Saussure, *Cours de linguistique générale*, quatrième édition, Payot, Paris, 1949, p. 163.
negatively, in terms of what they are not, in terms of their mutual contrasts. These phonological elements are termed phonemes.

A phoneme may therefore be defined as ‘an element in the sound system of a language having a characteristic set of inter-relationships with each of the other elements in that system’. 2

The technique for establishing the number of phonemes and the nature of their inter-relationships consists in arranging the utterances of the language in minimally contrasting sets, such as pin, bin, tin, din, chin, gin, kin, fin, thin, sin, shin, Lynn, win, in. The sound contrast between any of these forms and any other form included in the same set is paralleled by a difference in meaning. In other words, two utterances are phonemically distinct only if they differ in meaning.

It is obviously not necessary to define the meaning of these forms in any great detail. What matters to the analyst is that each of these forms differs in meaning from any of the others. Since the element /p/ differs from all other elements in the set, a speaker pronounces it in such a way that it cannot be mistaken for any of the other elements in the set. This does not mean that the same English speaker always pronounces his initial /p/ in exactly the same manner. A phonetician who studies a number of repetitions of the form /pin/ will detect considerable variations with regard to the amount of breath used in the production of the element /p/. The phonetician will therefore find that no two utterances are phonetically exactly alike. However, variations occurring in the same linguistic form are non-distinctive; that is, they are not paralleled by a difference in meaning and are therefore not essential to communication. These considerations have led to the fundamental assumption that ‘in every speech-community some utterances are alike in form and meaning’. 3

An analysis of the linguistic forms of English will reveal p-sounds occurring in positions other than at the beginning of a syllable, as in Spain, apple, top. Since we find no instance of pairs where any of these p-sounds stands in minimal contrast to another p-sound we classify these sounds as members of the phoneme /p/. The purely phonetic and non-distinctive difference between the aspirated p in pain and the unaspirated p in Spain is not phonemically relevant.

What in one language is a non-distinctive sound feature may in another language appear as a distinctive, that is, phonemic, feature. In all Chinese Mandarin dialects we find a phonemic contrast between a voiceless and aspirated bilabial stop — as in /phə/ ‘to be afraid’ — and its unaspirated

counterpart, as in /pə/ 'father'. In terms of phonetics this contrast is similar to the difference between the two p-sounds in pain and Spain. The reason why most native speakers of English experience difficulties in pronouncing the Chinese phonemic contrast correctly lies simply in the fact that in their own language this same phonetic distinction is non-phonemic and never by itself marks a difference in meaning. When a German speaker fails to uphold the distinction between the two forms German and chairman this is again due to the different phonemic patterning of the two languages.

A Chinese syllable has three constituents: the initial, the final and the tone, the latter being a pitch contour superimposed on the voiced part of the syllable.

In Northern Mandarin we find a set of initial consonants — [ts ts’ s], with a pronunciation similar to that of the initial consonants in English gin, chin and shin respectively — occurring only before the vowels [i] and [ii]. The same dialect possesses the dental initials [ts ts’ s], the supradental initials [ts ts’ s] and the velar initials [k k’ x], all of which occur only before vowels other than [i] and [ii]. This complementary distribution makes it possible to treat the first set of initials — [ts ts’ s] — as belonging to the same phonemes as any of the other three sets.

This fact brings out the important principle of the non-uniqueness of phonemic solutions. The linguist who investigates a given language has to identify its irreducible elements and their relational occurrence and to make ordered statements that express these facts. When several systems of statements are equally valid the investigator’s choice is an arbitrary one.4

In another Mandarin dialect, that of Chengtu in Western China, we find a palatal nasal, [ɲ], occurring in complementary distribution with the velar nasal [ŋ]. In this dialect the better proportional distribution between the palatal series, [ts ts’ s ɲ], and the velar series, [k k’ x ɲ], must be taken into account, and we therefore choose to treat the initials in [ka] and [tsi] as members of one phoneme, /k/.

In a sub-dialect spoken in a small town not far from Chengtu the phonemic system at first appears identical with that of the Chengtu dialect. A thorough search for minimal contrasts revealed the pair [ki] : [tɕi]; this one contrast shows that the phonemic structuring of this dialect differs from that of the Chengtu dialect, since [k] and [ts] in this dialect are phonemically distinctive.

Chinese is often described as a monosyllabic language. In order to qualify this statement we need to consider briefly certain general procedures for the description of grammatical systems. The aim of a description of a grammatical system is to identify the elements on levels of varying complexity.

and to furnish exhaustive and non-contradictory statements of the distribution of these elements relative to each other. There are two main types of procedures that can be used for the description of a grammatical system:

(i) the analytic procedure where the analyst starts from the highest unit — a complex utterance — and via a series of dichotomous divisions arrives at a level where the resultant constituents cannot be further analysed into smaller meaningful units. These smallest meaningful units of expression are the morphemes of the utterance;

(ii) the synthetic procedure where the linguist begins with the minimal elements — the morphemes — and then enquires into the distribution of elements on levels of increasing complexity.

The distinction between the two procedures — the analytic and the synthetic — is not always a clear-cut one. Indeed, a recently developed technique of transformational analysis does not appear to recognize this distinction. It may also be argued that the prototype of the analytic procedure — Constituent Analysis — a method which at present is dominant in American linguistics, also partakes of the synthetic approach, since in it the higher level units are divided into and defined by their immediate constituents.

Common to both the analytic and the synthetic procedure is the recognition of the morpheme as the minimal meaningful unit of expression. We may now return to the statement concerning the monosyllabic nature of the Chinese language. Practically all Chinese morphemes are monosyllabic. It is necessary to draw a clear line of distinction between free and bound morphemes. A morpheme which may constitute an utterance is free; a morpheme which is not free is bound. A free morpheme is a word.

The statement with regard to the monosyllabism of Chinese will, in the light of these definitions, have to be interpreted as follows: that there is a high rate of coincidence in Chinese between monosyllabic morphemes and words.

Because of the rather simple phonemic structure of the Mandarin dialects the number of distinctive syllables is relatively small. If we do not take the tonal contrasts of Northern Mandarin into account we find a total of less than 450 distinct syllables in that dialect. Even when we make allowance for the tonal contrasts created by the four tone categories of the dialect, the total number of distinctive syllables does not exceed 1300.

We shall see later that the simple phonemic structure of Northern Mandarin is the result of a long process of phonetic nivellation. This process has led to a considerable increase of homophones, that is, of morphemes that have the same sound as other morphemes in the same language.

The increase of homophones may be illustrated by the pathetic story
telling of the poet Shih who lived in a stone house and had an irrepressible craving for lion’s meat:

石室詩士施氏，嗜獅，誓食十獅。氏時時適市覓獅。十時，適十獅適市。是時，適施氏適市。氏視是十獅，恃矢勢，使是十獅逝逝。氏拾是十獅屍，適石室。石室濕，氏使侍拭石室。石室拭，氏始試食是十獅屍。食時，始識是十獅屍，實十石獅屍。試釋是事。

A poet by the name of Shih, who lived in a stone house, liked lions and swore that he would eat ten lions. He often went to the market to see the lions. One day, at ten o’clock, it happened that the ten lions came to the market and that Mr. Shih also went to the market. Mr. Shih looked at the ten lions and relying on the strength of his arrows he took the lives of the lions. Mr. Shih picked up the bodies of the ten lions and went to his stone house. The stone house was wet, so he made his servants sweep the house. Not until the house was swept did he have a go at eating the ten lions. It wasn’t until he ate the lions that he realized that the ten lions were in fact ten stone lions. Try to explain this matter.5

This dramatic tale of a frustrated glutton is dressed in a somewhat poor phonetic garb; the entire story is made up of 33 different morphemes differing only in tone: shih1 (level tone); shih2 (rising tone); shih3 (falling-rising tone) and shih4 (falling tone). I should add that the story is not typical of Chinese prose literature.

A great deal can be learnt from this story. By tabulating the reconstructed shapes of these 33 morphemes in earlier phonological stages of the Chinese language we are able fully to appreciate the tremendous growth of homophones in the modern dialect.

<table>
<thead>
<tr>
<th>800 B.C.</th>
<th>A.D. 600</th>
<th>Now</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) 詩 ‘poetry’ F</td>
<td>šjæg</td>
<td>ši</td>
</tr>
<tr>
<td>(2) 屍 ‘dead body’ F</td>
<td>šjar</td>
<td>šiè</td>
</tr>
<tr>
<td>(3) 施 ‘surname’ B</td>
<td>šia</td>
<td>šiè</td>
</tr>
<tr>
<td>(4) 獅 ‘lion’ B</td>
<td>šjar</td>
<td>ši</td>
</tr>
<tr>
<td>(5) 湼 ‘wet’ F</td>
<td>šjæp</td>
<td>šjæp</td>
</tr>
</tbody>
</table>

(Continued on page 7)

5 This story first appeared in a Letter to the Editor of the Kuang-ming Daily (August, 1957) and was subsequently published by the author, Yuan Ren Chao, in his 語言問題 Yu-yen wen-t’i (College of Liberal Arts, National Taiwan University, 1959), p. 143.
Homophones are found, to a varying extent, in all languages. We have seen that homophones may arise from changes in the phonemic structure of the language. The English language provides an excellent illustration of this process. We know that the phonemic distinction between the Middle English vowels [e:] and [ɛ:] disappeared already in Elizabethan times, and that therefore an earlier [be:ә] 'beet' and [bɛ:ә] 'beat' came to be pronounced alike, as Elizabethan English [be:t] and present English [bijt]. This phonemic restructuring was partly responsible for a great increase of homophones. In a number of instances, such as bean:been, beet:beat, flea: flee, heel:heal, leek:leak, meat:meet, reed:read, sea:see, seam:seem, steel:
steal, dear:dear, week:weak, these homophones belong to different parts of speech and no genuine ambiguity is therefore likely to arise from this homophone.

In other cases, however, we find that the homophones so created belong to the same part of speech, as in the following pairs: beach:beech, breach: breech, mead:meed, peace:piece, peal:peel, queen:queen, seal:seel, wheal: wheel. Here we are bound to see a causal relation between the creation of these pairs of homophones and the falling into obsolescence of such morphemes as breech, meed, queen and wheal. In other words, any language has the means of countering an uncomfortably heavy increase of potentially ambiguous forms.

In Chinese the growth of homophones has not been accompanied by an increase of potentially ambiguous forms. I have already referred to the fundamental distinction between free and bound morphemes. We find that the majority of the shih morphemes which I have listed above are bound forms. Since a bound form cannot in itself constitute an utterance it must be linked to another or to other forms. In Chinese the morphological processes involved in this linkage are affixation and compounding.

The Chinese language possesses a small number of suffixes which occur with great frequency. A few of the morphemes included in our list occur as underlying forms in expressions containing such suffixes. Examples are shih¹-tzu 'lion' and shih²-t'sou 'stone' containing the noun suffixes -tzu and -sou respectively. Other bound forms in our morpheme list occur as members of compound expressions, such as shih²-hou 'time'; hsiao³-shih³ 'hour'; shih²-tsai⁴ 'really'; shih²-shih⁴ 'fact'; k'ai¹-shih³ 'begin' and shih³-chung⁴ 'from beginning to end'.

Of all the words in the vocabulary of Northern Mandarin which contain the phoneme sequences shih¹, shih², shih³ or shih⁴ we find only a few cases of homophony, such as shih¹-tzu which means either 'lion' or 'louse', and shih⁴ 'yes, that's right', and 'try'.

The fact that two or more morphemes have identical phonemic shape rarely gives rise to genuine ambiguity. We do find instances, however, of what might be referred to as structural ambiguity, occasioned by the fact that a given morpheme sequence may be analysed in more than one way on a given level.

In Northern Mandarin one and the same stretch of morphemes may be translated into English either as 'he took part in the presidential elections last year' or 'he was elected president last year'. This type of ambiguity is in Chinese caused by the functional variability of forms, which term can be best explained as the ability of a given form to perform syntactically different functions. It is this functional variability which enables an Englishman to
sugar his tea, a caravan to sleep five, and a prize-fighter to floor his opponent.

I cannot here discuss the implications of this type of ambiguity on the technique of linguistic description. It appears that structural ambiguity, or, rather, ambiguity due to structural homonymity, can be best solved by the transformational approach to which I have referred briefly above.

We know that the sounds of a language change over time and that therefore modern English sounds differently from Elizabethan English and Middle English. There are two types of sound change: (i) sound change which merely alters the acoustic shape of the phonemes without disturbing the phonemic structure of the language, a type which is obviously of little interest to the student of structural linguistics; and (ii) sound change which affects the phonemic structure of the language.

We have seen how two phonemes — [e:] and [ɛː] — have coalesced in modern English. This phonemic change was part of a sound change known as the ‘great vowel shift’, and it may be phonetically described as a gradual raising of the tongue position and eventual diphthongization of certain long vowels of Middle English. But for the coalescence of the phonemes /eː/ and /ɛː/ this vowel shift would have had little effect on the phonemic patterning of English. When we remember, however, that a phoneme is a point of reference in an organized system of contrasts, it follows that any change in any part of the system will affect the structural weight of all members of the same system.

The most impressive feature of sound change is its regularity: sound change affects all occurrences of a given sound in a particular context at a given time. The linguist is not concerned with the ultimate cause of sound change; the cause, whatever its nature, lies outside the field of linguistics. The task of the linguist is to describe the process of the change and its effect on the phonemic structuring of the language. The formulation of the process of change is normally referred to by the rather inappropriate term ‘phonetic law’.

It is thanks to the regularity of sound change that historical linguistics has achieved its remarkable degree of exactness.

Comparative linguistics is a tool in the field of linguistic archaeology. The techniques of this discipline may be applied to a comparative study of languages which are known to be, or believed to be, related; and the ultimate result is a tentative reconstruction of the sound system of an earlier language from which the languages under study are derived.

Four main sources have been used for the reconstruction of the earlier stage of the Chinese language known as Ancient Chinese (A.D. 600):

(i) a rime dictionary — the Ch’ieh-yün — published in the year 601 of our era;
(ii) tabulations — in the form of complete syllabaries — devised as a
guide to the Ch'ieh-yün dictionary, and dating from the second half
of the eleventh century;

(iii) the phonetic shapes of such morphemes as were borrowed into
Korean and Japanese in the sixth and seventh centuries, and into
Annamese in the ninth century of our era;

(iv) the phonetic shapes of the morphemes in the Chinese dialects as
spoken today.

After its publication in A.D. 601, the Ch'ieh-yün dictionary was republished
in a number of enlarged editions, one of which was the Kuang-yün of the
early eleventh century. When western scholars first entered the field of
Chinese historical phonetics they took as their point of departure the phono­
logical distinctions codified in the Kuang-yün; earlier rime dictionaries were
considered long lost, and fragments of copies of the original Ch'ieh-yün
have only come to light in relatively recent times. In 1947, however, a
complete manuscript copy of an early critical edition of the Ch'ieh-yün was
found in Peking.

The wonderful story of the recovery of this long lost manuscript falls
outside the scope of my lecture, but since it is one of the most important
events in Chinese bibliography I have to make a short excursion at this point.

In the year 706, that is, 105 years after the publication of the Ch'ieh-yün
dictionary, a scholar-official, named Wang Jen-hsü, published a critical
edition of it. In the first half of the ninth century, this work — and other
rime dictionaries — were copied out by a woman — Wu Ts'ai-luan — who
was famous for her calligraphy. In the early twelfth century her copy of
Wang Jen-hsü's Ch'ieh-yün was acquired by Emperor Hui-tsung (1101-1126),
who was himself a calligrapher and a painter, and who was greatly impressed
by Wu Ts'ai-luan's calligraphy. From the time of Hui-tsung the manuscript
remained in the Imperial Library until 1912, when the private Imperial
collection was removed to Tientsin where the young ex-Emperor, P'u-yi,
had taken up his residence. When P'u-yi was brought by the Japanese to be
Regent of Manchoukuo in 1932, this library followed him to his new capital,
Ch'angch'un, in Manchuria. After the Japanese capitulation in 1945 the
manuscript 'fell into the hands' of a second-hand book-dealer in Ch'angch'un.
Two years later — in 1947 — it turned up in the book-market in Liu-li-ch'ang
in Peking, where it was found by two Chinese scholars. In the same year a
photographic edition of 200 copies was published by the Palace Museum
in Peking.6

6 For a detailed description of this work see Wang Lien-tseng, Un dictionnaire phono­
logique des T'ang, T'oung Pao 45 (1957) pp. 51-150.
— the factor which conditioned the split of X into /p/ and /ph/ — cannot have been a difference in segmental structure, since the segmental distribution of X is the same in both cases. In this particular instance the differentiating factor was a tonal one: /ph/ is found in morphemes which in Ancient Chinese were accompanied by the level tone, while /p/ is found in morphemes accompanied by tones other than the level tone.

Through a comparison of phonetic data gathered from various modern dialects it has thus been possible to replace the X's, Y's and Z's of the Ch'ieh-yin formulae with phonetic values.

According to a generally accepted definition a dialect is 'a form of speech which does not differ sufficiently from another form of speech to be unintelligible to the speakers of the latter'.

It should be noted that if the criterion of mutual intelligibility were applied, we would have to classify many of the Chinese dialects as languages, and not as dialects.

We know from literary sources that mutually unintelligible dialects existed in China in pre-Christian times. We also know that a given dialect may spread at the expense of other dialects as the result of the political dominance or economic or cultural supremacy of the speakers of that dialect. This is what happened to the Attic dialect which grew in influence, and eventually, in the Hellenistic period, became the standard speech of all Greece. The same process is under way in China today, where the Common Language — the Northern Mandarin — is being propagated all over the country. The spread of the knowledge of this dialect is indeed a prerequisite to the introduction of a romanized script, and this process is therefore being accelerated by the Peking government.

While it is a generally accepted view that the Ch'ieh-yin language was a koinê — a common language — opinions differ as to the original location of the dialect underlying this koinê. Karlgren believes that it was the dialect of the then capital, Ch'angan, the present Sian in Shensi; and other scholars have suggested that it was the dialect of the lower Yangtzu valley.

Some scholars have suggested that the Ch'ieh-yin dictionary incorporates many dialect forms and also contains remnants of earlier phonological stages. Karlgren argues convincingly that since nearly all the modern dialects may be individually derived from the Ch'ieh-yin system, this latter must represent a homogeneous language.

Thanks to the penetrating research undertaken by Chinese and western scholars we now have a fair knowledge of the phonological properties of a much earlier stage of the Chinese language known as Archaic Chinese and

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dating back to approximately 800 B.C. Two main sources were used for the reconstruction of Archaic Chinese:

(i) the rime categories in the Book of Poetry, one of the oldest of the Chinese Classics; and

(ii) the phonetic indications obtaining in the Chinese script.

Chinese philologists early realized that the phonetic categories as revealed by the riming in the Book of Poetry differed greatly from those which they found codified in the Ch’ieh-yin dictionary. In the last four hundred years Chinese scholars have achieved impressive results within this field. By identifying the rime words and by classifying them into a number of rime categories, these scholars laid the foundations on which modern western scholars have based their reconstruction of Archaic Chinese.

I shall now give a few examples of rimes in order to demonstrate the technique of the reconstruction. In one of the poems in the Book of Poetry we find the following rime sequence (the reconstructed forms are those of Ancient Chinese):

(1) 軸 d’juk; (2) 陶 d’au; (3) 抽 t’jau; (4) 好 xâu;

The presence of a final velar stop in (1) d’juk is evidenced by the reflexes of this morpheme in Sino-Korean, Sino-Japanese, and Annamese, and in a number of southern and southeastern Chinese dialects such as Cantonese, Hakka, and Swatow. Comparative data from other languages belonging to the Sinitic language family, such as Tibetan, show that this final consonant probably obtained in Primitive Sinitic, which stands in the same relation to Chinese, Tibetan, and Tai as Primitive Indo-European stands to its continuants among modern languages.

Since these four forms rime in the poetry of 800 B.C. we must expect them to have been more similar, at that time, than their Ancient Chinese projections seem to indicate. Again, when we compare (1) and (3) we find that both characters have one graphic element — the right-hand element — in common. This common element is referred to as the phonetic or sound-indicator. Characters which share one phonetic are said to belong to the same phonetic series. An example of a phonetic series is:

(1) 由 兼 ‘to follow’; (2) 柚 兼 ‘citrus’; (3) 油 兼 ‘to flow’; (4) 抽 t’jau ‘to pull’; (5) 袖 兼 ‘sleeve’; (6) 軸 d’juk ‘wheel-axle’.

The element which is not the phonetic — the left-hand element in this series — is the radical, or meaning-indicator. The ‘meanings’ of the radicals in this series are (2) ‘tree’; (3) ‘water’; (4) ‘hand’; (5) ‘dress’, and (6) ‘chariot’.

How are we to explain the fact that words which in Ancient Chinese ended in a u- sound in Archaic Chinese poetry rime with words ending in a stop
consonant? Or again, how are we to explain that an Ancient Chinese jy to serves to indicate the pronunciation of Ancient Chinese **d’jük**? The answers to these questions have been given by Karlgren who reconstructed a voiced velar stop — **g** — to account for rimes and phonetic series of this type. The Archaic Chinese values of the six morphemes listed above are then as follows: (1), (2) and (3) **djog**; (4) **t’jog**; (5) **dzjog** and (6) **d’jök**.

It should be noted here that while both rimes and phonetic compounds, that is, combinations of a radical and a phonetic element, have been used as criteria for the reconstruction of the Archaic Chinese finals, the reconstruction of the initial consonants has been based entirely on the evidence of the phonetic compounds. On the whole, our knowledge of the initial consonants of Archaic Chinese is less reliable than our knowledge of the finals.

While comparative linguistics is normally associated with the historical study of languages, it is obviously possible to use the comparative method as a purely descriptive technique. Already in the nineteenth century attempts were made to classify languages into types, and to place them in pigeonholes labelled analytic, synthetic and polysynthetic, etc. This classification involved difficulties of various kinds. One major difficulty concerned the choice of a basis for the comparison. Should the student apply his analysis to the phonological, the morphological or the syntactical system, or to all of them? Another obstacle to progress in this field lay in the tendency of earlier scholars to apply preconceived values to their analysis based on sentimental attachment to their own classical traditions. Often the structural differences between languages were obscured by the scholar’s insistence on stating the grammatical features of language in philosophical terms derived from Greek grammar.

On the whole, linguists have paid less attention to typological comparisons than to other branches of linguistics. The advances made in modern times are characterized by a tendency to introduce procedures of objective measurement into the comparisons. It would seem that the grammatical complexity of any given language — in terms of morphology (the processes of word formation) and syntax (the processes of sentence formation) — is about the same as that of any other language. In other words, the more complex the morphology, the simpler the syntax, and **vice versa**. This may be illustrated by a comparison between Chinese and Latin.

Chinese is normally chosen as a typical representative of the *isolating* languages — an isolating language being one in which the word is essentially unanalysable; while Latin represents the type of the *inflective* language. There is an obvious causal relation between the rich inflective system and the free word order of Latin, and, similarly, the relative lack of morphological devices and strict word order of Chinese.
There are strong reasons to assume that the isolating nature of modern Chinese is the end result of a long historical process. In recent years it has been possible to establish a number of word families, each family comprising Archaic Chinese morphemes similar in shape and meaning. A few examples are given below:

- kian 'to see'
- kān 'to shield'
- kįwan 'to roll up'
- kiweng 'distant region'
- pįek 'ruler'
- 'āk 'bad'
- d'āk 'to measure'
- sjők 'to halt'

: g'ian
: g'ān
: g'įwan
: g'įweng
: b'įek
: 'āg
: d'āg
: sjőg

'to be visible';
'to shield';
curling hair';
'distant';
'to rule';
to find bad, to hate';
a measure';
'halting place'.

From correspondences such as these we deduce the existence, in an earlier stage of the Chinese language, of morphological processes which have long ceased to be productive. A Chinese speaker may be aware of the etymological relationship between words belonging to the same word family — especially since many of these cognate forms are represented by the same character — but he is unable to correlate the phonetic variations found within word families to particular grammatical functions.

At the present stage of research we can therefore only make the following generalization:

In a number of languages of an isolating nature — such as Chinese, and, to a lesser degree, English — sound change has brought about a disintegration of morphological features. As a result of this development, grammatical distinctions which were originally expressed morphologically, that is, within the framework of a single word, have had to be expressed syntactically, by analytical means.

The question of the pre-Archaic nature of the Chinese language will have to be considered in the light of such knowledge as may in the future be gained through comparative studies of the languages which are supposed to belong to the Sinitic language family, such as Tibetan, Burmese, and Tai.

In conclusion I would like to point out some of the factors which make Chinese linguistics a highly rewarding field for the general linguist:

(i) With the present rapid spread of the Common Language, students of linguistics have a unique opportunity to observe the effect of this process on the multitude of local dialects;

(ii) The introduction of a romanized script will eventually have a marked effect on the morphology of the Chinese language. Here, the student
of linguistics will be able to observe the effect upon a living language of extra-linguistic factors;

(iii) The problems concerning the relation between the social and economic history of China and the development of the Chinese language constitute a highly rewarding field of study;

(iv) A more remote aim in the field of Chinese linguistics is the definite establishment and reconstruction of Primitive Sinitic. This, to my mind, constitutes one of the greatest challenges for future research workers in the field of Chinese linguistics.
The George Ernest Morrison Lecture was founded by Chinese residents in Australia and others in honour of the late Dr G. E. Morrison, a native of Geelong, Victoria, Australia.

The objects of the foundation of the lectureship were to honour for all time the memory of a great Australian who rendered valuable services to China, and to improve cultural relations between China and Australia. The foundation of the lectureship had the official support of the Chinese Consulate-General, and was due in particular to the efforts of Mr William Liu, merchant, of Sydney; Mr William Ah Ket, barrister, of Melbourne; Mr F. J. Quinlan and Sir Colin MacKenzie, of Canberra. From the time of its inception until 1948 the lecture was associated with the Australian Institute of Anatomy, but in the latter year the responsibility for the management of the lectureship was taken over by the Australian National University, and the lectures delivered since that date have been given under the auspices of the University.

The following lectures have been delivered:

Inaugural: Dr W. P. Chen (Consul-General for China in Australia), 'The Objects of the foundation of the Lectureship, and a review of Dr Morrison's Life in China', 10 May 1932.

Second: W. Ah Ket (Barrister at Law), 'Eastern Thought, with More Particular Reference to Confucius', 3 May 1933.

Third: J. S. MacDonald (Director, National Art Gallery, New South Wales), 'The History and Development of Chinese Art', 3 May 1934.

Fourth: Dr W. P. Chen (Consul-General for China in Australia), 'The New Culture Movement in China', 10 May 1935.

Fifth: Dr Wu Lien-tah (Director, National Quarantine Service, China), 'Reminiscences of George E. Morrison; and Chinese Abroad', 2 September 1936.

Sixth: Dr Chun-jien Pae (Consul-General for the Republic of China), 'China Today: With Special Reference to Higher Education', 4 May 1937.

Seventh: A. F. Barker (Professor of Textile Industries, Chiao-Tung University, Shanghai, China), 'The Impact of Western Industrialism on China', 17 May 1938.

Eighth: Professor S. H. Roberts (Vice-Chancellor of the University of Sydney), 'The Gifts of the Old China to the New', 5 June 1939.

Ninth: His Grace the Archbishop of Sydney, Howard Mowll, 'West China as Seen through the Eyes of the Westerner', 29 May 1940.

Tenth: Dr W. G. Goddard (President of the China Society of Australia), 'The Ming Shen. A Study in Chinese Democracy', 5 June 1941.


Fifteenth: LORD LINDSAY OF BIRKER (Department of International Affairs, The Australian National University), ‘China and the West’, 20 October 1953.


Seventeenth: H. BIELENSTEIN (Professor of Oriental Studies, Canberra University College), ‘Emperor Kuang-Wu (A.D. 25-57) and the Northern Barbarians’, 2 November 1955.


Nineteenth: OTTO P. N. BERKELBACH VAN DER SPRENKEL (Senior Lecturer in Oriental Civilization, Canberra University College), ‘The Chinese Civil Service’, 4 November 1957.


Twenty-third: L. CARRINGTON GOODRICH (Dean Lung Professor Emeritus of Chinese, Columbia University), ‘China’s Contacts with Other Parts of Asia in Ancient Times’, 1 August 1961.


A number of Morrison Lectures are still in print. Details of these are available from the Information Section, The Australian National University, G.P.O. Box 4, Canberra, A.C.T., Australia.