ACCESSING CHINESE MATERIALS: SOME CONCEPTUAL ISSUES IN BIBLIOGRAPHIC CONTROL†

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ABSTRACT

Discussions of patron access to East Asian collections in general have recently centered around the issue of minority service programs in various types of American libraries. This paper addresses the same issue from the perspective of organization using Chinese material in one of the American regional library networks as an example. In this paper, the author attempts to address several questions including: What is meant by “Chinese materials?” Who are the users of Chinese material? What are their needs? How does the Chinese language present itself as a problem in bibliographic control? After having discussed the meaning of “Chinese materials” and their users and use, the author concentrates on three issues in bibliographic control: subject access, treatment of translations, and Chinese language processing.

INTRODUCTION

The phrase “multi-lingual collections in multi-cultural environment” sounds multi-dimensional. At minimum, it implies two primary user groups and related information needs: (1) English speaking people who need all relevant materials on non-Western Cultures printed in any language, and (2) non-English-speaking users who want the same materials. In other words, the fact that


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the materials are not written in English should never be an obstacle for library users who wish to obtain access to them. The issue of information access should stand above any language barrier constraint.

The idea that materials should be made available to all groups of users is the fundamental belief for the library and information science profession. We are reminded in the Library Bill of Rights of phrases such as “In no case should any book be excluded because of the race or nationality . . . .”, or “The rights of an individual to the use of a library should not be denied or abridged because of his race, religion, national origins . . . .”

Furthermore, standards and policies have been established with the intention that they be applicable regardless of languages and scripts of the materials. Rule 0.1 in the General Introduction of the Anglo-American Cataloguing Rules makes it clear that

“These rules are designed for use in the construction of catalogues and other lists in general libraries of all sizes . . . . The rules cover the description of, and the provision of access points for, all library materials commonly collected at the present time. The integrated structure of the text makes the general rules usable as a basis for cataloguing uncommonly collected materials of all kinds and library materials yet unknown.”

Even thought Rule 0.12 states that “The rules contain some instances in which a decision is made on the basis of language and in which English is preferred,” it suggests that “users of the rules who do not use English as their working language should replace the specified preference for English by a preference for their working language.” A global view of organization for all materials across geographical boundaries at all times in order to better facilitate user access is clearly the goal for our daily professional activities.

With this in mind, we must look back from time to time and ask ourselves how well we are doing our jobs to achieve this goal of multi-lingual collections for multi-cultural users. This is what I
would like to do today. Using "Chinese materials" as an example, I will take a close look at how we organize these sources for patron access.

What is meant by "Chinese materials?" Who are the users of Chinese materials? What are their needs? How does the language present itself as a problem in bibliographic control? These are questions we must ask before we attempt to evaluate our organizational process. I consider myself an organizer, and believe that satisfactory access must begin with adequate organization. Therefore, I will address these questions from an organizer's points of view. In this paper, I will begin with an attempt to define the term "Chinese materials" by grouping these materials into three categories. This will lead to the identification of users of Chinese materials and their associated information needs. Having identified the users and use of Chinese materials, I will concentrate on three organizational issues related to these materials and the Chinese language: (1) subject access, (2) treatment of translations, and (3) Chinese language processing. In the end, I would like to point out some questions I think worth asking, some more than once, with the hope that they may stimulate further thinking and future studies.

CHINESE MATERIALS

What are Chinese materials? When asked, most people would respond by saying "Chinese materials are materials written in Chinese." The word "Chinese" is considered a noun denoting the language that more than one billion of the world population use today. This, in fact, is a very narrow description. A much broader description I prefer to use here is that "Chinese materials are materials written in or translated from or into, on or about Chinese." The word "Chinese" denotes not only the written and spoken language, but also the culture and the people. Materials fitting into this broad description generally fall into three main
accessing chinese materials: some conceptual issues in bibliographic control

categories: (1) materials on or about china not originally written in chinese; (2) materials originally written in chinese and simultaneously or later translated into other languages including english; and (3) materials written in chinese, mostly published in east asia, and collected by north american libraries.

materials in the first category may be in any language and organized in various subject areas. they are most likely written in english and published in english-speaking countries. the main characteristic of this type of material is that "china" (or any term related to that) is one essential facet in subject access. the second category encompasses materials in any subject area as long as they are translations from chinese language materials. this category of material is of great concern for catalogers not only because of the nature of translation, but also because of the accompanying text (such as commentaries and interpretations) that often appears with the translations. the third, and most often talked about, category also encompasses materials in any subject area; it differs from the second in that its materials are only accessible for those familiar with chinese language. they are the most difficult kind to organize due to the language skill required for interpretation of the bibliographic information and the need for appropriate technology to process the script.

user and use categories

all three categories of chinese materials are generally made available to all library users. the unique characteristics of each type of material, however, often attract different groups of users with different use patterns. some materials have drawn more attention in access than others, and consequently received better treatments in organizational process. for this reason, it is necessary to identify the different groups of users of chinese materials and to understand associated use patterns.

the first category of materials (i.e., all materials on or about
China or the Chinese) are mostly used by two distinct groups of library users in North America: (1) the scholars in East Asian studies, and (2) those of the public who are interested in current events of China or East Asia. The former appear mostly in academic and research libraries of various institutions supporting East Asian studies such as Princeton University, Stanford University and the University of Michigan. These scholars have strong research backgrounds in East Asian Studies and are familiar with Eastern history and culture. Many of them are fluent in Chinese. The latter, however, appear mainly in public libraries; most of them are interested in Chinese materials on an incidental basis. Information that they look for includes general descriptions of China, travel and tourism guides and information pertaining to social life and customs. Most of them do not read or speak Chinese and do not plan to read beyond the level that satisfies their information need concerning current events.

The second category of Chinese materials (i.e., materials originally written in Chinese and later translated in English) are important resources for another two groups of library users. The first group are those whose interests go beyond the current events, but not as much as that of the scholars. They may have a few years of Chinese language study and may be capable of reading basic language textbooks. Many of them are interested in Chinese philosophies and social customs, and have access to college and university libraries. Another very important group of users of this category consist of second generation Chinese Americans, who wish to learn more about their ethnic origin and cultural background. Many of them go to Chinese language schools in their youth and receive reading advice mainly from their language teachers and their parents.

The third category of Chinese materials (i.e., materials originally written in Chinese, published mostly in East Asia and collected in North American libraries) are often one of the main sources for Chinese immigrants and students in the U.S. to keep in touch with their homeland. A large portion of older immi-
grants who read little or no English are not comfortable with local community libraries without personal contacts with librarians of their own ethnic background. Chinese students in the U.S. universities and colleges and their family members frequently use their campus East Asian libraries for access to current newspapers from both China and Taiwan as well as for popular works by contemporary authors in their homeland. This category of material is also an important resource for bilingual scholars in East Asian studies, who are interested in scholarly materials, both current and classic.

ORGANIZATION FOR ACCESS

In organizing Chinese materials, we are constantly dealing with issues arising from the uniqueness of the Chinese language and culture. For now, I would like to focus the discussion on three organizational issues: subject access, treatment of translations, and Chinese language processing. In doing so, I will discuss how "Chinese," like many other non-Roman languages, has been perceived as a problem in bibliographic control.

SUBJECT ACCESS

There are many ways for librarians to provide subject access to materials on or about Chinese studies. These include compilation of bibliographies concerning current events and the assignment of adequate and precise subject access points to materials on or about Chinese. Good patron access to this category of Chinese materials relies heavily on the quality and especially the precision of subject access tools in treating terms related to Chinese studies.

A look at the current practices in organizing Chinese materials, however, suggests that the subject access for Chinese
materials is neither adequate nor precise. A sample of 70 items on or about "I ching," 33 items published before 1970 and 37 since 1970, were retrieved from the OCLC system and the MICROCAT XII, the Maryland Union Catalog on CD-ROM. All records retrieved have the phrase "I ching" or its equivalent transliterations appearing on the title or in the uniform title field.

Among those published before 1970, nineteen records were from the MICROCAT XII system and fourteen were OCLC records. More than half of the items were not assigned any subject headings. Only 13 items (or less than 40%) were assigned a total of 16 subject headings and only three are assigned more than one subject heading (Table 1). Eleven distinct subject headings were assigned to the sample (Table 2); none of them appears in more than three records.

<table>
<thead>
<tr>
<th># of subject headings</th>
<th># of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
</tr>
</tbody>
</table>
Table 2
List of subject headings assigned to the items prior to 1970

<table>
<thead>
<tr>
<th>Subject heading</th>
<th># of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Hsiian-tsang--ca. 596-664</td>
<td>1</td>
</tr>
<tr>
<td>2 I ching--635-713</td>
<td>1</td>
</tr>
<tr>
<td>3 I ching</td>
<td>3</td>
</tr>
<tr>
<td>4 Confucius</td>
<td>2</td>
</tr>
<tr>
<td>5 Confucius and Confucianism--Sacred books</td>
<td>1</td>
</tr>
<tr>
<td>6 Confucianism</td>
<td>3</td>
</tr>
<tr>
<td>7 Confucianism--Sacred books</td>
<td>1</td>
</tr>
<tr>
<td>8 Philosophy, Chinese</td>
<td>1</td>
</tr>
<tr>
<td>9 Chinese works</td>
<td>1</td>
</tr>
<tr>
<td>10 Chinese literature--Periodicals</td>
<td>1</td>
</tr>
<tr>
<td>11 China--History--Periodicals</td>
<td>1</td>
</tr>
</tbody>
</table>

Total 16

"I ching," as a subject heading with or without dates (the second and the third in Table 2), was assigned to four different items. The necessity of assigning this heading is questionable since all four records have the same heading in the uniform title field, and two of them have the exact transliteration on the title as well. Furthermore, since it is a transliteration of the title of a classical Chinese work, the heading is meaningful only to those who already know the book and the exact transliteration of the classic title. Using transliterations of classical Chinese titles as subject headings, such as "I ching," achieves the collocating function but does little to help general users locating all items on the subject. Consequently, the items assigned "I ching" as subject headings achieve no subject access function for library users with-
out *a priori* knowledge of the subject areas denoted by the original titles.

Four subject headings related to Confucius (the person) and Confucianism (the philosophy) were assigned to seven items, all prior to 1970. The assignment of CONFUCIUS or CONFUCIANISM to works on “I ching” is an obvious influence from the original edition (reprinted in 1965) of the Library of Congress Classification (LCC) for Chinese literature which classifies “I ching” with four other classical Chinese works (Shu ching, Shih ching, Li chi, and Ch’u i Ch’iu) under “Works about the Confucian canon” (PL 2948.Z9). The assignment of such kind of subject headings was based on the group title of the five classical Chinese works (i.e., Wu ching) and disregarded the intellectual content of the individual titles.

Another problem with the Confucius-type subject headings is the lack of clear distinction between such subject headings. There appears to be no obvious indication that one “I ching” is about the Confucius (the person), another about his philosophy, and yet another about the person as well as his philosophy, since all have similar titles. Finally, the assignment of subject headings, such as PHILOSOPHY, CHINESE and CHINESE WORKS (the eighth and nineth in Table 2), to works on “I ching” lacks precision. They are not useful in collections with emphasis on Chinese studies.

The fact that less than 40 percent of items prior to 1970 were assigned subject headings suggests that a majority of early Chinese materials, especially materials written in Chinese language, received less than full level cataloging treatment. The absence of subject headings for the items severely limits patron access to Chinese materials.

Those items published since 1970 appear to have received much better subject treatment. The heading, I CHING, appears on all items except one which was assigned no subject heading. Still, fourteen of the 37 items received no other subject heading. Another heading, DIVINATION, was assigned to 11 works ex-
clusively on "I ching" in this group. While other general subject headings, such as FORTUNE-TELLING and PHILOSOPHY, CHINESE were assigned occasionally, the Confucius-type subject headings were no longer used in this group of items, possibly because of the major revisions made for LCC Subclass PL around 1970 which allowed much detailed subject analysis for Chinese materials.

Observations on the assignment of subject headings in these two groups of works on and about "I ching" suggest an obvious improvement of precision in subject heading work for Chinese materials during the last two decades. The fact remains, however, that the inappropriate use of transliterations of titles for subject headings and the lack of clear distinctions between closely related subject headings must be resolved in the future.

Another issue in subject access often absent in discussions of Chinese materials is the value of librarians' knowledge for improving patron access. This is especially the case for accessing those subject areas unfamiliar to users, such as current events on or about China.

While in library schools, most of us learned the basic principles for subject access tools set forth by people like E. Wyndham Hulme, Charles Martel and David Haykin. All of their thoughts still have a profound effect on how subjects are represented in the hierarchical structure of LCC and in the alphabetical list of the Library of Congress Subject Headings (LCSH). Let us take Chinese studies as an example. As I said earlier, one unique characteristic of materials on or about China (the first category) is the use of China or related terms as a facet in subject access. In terms of bibliographic control, this is done in one of two methods: either by treating the term as a direct subject term or by treating it merely as a geographical or language qualifier under other subject headings.

In the former, the term would be listed as a main subject under a large discipline in the classification scheme (e.g., DS 701-799.9 and PL 1001-3208), or as a preferred heading in the entry
vocabulary in the subject heading list (e.g., CHINA, CHINESE LANGUAGE, and CHINESE LITERATURE). The term is perceived as a main subject that denotes the country with its historical and cultural elements. Since both LCC and LCSH have been developed on the basis of literary warrant, subdivisions under such main subjects are mostly arranged according to forms and literary authors, as well as historical events. For example, classification numbers for China, DS 701-799.9, are subdivided first by Martel's principle of "form before topic" subdivisions and, under topics, by period and geographical subdivisions. The result is a general structure for this part of the classification scheme as shown in Figure 1. The classification scheme for Chinese studies based on this general structure becomes more than just a browsing tool; it is also an important source for users to learn about the Chinese history and literary authors.

Figure 1
Citation orders under China DS701-799.9

General
1. Form subdivisions.
2. Major topical subdivisions, including "Description and travel," "Antiquities," "Social life and customs . . . .," etc.
   2.1 Form subdivisions, especially "General works", and "General special."
   2.2 Simplified historical or geographical subdivisions, except under "History."
3. Geographical subdivisions, including "Local history and description."

Under: China-History DS733-779.29
1. Form subdivisions.
2. "General specials."
3. Period subdivisions.
   3.1 Form subdivisions.
3.2 “General specials.”
3.3 Dynasties and emperors.
   3.3.1 Form subdivisions.
   3.3.2 Biography and memoirs [a historical facet]
   3.3.3 Literary authors.
   3.3.4 Historical events, especially since 1644.

In the latter method where CHINA or its related terms is
treated as mere qualifiers for subject headings, the instruction of
such assignment can be explicit or implicit. When the instruction
is explicit, users may consult the tools and find the appropriate
subject headings with such qualifiers as CHINESE or CHINA.
Some examples are “COOKERY, CHINESE”, “CHINESE AMER-
ICANS” and “CALENDAR——CHINESE.” But, when the assign-
ment of qualifiers is a matter of implicit instruction, such as the
instruction “(may subd. geog.)”, there needs to be some help
from librarians in using the term CHINA (or other related geo-
ographical places) as a geographical subdivision. Be it explicit or
implicit, instructions in the subject access tools, originally intend-
ed for catalogers, may be freely used in public services to improve
patron access to Chinese materials.

There are other practical problems with tools such as LCC
and LCSH for provision of subject access to Chinese materials.
As Chan points out, period subdivisions in LCSH are often in one
of at least six different forms. This diversity in the formations of
period subdivisions often creates problems in filing and patron
access. Her argument is well illustrated in the section of LCSH
for CHINA—HISTORY (see Appendix A). Similarly in LCC, the
basis for period subdivisions used in various subject areas is often
arbitrary. The section for description and travel of China, for
example, is subdivided into periods based first on a century
system (i.e., earliest through 1500, 1501—1800, 1801—1900) and
second on historical events (1949 as the beginning of Communist
regime, and 1976 as the end of Mao’s ruling (see Figure 2). Consis-
tistency in period subdivisions in such cases is necessary to im-
prove the use of subject access tools for Chinese materials.

Figure 2
Period subdivisions in the section
for the Description and travel of China, DS707-712

ASIA.
CHINA.

DESCRIPTION AND TRAVEL.

<table>
<thead>
<tr>
<th>DS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>707</td>
<td>Earliest through 1500</td>
</tr>
<tr>
<td>708</td>
<td>1500–1800</td>
</tr>
<tr>
<td>709</td>
<td>1801–1900</td>
</tr>
<tr>
<td>710</td>
<td>1901–1948</td>
</tr>
<tr>
<td>711*</td>
<td>1949–1975</td>
</tr>
<tr>
<td>712</td>
<td>1976–</td>
</tr>
</tbody>
</table>

TREATMENT OF TRANSLATIONS VERSUS ORIGINAL WORKS

Generally speaking, English translations of works originally written in Chinese (i.e., the second category of Chinese material) have received better bibliographic treatment. English translations of Chinese language materials require no special language skill and thus pose no difficulty in descriptive cataloging. Their bibliographic records require no special printing or display device and the items are physically shelved with other Roman language materials in general collections separate from their Chinese originals. Among the 37 items on or about “I ching” since 1970, 20 items are various manifestations of the original text; most of these (17) are English translations. Among the 17 items, ten were accompanied by introductions or commentaries, and nine were assigned subject headings. In comparison, the three items for the text of “I ching” in its original language received only minimum level cataloging, and none of these was assigned subject headings (see
Table 3.

Treatment of translations vs. originals

<table>
<thead>
<tr>
<th></th>
<th>Translations</th>
<th>Originals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>17</td>
<td>3</td>
</tr>
<tr>
<td>Text only</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>With ccomp. mat.</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Subj. hdg. asgn.</td>
<td>9</td>
<td>0</td>
</tr>
</tbody>
</table>

Furthermore, no interpretations or commentaries written in Chinese were found in the Maryland Union Catalog (though many have been published in China, Taiwan and Hongkong). The contrast in the number of items and kinds of works available between translations and originals suggests that English translations of Chinese materials have received more attention in collection development as well as in cataloging. Further study is needed to determine the exact cause of this phenomenon. However, I suggest the imbalance of treatment of translations and that of original Chinese materials may be the result of several problems: (1) the extra language skill needed to process Chinese language materials is not always available, (2) the printing and displaying devices for producing bibliographic records for Chinese language materials were not readily available until recently, (3) English translations of Chinese materials may be perceived as having a larger audience than their originals. The result of this imbalance is better service for English language readers while those who have not yet mastered English or are not familiar with the classic language style (e.g., older Chinese immigrants) receive no help from libraries to enjoy classical Chinese works when presented with the hard-to-understand original text. Further understanding of the characteristics
of different user groups and their needs may help in correcting this imbalance between translations and original language materials.

CHINESE LANGUAGE PROCESSING

Chinese, the written language, has been perceived as a challenge in bibliographic control. This is evident in the limited amount of literature on processing Chinese language materials, of which much has focused on the development of character processing. During the second half of the 1970's, a project to automate the Chinese language was initiated in RLIN. The project, led by John Haeger and Alan Tucker and later named “CJK system”, concentrated on the establishment of character sets, the hardware specifications for character input and retrieval, and the creation of CKJ thesaurus for Chinese characters. It began with the study of four proposals of character sets from China, Taiwan, Japan and Korea, and a main objective to support accurate transliteration of bibliographic records in Chinese, Japanese and Korean.

Since then, research on character processing has been conducted here and elsewhere. Chinese thesauri were created for special information systems. Online cataloging for Chinese materials became available in the Library of Congress, RLIN and OCLC. Some libraries have since automated their East Asian Collections. Currently RLIN is undertaking the development of a UNICODE which, when finished, will include characters in Chinese, Japanese, Korean, Cyrillic, Hebrew, Greek and Arabic, and will also incorporate fonts for printing character sets.

In light of previous research and development, there are still some unanswered questions regarding Chinese character processing. These include (1) what is the ideal structure of character set, such as the number of characters needed, and the number of bits needed for each character? (2) how to index Chinese words; and (3) what is the ideal input and retrieval system?
With the availability of machine processing for nonroman scripts, the MARC format for bibliographic records had to be modified to store the data in both roman and nonroman languages. Such modification was proposed by Alan Tucker and approved in early 1980’s. The modification called for a dual MARC tag systems in which a second field tag may be used to store the nonroman scripts of the bibliographic data. Both tags for roman transliteration and original script were to be made available for communication in MARC records and for display on screen of the CJK system\textsuperscript{13}. With the recently announced Library of Congress plan to inaugurat the distribution service for CJK materials in MARC format contributed by LC and OCLC members\textsuperscript{14}, we have reasons to believe that patron access to Chinese materials will be facilitated to a greater extent.

Language processing, however, is not the only issue in bibliographic control for Chinese materials. At least two other issues should be addressed, both having to do with descriptive cataloging. One is the problem of sorting bibliographic records under transliteration system and the other is the issue of name authority control.

Sorting Chinese characters was identified as one of the unanswered questions in language processing\textsuperscript{15}. Before the CJK system, there were two primary sources for cataloging Chinese materials. When cataloging records for Chinese materials were obtained from the Library of Congress, the Chinese characters appearing on the chief source of information were often printed with their transliterations, sometimes on the lower right-hand corner, on the cards. When records were produced locally, the Chinese characters had to be hand-written on cards. In either case, bibliographic records with Chinese characters were arranged in the catalog according to their transliterations. As shown in the example of title and author entries under the subject heading PHILOSOPHY, CHINESE (Table 4), using transliterations as the filing device reveals no semantic connotation of the Chinese words and phrases as to whether they are personal names, titles,
or names of corporate bodies; and gives no clue as to where the user may expect the record for a specific item to be located in the catalog.

Table 4
Partial list of name and title entries under the heading: PHILOSOPHY, CHINESE
(Source: East Asian Collection at UMCP)

<table>
<thead>
<tr>
<th>#</th>
<th>Entry heading</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ch’en, An-jen, 1890—</td>
<td>person</td>
</tr>
<tr>
<td>2</td>
<td>Ch’en, Yen-chieh</td>
<td>person</td>
</tr>
<tr>
<td>3</td>
<td>Chia, Feng-chen, 1880—</td>
<td>person</td>
</tr>
<tr>
<td>4</td>
<td>Chiang, Wei-chiao</td>
<td>person</td>
</tr>
<tr>
<td>5</td>
<td>Chien, Mu, 1895—</td>
<td>person</td>
</tr>
<tr>
<td>6</td>
<td>Chugoku Bunka Kenkyukai</td>
<td>title</td>
</tr>
<tr>
<td>7</td>
<td>Chugoku Kankei ronsetsu shiryo</td>
<td>title</td>
</tr>
<tr>
<td>8</td>
<td>Chung-kuo hsueh shu shih lun chi</td>
<td>title</td>
</tr>
<tr>
<td>9</td>
<td>Chung-kuo tsu hsueh ming chu chi cheng</td>
<td>title</td>
</tr>
<tr>
<td>10</td>
<td>Erh shih erh tzu</td>
<td>title</td>
</tr>
<tr>
<td>11</td>
<td>Hama, kummei</td>
<td>person</td>
</tr>
<tr>
<td>12</td>
<td>Hara, Tomio, 1898—</td>
<td>person</td>
</tr>
<tr>
<td>13</td>
<td>Ho, Ling-hsu</td>
<td>person</td>
</tr>
<tr>
<td>14</td>
<td>Sen te tsu icho kansho kokujikai zensho</td>
<td>title</td>
</tr>
<tr>
<td>15</td>
<td>Shen, Shan-hung</td>
<td>person</td>
</tr>
<tr>
<td>16</td>
<td>Tang tai Chung Kuo yen chiu so</td>
<td>corp. body</td>
</tr>
<tr>
<td>17</td>
<td>Uno, Tetsujin, 1875—</td>
<td>person</td>
</tr>
</tbody>
</table>

Although the Library of Congress announced its decision to continue using the Wade-Gile system in 1981\textsuperscript{16}, transliterations of Chinese characters in other systems, such as Pinying, appear in bibliographic description at times, and present the problem of
inconsistency in filing cards as well as in retrieving records from the online catalog.

Another issue, aside from language processing and transliteration, is the authority control for Chinese names. Uniformity of the forms of headings, including personal names, corporate bodies, place names, and uniform titles, is important because it gathers all works by the same person in the same place in the catalog and provides links from headings not used in the catalog to headings used. It also allows verification of bibliographic data in the future. The rules in AACR2 state that all names in non-roman scripts should be romanized according to the table for the language adopted by the cataloging agency (i.e., Wade-Gile system in the U.S.) and that catalogers must choose the surname in formulating the heading, follow it by a comma, even if the surname is the first element of the name.

AACR2 does not point out, however, that it is not always the practice for Chinese people to place their surnames in the first element of their names. To further complicate the forms of names, many Chinese adopt some form of English first names while others simply use initials for their Chinese first names. Chinese women often adopt their husband’s last name and thus make their own last name a middle name. Beginning in the early 80’s, authors from mainland China have usually followed their official policy of placing their surnames as the first element while most Chinese in the U.S. and Taiwan [when they communicate in English or other western languages] place their surnames as the last element in their names just as Americans do. Thus, a Chinese name may appear in any of the following forms:

1  Lin Yu-tang  [surname first]
2  Ching-chun Hsieh [surname last]
3  Nelson Chou  [Chinese first name dropped]
4  Jack Kai-tung Huang [English first name adopted without dropping the Chinese first name]
5  Nancy Ou-lan Hu Chou [a woman’s married name with
It is fortunate that in descriptive cataloging, most libraries accept the name authority records created by the Library of Congress, which has been very thorough in their verification of Chinese surnames. This is not the case however with indexing and abstracting services which seldom attempt any form of authority control. The result is an author index that is almost useless in online searching for works by Chinese authors (illustrated in Figure 3).

**Figure 3**

Partial list of Chinese names in the author index of LISA database with surnames highlighted

<table>
<thead>
<tr>
<th>Chen-Chau Yang</th>
<th>Hu, David Y.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chen-chau Yang</td>
<td>Hu, Ho-shang</td>
</tr>
<tr>
<td>Cheng-huang Lin</td>
<td>Kai-tung Huang, Jack</td>
</tr>
<tr>
<td>Ching-Chun Hsieh</td>
<td>Lin, Pin-shiang</td>
</tr>
<tr>
<td>Ch’iu-lang Chi</td>
<td>Ma, John T.</td>
</tr>
<tr>
<td>Chou, Nelson</td>
<td>Ou-lan Hu Chou, Nancy</td>
</tr>
<tr>
<td>Chung-tao Chang</td>
<td>Shih-hsion Huang</td>
</tr>
<tr>
<td>Heng-hsiung Chung</td>
<td>Wang, Andrew H.</td>
</tr>
<tr>
<td>Hong-Chu Huang</td>
<td>Yin-Chiang Li</td>
</tr>
<tr>
<td>Hsieh, Ching-Chun</td>
<td></td>
</tr>
</tbody>
</table>

Standardization in writing Chinese names may be a long way off. Still it is important for information professionals to know various ways in which Chinese names may appear. Without this knowledge, users will have only limited access to Chinese materials.

**CONCLUSION**

As I have said at the beginning of the paper, good access must begin with good organization. However, good organization alone is not enough for good access. Adequate information access
must also take into account the understanding of users and their use patterns of Chinese materials and a knowledge of the linguistic characteristics of these materials. In this paper, I have attempted to classify all Chinese materials into three groups: all materials on or about China not written in Chinese, all translations of materials originally written in Chinese and all materials in Chinese language. Each category has its own major groups of library users. Their needs often differ according to their language skills, ethnic origins, and reading interests. In order to provide better patron access to Chinese materials, three issues of bibliographic control were discussed: subject access on or about Chinese studies, the treatment of translations and their originals, and the issue of processing the Chinese language.

I hope by now, those of us who are catalogers can begin to ask ourselves “How can I improve the organization for Chinese materials?” More specifically, how do we improve our subject access systems? How can we add semantic factors into English versions of Chinese titles and names to facilitate access? How can we develop organizational policies that will ensure fair treatment for both translations and works in original languages? How do we make the best use of technology for language processing in online access?

For those of us who devote ourselves to public services, I hope this paper help us to think more about our users. Who are they? What questions do they ask? What kinds of Chinese materials do they need? How much do they already know about Chinese materials? Do we have too many assumptions and too little understanding? Next time when you are ready to display proudly the Chinese collection in your library, I hope you pause a second and ask yourself “It’s four o’clock in the afternoon, do I know the questions my users asked today?”
REFERENCES

2. Ibid., p. 3.
9. For example, see Wu, Wan-jiun. “AGRI-Thesaurus: A Chinese Thesaurus for the Agricultural Science and Technology Information Management System.” Journal of Educational
Accessing Chinese Materials: Some Conceptual Issues in Bibliographic Control


17. *AACR2*, p. 390. (see ref. 1).

18. *AACR2*, p. 392. (see ref. 1).

**APPENDIX A**

**Period subdivisions under CHINA in LCSH**

All period subdivisions under the heading may be grouped into four types:

(1) Basic subdivisions: This system, although it varies slightly under some first-level subdivisions, uses the following events as dividing points:

- 221 B.C. [End of Mythical period]
- 960 A.D. [China united]
1644 [Beginning of Ching dynasty]
1912 [Beginning of Republic]
1945 [End of WW II]
or 1949 [Beginning of Communist regime]
1976 [Death of Mao]

Examples of this type are under:
-- CIVILIZATION
-- ECONOMIC CONDITION
-- ECONOMIC POLICY
-- FOREIGN RELATIONS
-- SOCIAL CONDITIONS
-- SOCIAL LIFE AND CUSTOMS

(2) Subdivisions by centuries: Occasionally, subdivisions take the form of centuries. They primarily appear mixed with the first type of subdivisions.
18th century
19th century
20th century

(3) Subdivisions by dynasties and emperors: This system appears mainly under first-level subdivision, HISTORY and under the main headings for specific forms of Chinese Literature (e.g., CHINESE POETRY). In LCSH, subdivisions of type 3 and 4 appear in the form of “name of dynasty (emperor, event), dates,” but are arranged chronologically.
1766–1122 B.C. Shang dynasty
1122–221 B.C. Chou dynasty
722–481 B.C. Spring and Autumn period
403–221 B.C. Warring States
221–207 B.C. Ch'in dynasty
202 B.C.
-220 A.D Han dynasty
220–265 Three kingdoms
265–419  Chin dynasty
304–439  Five Hu and
   the Sixteen kingdoms
386–534  Northern Wei dynasty
386–589  Northern and Southern
dynasties
420–479  Liu Sung dynasty
479–502  Ch’i dynasty
502–557  Liang dynasty
550–577  Northern Chou dynasty
557–589  Ch’en dynasty
581–618  Sui dynasty
618–907  T’ang dynasty
907–979  Five dynasties and
   the Ten kingdoms
917–971  Southern Han kingdom
937–975  Southern T’ang kingdom
947–1125  Liao dynasty
951–960  Later Chou dynasty
960–1279  Sung dynasty
1038–1227  Hsi Hsia dynasty
1115–1234  Chin dynasty
1260–1368  Yuan dynasty
1368–1644  Ming dynasty
1644–1912  Ch’ing dynasty
1662–1722  K’ang Hsi
1723–1735  Yung cheng
1736–1795  Ch’ien lung
1796–1820  Chia ch’ing
1820–1850  Tao kuang
1850–1861  Hsien feng
1861–1875  Tung chih
1875–1908  Kuang hsu
1908–1912  Hsuan tung
1912–1949  Republic
1916–1928  Warlord period

(4) Subdivisions by events: This system appears almost exclusively under the first-level subdivision, HISTORY.
755–763  An Lu shan Rebellion
874–884  Huang Ch’ao Rebellion
1628–1645  Li Tzu ch’eng Rebellion
1643–1644  Tatar Conquest
1796–1804  White Lotus Rebellion
1840–1842  Opium War
1850–1864  Taiping Rebellion
1853–1868  Nien Rebellion
1857–1861  Foreign intervention
1861–1895  Self strengthening movement
1989  Reform movement
1899–1901  Boxer Rebellion
1911–1912  Revolution
1913  Revolution
1915–1916  Revolution
1917  Ch’ing Dynasty Restoration Attempt
1919  May fourth movement
1925  May Thirtieth movement
1926–1928  Northern Expedition
1928  Tsinan Incident
1934–1935  Long March
1936  Sian Incident
1941  Southern Anhui Incident
1945–1949  Civil War
1956  Hundred Flowers Campaign
1957–1958  Antirightist Campaign
1966–1969  Cultural Revolution