

Trindex

三字典引得

Introduction

Extraordinary difficulties in filing and indexing in ideographic languages have, until recent years, constituted a chief drawback of ideograms. It has doubtless been assumed by most persons that this objectionable feature was inherent in the nature of non-alphabetic symbols. Some scholars today, however, not only believe that the problem has been obviated for the Chinese language but also are actually confident that the relative facility of filing and indexing systems in ideographic and alphabetic languages may ere long be reversed. They believe, in other words, that some system for filing and indexing will be perfected and generally adopted for the Chinese language which will be much more convenient, usable and speedy than any methods now used in the romanized languages.

The conventional system of indexing in Chinese, based upon radicals and numbers of strokes, is obviously cumbersome. Efforts to devise a thoroughly satisfactory means seem increasingly intensive during the past decade, and continue unabated. Seventy-two different comprehensive schemes have

Trindex

been proposed thus far. Most of them are considered impracticable for all-round purposes. Results have already been secured with others which seem to the writer to justify an assurance that we shall all be able to use before long a method at least comparable in its facility to those available in romanized languages. The general acceptance of a thoroughly practicable system for filing and indexing would be of incalculable benefit to China, especially to sinological students, to libraries and to other institutions of all kinds.

Many of the proposed systems provide methods by which Chinese characters can be converted into arabic numerals. Those who desire to study the general problem will find a discussion thereof in Chinese in Supplement No. 4 "On Indexing" issued by the Harvard-Yenching Institute Sinological Index Series. This booklet, as long as the supply lasts, may be obtained on application to the editor, Prof. William Hung, Yenching University, Peiping. Mr. Hung, who is editor-in-chief and director of the Institute's indexing work, presents in that brochure a system which is being worked out by him and his associates based upon their study of the other systems proposed. They call it 中國字度類, *Chung Kuo*

Introduction

Tzu Kuei Hsieh, which may be translated "the filing of Chinese characters." The compiler is obviously not competent to pass judgment upon the relative merits of the various systems. He has been eager for a long time to possess an index to Chinese characters arranged according to one of the numerical-conversion schemes and was therefore delighted when the production of such an index became feasible through the willingness of the Harvard-Yenching Institute Sinological Index Series to supply the copy for the body of the book from the master check-cards in their *Kuei Hsieh* files. Mr. Hung and his associate editors gave their advice, suggestions and aid so generously in the prolonged working out of the technical details of **TRINDEX** as almost to constitute collaboration. Without such assistance this book in its present form would not have been possible. I am also most grateful for a substantial advance grant-in-aid toward the costs of publication provided by the Peiping Office of the Harvard-Yenching Institute. The unusually arduous task of proofing such material was done by Mr. Li Shu-ch'un, one of the editors of the Index Series and manager of the Index Press.

Beyond the necessary oversight of the pro-

Trindex

ject as a whole, my personal contribution to TRINDEX therefore is confined to the sections in English and to the preparation of the copy for various charts and tables. In all work which involved translation I had the continuous assistance of my language teacher, Mr. Ho I-min (赫逸民先生). I was helped greatly by criticisms of the English manuscript made by Dr. Lucius C. Porter, Dr. Knight Biggerstaff, Dr. Arthur W. Hummel, and other friends. By reason of modest objections from a certain influential quarter, I am estopped from making one grateful acknowledgment which is usually found in the prefaces of married authors. My two children, both in their early teens, provided very helpful "laboratory controls" in testing the clarity of my explanations of the numerical conversion process. The elder with only limited practice at infrequent intervals and despite the fact that she has a ready command of very few characters can now use the *Kuei Hsieh* system with remarkable speed and accuracy. This demonstration greatly increases my confidence in the practical utility of the scheme.

The editors of the Harvard-Yenching Institute Sinological Index Series wish me to state

Introduction

that the *Kuei Hsieh* system of numerical conversion is still in an experimental stage. They therefore earnestly seek and will cordially welcome criticisms and suggestions. One of their principal technical concerns has been the avoiding of duplications due to the producing of an extraordinary number of zeros, because blobs (點) appear frequently at corners and since a general rule of their system calls for its appropriate digit and zero whenever one of the combinations shown in Table II forms alone one division of a character. Their giving of the digits 42, instead of 40 to 𠄎 arose from this effort to avoid zeros wherever possible. It is the only case I have found which could not be shown to my satisfaction to be compatible with their general rules. The editors have agreed that it should be treated at present as an exception and it will doubtless be changed in a proposed revision of the scheme to be made in the near future. In preparation for this projected general revision, the editors will welcome further questionings, objections, criticisms and suggestions. These may be addressed to the compiler or to Prof. William Hung, Yenching University, Peiping.

While I disclaim competence to discriminate

Trindex

among the many proposals, I do feel assured as to the practicality of the basic idea. There seems to me to be solid grounds for believing that some system which uses a method of converting Chinese characters into numerals will be universally adopted in China in the not-too-distant future. This confidence is not at all shaken by the generally contemptuous and indifferent attitude of so many sinologists toward efforts to create such a system. Persons most intimately concerned often blindly obstruct progress in their own fields. Dr. Charles W. Eliot declared that the chief opposition to his efforts to build up real schools of law and medicine at Harvard came from lawyers and doctors respectively.

Dr. Arthur W. Hummel, in an introduction to his translation of the autobiographical preface of Mr. Ku Chieh-kang, remarks in passing that sinologists in general have the same attitude toward labor-saving devices in their field that Western scholars have traditionally held toward the use of so-called "cribs" and "ponies" (translations) in the study of classical literatures. From the context it is apparent that Doctor Hummel does not share this unfavorable opinion of new methods in sinology. The circumstances are not parallel. While transla-

Introduction

tions must of necessity deal imperfectly with the essential nature of classics, a system of indexing and filing is concerned only with the mechanical considerations of obtaining greater facility in the use of references. The original sources remain the same whether discovered by means of the radical-stroke method or by numerical-conversion systems. One wonders whether some sinologists are not unconsciously the victims of a kind of "trades union" complex. They will undoubtedly have a much less exclusive profession when the Chinese classics have been completely indexed and have been rendered thoroughly accessible to all students. Abundant time, prodigious labor, and an exceptional memory are required in sinological studies under present conditions; they will be far less vital factors in the future.

The impracticability of the old radical-stroke method for indexing and filing seems to the writer to be indicated by the following facts: (1) the Chinese classics are devoid of indexes, (2) an individual Chinese book with an index is still so rare as to be an oddity, (3) many Chinese vernacular libraries must depend largely upon staff memories as to the location of material in their stacks, (4) large libraries and business houses, in

Trindex

many cases, maintain a card-catalogue in romanization for all books and files which are in the Chinese language. It is my belief that all these handicaps to learning and to efficiency will be removed by the universal adoption of some method of transposing Chinese characters into arabic numerals by a swift scrutiny of their general designs.

None can say which system of numerical conversion will win popular favor. One method has far wider use at present than any other and has the added advantage of being used by China's largest publishing house. The *Kuei Hsieh* system has certain other enormous advantages, however, which should become more and more apparent in the future. Among these may be mentioned the following:

(1) It is highly desirable that there be only one character to each number in an index. The most distinctive feature of the *Kuei Hsieh* is its close approximation to this major desideratum—much nearer than any other system, especially when all the 47,000 characters of *K'ang Hsi* have been indexed. There is a lively hope that further modifications in the scheme will bring an approach to perfection by obtaining one character only to virtually all numbers. It is doubtful if any

Introduction

feasible scheme could ever produce a different numeral for 士 and 士, for example, or for 未 and 未.

(2) More than a hundred standard Chinese literary and historical works have already been indexed by the editors of the Harvard-Yenching Institute Sinological Index Series, and the indexes have been published. This service to sinological scholarship will be continuously enlarged. Each index itself is being indexed in three ways. An alphabetical index using Wade's romanization, the traditional Chinese method, and the new *Kuei Hsieh* numerical-conversion system are provided.

(3) Meanwhile, the necessary work upon a major undertaking is being carried forward steadily, and some years hence an index to all the characters in the *K'ang Hsi* dictionary will be published. Under every character in this index will be given virtually everything of reference value that could be desired concerning it. Among the outstanding features therein may be mentioned: references indicating character's location in the classic unabridged *K'ang Hsi Tzu Tien*; the rhyme-character under which it is found in the *P'ei Wen Yun Fu*; numerical and romanization references to Giles' and Karlgren's dictionaries which give all the varied

Trindex

ancient and modern pronunciations; the Japanese pronunciation of each character, together with numerical references to Japanese works which will make possible the ready use of the large number of valuable Japanese volumes on Chinese works without one's having to know the Japanese language.

Most of the work upon the material which is supplied in this index has already been completed, and is now being made available in this limited form for the 13,848 characters of Giles' Dictionary. The *Kuei Hsieh* system of indexing is the only method provided in this book. Giles' selection of characters has been chosen not only because his dictionary is standard for most Western students of Chinese but also because his list satisfactorily embraces the characters in common and frequent use by Chinese scholars. An S alone or after the number in the Giles column indicates that the character is used as a surname and is in Giles' list of surnames; an A indicates that the character is not found in the earlier editions of Giles but was included in the 1912 edition which was used in making this index. In the *P'ei Wen Yun Fu* column, only the rhyme-characters under which each character is found in that work are indicated. In Section VI of **TRINDEX** are found all the rhyme-

Introduction

characters listed in the numerical sequence of their *Kuei Hsieh* numerals. Under each rhyme-character in that table is given its tonal number, its ordinal number within that tone, and the number of the volume of the *P'ei Wen Yun Fu* in which it is found. The ordinal number is useful for reference because of the common use of these characters in telegraphing in lieu of numbers for dates, etc. In the *K'ang Hsi* column, the following is given for each character in order: the number of its radical, the division and section ("chapter and verse," as it were) in which it is found, as indicated by the appropriate serial characters; the number of strokes in character's radical, its radical's ideogram, and also the number of strokes in its phonetic. The total number of strokes in the entire character can be ascertained by adding the figures to be found on either side of the radical. For example:

"5/26560 秝 mo⁵ 115午下5禾5 曷 8005" is interpretable as follows: the correct Wade Romanization of 秝 is mo⁵. The number of its radical is 115. It is found in the 午下 section and sub-section of the *K'ang Hsi*; its radical has five strokes in it; its radical is 禾, and its phonetic has five strokes in it. It is found under the

Trindex

rhyme-character 曷 section in the *P'ei Wen Yun Fu*. It is character No. 8005 in Giles' Chinese-English dictionary.

It will be noted that the *ju sheng* (fifth tone) is indicated in the column giving romanizations and tones. This was necessary in order to make TRINDEX most useful to Chinese everywhere and to Western sinologists. The usage will cause no difficulty to other Westerners who consult Giles as they will follow the numbers indicated in the columns at the far right of each page anyway. Those using dictionaries which give only four tones are advised to look first for the character under the fourth tone of the proper romanization as most fifth tones become fourth tones in Peiping Mandarin. Thereafter, if the character is not found among fourth tones, consult dictionaries *backward* along the columns under the proper romanization as the percentage of probabilities are in the following order: fourth, third, second, and first. This process will be troublesome only in cases where there are large numbers of characters under one romanization. It will be noted that the fifth tone is usually found upon the less commonly used characters; the slight inconvenience for Westerners occasioned by its indication.

Introduction

will therefore be infrequently experienced.

TRINDEX will also be useful for consulting all dictionaries which are arranged in an alphabetical order according to some standard system of romanization. Those who use a system of romanization other than Wade's usually have found it desirable to secure, or to work out, a method of transposing readily from one system to the other, since Wade's system has come into most general use. A transliteration table from Wade to the French System is provided in TRINDEX since the latter is the chief other system now widely used.

My own interest in the question of filing and indexing with Chinese characters is both personal and professional. It is my conviction, growing out of my own experience and observation, that ordinary Western students of written Chinese use a teacher too largely as an oral dictionary. We will all do more reading alone in the Chinese language, I feel sure, when a method is available by which we can ascertain readily the meaning and usages of unfamiliar characters and phrases. There is of course much of value which is not easily gained from dictionaries, if obtainable at all. For such, one will rightly continue to depend upon the help of a competent teacher. But continuous

Trindex

attempts to learn chiefly by ear any material which must be used by the eye is not a trustworthy method. So far as I have been able to learn, no index which uses one of the systems of converting a character into a numeral has yet been issued with any of the widely used or common forms of romanization. I sincerely hope that this book will be specially helpful to those like myself whose study of the Chinese written language must be largely through the medium of dictionaries in romanized languages, whose linguistic studies are necessarily secondary to other activities and duties, and who earnestly desire to increase steadily their command of Chinese.

As a journalist and teacher of journalism, I am convinced that one of the primary needs of my profession everywhere is the maintenance of fully adequate reference libraries by all newspapers and other periodical publications, and the comprehensive filing by them of published materials for possible future use. Most of the better news and editorial staffs in the West now have access to adequate libraries and "morgues"; the situation in almost all vernacular newspaper offices in China is lamentable in this respect, due in large measure at least to the want of a thoroughly satisfactory

Introduction

system of filing and indexing. Hence arises my professional interest in the subject.

Efforts to work out a thoroughly satisfactory method for the numerical conversion of Chinese characters create a lively and confident hope that Chinese typewriters and typesetting machines will be entirely feasible, once near-perfection shall have been accomplished. Such machines will probably be able to make use of the selective-mechanism principle which is employed in automatic telephones. Their keyboards will need have only ten keys, one for each of the digits 0 to 9. When the proper total of keys has been struck, the machine will shift and turn a cylinder (or, more probably, a series of narrow wheels) until the desired type or mat is brought into place for typing or for casting. A cylinder with a surface of one square foot is large enough to contain 10,000 types or mats of the size most used in Chinese books and newspapers. Less than half that number is used with any frequency; a much smaller cylinder would therefore be practicable for ordinary uses, thus making for a cheaper and probably speedier machine. Even purely mechanical devices (i. e., without electrical mechanisms) may also prove feasible, and would doubtless be decidedly less

Trindex

expensive. Though any of these machines would probably be slower than alphabetic typewriters and type-setters, they would be a great improvement over hand composition in printing and over the almost illegible scrawls of most handwriting.

The numerals for each character in codes used in telegraphing would undoubtedly be changed to correspond with those of a numerical-conversion system which had won its way into general use. It would then be unnecessary to remember the numbers, or to consult any indexes, in coding characters into numerals. In this respect, however, it is imperative that there be only one character to each number since it is necessary to decode from numerals into characters when a message has been received. An arbitrary method of differentiation would still be required if a few numerical duplications could not be eliminated. Using the initial letter of a character's romanization in place of the sixth digit might be practicable. But one of the inventions for the transmission of facsimile material by wire and wireless will probably be installed by the Chinese Ministry of Communications many years before a numerical-conversion system for characters has been sufficiently perfected. China will welcome