Academic Libraries in China: Current Status and Issues

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Introduction

China is a latecomer in establishing academic libraries as compared to the counterparts in western countries. However, in the recent 30 years, impressive progresses have been achieved to transfer the academic libraries from the traditional model of material-preserving-oriented, closed-stacked, and passive service to a model that is suitable to modern day university library users, which is a combination of more accessible collections, personalized service and updated information technologies. The decade from 1978 to 1988 witnessed the revitalization and standardization of academic libraries in China, and modernization in all-aspects followed in the 1990s. Academic libraries in China expanded significantly in building sizes, collection volume and library services to meet the increasing and evolving needs of Library users. Despite all the great achievements, it’s still a long way to perfection, if there ever exists such state, and various issues and obstacles persist.

This paper reviews the accomplishment achieved, and exams challenges that the academic libraries in China are facing nowadays, particularly in providing effective user services to achieve more efficient and effective utilization of library resources. Part I is a brief overview of the development of the Chinese academic libraries in the past 30 years, with each decade serving its own purposes and combating unique challenges. Part two exams and illustrates the issues of the Chinese academic libraries in current status. User services and information literacy education is largely overlooked in the previous 30 years of development, and the nasty consequence gradually grows into a unavoidable obstacle on the way to further development. Present situation and causes are discussed. Part three reviews currently proposed solutions. This paper will serve as an introductory step into the field for me, also a potential research direction in the future.

Part I: A Brief Historical Review

Although the existence of functioning library in China can be traced back to the Shang Dynasty (1766-1123 B.C.), when Shang rulers preserved the records of prognostication with oracle bone inscriptions, the idea of academic library was not popularized until early 20th century (Liao, 2004). By the time of 1936, there were 20 national university libraries with a collection averaging around 87,426 Volume (Chen & Zhai, 1999). After the victory over Japanese invasion (1937-1945) and the founding of People of Republic of China in 1949, universities and their libraries returned to normal operation. In 1957, the
number of university libraries reached 229, with a total collection of 14 million items; at the same year, the state council issued “National Plan for Library Coordination” to further promote academic library development (China Library Yearbook, 2001). Unfortunately, the stable environment didn’t last long. The Ten-year Cultural Revolution brake out in 1966 and had devastating impacts on academic libraries; the construction of many new libraries were halted, some were even destroyed.

The 1978 Reform and Open-Door policy renewed the economic growth in China, but also revitalized the development in university libraries. Vast amount of resources were allocated to support construction of new facilities, and to finance collection expansion that serve both the general and research purpose, to meet the fast growing needs of university faculties and students. In October 1981, the National Committee on Academic Libraries was established, and the committee immediately issued Regulations for College and University Libraries as the official guideline and regulation. Statistics shown in Table I illustrate the remarkable achievement in the 80s and 90s in areas of collection development and space expansion. The total floor space more than doubled in 1987 comparing to 1980, it continue to grow for the next 20 years.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Libraries</th>
<th>Collection Volume</th>
<th>Floor Space (Sq.meter)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>670</td>
<td>193,620,000</td>
<td>1,320,000</td>
</tr>
<tr>
<td>1987</td>
<td>1053</td>
<td>345,000,000</td>
<td>2,900,000</td>
</tr>
<tr>
<td>1989</td>
<td>1075</td>
<td>382,000,000</td>
<td>4,110,000</td>
</tr>
<tr>
<td>1994</td>
<td>2080</td>
<td>418,000,000</td>
<td>5,500,000</td>
</tr>
<tr>
<td>1997</td>
<td>1162</td>
<td>468,179,000</td>
<td>6,278,000</td>
</tr>
<tr>
<td>2009</td>
<td>-</td>
<td>1,619,180,700</td>
<td>31,016,453 (Digital Materials)</td>
</tr>
</tbody>
</table>

Data consolidated from (Wu & Huang, 2003) and CALIS

In 1987, following the 3rd meeting of the committee, the Regulation was revised to emphasize the “educational and informational functions” of university libraries (Yu, 1997, p53). On top of the continuous space and collection expansion, adoption of automation system and other state-of–art information technologies became the new focal point, as the construction of basic infrastructure got its momentum and internet facilities became more widely available. This full-scale modernization of university libraries continued well into the 1990s. Back in the 1980s, computers were rare in the system.
of academic libraries in China, not to mention internet access, one computer terminal was shared among 40 academic libraries in 1980, in Guangdong Province, which is the most economically developed region in China at that moment (Tan & Wei, 1996). Data from CALIS (China Academic Library and Information System) website shows that in 1993, 682 universities were equipped with around 3300 computers; approximately 150 university libraries established their own local area network, some of them were even connected to Cernet (China Education and Research Network, founded in 1994 as the core regulatory and managerial committee of network development in China, headquarter in Qinghua University, Beijing) (Dong & Li, 1995).

Some of the top ranking universities benefited most from this wave of expansion and modernization. For example, Peking University library held an initial collection of 78,500 volumes, when first founded in 1902 (Yu, 1997, p.13). The size of the collection increased to 3,261,987 items in 1982, and exceeded 4,500,000 items in 1995. In 1998, the newly built east branch, approximately 50,000 square meters, opened to the faculties and students, with a capacity of housing more than 3,000,000 volumes. At the end of 2011, Peking University library houses around 8,000,000 items of print resources, 2,760,000 digital materials, 56,000 items of audio-video materials, around 20 self-constructed databases, and subscription to over 500 foreign or domestic (Peking University Library, 2013).

In the 1990s, two events affected the development of academic libraries significantly: the mergers of universities and the “211 Project”. The merger, part of the reform scheme to improve education quality, was officially carried out in 1992, 556 institutions of higher education were consolidated into 232, as an effort to relocate and consolidate education resources and improve teaching qualities (Wu & Huang, 2003). This also explains the sudden drop of number of university libraries in 1997, as shown in Table I. In 1995, the “211 Project” was lunched in attempt to transform 101 target universities into hubs of research and specialization to improve the quality of higher education and support economic development. After careful selection, 96 universities were approved to receive government funds, which totaled 11 billion yuan, the largest investment ever since 1949, to be used in improving academic standards and research facilities (Wu & Huang, 2003). As one of the two public service system (the other is CERNET: China Education and Research Network), CALIS, China Academic Library and Information System was approved by State Development and Planning Commission of China in 1998. CALIS is centrally funded and is designed to “serve multiple resource-sharing functions among the participating libraries—including online searching, inter-library loan, document delivery, and coordinated purchasing and cataloguing—by digitizing resources and developing as information service network” (Dai, Chen & Zhang, 2000). At its initiation, CALIS had 70 member libraries and serves over 700,000 students, and its potential is yet to be realized.
Part II: Current Situation and Key Issue

Into the 21st century, academic libraries in China is empowered by the strong economic growth and stable social-political environment, the development is slowing down in pace, but is becoming more sophisticated and carefully planned. According to the “2011 University Library Development Report”, in 2011, the 501 university libraries that submitted the data, on average, enjoyed stable growth of funding, further enrichment of library collection, and greater level of digitization. The average fund spent on purchase of print resources is 2,525,206.2 yuan. Money spent on purchase of digital resources is more dispersed; the biggest spender is Shanghai Jiaotong University with 17,640,000 yuan, an increase from 15,680,000 yuan in 2010; the least spent only 2800 yuan. 176 out 501 university libraries delivered a total of 350,000 items of resource material to outside requestors. However, the growth of the number of information professionals with higher degree is rather slow, comparing to the development in other areas. The 501 university libraries have, in total, 340 registered information professionals with doctor’s degrees, many of which are concentrated in top-ranking universities; approximately 68.4% of the libraries do not have the luxury. Master’s degree is more common, but still 17.3% of the libraries do not share even one of the 3896 information professionals with graduate program experiences (Wang, Wu, Yao, Guan, Wang & Zhu, 2011).

In general, modernization is still the key to many university libraries, especially those in economically under-developed regions that lack the infrastructure upgrade. But the focus has shifted to a source of productivity that has long being ignored: user service and user education, for further development of academic libraries. Such shift is becoming more of a result of a concerted effort rather than the by-product of the infrastructure improvement, as the library administrators realize that the resources and services of academic libraries nowadays should evolve alongside users’ demands and their information seeking behavior, instead of the other way around. University library, faculty members, and students are the three most important and precious assets of a university, vital to its present state and future development. The essentiality of university library resource to the research and teaching of a faculty member is needless to say. University library also serves an important source of knowledge for student outside of their classes. Not only does it provides supplementary materials, fosters further and broader understanding of the subjects, but more importantly, supports deeper analysis and original research. The inadequacy of user services limits information accessibility; it makes information retrieval a painful process, and even worse, it creates inefficiency and waste, all of which adds cost to expansive yet idle resources. As part of user service, information literacy education was largely ignored in the previous stages of development of academic libraries, which is quite contradictory to the famous old saying in the Chinese education circle, “Equip the students with hunting rifles rather than a bag of food” (Sun, 2002). In an era that information
Part II-A: Summary of Survey Result

During the research, majority of the literature or journal articles on Chinese academic libraries approaches the situation from the perspective of institutions and faculties, but rarely any touch upon the feedbacks of library users, especially students. Lo (1987) mentioned in his article on the obstacles of reform on Chinese academic libraries, the very first user survey ever conducted in China. 450 out of 500 questionnaires handed out to university students from 8 key Chinese universities were returned and produced rather interesting results. Complaints range from limited reading space, lack of professional reference librarian, to difficulties using card catalog and insufficient current foreign publications, particularly journals. A more recent survey, conducted by Ren (2010), on library resource and services, showcased a more positive rating, justifying the significant progress achieved in the last two decades. A total of 15197 administrative personnel, faculties and students from 100 universities are randomly selected to give ratings on library material, digital resources and library services, on a scale of 1 to 5, 5 being the best. All three categories reached a score of 3.5 or above on average. Still, there is plenty of room for improvement.

To showcase the viewpoints from student’s perspective, I invited my close friends, most of whom have completed their undergraduate program in Chinese universities and are now in Boston to pursue their master’ degree, to participate in this online survey. 12 responded and 10 respondents’ replies are useable. I realize that 10 people are a very small sample and the outcome not necessarily reflects the whole picture, but it’s a knocking brick that help me to peek into the real situation. Surprisingly and luckily, the 10 respondents are from 10 difficult universities in China, which includes top ranking universities like Qinghua University and Peking University, but also mid-ranking schools. For all the respondents, dissertation is required for graduation, which implies that students must have some experience with heavy-load research besides class assignments.

Table I summaries some of the interesting findings. On the question regarding the availability of information literacy education course, the response is rather disappointing and contradictory to the fact that around 700 out of 1080 universities now offer various courses on information literacy (Liao, 2004). 5 people are not sure about whether user instruction courses is provided, which implies that the school is either not paying enough emphasis on user education, or not promoting vigorously the existing information literacy courses. Students are not informed of the importance and usefulness of information literacy, or in some other cases, informed but find it difficult to seek support. It’s a relief to know that,
according question to 11, university library catalog and database are still the first choice for half the sample, but evidently university librarian is left out of the picture. It is expected that people choose the sources online over library print sources because of the quick speed, immediate access and broader coverage of search materials, which are the typical advantage of online search, while they value greatly the credibility and higher relevancy of free library resources. When asked to pinpoint the issues of their libraries, majority of the respondents seem to have had bad experiences in library during exam period, where space is a big problem and the demands for limited resources skyrocket. Insufficient access to full-text resources and the lack of subscription to field-specific journals, particularly foreign language journal also complicates the research task. 3 respondents point out their poor experiences in seeking help from university librarian on research for specific course, but only to find out the librarian have no idea about the course or even the related field.

The survey results seem to indicate that the respondents are generally satisfied with library resources and services, while, much more can certainly be done to improve the experience of utilizing library resource. Some of the library resources, which are often quite expensive to collect and maintain, are collecting dust due to poor organization and presentation. Complex searching and locating processes deter students from further exploration of the library sources, in a time when efficiency and accessibility are greatly valued.

In a similar survey conducted by Ma, Ding & Li (2009) on the information literacy of students in universities in Wuhan area, the results are mixed but worrisome. Of the 4210 students that replied to the survey, 79% of the graduate students and 73% of the undergraduate students consider general Internet websites as their top information source. When they are having difficulty either locating or accessing the desired information, 71% of the student will first sort to their friends, and 40.6% rely on their past experience, only 3.4% seek help from librarian. Free access and the simplicity of the searching process are two of the major qualities that both graduate and undergraduate student value. The results regarding the sorting, organizing and storing of information is rather disappointing. Only 25.3% of the graduates and 11.7% of the undergraduates organizing their resource on a regular basis; 16% of the graduates and 10% of the undergraduate regularly create backups. The report also warns the prevalence of the lack of sense of information safety and information ethics among students. Over 56% of the students believe that it’s safe to post and transmit any type of information online and 54.4% of the students have no knowledge of regulations concerning information safety currently in effect. The status of information ethics and intellectual property is even worse, unfortunately. Only 49% of the graduates strictly follow the citation rule, much higher than the 22% in undergraduates. The rest cite at will, many fall into the region of plagiarism. Less than 12% of the students actively resist pirated materials, and more than 65% of the students simply ignore the fact, many due to economic reasons.
Table II: Summary of Survey Results* (Complete survey attached at the end)

<table>
<thead>
<tr>
<th>Q10. Whether formal information literacy instruction is offered and required?***</th>
<th>Formal course offered and required 0/12</th>
<th>Training seminar for dissertation available for senior 2/12</th>
<th>I know general help is available in library or through website 5/12</th>
<th>Not sure. I prefer work on my own or seek help online 5/12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q11. First source of research for class assignments and dissertation?</td>
<td>Commercial search engine 4/10</td>
<td>University library catalog and database 5/10</td>
<td>Professor recommendation 1/10</td>
<td>University librarian 0/10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Classmates or friends 0/10</td>
</tr>
<tr>
<td>Q13. Quality of trustworthy website? (select two qualities)</td>
<td>Website is commercial free 4/10</td>
<td>Website based on respected print source 6/10</td>
<td>Website ownership is explicit 2/10</td>
<td>URL contains .org or .edu 3/10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Recommended by professor or university librarian 5/10</td>
</tr>
<tr>
<td>Q15. Behavior of using commercial search engine?***</td>
<td>Academic papers preferred over other source Always: 4/10 Often: 4/10</td>
<td>I observe the citation to determine accuracy and relevancy of the source Always:2/10 Often: 5/10 Sometimes: 2/10</td>
<td>I exam the date of the information being published Always: 1/10 Often: 5/10 Sometimes: 3/10 Seldom or never: 1/10</td>
<td>I go back to university library to check for free access if such material is not available online always: 3/10 often: 5/10 sometimes: 2/10</td>
</tr>
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<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Q17. Quality of web search that makes it preferable to print source? (Select two qualities)</td>
<td>Quick speed and immediate access 6/10</td>
<td>Broader coverage 5/10</td>
<td>Full-text access instead 4/10</td>
<td>In some cases, specific questions and answers are already available 1/10</td>
</tr>
<tr>
<td>Q18. Quality of print source that makes it preferable to web search? (select two qualities)</td>
<td>Guarantee of authority and credibility 4/10</td>
<td>All the resources are free 4/10</td>
<td>Reference help is always available 3/10</td>
<td>More efficient and higher relevancy due to curated collection 5/10</td>
</tr>
<tr>
<td>Q19. Issues of your university library? (select all that apply)</td>
<td>Library always packed during exam period 6/10</td>
<td>Reference service and other academic assistance are not 24-7 3/10</td>
<td>No coordination between course instructor and university librarian 3/10</td>
<td>Insufficient access to full-text resources, lacks subscriptions to field-specific academic journals 4/10</td>
</tr>
</tbody>
</table>

*: Results are presented in: number of people choosing this option / total number of people responding to the question

**: 12 people responded to this question.

***: Options include “always”, “Often”, “Sometimes”, “Seldom”. “always 4/10” means 4 out of 10 respondents always prefer academic papers over other source.
**Part II-B: Discussion of the causes**

The survey results above portray a rather dismal picture of the consequences of neglecting user service and education for the past 30 years. The underdevelopment before the 90s is largely accredited to external forces, such as socio-political instability and financial deficiency. Lo (1997) suggests that one of the important factor is the long lasting aftermath of and slow recovery from Cultural Revolution, considering the catastrophic effects of it even on the daily life of ordinary people, not to mention the most targeted school teachers, scholars, and information professionals. Many of them witnessed the destruction of ancient scrolls and books, antiques and many other national treasures, and naturally developed a tendency to preserve and keep books under close watch rather than share it with the public. The scarcity of financial resources was also a factor in the 80s, when every library project was under fierce debate and many rounds of reviews before approval. Basically, university libraries have to compete with every other national project that was intended to promote economic growth. It is an unfortunate yet justified decision to sacrifice user service and some other part to concentrate more resources on the development of hardware of libraries. The bottom line is that library services are impossible without the physical space and collection.

Into the 90s and 00s, internal factors became the center point of scrutiny. Some library collections remain close-stacked, and there are segregation of faculties and students in reading rooms, where the later do not have access to the reference books available to the former. Some scholars point out that the philosophies of knowledge and librarianship is different; Chinese modern day librarianship still carries the features of traditional librarianship existed in the feudal systems of dynastic China, where the source of knowledge is monopolized to empower the imperial rulers, while western librarians believe the power of knowledge lies in the empowerment of the public. Liao (2004) claims: “the traditional concept of books and knowledge in China are fundamentally at odds with the very philosophy of user service”, which is a very tempting “one-stop” argument that solves the puzzle of the underdevelopment of user service. It is justifiable to suggest that imperial rulers built private collections to strengthen the centralized power, and elites in ancient China kept their own collection out of public reach to gain advantage in their quest of social, economic and political power. However, the general environment of that era cannot be overlooked. Majority of the ordinary peasants were illiterate, and most of the information transmission are oral based. In a time when mass printing was not invented yet, the limited amount of books was treated more like treasures than information carriers and very few can afford the luxury. After the implementation of the 9-year compulsory education system in the 80s, illiteracy in China dropped to near zero and subsequently, the demand for all types of information rose significantly, much faster than the speed of adjustments in
library services intended to boost supply. This mismatch of demand and supply magnified the problem of user service disproportionately.

It is undeniable that some private libraries today still operate under the philosophy of empowerment through exclusion, and Liao’s argument is perfectly applicable in those cases. Nevertheless, academic library operates based on different principals, and its prosperity depends on the people who use its resources and the development of the university it facilitates through enabling faculties and students. Exclusion and other types of behavior that limit the accessibility of library resource do more harm than benefit to the university library, as it reduces the university library to a mere storage facility instead of the center of information sharing and exchange. This cost-benefit relationship is too clear to be bypassed by any sensible librarian or administrator. As the world becomes more integrated and the exchange of information more frequent and profound, the philosophy of knowledge and librarianship in China is also evolving to be more similar to the western counterpart, while preserving its own unique characteristics. For the moment, we just have to bear with all the cost and pain from initial strategy that lead to unsymmetrical development in user service.

Part III: Proposed Solutions and Prospects

To summarize everything above into one question and it essentially becomes: what can university libraries do to release the potential of their existing resources, and to minimize the cost involved in the searching, locating and acquiring process so that the productivity and utility of the users can be maximized. One obvious solution is creating more sophisticated user services, including information literacy education. Academic libraries definitely need to boost the publicity of the existing resources so that faculties and students know clearly the materials that are available and free. Resource permitted, information literacy courses or equivalent training sessions should be mandatory for freshmen to equip the student with fundamentals in library resources usage, and other information retrieval related abilities and technologies. Library website should be geared up to support more services online that are accessible outside of school library, so that students won’t have to fight for library space during rush hours.

User service, though the major issue, cannot be approached and solved in isolation. Resource sharing is another crucial means that benefits every participants and help relieving the financial stress on academic libraries, especially those in under-developed regions. The major player and facilitator is CALIS, which oversees over 500 member institutions today, regulates and coordinates resource-sharing among them through different networks and platforms. Not every university in China possesses the financial ability and spends on collections, systems and technologies like Qinghua University or Peking University does. Even those top-ranking universities only specialize and hold authority in collections of limited fields.
Networks constructed and maintained under CALIS connect academic libraries across the country and enable them with access to all the resources of the member institutions. Databases purchased on CALIS on a group basis, such as UMI, EBSCO, INSPEC and etc, are shared among member institutions either directly online or indirectly through service request and document delivery. CALIS is also critical in developing a series of software platforms that helps coordinate different cataloguing systems, promote the development of shared databases, and facilitate interlibrary loan.

Another major development in the field of academic libraries is the emergency of digital libraries. DL enables much faster dissemination of information through digital resource, unrestricted by time or location. Since the inception of the “Chinese Digital Library Standard” (CDLS) in 2004, DL construction in China has made great progress in homepage set-up, resource digitization, featured user services and integrated search and etc (Yao & Zhao, 2004). CALIS, as a coordinator, helped set up China Academic Digital Library Alliance of 22 member libraries to foster integrated planning, unifying standard and resource sharing. Although problems and difficulties persists, for instance, financial stress in maintaining the operation, the conflict between resource sharing and copyright protection; the potential of DL in empowering library users is hard to estimate.

The training of information professionals cannot be ignored either. Over the years, the enrollment of both undergraduate and graduate students into information programs is kept at a rather low level. This policy is effective in maintain the quality of the program, but meanwhile creates a shortage of qualified information professionals that are crucial to the smooth operation of the libraries. In some instances, academic libraries lose talents to corporations and government agencies because of compensation issues, despite the fact that university faculties and librarians are considered with relatively high social status. We could only hope that more young graduates become interested in this field and devote their talents to improve library services.

The progress should be acknowledged and issues be seriously confronted. Roman is not built overnight, so we just have to be patient and good prospect awaits.
Reference


