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EDITORIAL

East is East

Stephen Parker

In keeping with a recently-established tradition, this issue of IFLA Journal contains, not only a keynote paper on the host country for this year's World Library and Information Congress (WLIC), the Republic of Korea, but also a number of other papers on the library and information situation in other countries of East, Southeast and Central Asia.

In the keynote paper, 'Libraries in Korea: a general overview', Hee-Yoon Yoon, Duk-Hyun Chang and Young-seok Kim provide a detailed and well-illustrated account of the current situation of libraries in this year's WLIC host country, including the National Library of Korea, the National Assembly Library, the Supreme Court Library, public, academic, school and special libraries. The authors conclude with the observation that "Korea is a country blessed with an exceptionally rich documentary heritage" and that "The People of Korea and its government are keenly aware of the strategic role of libraries and information centers in a knowledge-driven society and have been actively investing in them". While the development of Korea's 12,000 or so libraries has been greatly helped by its leading position in information technology and the growth of its economy and financial resources, in terms of the number of public libraries for local neighborhoods and the size of their holdings, Korea compares rather poorly to other OECD member countries. However, efforts to fill this gap are already under way, and "Informatization, balanced development, reading promotion, legal and regulatory changes and institutional mechanisms are the key components of these efforts."

Korea is also one of the countries covered by the next paper, 'Scholarly Communication in East and Southeast Asia: traditions and challenges', by Jingfeng Xia of Rutgers University in the United States. The paper outlines the tradition of scholarly communication in China, Japan, Korea, and Myanmar and compares their history and the current conditions of research and publication practices. It highlights the challenges presented by advances in information and communication technologies and evaluates various solutions implemented or proposed by these four

countries, each of which has its own characteristics of scholarly communication.

China is the focus of the next paper, 'The Vigorous Advancement of Libraries in China', prepared by The Library Society of China, which outlines the development of libraries in the country, including the National Library, university libraries, public libraries, specialized libraries and other types of library, as well as the work of the Library Society of China itself.

From China we move to Japan and a review of 'Changes in University and Public Libraries in Japan' by Professor Kimio Hosono of the School of Library and Information Science at Keio University. This paper describes the factors and institutions influencing university and public libraries in Japan, their organizational structure and basic characteristics and the role and activities of national level institutions, including the National Institute of Informatics (NII), the National Diet Library, and the Japan Library Association. University libraries face problems related to budget cuts, journal price increases, insufficient shelf capacity, collection development, interlibrary lending and staff expertise, while public libraries face problems related to the merger of local governments, the outsourcing of local government management, budget cuts and poor staff qualifications. Despite these problems, public libraries are introducing new business information and consumer health information services as well as IC tag systems.

From East Asia to Central Asia; in his paper, 'The Library and Information Economy in Turkmenistan' Professor John V. Richardson Jr. of the University of California at Los Angeles presents a report, based on a recent visit funded by the US Department of State, on the situation of national, university, and school libraries situation in Turkmenistan. The paper covers the social, political, economic, and technological constraints in the development of Turkmenistan's information economy and includes details of the 2000 national information policy law and the off-the-cuff Presidential remarks of April 2005 to the effect that "No one goes to libraries and reads books anyway; accordingly, they must close". The paper concludes with a

number of recommendations for improving the state of affairs.

We return to China for the next paper, 'Sustainable Digital Library Development for Scientific Communities in China', by Zhang Xiaolin, Director of the Library of Chinese Academy of Sciences (LCAS) and the Chinese Science Digital Library. This paper analyses the digital library services available to China's scientific communities, explores the challenges toward sustainable digital libraries, presents a development strategy for digital libraries using Chinese Academy of Sciences as an example, and provides a layered design framework for a digital library in an e-science environment.

The final paper in this special Asian issue takes us to the Far Eastern region of the Russian Federation. In her paper, 'Between East and West: Libraries of the Russian Far East', Irina V. Filatkina Director of the Far Eastern State Research Library in Khabarovsk, provides a brief outline

of the library network in the Far East Federal District (FEFD) of the Russian Federation and describes the Far Eastern State Research Library (FESRL), the largest library in the region with a collection of about 3 million items. The Library's OPAC contains 500,000 bibliographic records and registers around 45,000 visits by readers every year. The FESRL is actively involved in library education and training and interlibrary cooperation, and has an active publications programme as well as playing an important role as an educational, cultural and enlightenment centre for the region.

We hope that this extensive overview of the library and information scene in East, Southeast and Central Asia will encourage readers to join us in Seoul in August for this year's WLIC, or, failing that, at least give those who cannot go to Seoul some idea of developments in our field in this varied region, where libraries really are 'dynamic engines for the knowledge and information society'.

Libraries in Korea: a general overview

Hee-Yoon Yoon, Duk-Hyun Chang and Young-seok Kim



Abstract

Describes the current situation of libraries in the Republic of Korea, including the National Library of Korea, the National Assembly Library, the Supreme Court Library, public, academic, school and special libraries. Informatization, balanced development, reading promotion, legal and regulatory changes and institutional mechanisms are key components of efforts to continue library development in Korea.

Keywords: Libraries; Republic of Korea

Introduction

Korea, located in Northeast Asia, faces the Japanese Archipelago to the east across the Korea Strait and China to the west across the Yellow Sea, bordering Manchuria and Siberia to the north across the Dumangang and Apnokgang Rivers (see Figure 1).

The Korean Peninsula, 222,154 km² in total area including islands, is roughly the same size as Great Britain (241,752 km²). South Korea, officially the Republic of Korea, occupies the southern half, corresponding to an approximate 45 percent of the peninsula. About 70 percent of its total 99,392 km² area is mountainous. The climate is moderate and the four seasons are distinct.

A country at a remote tip of East Asia, Korea was little known to the outside world prior to the 20th century. Even up until the early 20th century, Korea, for the greater part of the world, was scarcely more than “the Land of Morning Calm,” a poetic appellation given by Rabindranath Tagore, the famous Bengali philosopher. This isolation became definitively a thing of the past after



Figure 1. Korea and its neighbors.

the 1988 Olympics were hosted in Seoul. Subsequently, in 2002, the FIFA (The Fédération International de Football) World Cup, held in Korea and Japan, provided the world with an opportunity to rediscover Korea as an emerging economic power and an information technology powerhouse. In 1996, it became the 19th member to join the Organisation for Economic Co-operation and Development (OECD). Korea maintains diplomatic relationships with 186 countries. According to the National Statistics Office (NSO) Social Indicators, as of July 2005, Korea's population amounts to 48,290,000, and the average life expectancy is 77.5 years (73.9 years for men, 80.8 years for women). Korea's GDP at the end of 2004 stood at USD 680 billion, ranking 8th among OECD member economies. With a high education enrollment rate estimated at 71.1 percent, and advancement rate to higher education at as much as 82.1 percent (end of 2005), Korea is ahead of most developed countries in educational attainment. High educational investment and attainment have significantly assisted Korea in achieving the economic growth and social progress realized over the past decades. Developing quality manpower is also a high priority for the Korean government, an active investor in human capital.

Korea, one of the largest economies in the world, located at one of its geopolitical centers, with an educational attainment level among the highest globally, will have this year the honor of hosting the IFLA World Library and Information Congress (WLIC) 2006 in its capital city, Seoul. The WLIC will have this year as its theme 'Libraries: Dynamic Engines for the Knowledge and Information Society'. The choice of the host city could not have been more opportune or appropriate, given how this year's theme is about the need for libraries to reinvent themselves as knowledge and information centers adapted to today's knowledge society and serving its demand for knowledge creation. This paper is intended as a presentation of general information about libraries in Korea, this year's host country for the WLIC, for the benefit of researchers, library practitioners and information professionals worldwide, and will discuss their types, characteristics and functions.

The National Library of Korea

The National Library of Korea (NLK), founded in 1945, is Korea's foremost repository of books, documents and other forms of recorded infor-

mation. Its role is to build a collection of the cultural and intellectual heritage of Korea, and preserve the accumulated knowledge and wisdom of the nation for future generations. Compiling and distributing national bibliographies is an integral part of this activity. In its capacity as the nation's largest and most prominent library, the NLK also has the mission to seek to increase Korea's knowledge assets and information capabilities through exchange with foreign libraries and archives.

Since August 2000, the National Library of Korea has stored its collection of rare and old books and manuscripts, some of which are national treasures, in the Deposit Building, which was built for the systematic and scientific preservation of national collections and has many state-of-the-art facilities like air controls, special wooden panels in the Rare Books Stacks, ultra-violet blocking fluorescent lights and so on.

To increase the efficiency and effectiveness of the nation's library policies, responsibility for formulating library policy was transferred from the Ministry of Culture and Tourism to the National Library of Korea at the end of 2004.

The library has a staff of 228, and is used by close to 1,340,000 people annually. In 2004, its collection reached 5 million items. With a nationwide library and archive database and a computerized catalog of its holdings, it has in place a full-featured e-library system covering most essential processes and services.

Marking the 60th anniversary of its founding on 15 October 2005, the library announced 'The National Library of Korea 2010', a set of strategies and future plans for becoming a world



Figure 2. The National Library of Korea.

library. The plan laid out the roadmap toward four goals:

1. Pride and repository of Korean knowledge heritage
2. Distribution and provision center of national knowledge and information resources
3. Library policy and research hub
4. Global portal and gateway for library and information centers

The NLK is currently at work on a project to build an information-age library, tentatively named 'the National Digital Library', to open sometime during 2008. Meanwhile, it expects the new National Library for Children and Young Adults, scheduled to open in June 2006, to serve as a central institute among public libraries which offer services to children and young adults.

The National Assembly Library

The National Assembly Library was established in 1952 during the Korean War. Serving the National Assembly as its primary source of information and supporting its legislative activities, the library has made major contributions to the promotion of democracy in Korea over the years. This library, with a collection of 2,450,000 volumes, has a staff of 275 as of the end of 2005, and is visited by 500,000 users annually.

Its most important function is gathering, organizing and analyzing information, of both domestic and foreign origin, needed by the legislative body. In its role as a national library, it also carries out activities like compiling bibliographies of dissertations and theses, and of periodicals, to facilitate public access to information. A digital library project begun in 1998



Figure 3. The National Assembly Library.

has equipped the library with a full-text database with close to 71 million full-text images (equivalent to 600,000 volumes of books), a size so far unprecedented in Korea. The database, accessed by as many as 706 universities, public institutions and research institutes nationwide, has transformed it into a full-fledged national digital library.

The National Assembly Library's plans for coming years include harnessing ubiquitous technologies for improvement of its programs, processes and system capabilities to better fulfill its role as the information gateway, connecting citizens and the legislative branch, on the one hand, and the legislative branch and the executive body, on the other.

The Supreme Court Library

The Supreme Court Library of Korea, as a library serving the judicial branch, is located within the Supreme Court, the highest judicial body in Korea. The library was formally established in 1989. With a dedicated 75-strong staff, the library has recently given itself the means to better meet information needs in legal fields through a project to build an integrated information system. Based on cross-linked databases of precedents from 1996 to the present, legal literature and information, the system has brought about a major improvement in information accessibility and usability. More recently, the completion of an inter-court library network has enabled the Supreme Court Library to provide guidance to lower court libraries in a more efficient manner and serve a broader public with their information needs.



Figure 4. The Supreme Court Library.

Public Libraries

One of the sources of lingering admiration about Korea’s economic progress is the speed at which such a metamorphosis was achieved. The public library service sector in Korea has been no exception to this rule. Over the past 40 years, the sector grew 27-fold with the quality of service undergoing a commensurate enhancement. The number of librarians in public libraries across the country has massively surged over a relatively short period, and public library collections have continuously increased. In recent years, their operations and services were overhauled, equipping them with a digital library system and enabling them to provide library services via the Internet. Public libraries in Korea are generally rather large in size, but do not have many branch libraries. As can be seen in Table 1, at the end of 2004, the number of public libraries in Korea was at 487 (including 39 branch libraries). Of these, 250 were owned and operated by local governments, 223 by local educational authorities and 14 by individuals or private organizations. All public libraries in Korea are members of a nationwide cooperative network, as required by the Libraries and Reading Promotion Act. With the National Library of Korea at its center, the network comprises 35 headquarters libraries at 16 metropolitan cities and provinces, and 436 local libraries and branch libraries.

The aggregate holdings amount to 38,400,000 books, representing 78,000 volumes per library

and 0.79 volumes per capita. Average staff size (full-time employees only) is 12. An estimated 2,000 librarians serve in public libraries, corresponding to 4.1 per library and 38 percent of the total library workforce. Annual operating costs amount to KRW 710 million (USD 887,500) on average, 12 percent of which (KRW 91 million; USD 113,750) is accounted for by acquisition of library materials.

Modern public library services began in Korea in the early 1900s. The Japanese occupation which shortly followed, succeeded by the United States military government and the Korean War, put the development of public libraries on hold until the end of the 1950s. In 1963, the Libraries Act, Korea’s first library law, was enacted. The 1970s and 1980s, two decades of accelerated economic growth, saw scores of new public libraries spring up across the country. In 1990, a Division of Libraries and Museums was created within the Ministry of Culture (the present-day Ministry of Culture and Tourism). Following the introduction of a local self-government system in 1995, Korea’s public libraries enjoyed a period of rapid growth. The first half of the 2000s witnessed a notable progress in library informatization and substantial improvements in children’s service.

The informatization process kicked in significantly later in public libraries than in university or special libraries. The distribution of the Korean Library Automation System (KOLAS) by the National Library of Korea in the early 1990s marked the beginning of the automation

Year	Public libraries	Academic libraries	School libraries	Special libraries
1995	304	385	7,656	438
1996	319	388	8,140	443
1997	330	399	8,140	491
1998	370	408	8,716	542
1999	400	416	8,060	591
2000	420	420	7,918	578
2001	437	436	8,426	572
2002	462	438	9,080	562
2003	471	435	9,649	548
2004	487	438	10,297	570

Table 1. Number of libraries in Korea, 1995–2004.



Figure 5. Seoksu Public Library.

process for public libraries, and heralded an extensive transformation of classification processes in particular. By the end of 2005, automation was completed at nearly all public libraries across the country, now equipped with a fully integrated system. Under an e-library project by the central government launched in 1996, all public libraries nationwide became linked to the National Library of Korea through broadband network connections. By the early 2000s, a great majority of public libraries with automation systems had also readied a digital library environment. Some of them even integrated advanced technologies like RFID into their services, while e-books and e-journals, provided over the Internet, became basic services for most of them. In some instances, users are enabled to search through the library's databases using their cell phones, with quite a few libraries also providing Short Message Service (SMS) to their patrons.

In 2002, the Ministry of Culture and Tourism unveiled its 'Library Development Roadmap', a policy blueprint for the development of public library service in Korea in upcoming years. The essential content of this plan is as follows:

- First, increase the number of public libraries from 471 (as of 2003) to 750 by the year 2011.
- Second, establish small branch libraries linked to the regional central library in densely-populated areas or highly-frequented locations such as residential neighborhoods, shopping malls, apartment complexes and areas near the subway, to enhance accessibility.
- Third, enact a new library law in 2006, through a wholesale overhaul of the current Libraries and Reading Promotion Act.
- Fourth, introduce a greater variety of digital library services based on the latest infor-

mation technologies and improve the quality of services.

- Fifth, enhance children's services in public libraries by linking children's libraries with the National Library for Children and Youth, scheduled to open in 2006.

Academic Libraries

A deep respect for learning and scholarship has been a defining characteristic of Korean culture throughout its history. The history of universities in Korea goes back to the Goguryeo Period. 'Taehak', the oldest documented state-operated educational institution dating back to 372 BC, appears to have provided instruction to children and young adults of ruling-class families. 'Taehak' is believed to have owned a collection of materials necessary for learning and education, fulfilling the basic functions of today's university libraries, although no evidence has survived to support this conjecture.

The earliest known reference to a library concerns 'Jongyeongak', established within Sungkyunkwan, the Joseon-dynasty royal academy. Sungkyunkwan, founded in 1398 (7th year of King Taejo's rule), was a higher education institution that produced Confucian scholars and members of Joseon's political and cultural elite. Jongyeongak, created in 1475, maintained a collection of books and manuscripts for consultation by educators and scholars and provided patron services. Its collection was populated by complimentary copies donated by the government publisher and acquisitions made through government procurement. The collection is currently located in Sungkyunkwan University's Seoul campus.

Modern university education was introduced in Korea toward the late 19th century. Yonhi College (1885, present-day Yonsei University) and Ewha College (1886, present-day Ewha Women's University), both private schools founded by American missionaries, were the oldest higher educational institutions in Korea. In the aftermath of the Japanese occupation in 1945, a host of new universities cropped up. By 1948, the year of the constitution of the Republic of Korea, the country counted 42 total universities; the list has continuously expanded since then.

The Framework Act on Education, governing higher education in Korea, provides for two

types of undergraduate college: 4-year colleges and 2-year colleges (junior colleges). Four-year colleges may in turn be national or municipal colleges (colleges of education, industrial colleges and polytechnic colleges) or private colleges. Two-year colleges may be distinguished likewise. There exist other accredited institutions offering college equivalent curricula.

As of the end of 2004, the total number of universities and colleges in Korea was 438, comprising 61 national and municipal universities and colleges, 200 private universities and colleges and 157 junior colleges offering two to three-year programs (see Table 1). Fourteen of these institutions, including the Seoul National University, Yonsei University, the Korea University, Ewha Women's University, Pusan National University and Kyungpook National University, own libraries with collections of 1 million volumes or more. The Seoul National University Library has the largest collection, including close to 2,500,000 volumes, maintained by a staff of 107 (76 librarians). The next largest collection is 1,600,000 volumes at Kyungpook National University in Daegu.

Among private schools, the Korea University boasts the largest collection (1,700,000), closely trailed by Yonsei University (1,600,000). In spite of the rather large sizes of holdings among university libraries in the top tier, the average number of volumes per library amounts to a mere 216,000, and the average number of staff to 8.7, indicating that university libraries in Korea are overall both undersized and understaffed.

Meanwhile, in recent years, many Korean university libraries have been launching efforts

to enhance their capabilities in collecting and providing academic and research information the better to fulfill their roles as the foremost repositories of knowledge and the prime supporters of educational and research activities in the higher education field. Also, automation has quickly become a norm among university libraries. For the time being, the challenge faced by them is to ensure a successful transition from traditional print-based resources to digital formats by updating their methods for collecting, managing, organizing and preserving information resources and by more fully integrating information technology in their service operations. One of the most notable changes in Korea's university libraries concerns the composition of the collections. The dwindling importance of humanities and social sciences in higher education in favor of scientific and technological fields has led to a diminishing share of printed books, eroded by academic journals, online databases and multimedia materials.

This change, coupled with the progress in society-wide informatization, is also driving up the demand for online database retrieval via the Internet. Offering e-learning and lifelong education, both in and outside the campus, is soon to become a standard. Some universities with mobile campuses, for instance, are known to be preparing downloadable e-books for cell phones or PDAs in the context of Wireless Digital Library (WDL) service. Quite a few universities have already introduced RFID (Radio Frequency Identification) to manage their academic and student affairs data. All this points to the need for continued efforts to develop services adapted to learning in an increasingly ubiquitous network environment.



Figure 6. Central Library, the Korea University.



Figure 7. Central Library, Ewha Women's University.

The environmental change is not the only challenge universities in Korea are lately confronted with. A wave of restructuring and reengineering in campuses across the country has undermined the status of libraries in these institutions. Libraries have not come away unscathed from mounting pressures towards downsizing and reengineering in deficit-ridden universities. Even in the cases of libraries that are comparatively less severely affected by this phenomenon, many of them are subjected to a variety of streamlining measures, including reorganization of jobs and processes, introduction of project- or task-based teams and consolidation of units and sections. It is not infrequent to see some libraries merged with computer centers. An increasing number of jobs are outsourced as well. Renaming university libraries – done by several private schools – ‘Academic Information Center’, for instance, is highly indicative of this trend.

Korea’s university libraries rely heavily on foreign materials for information resources. The severe disparity between schools in Seoul and surrounding areas and their counterparts elsewhere in the country, and between universities and junior colleges, has been another problem hindering the balanced development of university libraries. These libraries further have to cope with an ever-diminishing budget, amid ever-rising prices. One solution which may be a remedy to all of these problems is creating a consortium for academic resource sharing such as the Center for Research Libraries. Duplicate materials of lesser importance will have to be discarded or relegated for the sake of the creation of a national-level repository of knowledge resources.

To effectively support research activities, university libraries must increase the number of national licenses on overseas electronic resources and open a center for online access and consultation of foreign academic journals. Joint subscriptions with other libraries can help reduce the cost, and inter-library loans are a great means to tap into larger pools of resources. As a matter of fact, a growing number of university libraries are entering into cooperation arrangements with their peers. Under these arrangements, they share both the library infrastructure and the collection, making them available to patrons of member institutions. Sharing agreements are becoming especially frequent concerning academic journals. Many Korean universities have already entered or are entering

into consortia for academic resource sharing with peers in Japan, China and Russia.

Rare book collections, incunabula and manuscripts make up an area which has been relatively neglected by Korea’s university libraries in their collection development efforts; a rather surprising detail in a country with thousands of years of history. In more recent times, however, this oversight has been actively addressed through projects to digitize catalogs and create full-text images of ancient documents and manuscripts, coinciding with a keen interest among libraries in building a national-level academic information sharing system. The diffusion of the dCollection Project, an academic information distribution system for gray literature like statistics and survey data, numerical data, dissertations and theses proceedings and papers presented in academic conferences, carried out by KERIS (Korea Education and Research Information Service), is a good example of progress made in this direction.

School Libraries

Schooling in elementary and secondary education in Korea is organized into 6 years of elementary school, 3 years of lower secondary school (mandatory curriculum) and 3 years of higher secondary school (with optional curriculum). Elementary and secondary schools are distinguished into public schools run by local educational authorities, national schools run by the central government and private schools. As of the end of 2004, there are a total of 10,650 schools in Korea, including 5,541 elementary schools, 2,888 middle schools and 2,221 high schools.

The Libraries and Reading Promotion Act of 1994 regulates all libraries in Korea and their duties and functions. Article 2–6 of this Act stipulates, “the role of school libraries in elementary and secondary schools, and institutions equivalent thereto, is to support teaching and learning activities taking place within respective organizations”. The same Act also makes it mandatory for all schools to have a school library. There are 10,297 school libraries (see Table 1) in operation in Korea as of the end of 2004. More than 90 percent of all Korean schools are provided with a library, which breaks down by grade level to 86.2 percent for elementary schools, 91.8 percent for lower secondary schools and 99.9 percent for higher secondary

schools. The average size of holdings per library stands at 5,169 books for elementary schools, 4,557 books for lower secondary schools, and 5,987 books for higher secondary schools, equivalent to 7.4 books per pupil.

Although the history of modern school libraries in Korea is relatively short, starting in the 1950s, it has undergone rapid progress. Various library-related training programs provided the needed numbers of librarians, and school libraries quickly emerged as the centerpiece to learning in the perception of educators and educational administrators both inside and outside the school walls, spurring their growth and development. Interest in school libraries, once into the 1960s, grew into a national movement, tremendously benefiting their cause. The 1970s and 1980s, however, were a period of stagnation for school libraries, which bore the brunt of an unstable education system. The 1990s had a more upbeat period in store. The 'Real Education Movement' by teachers' unions and the 'Giving Our Children Libraries They Deserve Movement' by citizens' organizations signaled a positive turning point, and major changes like national-level efforts to improve teaching and learning methods and the university/college entrance examination reform followed, reigniting interest in school libraries.

The Master Plan for Library Informatization of March 2000 by the Ministry of Education and Human Resources Development provides a good measure of the vested interest Korean society had in school libraries. In accordance with this plan, in 2001, an application hosting system (AHS)-based digital library system (DLS) was developed. Digital libraries were set up in 96 schools in two regions, and a pilot DLS was launched. The DLS is a standardized school

library information system operated at the level of local educational authorities. By the end of 2004, 5,504 school libraries within 15 regional school districts in Korea were equipped with DLS, corresponding to 57 percent of 9,649 schools with a library.

In Korea of late, demand for a wider variety of instructional and learning materials has been surging, as a consequence of dramatic changes in learning methods and environments, brought about among others by the introduction of the new national educational curriculum. Students are increasingly proficient at using school libraries, turning them into effective learning resources for themselves. In 2002, the Ministry of Education and Human Resources Development responded to the evolving education environment by issuing another plan, this time baptized 'The Roadmap to the Improvement of School Libraries', aiming at redesigning libraries in a manner conducive to self-directed explorative learning. Included in it was a plan to provide a library to all Korean schools over a period between 2003 and 2007, setting aside KRW 60 billion (USD 75 million) of the national education budget for this purpose. Its four key missions are:

1. expanding basic infrastructure for school libraries and their collections
2. beefing up programs for broadening their use by students
3. task and area-specific allocation of managerial manpower
4. building a public/private-sector cooperation system to support school libraries.

Meanwhile, library professionals from both inside and outside school walls joined hands in an effort to pass a new law regulating specifically the roles and functions of school libraries.

Special Libraries

The earliest Korean prototype of a modern special library, according to a widely held view, is the railway library opened in 1920 by the Southern Manchuria Railway Company. No other libraries worthy of this name appeared in Korea thereafter until 1953. As the signing of the cease-fire agreement in July of 1953 brought the Korean War to an end, government started to invest in education, science and technology as part of its postwar economic recovery efforts.



Figure 8. Sinsung High School Dong-Chun Library.

Scores of research institutes were created along with libraries to support research activities.

In 1959, the Korea Atomic Energy Research Institute was established, and in 1962, the Korean Scientific and Technological Information Center (KORSTIC) opened, with help from UNESCO, offering Korea's first public information service. Once into the 1970s, with the creation of the Science Complex in Seoul, a series of new special libraries were introduced to serve research institutions operating out of it.

In the 1980s, economic growth further spawned a host of new special libraries. With corporate research centers adding on to the expanding list of research facilities, the number of special libraries steadily increased in Korea. These libraries, whose chief function is providing information services to researchers, are specialized in wide-ranging fields, from science and technology to culture, history and economics. Special libraries in Korea generally cooperate closely with others in the same or similar fields. The Korea Information Resources Sharing Association, the Science and Technology Information Management Association and the Korean Medical Library Association are some of the better-known examples of special library associations in Korea, that are research information sharing platforms for librarians.

According to the 2005 *Yearbook of Korean Libraries*, the number of special libraries in Korea climbed from a mere 360 in 1990 to 570 by the end of 2004 (see Table 1), bringing the number of employees on their payrolls to 2,317 (1,015 librarians). Of these, 14 own a collection of 100,000 volumes or more, including the Ministry of Unification North Korean Infor-

mation Center (284,867 volumes), the Academy of Korean Studies (422,194 volumes), the Bank of Korea Library, and the Korea Institute of Science and Technology Information (KISTI).

With the average size of holdings per library at 23,000 volumes, special libraries, owing to their special characteristics, hold quite a large collection of non-book materials, estimated at about 12,210,000 volumes in aggregate size. Two thirds of all special libraries (391) are concentrated in Seoul and its immediately surrounding areas, which, combined with Daedeok Science Valley in Daejeon, are home to as much as 77.5 percent (442) of them.

The level of informatization and automation is very high among these libraries, which are most often research libraries for technology-intensive sectors. Digitization of information resources is making rapid progress among them, and online service capability is increasing rapidly. With the gradual decline in acquisition of print-based materials in favor of digital content, a pressing issue for these libraries is finding efficient solutions for organizing and managing electronic materials, and resource sharing is a concept quickly gaining importance among them. The trend among Korea's special libraries is therefore unambiguously toward being digital.

Profound changes are occurring also to the role of librarians. Their duties now extend beyond the traditional boundaries, to include computing, knowledge management, records management, public relations and training and education, as required by the increasingly multi-task environment. This is one reason why job skills training and workshops account for an important agenda of the programs of special



Figure 9. The Academy of Korean Studies Library.



Figure 10. KISTI, Daejeon, Korea.

library associations in recent times. At the same time, subject specialization of librarians is growingly perceived as an urgent requirement for the sector. The widely shared view is that subject specialist librarians with expertise in a given subject field will be in a better position to provide patrons with customized services. The Korean Medical Library Association, for instance, created a special committee in 2004, to perform research on a subject specialist librarian system. However, for such a system to successfully take hold, related rules and procedures need to be documented, and research must be conducted also in the areas of human resources development strategies and educational programs in the discipline of library and information science.

Conclusion

Korea is a country blessed with an exceptionally rich documentary heritage. This country is home to treasures of world printing history such as *Mu-gu-jeong-gwang-dae-da-ra-ni-gyeong* (the Pure Light Dharani Sutra) the world's oldest surviving example of woodblock printing, and *Jik-ji-sim-che-yo-jeol* or *Jikji*, the world's oldest specimen of movable metal type printing. The *Dharani Sutra*, dated to the early 8th century, is registered as a national treasure. Of the two volumes making up *Jikji*, found inside a pagoda at Heungdeoksa Temple of Cheongju in July 1377, only one has survived. The surviving volume, currently held at the Bibliothèque Nationale of France, was registered on the UNESCO World Heritage List in September 2001.

The People of Korea and its government are keenly aware of the strategic role of libraries and information centers in a knowledge-driven society and have been actively investing in them. Harnessing its leading information technologies and helped by the growing size of its economy and financial resources, Korea has stepped up initiatives toward the advancement and growth of libraries especially since 2000. As of the end of 2004, Korea counts a total of 11,792 libraries (487 public libraries, 438 university libraries, 10,297 school libraries and 570 special libraries) under its two national-level libraries (the National Library of Korea and the National Assembly Library). In terms of the number of public libraries for local neighborhoods and the size of holdings, Korea compares rather poorly to other OECD member countries. Efforts to fill

this gap are already under way. Informatization, balanced development, reading promotion, legal and regulatory changes and institutional mechanisms are the key components of these efforts.

The authors of this paper believe that the WLIC 2006 Seoul will be a rare and valuable opportunity for the Korean people to broaden and deepen their understanding of libraries and information services. Insights gained through this opportunity will help Korean libraries with their efforts to reach the next level in their development. Meanwhile, for visiting international library and information professionals and experts, this will be a chance for reflection and debate on the very important question of how libraries and information centers can drive and propel the society and economy in the age of information through the Korean example.

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Scholarly Communication in East and Southeast Asia: traditions and challenges

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Abstract

Outlines the tradition of scholarly communication in four East and Southeast Asian countries. Compares the similarities and differences in history and current conditions of research and publication practices in China, Japan, Korea, and Myanmar. Highlights challenges brought up by the advances of information and communication technologies. By analyzing existing imbalances in the development, the paper evaluates various solutions implemented or proposed by these countries. It discovers that each country has its own characteristics of scholarly communication, making the world diverse and colorful.

Keywords: Scholarly communication; China; Japan; Korea; Myanmar

Introduction

'Scholarly communication' is a term that defines a process of knowledge delivery practiced by members of the academic community. A vital part of this process is the broadest possible sharing of academic publications among scholars and students. According to the American Library Association (ALA), scholarly communication is

the system through which research and other scholarly writings are created, evaluated for quality, disseminated to the scholarly community, and preserved for future use.¹

Although scholarly communication is a new concept, its practice has a long history. Because of the dissimilarities of political and economic situations in different countries and regions across the world, scholarly communication has developed into diverse systems. The uniqueness of cultural practices in individual countries also plays an important role in the shaping of the systems.

With rich histories and vast cultural heritages, many countries in East and Southeast Asia have their own scholarly communication traditions distinct from other countries. Such traditions may differ in the way knowledge is accumulated, evaluated, and conveyed. For example, peer review may not be the only standard in the evaluation of scholarly research. Alternatives may exist and be proven to work effectively and efficiently in the academic field in some countries.

However, as part of the international community in the information era, East and Southeast Asian countries share many common characteristics in scholarly communication with the rest of the world. Knowledge exchange is no longer undertaken within the limits of country boundaries. Rather, communication at the international level is facilitated by the advances in modern technologies. Similarly, all of these countries now face the same challenge as countries outside the region: an increasing reliance on information and communication technology (ICT).

Undeniably, the development of ICT has dramatically altered the landscape of scholarly communication in recent years. Now, not only print publications serve as vehicles to convey information, but electronic resources have also become increasingly popular in preserving and delivering research ideas and results. However, because ICT infrastructure has been developed unevenly among countries and regions, the electronic revolution has brought varied results to scholarly communication in different areas. A digital divide has unfortunately limited the capability of some scholars and students to distribute and access research information across country boundaries.

Many East and Southeast Asian countries have already made great efforts to boost their ICT enterprises as the necessary step to improve their own scholarly communication. International efforts to narrow the gap between developed and developing countries in access to and use of ICT may also be observed.² A nation-to-nation comparison will help demonstrate the accomplishments and the trends of such developments in this region.

Traditions

There are many countries in East and Southeast Asia.³ This article, however, will only concentrate on four of them, namely, China, Korea, Japan, and Myanmar. These countries share lengthy historical relations with some or all of the others. Korea, China and Japan are geographically close; China and Myanmar share a common border. They share many similarities, as well as some differences, in the practices of scholarly communication.

East Asia has one of the earliest civilizations in the world. China invented the printing press about 1,000 years ago and thus had the capability to develop one of the earliest scholarly publishing systems.⁴ The printing press and publishing system were soon introduced into neighboring countries. For a long time, both Korea and Japan adopted Chinese publishing as the model to develop their own systems. Even the Chinese language was borrowed in their languages and was used in communication as the symbol of prestigious education.

The situation changed dramatically about a century ago under the strong influence of modern publishing and scientific research from

the West. Journals, books, and newspapers became the major vehicles for exchanging scholarly ideas, results, and activities. Western publishing systems were integrated into this region. Nonetheless, the localization of the systems created a great deal of diversity in scholarly communication.

China

In China, peer review is a standard model in the evaluation of research publications. This is in conjunction with editorial review that is mainly for non-research related papers such as reports and research news.⁵ Publications are primarily in the forms of books, periodicals, and research reports. Research journals are based on either disciplines or institutions and books are published by over 560 publishing houses and university presses.⁶

By 2001, there were as many as 8,725 periodicals in China, with a total impression of 2.9 billion copies, and 6.35 billion books nationwide. It is interesting to compare these figures to the statistics of 1949: 257 periodicals, with a total impression of 20 million copies.

Recently, China has experienced remarkable economic reform. For a period of more than 20 years, its economy has grown at a double-digit rate annually.⁷ The increase has brought economic prosperity to the Chinese people, but on the other hand has produced serious impacts on scholarly publications. One of the issues is that publishers are eager to make commercial profits and disregard the peer review process when publication quality and financial earnings conflict. A 'pay-to-publish' style has regrettably lowered the quality of many scholarly publications. Currently, the 'pay-to-publish' model is limited to book publishing, and journals still give remuneration to authors rather than charging for publishing.

Research institutes and universities have set harsh rules to put pressure on researchers. The regulations for researchers to get promoted favor the quantity of publications, whereas their quality is not a big concern. To provide adequate places for researchers to publish their articles, almost every university in China publishes its own journal that solely accommodates the articles of its employees. Some universities even publish different versions by discipline. It is estimated that a total of 1,075 universities and colleges are producing more than 2,000

journals.⁸ Unfortunately, most of the university journals are too broad in scope and too indiscriminating in article selection, making them academically worthless.

Another threat to scholarly communication in China is disrespect of intellectual property and copyright by some researchers. The intense competition has pressured some to publish articles and books without making necessary research efforts. The 'pay-to-publish' practice makes stealing others' work possible. There are no official statistics to indicate how widespread such cheating has been in the scholarly community in China. However, several occasions of cross-publishing by professors at top-ranked universities point to the seriousness of the problem.

Japan

Unlike China, Japan has a very different tradition of scholarly communication. Peer review is not the only way of controlling the quality of scholarly publications. This is especially common in the humanities and social sciences, where scholars publish their articles in an institutional or association journal with which they are affiliated.⁹ Such a journal is normally called *Kiyo* or *Daigaku Kiyo* (university journal). "It is a means through which affiliated faculty members publish their scholarly works."¹⁰ In particular, junior researchers find a perfect place where their articles can be published.

Quality control of publications in *Daigaku Kiyo* is carried out by senior professors in a university, who are familiar with contemporary research conditions and future research trends. This tradition is the product of a popular trainer-apprentice system in Japan within which an entire program at any university consists of a professor and his former students. The system has been utilized for more than 100 years and has helped Japanese articles get recognized internationally. Its extensive use has continued along the lines in which it was designed originally, although there have been increased concerns recently about the quality and usability of articles in *Daigaku Kiyo*. Scholars have started to question their acceptance standards.

Outside the domain of the social sciences and humanities, peer review universally exists. Scientific and technological journal articles have been published at a rate of as many as 57,240 per

million people in Japan, second only to the United States in ranking.¹¹ At the same time, scientists also prefer to publish articles in English in non-Japanese journals abroad.

Due to the economic recession since 1997, Japan's publishing industry has been shrinking nationwide.¹² To respond to this unpleasant situation, many universities strove to secure their own presses and add more *Daigaku Kiyo* to Japan's scholarly community.¹³ Though not being able to solve all problems caused by the economic depression, such efforts have at least helped ease its threats to research activities in Japan.

Myanmar

In Myanmar, scholarly publications are scarce. The leading publishers include a handful of government ministries and commissions.¹⁴ For example, the Myanmar Historical Commission frequently publishes scholarly material, the Ministry of Religious Affairs is relatively prolific in publishing religious-related materials and various dictionaries, and the Ministry of Culture publishes several titles a year both from the Department of Fine Arts and the Department of Archaeology. Myanmar is proud of both its traditional performing arts and ancient civilization, which the Ministry staunchly protects from outside influence. Most publications in these areas seek to notate music and dance as well as document ancient architecture and art. In other words, most scholarly publications are related to very safe topics: history, religion, art, music, archeology, etc.¹⁵

Book production amounted to only 227 titles in Myanmar in 1999. Less than 10 scientific and technical journal articles per million people (the total population is about 43 million) appeared in print. Instead, many Myanmar-based scholars have managed to publish articles abroad.

Censorship is carried out by the central government in Yangon, Myanmar. However, in the periphery of the country there are isolated and thriving publishing industries that operate outside of the central government's control. Many ethnic groups in these areas have formed independent cultural and literary commissions to publish alternative histories. Political wings of opposition groups have also produced publications. This situation reflects a relatively weak military and political control over its remote areas by the Myanmar government.

South Korea

In South Korea, censorship of print and media was traditionally controlled by the government. Political liberalization in the 1980s brought a loosening of press restraints and a rapid growth of scholarly publication.¹⁶ Now, the government controls only a few publications (for political purposes). Scholarly journals and books are mostly published by publishing houses and research organizations.

It is interesting that the majority of publishing houses in South Korea are operated by scholars as well as those who do not have financial pursuits as their primary purpose. Rather, publishing is regarded as a way of facilitating scholarly communication, or as the vocation of the publishers.¹⁷ Although publications are primarily in the Korean language, English is also a popular language in print. International collaboration is very popular.¹⁸ Recently, foreign publishers, especially those from the United States and European countries, became visible in the Korean market and brought tremendous competition to local publishing houses.¹⁹

Figure 1 provides an overview of the numbers of science and technological articles published in 2005.²⁰ This visual comparison can help illustrate the status of current scholarly research in the four countries. It is apparent that, compared to the other three countries, Myanmar's figure is too low to be displayed in the chart, and that Japan has the most published articles. Yet, this comparison does not reflect how scholarly communication has been structured traditionally in each country. Nor does it tell how the development of ICT has influenced scientific research in this region.

ICT Challenges

In the past decades, the rapid development of ICT has brought a revolution to scholarly communication in the world. East and Southeast

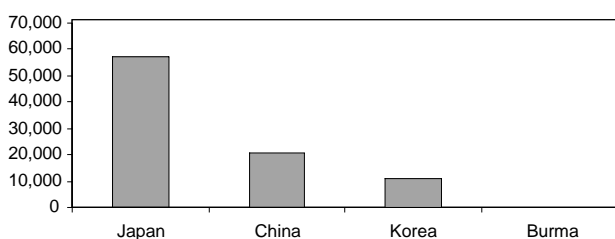


Figure 1. Comparison of the numbers of science and technology articles among the four countries.

Asia are not an exception. Similar to the West, e-books, e-journals, digital libraries, and other electronic publications have become the new forms of information gathering, storage, and distribution. Technology has played a key role in the transition. The statistics may help highlight the significance of ICT in scholarly communication in these countries:

- In mainland China, there are 36 electronic publishing units operating with the permission of the Press and Publications Administration, putting out more than 200 electronic publications in 2002.²¹ China's electronic publishing draws on enormous markets and well established entrepreneurial skills.²² The Internet-using population in the mainland reached 45.8 million in 2002, making China the second largest in the world.²³
- Scholarly publication in electronic format is relatively scarce in Japan. The shortage is especially obvious if it is compared to the advances of ICT infrastructure in the country.²⁴ For example, among its 1,700 academic societies, only a few have their own web publications. Although some 'electronic libraries' have been created to disseminate research information in digitized form, such attempts are limited to only a few major university libraries.²⁵
- Korea has enjoyed a rapid development in scholarly communication in electronic format in recent years.²⁶ Universities have played an important role in the movement. E-databases and e-journals are the major types of electronic publication.²⁷ The Korean government is strongly supportive of higher education and academic research. Since 1996, it has offered an extra USD 20–30 million annually "to universities to finance expansion."²⁸

The development has unfortunately been uneven across countries and regions. Like any other new technology, ICT has exacerbated the existing divide between the rich and the poor. The disparities in people's capability to use information to their advantage have unfortunately been widened as a result of the progress. Some countries have an inadequate development in ICT infrastructure so that their scientific activities and publishing have suffered dramatically. In contrast, scholarly communication in other countries has greatly developed due to the advent of new technologies.²⁹

Such impacts are visible in several aspects of scientific research in the developing countries.³⁰

First, information accessibility is severely restricted. The lack of Internet connectivity in many areas, especially rural areas, limits people's capability to read the most recent research online. Digital resources are largely unavailable, not only because of the low buying power in many developing countries, but also because of the lack of necessary facilities. Even CD-ROM files are in short supply. Figure 2 provides a quick look at the differences in Internet accessibility in these countries. It is apparent that Myanmar has a significant lower rate of Internet use.³¹

Secondly, information dissemination has hardly been possible through the new means of ICT in some areas. Scientific activities in some developing countries have been isolated from the outside world, and research results have been invisible to the exterior. Scholars have found themselves unable to join and contribute to the international community. Very few papers published in developing countries have become citation classics or found a place in the list of key papers in an emerging research front.

The isolation has been further observable in essential communications among scholars in different areas. Not only has their research been unknown to their colleagues in the industrial countries, but their personal participation in scholarly activities has also been narrowed. Without an easy way to access e-mail and other types of electronic communication, they have not even been able to accept invitations to be on lists of research referees and on advisory boards.

Compared to some developed countries in East Asia like Japan and South Korea, Myanmar has significantly lagged behind in the construction of ICT infrastructure and thus in the new way of scholarly communication. Media are notably limited. Scholars visiting Myanmar from other

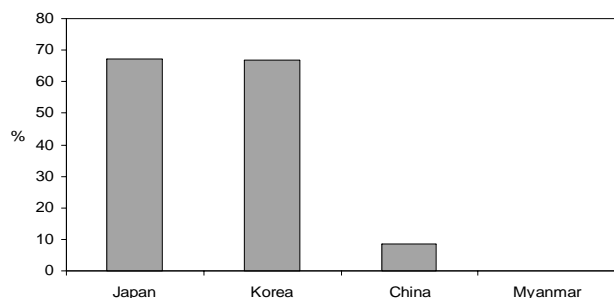


Figure 2. Internet penetration percentage of population in the four countries (2005).

countries may have to create their own little impromptu collections of out-of-print scholarly materials.

Within China, regional imbalance in ICT development is apparent. Communication facilities are conveniently available in big cities, major industrial centers, and most maritime provinces. Remote areas, mostly in the western part of the country, have difficulty in getting access.³² For these areas, the ICT revolution in scholarly communication is still a dream.

Both the Myanmar and Chinese governments, however, have noticed the problems and proposed, or actually worked on, improving this situation. The central and regional governments in China have recently launched a series of information digitization initiatives in western China as a way of preserving cultural heritage and disseminating information in electronic forms. According to China's statistics, by the end of 2001 in China, there were altogether 2,689 public libraries above the county level, of which 963 were in western China. They held 136.8 million of the around 400 million books in the entire country. However, in the year 2000, 27.6 percent of the libraries in China did not purchase even one new book during the whole year; 70 percent of these libraries were located in western China.³³ Recently, the Chinese government has been emphasizing the importance and urgency of speeding up information system construction to raise China's comprehensive competitiveness. The government has started to realize that digital libraries are a key to the construction of the digitized China. Western China is on the priority list.

As the initiatives go on, a main communication network has been established, including the data network, the optical fiber trunk network, the ATM network, the SHD synchronous digital serial network, and the optical fiber linkage network. The wideband networks under construction in some large and medium-sized cities in western China would provide the necessary communication platform to carry out western China's literature resource digitization. It is expected that more ICT infrastructures will be created in the disadvantaged areas in the future.

One of the improvements that many of these countries have made is in the construction of e-dissertation databases. Asian countries have become active in joining international efforts for

enhancing a new form of scholarly communication.³⁴ For example, the National Library of Korea set up a digital library of PhD dissertations in 1997, which now contains more than 7,000 dissertations in the humanities for the public to use.

Globalization Efforts

Globalization is one of the efforts by East and Southeast Asian countries to share research information with and disseminate scholarship to the international community. The relaxation of political barriers to access and relations between colleagues after the Cold War made possible the efforts. A rapid development of ICT in recent decades has helped facilitate the sharing of ideas and results across national and geographic boundaries. The globalization trend in scholarly communication can be understood at three different levels: governmental, institutional, and individual.

Government has played an important role in promoting globalization by promulgating beneficial policies and providing financial sponsorship to research activities. An example is the 'Center of Excellence Program' introduced by the Japanese government to support Japan's research institutions in international competition. Researchers are encouraged to apply for financial assistance from the program and publish scholarly monographs in English in order to receive international recognition.³⁵

The Chinese government endorses a campaign of scholarship internationalization by encouraging the publication of English-language journals. Through the National Science Foundation of China, the government has allocated millions of dollars to journals that are published in English in the fields of the sciences, medical science, and engineering. For the period of 2003–2004, for example, "32 journals received support and 20 of these are published in English."³⁶

Because English is the language most commonly used and recognized by researchers around the world, publishing English-language journals is considered to be one of the major efforts toward globalization in scholarly communication. It is worth noting that none of these four countries uses English as its official language, even in the scholarly communities. Publications in their own languages lack necessary international visibility and are thought to be academically restricted.

The publishing of English-language journals is implemented at the institutional level. Top universities may have their own journals in English such as *Tsinghua Science and Technology* published by Tsinghua University in China.³⁷ Similarly, professional associations and research institutes have produced many such journals. Figure 3 shows how four major types of organizations have made their contributions to the globalization efforts.

In the overall market, there are several publishing models for English-language journals in some East Asian countries.³⁸ The major ones include:

- those that are controlled by US or European companies in an Asian country
- those that are managed by local companies, universities, research institutes, or professional associations
- those that are co-operated by a local and an overseas company
- Kiyō type journals that are designed to be vehicles for scholarly exchange with libraries and schools abroad.

In addition to English-language journals, major scholarly journals published in local languages also have an English abstract for each article as a globalization effort to attract international attention.

It is unfortunate that the globalization efforts of these countries have not been very successful in reaching the goal of exchanging scholarly information with the rest of the world. On the one hand, the number of publications in English is still small.³⁹ On the other, the quality of research papers in English is still regarded very skeptically.⁴⁰ Few of the English-language journals are rated as world-class journals by scholars. As a result, their international visibility is still very

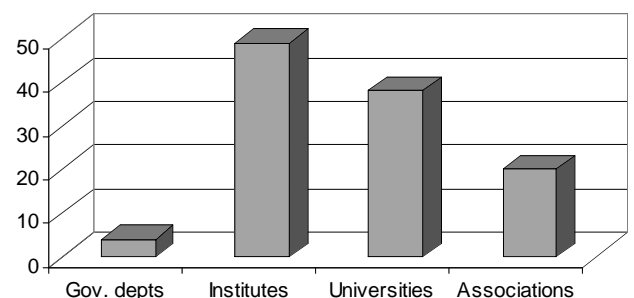


Figure 3. Sponsoring organization of English-language Chinese journals (from Ren and Rousseau 2004, Figure 2).

low, which can be judged by the citation indexes and the journal subscription rate.

The causes are multifold. First, many scholars in these countries are not able to utilize the English language efficiently. Secondly, editorial staff of the journals may lack necessary language skills. Thirdly, there is a lack of internationalization of authors and editorial board members; many of these English-language journals are merely different language versions of local journals. Most importantly, it is the attitude of scholars in these countries that has made the locally published English-language journals non-competitive.

Naturally, in any of these countries there are some researchers who are carrying out cutting-edge projects and who are able to utilize the English language well. The question is, however, where and how do they publish their research results? It is interesting to find that Japan and China have contrasting environments that drive scholars in selecting their means of communication. Yet, scholars in both countries all disregard locally published English-language journals.

In Japan, publishing articles in English is not very much encouraged, especially in the humanities and social sciences. Scholars usually work in the same institution where they received their degrees. Being faithful to their former academic supervisor (hence current boss) and responsible to their own program are the big priorities. Credits are given first to articles published in the Japanese language, although an English abstract is considered to be important.

Chinese institutions, in contrast, put too much pressure on scholars to publish their research in the English language. Quite normally, these institutions will set promotion criteria to require publications in journals outside the country. Some even provide monetary awards for those researchers whose publications appear in top-ranked international journals like *Nature* and *Science*. Such a system has resulted in an increasing number of articles published in overseas English journals by the Chinese.⁴¹ From this viewpoint, the Chinese efforts toward a globalization of scholarly communication have been successful at the individual level, but unsuccessful at the institutional level.

Globalization efforts at the individual level are not only rewarded in China, but are also popular in South Korea and Myanmar. Scholars in both countries have striven to bring their research results to the attention of an international audience.

International collaborations are common practice in East and Southeast Asian countries. They can be at the levels of the individual, organization, or government, and in the forms of research cooperation, scholar visiting, conference holding, and the like. The internationalization process is not limited to the involvement of the English language. Collaborations can take place between any two countries, including countries inside this particular region. For example, there is an active program aiming to facilitate scholarly exchange between Korea and Japan. On the whole, globalization efforts have made the world closer together.

Conclusion

The imbalances in the use of ICT and in the extent of scholarly communication in these four countries have many causes. Barriers can be technical, economic, political, legal, cultural, and social. In general, each country has its own system, and thus has varied solutions for scholarly communication. As part of the international community, East and Southeast Asian countries have made great endeavors in scholarly contributions.

Although ICT has been unequally developed, each country has a commitment to improving its systems of information exchange. This paper has listed some examples to explain what these countries have done for improvement. The encouraging thing is that each country has its own characteristics of scholarly communication. All together, they make a diverse and colorful world.

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The Vigorous Advancement of Libraries in China

The Library Society of China

Abstract

Outlines the development of libraries in China, including the National Library, university libraries, public libraries, specialized libraries and other types of library, and the work of the Library Society of China.

Keywords: Libraries; Library development; China

Introduction

China is an old country and its librarianship has developed with a long and brilliant history. The initial period of the 20th century, the important period of China's librarianship, witnessed an evolution from the old 'house for storing books' to the contemporary library. According to the survey and statistics of 1936, China then had 2,520 libraries and educational centres for the masses, among which there were 2,005 public libraries and 515 private libraries.

The founding of the People's Republic of China in 1949 represented a new era for the development of China's librarianship. Under the leadership of the Chinese Government, especially under the guidance of the reform and opening-up policies, China's librarianship, which used to feature a weak basis, imbalance in development and irrational distribution, has been built into a librarianship system with features of Chinese socialism including the national library, public libraries, university libraries, specialized libraries, primary and middle school libraries, enterprise libraries, etc., which together have large collections, and provide various services. Remarkable achievements have been made in this regard. And we will keep the developing trend going steadily and continually.

The National Library of China

The predecessor of the National Library of China, the Capital Library, was established on 9 September 1909, and so has a history of 97 years. The area of the building is 170,000 square meters. Over 1,300 full time staff members and about 600 part time staff work for the library. There are 47 reading rooms and 3,600 reader



Figure 1. National Library of China.

seats in all, and the library opens to public on 363 days of the year.

The National Library of China is a comprehensive research library, a repository of publications, a national center of bibliographies, a center of library information and a research centre of librarianship development, and is responsible for collecting, processing, storing, utilizing and disseminating information. The National Library of China studies and adopts modern technology, and plays the leading role in standardization and digitization of libraries. The Library serves the central legislature, the govern-



Figure 2. The Readers of National Library of China.

ment, key research institutions, academies, education, business and the general public. The National Library is also responsible for training librarians in China and developing the study of library science. On behalf of China, the National Library enters into cultural agreements and develops cooperation and communication with libraries both at home and abroad.

At the end of 2005, the National Library had a rich collection of more than 25 million items. In that year, the total collections amounted to 224,471 titles and 636,063 items.

Also in 2005, the National Library received 4,586,564 readers, and issued 195,300 reader cards, while 189,094,000 visits to the library's website were recorded. More than 20 million loans recorded and 280,500 reference enquiries were answered. In addition, the National Library of China organizes lectures and exhibitions. In 2005, the library held 392 lectures with a total of 94,000 attendances being recorded. Now the library makes efforts to provide online services, such as online retrieval of bibliography, digital document delivery, information delivery, online lectures and training, resource guidance, etc.



Figure 3. The National Library of China, Phase II Project.

The new library building (the National Library of China Phase II Project and National Digital Library of China Project) is now under construction. The new library is designed to serve 6,000–8,000 readers per day, with a collection capacity of 12–14 million volumes and a construction area of about 80,000 square meters. The National Digital Library of China Project will develop more models of service, and will become a center of Internet knowledge and a base for information service without limitations of space and time. The project is expected to be completed in October 2007, and will come into operation in 2008. Then, the total area of the National Library including both old and new buildings will be 250,000 square meters, ranking it third among the world's national libraries.

Public Libraries

Public libraries in China are an important part of mass cultural services. They play an important role for the citizens, who have the basic right of getting cultural information and education. By 2004, China had 2,719 public libraries at and above county level with 47,727 staff members. They had a total of floor space of 6.087 million square meters, including 1.534 million square meters for book storage and 1.385 million square meters for reading rooms. The total collections of these public libraries amounted to 437 million items. The libraries received 216 million readers and 181 million loans were recorded in 2004.

The public libraries organized various programs, such as information literacy training, lectures, exhibitions, readers salon, etc., for the readers. In 2004, they held 153,000 programs with a total of 25.5 million attendances.



Figure 4. Capital Library I.



Figure 5. Capital Library II.

Local authorities are responsible for the public libraries. All public libraries above the county level plan reading spaces or reading-rooms for children. In addition, there are over 80 separate children's libraries in China. Both public libraries and the children's libraries offer loan service and Internet service to children. The public libraries and some children's libraries regularly hold activities for children, such as family reading campaign, foreign language training, art courses and children's summer camps, etc. Some public libraries also plan some special seating, special spaces and reading rooms and offer loan services for the elderly, the handicapped and the blind, and hold some activities such as computer training and reading parties for the blind. In addition, some public libraries provide the blind with braille reading devices.

University Libraries

According to the 'Chinese Academic Library and Information System' statistics reported in 2004, there were approximately 1,450 universities (including Higher Technical and Vocational Education Institutes) in mainland China. They included 150 universities affiliated to Ministry of Education and more than 100 '211' university libraries. '211' is a code for the project, and



Figure 6. Library Building of Beijing University Library.

means that the government will invest in the development of 100 A-level universities in the 21st century. There were also about 700 ordinary university libraries and more than 600 libraries of Higher Technical and Vocational Education Institutes. In addition, there were a total of 193 universities in Hong Kong (22), Macao (12) and Taiwan (159).

According to the statistics, there are more than 55,000 staff members in the university libraries in mainland China, including more than 11,000 in the libraries of '211' universities and about 30,000 in ordinary university libraries. The rest, about 15,000, are working in libraries of Higher Technical and Vocational Education Institutes.

In 2004, about 80 million readers were received by university libraries in the mainland, including around 23 million readers in '211' university libraries and about 45 million readers in ordinary university libraries. The rest, about 12 million readers, were in higher technical and vocational education institutes.



Figure 7. Library of Beijing University.



Figure 8. Library of Tsinghua University I.



Figure 10. Library of Chinese Academy Sciences I.



Figure 9. Library of Tsinghua University II.



Figure 11. Library of Chinese Academy Sciences II.

It is estimated that university libraries have total collections of about 976 million volumes (only printed materials are included). The '211' university libraries provide on average 86 volumes per student, while ordinary university libraries provide on average 95 volumes per student. The libraries in Beijing, Tianjin and Hubei have average collections of more than 1 million items, while libraries in Shanghai, Sichuan Province, Heilongjiang Province, Shanxi Province, Chongqing, Shandong Province and Liaoning Province each have more than 800,000 items.

Specialized Libraries

Among Chinese library systems, the specialized library system has the biggest number and most types of library of the most varied sizes, and the most staff. Their levels of development are also very different.

Specialized libraries are widely spread in every industry and throughout the country. In general, industrial libraries regard the national-level specialized libraries as the central libraries for certain industries. The specialized library system is mainly formed by the libraries of the Academies of Sciences, libraries of industrial institutes, national defense technology and all levels of government, enterprise libraries, hospital libraries and mass media libraries. These libraries mainly collect documents of different types relating to a certain discipline or a specific field of knowledge. They provide the industry or organization with document delivery services and information services. Most of them also serve the general public and are staffed by professional librarians with specialized academic backgrounds.

There are about 8,000 to 9,000 specialized libraries, with a total collection of about 1,060 million volumes and a total number of employees of about 890,000. The Chinese Academy of Sciences System has 96 libraries, collections of over 35 million volumes and about 1400 employees, while the Chinese Academy of Social Sciences System has 20 libraries, collections of 5 million volumes and about 300 employees.

Other Libraries

There are 600,000 school libraries with collections totalling 2,765 million volumes and a total floor space of some 29 million square meters. There are 60,000 enterprise libraries in China, including 12,000 trade union libraries with total collections of 191 million volumes.

Other Aspects

The Legislation Institute of China is now drawing up the draft of a China Library Law, so there is no library law in China so far. But some local governments and universities have published regulations on the construction of libraries, the architecture of libraries, library evaluation and the professional management of libraries.

All libraries in China make efforts to improve information literacy education for the public and professional training for the librarians. According to the regulations, every librarian must take at least 40 hours training or workshops per year. This is an important means of evaluating librarians, and also a necessary qualification for the librarians to keep their positions and get promotion.

Libraries in China pay much attention to library cooperation. Interlibrary lending and sharing of documents are important for most libraries. The Consortium of National Information Resource Sharing and the China Academic Library and Information System (CALIS) are two national programs for sharing information and documents. Programs of cooperation have also been developed in some regions and systems, while some libraries establish alliances in their specialized fields.

In 1997, the Online Catalog Center was established in China which published cataloging

standards and cooperated with many libraries in creating a national union catalog.

The Library Society of China

The Library Society of China (LSC), which was established in 1979, consists of staff members from libraries and relevant trade and scientific organizations. It is a national non-governmental non-profit academic organization. The mission of the Society can be outlined as: to guide the scientific management of the library and to advance the development of science and technology. The LSC is an important non-governmental force to improve the library undertaking. It is a member of the China Association for Science and Technology, and is a global academic organization for the study of library science, an A level consultative body of UNESCO and a National Association Member of IFLA. There are nineteen professional librarians from China currently serving as members of Standing Committees of the professional Sections of IFLA.

The predecessor of the LSC was the the Chinese Library Association, which was established in 1925. Its mission was to study library science and to develop Chinese library undertakings. It was one of the founders of IFLA in 1927.

The Eleventh Five-year Plan of the Library Society of China outlines the following key objectives for the next 5 years:

1. Lead, organize, coordinate the relative professionals and institutes for making investigations of the theory and practice that influence the overall development of librarianship; Promote the organic integration of theory and practice; Pay attention to the development of academic morals and styles of study, and make great efforts to build a healthy, harmonious academic environment; Establish and perfect the mechanism of investigation and research on the annual plan, medium-term plans and long-term plans; Enhance its influence on decision making and policy.
2. Actively promote the building and perfection of the legal environment, in which librarianship develops healthily and orderly; strengthen the professional norms and self-discipline.
3. Make great efforts to promote and improve the balance of librarianship development in

different areas and in different systems; Encourage and support cooperation among libraries in different areas and different systems; Implement the ‘Socialism New Village Policy’ of the central government, and assist the development and construction of basic libraries in the depressed areas and, to the maximum extent, guarantee the basic right of the public to access information and documents freely and equally.

4. Through various methods and approaches, build the cultural infrastructure of the library, and advertise and expand the influence and function of the library; Encourage the public to read; Launch popular science educational activities, promote the innovation and spread of knowledge, and improve public literacy.
5. Actively develop research into the public relations of libraries, and establish procedures for the public relations of libraries in order to deal with crises such as terrorism, accidents and natural disasters including flood, fire, and earthquake, and create a good external environment for librarianship.
6. Enhance the LSC’s abilities in respect of self-determination, independence, self-improvement and self-discipline; Innovate organizational mechanisms, operating mechanisms and activity methods to meet the needs of the socialist market economy and the development rule of society; Strengthen the

cohesive force, centripetal force and influencing power of society.

Conclusion

Libraries, as dynamic engines for knowledge and the information society, are facing the impact of the digital era, and taking on significant responsibilities. Chinese librarians therefore expect to enhance their cooperation with colleagues from all over the world, to face the challenges, and to contribute to the development of civilization.

Note

This article was compiled and translated by Library Society of China. All photos were provided by Library Society of China.

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Changes in University and Public Libraries in Japan

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Abstract

Describes the factors and institutions influencing university and public libraries in Japan, the organizational structure and basic characteristics of both types of libraries. The role and activities of the Ministry of Education, Culture, Sports, Science and Technology (MEXT), the National Institute of Informatics (NII), the National Diet Library, and the Japan Library Association are outlined. University libraries face problems related to budget cuts, journal price increases, insufficient shelf capacity, collection development, interlibrary lending and staff expertise. Public libraries face problems related to the merger of local governments, the Shitei Kanrisha System (outsourcing of local government management), budget cuts and poor staff qualifications. Public libraries are introducing business information and consumer health information services as well as IC tag systems.

Keywords: University libraries; Public libraries; Japan

Introduction

Today libraries of all kinds are in a state of flux. They are struggling to find a new and powerful paradigm, policies, strategies, and tools in order to retain their longstanding roles as information providers. This situation is also applicable to libraries in Japan. The effects of social changes and the economic situation are outstanding and libraries have to deal properly with the problems arising from these changes. The impacts of budget cuts and information technology are particularly predominant in university and public libraries in Japan.

Since the environment surrounding libraries is variable and complicated and the same applies to the institutions whose activities are closely related to libraries, it is difficult to present a clear picture of all aspects of Japanese libraries today. Information on their general characteristics can be acquired from several articles and books, some of which are available on the Internet. For example, Koizumi and others outlined library history, the general characteristics of public, university, school and special libraries, the National Diet Library (which is the only national library), and the Japan Library Association (JLA) and also described education and training for librarianship.¹ Brief statistics on university and public libraries as of 1 April 1997 are shown on the JLA home page.² Information and data from these sources will give the basic conditions and some images of the uniqueness of libraries in Japan.

It is not too much to say that university and public libraries are typical representatives to indicate how today's libraries are changing drastically. This paper will try to show how these libraries are facing the changes in the environment in Japan and how they are adapting to it. In particular, attention will be focused on recent phenomena which will shape the future of libraries.

Factors and Institutions Influencing Libraries in Japan

Before describing the present state of university and public libraries in Japan it is necessary to mention an inherent factor, namely the organizational structure, which shapes library services as well as the institutions which play an important role in the library arena. University and public libraries are serving distinct users in different ways, and there are few cooperative activities between them in terms of offering library services so far because of the lack of flexibility in the structure. As the result the volume and quality of services provided by both types of libraries are limited. Sometimes the effectiveness of the services is impaired.

Nationwide organizations which have close relations with and influence on the activities of such libraries are the Ministry of Education, Culture, Sports, Science and Technology (MEXT), the National Institute of Informatics (NII), the National Diet Library, and the Japan Library Association. The most influential from the point of view of daily library services is the NII.

MEXT has been taking initiatives to promote activities and services in university libraries in many ways. It has allocated some of its budget to national universities and financially supported the purchase of e-journals by public university libraries. It has developed a variety of policies, plans, and recommendations under which substantial amounts of money have been allocated to promote libraries, both directly and indirectly. A typical example is the establishment by MEXT of the NII.

MEXT has also organized an ad hoc working section in the Subdivision on Science of the Council for Science and Technology in which policies for promoting academic information infrastructures are comprehensively deliberated. The Council carries out research and deliberation on important matters relating to the promotion of science and technology in response to requests from the Minister and provides its opinions to the Minister, thus it is not an internal organization. The Council has six subdivisions and the Subdivision on Science is one of them. A working group has been set up in the above mentioned ad hoc working section to exclusively study the tough problems

occurring at university libraries and to find possible solutions for them.³

MEXT has for a long time taken action to promote public libraries. It has compiled guidelines, offered opinions and suggestions, and carried out research on matters closely related to public library services. Financial support for developing libraries is given to local governments when their actions for promoting libraries fit in with the plans prepared by MEXT. In addition, MEXT organizes training sessions for public library staff at a national level.

Some other ministries and agencies sometimes take part in promoting libraries. In most cases, however, their involvement is not steady. There is no bureau or department in the national government which deals exclusively with library affairs, thus it is hard to say that there is a robust library policy in Japan.

The NII, an interuniversity research institute, was called the National Center for Science Information Systems (NACSIS) until 2000. The institute is quite unique in the sense that it plays an important role in the distribution of academic and scholarly information nationally and internationally as well as building the infrastructure for processing such information. NII functions as the bibliographic utility for university libraries in Japan. It does not offer many benefits to public libraries since its main target is the university libraries. More details of the services of the NII are provided below.

The National Diet Library (NDL) has a close relationship with public libraries. Its response to requests from public libraries to provide backup support for their services to local communities is faster than it was before. On the other hand, it does not have much to do with university libraries so far. Recently there is an indication that it intends to modify its policy in order to strengthen relations with the academic world. The activities and services of the NDL are described on its home page.⁴

Although the mission of the Japan Library Association is to promote all kinds of libraries in Japan, the emphasis of its activities is on public libraries and it has few connections with university libraries at present. Its brief history, organization chart, publications, library statistics of public and university libraries, library

directory, and library laws and statements are shown on its home page.²

University Libraries

Organizational Structure

There are three types of universities in Japan; national universities, local public universities, and private universities. National universities are now called ‘national university corporations’, which are independent organizations. Local public universities are established and funded by local governments. These three types of library have formed different associations, namely, the Association of National University Libraries, the Public University Library Association, and the Japan Association of Private University Libraries.

The numbers of national, local public, and private universities and their respective libraries are shown in Table 1.

The table shows that users at national universities are, on average, in a more favorable environment in terms of library provision than those at other kinds of university. In fact, national university libraries are the most prominent institutions and only a very few private university libraries enjoy comparable status. The libraries of many private universities are not well equipped and their services are not necessarily good. The same goes for the libraries of local public universities. Thus there is a big gap with regard to both quantity and quality between rich and poor libraries. As a result, productive cooperative activities among university libraries are not necessarily easy and effective.

Figures 1 and 2 show the Keio University Library on the Mita campus, which is a representative private university library. In fact it has taken the lead in all aspects of library activities and services for a long time. The services provided by

the library are shown on its home page.⁵ The building of the old library, shown in Figure 1, is an important cultural property and a symbolic representation of the university libraries in Japan.

A dramatic and memorable event which may hold sway over the destinies of the national university libraries is the reorganization and consolidation of the national universities themselves. From April 2004 they have been redesignated as national university corporations. The



Figure 1. Keio University: the old library.



Figure 2. Keio University: the new library.

Type	Universities	Libraries	Libraries/university
National	87	296	3.4
Local	77	118	1.5
Private	544	927	1.7
Total	708	1314	1.9

Table 1. Universities and their libraries in Japan, 2004.

main aim of changing the structure and establishing such corporations is to make the university managements more autonomous, for example in respect of personnel affairs and budgets. Thus each national university requires more managerial ability than before. As a natural consequence, their libraries must also clearly justify their existence. This means they should do their best to function more effectively in the new environment.

Basic Features of University Libraries

The basic features of university libraries have been described by Hosono.⁶ He mentions topics such as background, current conditions, bibliographic control and related topics, consortia, library housekeeping systems, cooperative activities, digitization projects, research and development activities, and international activities.

Almost all university libraries in Japan maintain local catalog databases, taking advantage of shared cataloging using NACSIS-CAT, which is operated by NII (see below). A new trend in current cataloging practice is outsourcing, either hiring contract catalogers or purchasing complete catalog records from outside organizations.

More than 60 percent of holdings in university libraries, on average, are materials published in the Japanese language, while the rest are in Western and other languages. The two types of materials are cataloged differently. Most libraries are using the Nippon Cataloging Rules, maintained by the Committee of Cataloging of JLA, for descriptive cataloging of materials in Japanese and several Asian languages, while the Anglo-American Cataloging Rules are used by 71 percent of the libraries for publications in Western languages.⁶ The most frequently used classification scheme is the Nippon Decimal Classification maintained by JLA. Subject headings are rarely used so far because of the unavailability of a good subject headings list in Japan.

There are several kinds of MARC products in use in Japan. Typical examples are Japan MARC, created by the National Diet Library; NS-MARC, developed by Nippan Toshokan Service; and TRC MARC, created by Thokan Ryutsu Center. Commonly used MARC formats in Japan are NC/MARC, Japan MARC, and MARC21. NC/MARC, a format specific to NACSIS-CAT,

is a relatively simple format used by most academic libraries. Japan MARC is a UNIMARC-like format used for domestic publications, while MARC21 is used for foreign publications.

University libraries in Japan began developing mechanized housekeeping systems in the 1980s. The 1990s saw increased standardization of library operations with the establishment of cataloging and interlibrary lending (ILL) systems under the auspices of NII, as well as the marketing of various library system packages. Most library package vendors are Japanese since Japanese language processing is considerably complicated.

Comprehensive statistics concerning university libraries are compiled every year by MEXT⁷. These include data with respect to library staff, library buildings and facilities, library holdings, acquisition of materials, expenditures, services, outsourcing library operations, service to the public, and digital library functions. Averaged data for each of the three types of university library for 2004 are shown in Table 2.

The services and activities of university libraries fall into two groups. The first group comprises services carried out independently by each institution based on its purposes and policies. The second comprises activities carried out through cooperation among libraries. Since the three types of libraries are differently established and funded, they have, until recently, rendered services to users independently without substantial cooperation among them. Under the financial pressures of severe budget cuts and demands for more cost-effective work, libraries have to seek legitimate actions to cope with the pressures and demands. Thus, cooperative activities are becoming more important. Now it is impossible for a library to survive without working together with others. This is the main reason why the three types of university libraries have established a joint committee. Now it functions as the place where they exchange more precise information about these problems and discuss countermeasures to deal with them.

The Environment of University Libraries

Without doubt the services provided by NII, electronic journals, digitization projects, and the Internet have had a tremendous impact on the activities and services of today's Japanese academic libraries. The NII functions not only as

Item	Type of university		
	National	Local	Private
No. of staff	44	11	16
Total floor space (m ²)	10,633	3,580	4,339
Shelf capacity (vols)	976,859	273,750	378,304
Holdings			
Books (vols)	1,052,924	235,763	304,192
Serials (vols)	18,098	3,114	3,401
Annual acquisitions (purchases)			
Volumes added	10,529	4,708	7,154
Current serials	2,640	556	820
Annual expenditure on library materials (JPY 1000s)	272,711	51,885	90,838

Table 2. Selected statistics for Japanese university libraries, 2004 (averages).

a service agency but also as a leading research and educational institute for information science and computer science. The activities and services of the NII are described on its home page,⁸ which clearly shows the aims of the high-level research and services as well as the coverage of the NII. Its service aspect is closely related to the activities and services of university libraries, although some of the products of its research are applied to its own services. The services outlined below, among others, are relatively more influential for libraries.

NACSIS-CAT/ILL (Cataloging Information Service)

NACSIS-CAT began service in 1984 and provides a shared cataloging facility and as the result a union catalog. These services are available free of charge. A total of 1,139 organizations, mostly university libraries and including 72 foreign organizations, were participating in the service as of 28 February 2005.⁹ NACSIS-CAT has about 8 million catalog records and more than 82 million location records for books as well as nearly 300,000 bibliographic records and more than 4 million location records for serials as of 25 February 2006.¹⁰ In addition, it has more than 1 million authority records.

NACSIS-ILL supports interlibrary lending. As of August 2005, 967 institutions were taking

advantage, while the total number of transactions in 2004 was about 1.2 million¹¹. Now NII also provides NACSIS-ILL services to libraries in the United States and Korea.

*GeNii (Global Environment for Networked Intellectual Information)*¹²

GeNii is the academic content portal, providing search systems by which users can get access to several databases. The available databases are CiNii (papers, theses, etc.), Webcat Plus (books, magazines, etc.) Kaken (research subjects), and NII-DBR (specialized academic information).

NII-REO (NII Repository of Electronic Journals and Online Publications)

This provides universities and other institutions with a reliable, uninterrupted supply of electronic journal content. This service is offered in response to requests from universities, libraries, and consortia in accordance with licensing agreements with participating publishers.¹³

E-journals and Digitization

The environment surrounding university libraries is changing drastically. The number of libraries which subscribe to electronic journals has increased rapidly since 2002. Total subscriptions to e-journals in university libraries

amounted to 850,000 titles in 2003.³ National university libraries subscribe to an average of 4,900 titles each. Some universities buy about 14,000 titles.

Digitizing projects are flourishing for rare books, old maps, and documents owned by academic institutions. A link list created and maintained by the Ryukyu University Library provides information on the current extent of digitization efforts as well as digital content produced at national and other university libraries.^{6,14} The list shows some valuable cultural assets which are usually difficult to see in their original forms. An example from the collection at Kyoto University Library¹⁵ is shown in Figure 3. At present these digital documents are accessible to the public in a variety of ways, but they may be reorganized into an institutional repository in the near future.

The Internet

The popularity of the Internet has formidable impacts, not only on library services but also on the behavior of users in accessing information. The behavior of users changes in the sense that many of them seek information, not by going to physical libraries, but by operating mice and keyboards at their homes or laboratories. Libraries seem to be losing their important role as the information source of last resort.

The i-mode, which began in 1999, is a new means whereby Japanese users can get access to the Internet from mobile phones. A number of libraries have introduced such technology to their OPAC systems so that users can access them from their mobile phones. The first application of i-mode to OPAC systems was at Toyama University Library in 2000. A survey in 1999 showed more than 90 percent of users owned mobile phones.¹⁶ This shows that the

project to offer information by using such technology was timely. Tokyo University Library has also offered i-mode OPAC since May 2001. From April through November of 2005, the service was accessed 8,526 times.¹⁷ Approximately 90 libraries have embarked on similar service as of February 2006. However, since users seeking information via mobile phones must cope with the small screen and the input process with the ten-key pad,¹⁶ it is difficult for them to get detailed cataloging information in this way. Thus many libraries offer only news and general information concerning library services via i-mode instead of full cataloging information from OPAC.

Problems and Issues for University Libraries

Decrease in Budgets

The most influential factor on the future of university libraries in Japan is the general decrease in library budgets. For example, Keio University Library, one of the leading libraries, has suffered from pressure of budget cuts. The budget for books, periodicals, online journals, databases, and other library materials was JPY 1,708,349,413 in the fiscal year 2004,¹⁸ but will be reduced by about 4 percent in 2006. The budget for personnel will be also cut. No university library can get avoid such pressures. Consequently, the situation with regard to the number of professional staff is getting worse and many university libraries are obliged to outsource some of their work.⁶

Price Rises of Academic Journals

The phenomenon of steady rises in the price of scholarly journals is well known internationally. University libraries in Japan have suffered considerably. In particular, the price of foreign journals is estimated to go up by nearly 10 percent every year.³ Budget cuts have worsened the situation. As a result a number of libraries have had to cancel their subscriptions. In order to deal with this journal crisis, national university libraries and private university libraries respectively have formed consortia⁶. However, since Japanese consortia are weak in cohesive nature, their negotiating powers with publishers are limited.

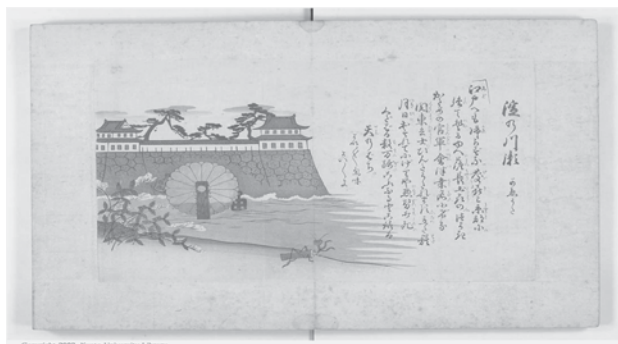


Figure 3. A digital image of old material (*Edoemazehari*) in Kyoto University Library.

Shelf Capacity Issues

It is said that shelving of new books is hindered if more than 70 percent of the shelves are already occupied by existing library materials, yet on average 90 percent of shelf space in all university libraries is already filled. The condition is worse in national university libraries and there are libraries whose collections amount to nearly 110 percent of available shelf space.³ Many books are kept in corrugated boxes without any means to get access to them. This means that average collection size at many university libraries exceeds shelf capacity or is close to capacity. These libraries are compelled to adopt a variety of strategies to cope with the shortage of shelf space.

Solutions include repositories of overflow materials at off-campus sites, deposit libraries or stacks, shared storage, and automatically operated compact shelving. Figure 4 shows the deposit stack with automatically operating compact shelving at the Tokyo University Library in Kashiwa campus. It can store 500,000 items for the present and there is a plan to enlarge its capacity to store 1 million items in the future.¹⁹ Automatically operating compact shelving has been introduced in several libraries. On the other hand, shared storage programs in the strict sense are not seen so far.

Collection Development

The popularity of e-journals and e-books (e.g. netLibrary) as well as the Internet will deprive us of the concept of collection development which libraries have cherished for a long time. Systematic and seamless combinations of traditional printed materials and digital ones are needed for the new collection development policies. This means that some printed materials will be replaced by digital ones. Today, collection development and the means to solve shelf capacity issues are closely related.



Figure 4. Automated compact shelving in the Kashiwa Library, University of Tokyo.

A variety of bibliographic, numeric, and full-text databases in many subjects have been produced by scholars and researchers in academic institutions for several decades but the systems and procedures for maintaining them properly and efficiently were not developed. The reorganization or integration of such valuable resources by libraries will be meaningful as part of collection development plans since these resources can become more accessible to library patrons.

Cooperation through NACSIS-CAT/ILL

The NACSIS-CAT/ILL service provided by NII is said nowadays to be somehow fragile and unstable in the sense that service quality is decreasing. Some cataloging data provided by member libraries are not good in quality. In terms of ILL procedures, some libraries refuse services for requesting libraries. These will impede the sound operation of the service and in the worst case will bring about its malfunctioning. Though several reasons for the troubles can be suggested, the most probable one is cuts in personnel budgets. Decreases in the number of professional staff have led to outsourcing of cataloging work and also encourage a decline in the morale of staff because of the increased workload. In order to cope with this problem a project team was set up with members from NII and the joint committee of three types of university library. An action plan prepared in 2005 sets up a training session to raise the morale of staff and qualifies outsourcers for cataloging work to maintain its quality.

Expertise of Staff

Library staff need to have much more expertise or knowledge than before since library environments have changed extremely. The range of topics they need to cover has been extended from traditional technical and public services to advanced information technologies and contracts or laws related to the production and use of digital materials. The needs are usually not fulfilled completely, but some actions are being taken to meet these challenges. For example, the School of Library and Information Science of Keio University has opened a special graduate level course to provide library staff with recent theories, knowledge, and skills.

Functions to be Upgraded in University Libraries

There are many university library functions which need to be reinforced; institutional repositories and information literacy education are typical examples.

The concept of the institutional repository is well known and its necessity will be supported by many people. However, few universities have established such repositories, while the kinds of roles their libraries will take are not clear. There is an urgent need for the library world to develop policies with regard to setting up institutional repositories. NII is in a position to promote plans to build institutional repositories and to give information like metadata to concerned universities.

As born digital materials spread widely and the number of digital materials in the library increases, user behaviors for accessing information have changed significantly. Search skills and skills to evaluate information resources are more important today than when substantially all materials were in printed form. New programs to educate users in the digital age are therefore necessary. A number of universities are providing users with the courses or tools to make them information literate. Examples include KITIE, a web tutorial system for students at Hiyoshi Media Center at Keio University and a pathfinder at Nagoya University Library.

Public Libraries

Organizational Structure

The public library system in Japan operates on two levels. The first is the so-called 'forefront library', which provides library services directly to the local community in the towns, villages, and cities. There were about 2,900 such libraries as of 2005.²⁰ Figure 5 shows the exterior of the Central Library of Yokohama City, which is one of the leading libraries of this kind.²¹ The second level, called 'backup library', is established by prefectural governments. There were 64 such libraries as of 2005.²⁰ The Tokyo Metropolitan Government has three libraries of this kind. This type of library plays a role in supporting the 'forefront libraries' and itself functions as the 'forefront library' in some rural areas where there is no such library or where only primitive services are provided. They also act as coordina-



Figure 5. Central Library of Yokohama City.

tors among libraries in the region. A few of these libraries act as research libraries. The two levels of libraries are organizationally independent.

Statistics published annually by the JLA show several important aspects of public libraries. They indicate the numbers of libraries (at both levels), staff (full-time and part-time), holdings, acquisitions, loans, sum of settled accounts in previous year, and budget in the current year.²⁰ The latest data from JLA show that there were 2,951 public libraries in 2005 – an increase of more than 300 from 2000. However, the number of staff in 2005 was 14,302 – a decrease of nearly 1,000 from 2000. This means that the working conditions of staff are worse in 2005 in the sense that they are required to work more efficiently. As a matter of course, holdings and loans both increased in number from 2000 to 2005.

Almost all books purchased by public libraries are in the Japanese language. In most cases the demands by users to study new knowledge, get information, and solve problems are only satisfied by accessing Japanese materials and thus it is not necessary for libraries to have materials in foreign languages.

Parker described her impression of public libraries in Japan.²² She indicates that comparative data from G7 countries put Japan slightly below average for the number of items borrowed per 100,000 people, but at the top of the scale in terms of books issued per library. In addition she mentions several differences between the public libraries of Japan and the United Kingdom in terms of use of libraries as a place, holdings of newspapers and magazines, reference libraries, fund raising, public lending right, volunteers, and information technology. Many things are the

same but several things are different in Japan and the UK. It can be said that public libraries are a microcosm of the world to which they belong. They represent a variety of aspects peculiar to individual countries or communities.

There are no ministries or central government agencies which exclusively take care of public libraries in Japan. Instead several government organizations participate in activities to support them. MEXT is the most important among them. The Small and Medium Enterprise Agency and the Ministry of Health, Labor and Welfare help public libraries by giving opportunities for them to get knowledge and information about business activities and consumer health respectively. In terms of national legislation, the Library Law was enacted in 1950 but no national policies were established as laws.

The Environment of Public Libraries

Local government mergers

At present a number of local governments are being merged to become larger units. As a result, towns, villages, and cities which are merged lose their status as independent administrative bodies. It is widely recognized that every town, city, etc. should build at least one library to give services to the people of the community, but the number of libraries and how these will be operated are determined by each local government. Since public libraries are one of the constituents of local government they cannot avoid accepting its decisions. Providing library services to the public usually requires substantial amounts of money, and some local governments are reluctant to invest in libraries. As the result, the merging of local governments brings about a decrease in the number of public libraries.

The Shitei Kanrisha System

Under partial amendment of the Local Autonomy Law enforced in 2003, the Shitei Kanrisha System was established, which introduces appointed management to manage or administer public institutions and facilities. Organizations which are to be involved in the operational management of public institutions had to meet several conditions and regulations, and thus the number of eligible organizations was limited. So far, only local governments themselves or organizations which have very close relations with them have been found to be acceptable for performing such tasks.

The concept of the Shitei Kanrisha System is to relax the conditions and regulations and make it possible for many outsiders to find a way to be involved in the business of managing public institutions, with the aim of reducing public spending. The system has already been introduced to manage community centers, concert halls, gymnasiums, etc. in several local governments. Public libraries are not exempted from this course of events. A very complicated issue in the public library situation is whether libraries operated under the Shitei Kanrisha System can function properly and provide professional services to the public.

Information technologies

A variety of information technologies have permeated deeply into the public library world. Newly built libraries are usually equipped with facilities by which users can take advantage of advanced information technologies. Figure 6 shows an example.

The homepage of the new Nara Prefectural Library, opened in 2005, gives interesting pictures as well as basic information for using the library.²³

Several libraries have undertaken a variety of digital projects. Yokohama's 'Memory of the Central Library of Yokohama City' is one of them. Since Yokohama has a unique history in terms of diplomatic relations with foreign countries at the middle of 19th century, there are lots of precious pictures, maps, and documents preserved in the library. Figure 7 shows an example and many others are accessible.²⁴



Figure 6. The PC corner in Nara Prefectural Library.



Figure 7. A sample from the 'Memory of the Central Library of Yokohama City'.

Data provided by the JLA as of February 2006 show how information technologies are distributed in public libraries.²⁵ There are 1,009 libraries which offer Web-based OPACs, 497 libraries which provide Web-based functions for reservation services and 172 libraries with i-mode OPACs, 91 of them with reservation services. Eighty-four libraries accept reference questions via e-mail. In addition, examples of reference questions as well as answers, regional information, and digital materials are accessible via the Internet.

Problems and Issues for Public Libraries

There are a lot of problems and issues in the public library world in Japan. Some of them are common to all libraries. It is possible to consider that problems and issues are the environments under which libraries are required to behave adequately or the triggers by which libraries embark on a new service. Thus, only the two most severe ones are mentioned here as problems and issues.

Decrease in Budgets

Budget cuts between 2000 and 2005 created an immeasurable burden for public library services. The budget for library materials as a whole declined during this period. The total amount was about JPY 30.7 billion in 2005 – a decrease of 4 billion yen from 2000.^{20,26}

Budget cuts compelled many libraries to outsource their work to a variety of commercial firms which have created a new business market relating to library work. Although expenditure

on outsourcing is usually low, in most cases the quality of the services provided is not high enough from the viewpoints of the librarians.

Professionalism of Public Librarians

There has been an increase in the number of complex buildings in which public libraries, community centers, concert halls, gymnasiums, and other social education agencies physically co-exist. The Shitei Kanrisha System is introduced in many cases to efficiently manage whole operations and issues in such buildings, namely, to reduce spending on the personnel who are providing services. The professionalism of public librarians in such a context is in a state of crisis and drastic measures, such as enacting a law to force local governments to hire professional staff, are necessary. Maintaining professionalism is an extremely tough problem.

It has been said for a long time that the existing library qualifications in Japan are quite inadequate. What kinds of qualifications are necessary, then, in a society dominated by the Internet? What kinds of knowledge and skills should be considered to fulfill the need for legitimate qualifications? A number of projects have been implemented to solve these problems. An example is the project by the Japan Society of Library and Information Science, of which the report was published in 2006.²⁷ It proposes a new curriculum and a special qualification test for library and information science education. However, no definite persuasive answers are obtained because they have to clear up such complicated matters as identifying eligible institutions and teachers.

Challenges Beyond Traditional Frameworks

Under severe conditions public libraries are doing their best. Copyright issues are complicated and sometimes hamper effective library services. For example, whenever libraries made tape recordings of books for the blind in the past it was necessary to get permission from the copyright owners. Since this is time consuming, the JLA tried to reduce the burden. It succeeded in changing the agreement with copyright owners, which now permits libraries to freely make tape recordings of works in a list compiled in advance by libraries and copyright owners.

Public libraries are also developing new services and trying to implement new technology in existing services.

Information services for supporting business activities

Providing business information of any kind has not been outside the mainstream of basic services in public libraries since several reference questions dealt with there have been related to business activities. In fact, many library staff have strong expertise in answering questions of this kind. The aim of offering business information services is to attract more users to the libraries. In December 2000, organized business information services began to be provided by a number of libraries which had strong incentives to offer such service and now nearly 50 libraries are doing so. At present the main activity is developing special collections of business books, journals, and periodicals. Reference services are provided by a few libraries and seminars are also held to promote the services. The service is highly evaluated by the community and has been picked up as a news topic by newspapers.

Consumer health information services

This kind of service started quite recently. The aim is almost the same as for business information services. The main activity at present is to provide materials or data related to consumer health information. The number of libraries engaging in the service is limited and they work in close coordination with concerned medical institutions. The Tokyo Metropolitan Library and the Tottori Prefectural Library are typical examples which provide this service. Since public libraries do not have sufficient experience in this field so far, it is hard to say now whether or not the future of this service is promising.

IC tag systems

IC tags are very compact media on which information about library materials, users, circulation and other matters are stored. The tag is put on library materials and used for automatic charging of books, book detection, inventory of materials, and so forth. This technology means that users can charge books by themselves, thus allowing libraries to reduce the number of staff

needed for circulation transactions. The system is a promising alternative tool for newly built libraries because it is not necessary to replace already settled magnetic components in books by IC tags. It is said that this technology has been introduced in about 40 public libraries – more than the number of university libraries which have done so. At present the technology is not used for inventory purposes, although it is a powerful means to make inventory more efficiently, which is a very time consuming task for libraries.

Conclusion

Assessment of performance and outcome with regard to library services is inevitable. University libraries in Japan have been assessed by university administration and outside organizations. This is a good opportunity for libraries to indicate strategically their importance and needs – for example, to demonstrate their contribution to research and education, in the case of university libraries, or to the benefit of the community, in the public library setting.

Both university and public libraries are functioning in an unstable society or community and so more advanced, sophisticated, and unique services are required. Information technology has broken some physical barriers, such as distance and time, for people who are seeking information. We are in an era when borders of any kind seem to disappear. This is also true of the flow of information. The role of libraries as physical places is decreasing, although their role as information providing and navigating agencies is increasing. This means that every library has to develop new concepts, strategies, and plans for providing information services.

It is time to close long-standing rifts between different types of libraries and work more cooperatively to serve the information-oriented users of today. An early sign is seen in Japan in the union catalog networks operated by some prefectural libraries, in which university libraries are also members.²⁵ Promising trials to develop, for example, ILL services between university and public libraries are found in the Tokai Region. MEXT and the National Diet Library are interested in this kind of cooperation and the JLA will be expected to play a pivotal role in the scene.

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The Library and Information Economy in Turkmenistan

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Abstract

A report on the current national, university, and school libraries situation in Turkmenistan, covering the social, political, economic, and technological constraints in the development of its information economy. This account includes details of the 2000 national information policy law and the off-the-cuff Presidential remarks of April 2005 as well as several recommendations for improving the state of affairs.

Keywords: Libraries; Turkmenistan; PEST/STEPE Analysis

Introduction

On 27 October 1991, the Soviet Republic of Turkmenistan declared itself an independent country. With an estimated 2004 population of 4.9 to 5.2 million, the country covers 188,500 square miles. The 55 to 45 rural-urban split means that almost all of the urban area is centered in just five cities: the capital, Ashgabat with a population of 696,900; Turkmenbashi; Dashoguz; Türkmenabat; and Mary.¹ While these five cities have a number of libraries, library and information science (LIS) researchers, educators, and practitioners worldwide know little about the current status of its library and information economy in general – other than the Presidential ‘decree’ of April 2005 supposedly closing all libraries because people do not read (see below). Understandably, the older professional literature covers Turkmenistan as part of the former Soviet Union,² so this article’s main objectives are, first, to describe the barriers and constraints in developing these library centres using a modified PEST/STEPE environmental scanning technique to identify trends, or emergent issues;³ and secondly, to provide a set of library-related recommendations or ‘next steps’ for interested parties.

Socio-Cultural Constraints

Much of Turkmenistan’s developing country, which is roughly the size of California, is still committed to nomadic pastoralism⁴ or a village economy outside the capital. Because only 3 percent of the land is arable even with irrigation, the country must transition to an industrialized society.

Turkmenistan still enjoys high literacy – reportedly 98.8 percent for youth over 15 years and adults.⁵ Nonetheless, a flourishing reading culture does not yet exist because there are too few, or even no new books in the countryside, or just simply too expensive books. Even for librarians, books are expensive; an entry level bachelor degree-holding ‘librarian’ may only earn 2 million Manat, the local currency, (USD 80.00) a month whereas a department head might earn 3 million Manat (USD 120.00) and head librarian might make 4 million Manat per month

(USD 160.00), whereas USD 150 is about the national average income.

In addition to its modest reading culture, Turkmenistan is also multilingual⁶ and multicultural. Students are taught in Turkmen from age 7 through the compulsory 9th grade (age 15). Russian is commonly used as a lingua franca among the intelligentsia and older generation.⁷ “In 1993 English was moved ahead of Russian as the ‘second state language,’ although in practical terms Russian remains a key language in government and other spheres.”⁸ The role and status of women in Turkmenistan is improving; for example, one-fourth of all elected officials are women and they are protected under the rule of law. However, there are dress codes for women in school and at work.

Technical Constraints

The Turkmenistan information technology infrastructure is struggling, given the expense of high license costs, fees for services, and import taxes on equipment as well as an opaque, time-consuming government application process for telecom companies.⁹ In 1998, about 1,000 Internet hosts were using the state Internet monopoly, STC Turkmentelecom. Searches are filtered by the government for pornography, violence, and anti-government sentiments; the Director of the Internet Access and Training Program (IATP) at the National Library has been visited by government officials from the Ministry of National Security as well as the Ministry of Communication/Turkmen Telecom seeking assurances that the free Internet searches are not pornographic and must be educational and supportive of national policy in the government’s view. In the meantime, NATO is building their ‘virtual silk highway’, using satellites for high-speed Internet communication; the World Bank already offers its materials to in-house users via high-speed satellite downlink.

Countrywide cellular communication penetration is only 1 percent; for those 59,000 who can afford to be subscribers (or roughly 97 percent of the country’s users), their cell service is managed by Barash Communications Technologies Inc. (BCTI GSM). Otherwise, GSM service of variable quality exists outside Ashgabat in Dashoguz, Türkmenabat and Mary. Furthermore, one should assume that all calls, including short message service (SMS), are monitored by

the government. The Turkmen-Chinese mobile service Huawei has been rapidly entering the communications market. Even given the government’s long-range 2020 modernization plan for telecommunications, which aims to increase availability and access, countrywide, restrictive government policies, such as eavesdropping and Internet filtering, may prevent Turkmenistan from truly advancing into the high-tech era.

Economic and Political¹⁰ Constraints

By World Bank standards, Turkmenistan is a lower middle income country with Gross National Income (GNI) per person estimated at USD 1,130 in 2003.¹¹ The current rate of inflation is about 9 percent. Energy is a major export. Industry experts consider Turkmenistan to be among the top five natural gas regions in the world. Turkmenistan is positioned to do well in the future, economically speaking.

Having overwhelmingly won the 1992 election for a 5-year term, the President’s term was extended to 10 years by a January 1994 referendum.¹² More recently, however, Saparmyrat Niyazov, the former Soviet *nomenklatura*, has been confirmed President for life, first in 1999 and again in 2002 at the end of his first 10-year term. Recently, though, he proposed to retire and not run again in 2009. In any event, the President is proud of Turkmenistan being confirmed as an independent, neutral state by the United Nations in December 1995; for example, Turkmenistan hosted the first international conference on the Caspian Sea in the spring of 2005, which suggests its interest in being a political player in the region.

Legislative and Quasi-Legal Constraints

June 2000 Legislation

On 15 June 2000, the President signed a piece of legislation, ‘About Libraries and Library Activities’, or *Zakon* #31-II. Part 1 defines a library (in Article 1) and librarianship (Article 2) as well as the national information policy (Article 3). It places responsibility for libraries under the Cabinet of Ministers, but especially the Ministry of Culture and Tele/Radion Broadcasting. Part 2 addresses the library system of Turkmenistan; Part 3 covers library collections and the acquisition of these collections; Part 4 deals with library services; Part 5 discusses the

creation and registration of libraries; Part 6 concentrates on the finances and economic foundations of libraries; and Part 7 encourages international cooperation among libraries. However, this legislation is largely descriptive of good library practice, but it definitely does not address copyright concerns (see below) or privacy issues.

The April 2005 ‘Decree’

In Turkmenistan, Presidential decrees are formal pronouncements similar to the United States President’s Executive Orders. In fact, the Turkmenistan President’s comment that “No one goes to libraries and reads books anyway; accordingly, they must close” was an off-the-cuff comment –actually said in front of his Cabinet of Ministers and televised by Watan on 22 April 2005.¹³ Apparently, there have been some library closings using his statement as justification. Indeed, there are word-of-mouth rumors of increased library centralization (for instance, books in a village library were transferred into the local high school library due to the lack of funds to sustain these small libraries in remote areas) and those branchlets of branches, or small rooms, have been locked up in the southeast part of the country while western provinces report no changes.

The Information Economy

This section briefly examines the constraints on Turkmenistan’s education and literacy, reading culture as well as the role of book clubs and bookstores, and the role of the university as well as the national library in providing information resources.

Role of the *Rukhnama*

*Rukhnama: reflections on the spiritual values of the Turkmen*¹⁴ (aka ‘The Book of Souls’) was written by the President between 1997 and 2001. His stated purpose in writing it was “to express explicitly how the nation has contributed much to the sciences, literature, civilizations, and development of the world and in every area of life . . . to enable my nation to perceive our past and to envision our own dignity . . . The *Rukhnama* deals with the new form of national consciousness . . . to open the dwindling spring of national pride by clearing it of grass and stones and letting it flow again. I hope to enliven the heart with the medication of Philosophy”.¹⁵

Because some Turkmen readers regard it as second only in importance to the Koran or the Bible, one should know more about this 400-page book. On a practical level, novice drivers wishing to obtain a license must first pass an 16-hour course and examination on the book; students applying to university are questioned in person about it Soviet-style; and ministerial workers have a weekly study hour in a special room or corner devoted to it. Every library, including universities, must have a *Rukhnama* Room, devoted to the cult of this book.

Given the Presidential perspective that “Knowledge is the light of happiness and that knowledge should first of all be of use to society”,¹⁶ it is surprising that reading is not more popular in his country. For instance, according to the *Rukhnama*, “the best way to learn is to read. And the best way is reading through reflection. If there is no reflection, then there is no science at all.”¹⁷ Even the President himself knows firsthand the value of libraries because he comments on learning his people’s past at the Leningrad Polytechnic University’s library in 1954.

Reading Culture, State Publishing, and the Role of Bookstores

Reading print materials, on the street or in cafés, does not seem as popular as it is in Russia, for instance. Unfortunately, the news radio Mayak, widely thought to be the most popular station, was suspended by the government on 11 July 2004, although there is still modest Internet access to news. There are some 20 local newspapers¹⁸ such as the widely available *Neytralny Turkmenistan* or ‘Neutral Turkmenistan’ in Russian and *Turkmenistan* in Turkmen. Hence, reading culture is rather backward here.

State Publishing

Manuscripts for publication are presented to the State Publishing House, Miras,¹⁹ which has the capability of publishing about 500 book titles per year, mostly titles for early education and on the country’s cultural heritage. Each title receives a registration number, which makes it easy to create the national bibliography. There is no national bibliography *per se*, but one might argue that the national library’s catalog is the bibliography. Many books seem to have Cataloging in Publication information, including classification numbers based on the Universal Decimal Classification (UDK/UDC) and Bibliotekhnobibliograficheskaya Klassifikatsiya (BBK). The

average press run is 20,000 copies; the *zakon* or 'Library Law of 2000' requires that copies be reserved for certain libraries of national importance as designated by the Cabinet of Ministers of Turkmenistan (see below). Foreign books are approved for importing and licensed by the printing committee, a part of the Cabinet of Ministers.

Government Operated Bookstores

Seven government-run 'Miras' bookstores are available in Ashgabat. At Store Number 3, the largest of these, one can find about 2,000 unique titles; besides the ever-prominent Presidential *Rukhnama* in multiple languages, one can find some inexpensive used Russian books, new French and German works and office supplies. Interestingly, children's stories are Turkmenized by taking Russian characters (such as a bear or wolf) and making them into camels or sheep.

Book Stalls and Retail Bookstores

In addition to the state-run bookstores, one can find at least two private bookstores in Ashgabat, which carry upwards of 1,000 titles including some Russian language reference manuals for driving and car repair. In the Russian Market, several bookstalls sell recent inexpensive Russian novels, some popular reference materials such as the works of Dr. Benjamin Spock, and bi-lingual Russian-English dictionaries. However, there are no glossy periodicals from countries other than Russia; there are a handful of Russian periodicals devoted to good housekeeping, dieting, and crossword puzzles. They are usually sold in kiosks at the local markets. Otherwise, no magazines are to be seen anywhere.

Basic Reference Materials

In order to support the national curriculum, the State Publishing House undertook to publish a series of reference materials, starting in 1996. While a variety of reference formats have appeared thus far, however, no indigenous atlases or even detailed maps of the countryside exist. The Institute of Language and Literature, a branch of the Supreme Council on Science and Technology, is publishing a two-volume dictionary²⁰ of the Turkmen language. Other more specialized dictionaries are published for the local institutes and universities by Ylym ('Science'), a specialized government publisher, which has an output of approximately 100 titles

per year. Statistical sources comparable to the US *Statistical Abstract* or the United Nations *Statistical Yearbook* are available from the National Institute of Statistics, but a national census has not been published.

Twin Principles of Librarianship

The Turkmenistan library law of 2000 has one of the best definitions of a library, stating:

A library is a cultural, educational, and informational institution that provides for the satisfaction of spiritual/intellectual and informational needs of the citizens by accumulating, systematizing, storing, and spreading the printed literature and other materials."²¹

Necessarily, this definition involves preservation and access.

Preservation

Most collections consist largely of cast-offs; almost every library contains dated and worn collections. If there is anything worth saving or maintaining, the requisite environmental conditions are not present. For instance, high ultraviolet radiation, numerous open windows, and frequent poor closures around door and window openings work against long-term preservation. Fortunately, much of the country has a hot dry climate with low humidity. The major issue is the change in interior temperatures between day and night. The charge of the Institute of Manuscripts is to preserve Turkmen literary culture; they have an imposing job ahead of them. The forthcoming new National Library building should be a brand new, state-of-the-art facility with proper temperature and humidity controls. At present, there are no preservation or conservation facilities in existence.

Information Access

Most libraries maintain relatively short hours of operation; circulation services are based on possession of a membership card, which can be acquired by paying a modest fee. Collections are orderly, using BBK or UDC. Cataloging records are quite minimal, mainly shelf inventories. Other than at the National Library and Turkmen State University, no typed, printed, or computer catalogs (i.e. no full standard cataloging by author, title, and subject access according to

AACR2R or LCSH) appear to exist. Nonetheless, as personal computers become less expensive, there is increasing use of computer technology for word processing and email, along with filtered Internet access. The professional concept of question answering is not widespread; hence, reference desk service is not widely apparent. Given the government restrictions on Internet access, Internet cafés are still rare in Ashgabat.

Types of Libraries

Estimates of the total number of libraries in Turkmenistan vary, but the Ministry of Culture and Broadcasting claims 88 state-funded libraries, which seems like a reasonable estimate. An estimated 10 percent of the national budget is spent on museums and libraries, which seems high. As for the actual numbers of libraries of different types, there are currently no good estimates. There are three national libraries (the National Library itself, the State Children's Library with outreach to kindergartens and schools, and the Science Library). The five provinces (Ahal, Balkan, Mary, Dashoguz, and Lebap *Velayats*) each have one central public library for adults; in the cities each district should have one (for instance, Ashgabat should have seventeen libraries). There is a national archive and national museum related to national culture as well as one devoted to Turkmen carpets. Under the national library law, all libraries are charged with developing the national Turkmen culture and preserving national Turkmen heritage.

The National Library

Formerly known as the Turkmen State Public Library, the national library was established in 1895, and is the largest of the depository libraries with a collection of 5 million items (including 16,200 maps, 400 manuscripts, theses and dissertations, 2,900 magazines and journals, and newspapers in 45 languages). In addition to receiving all items from the national publishing house, it is a United Nations (since 2000), Organization of American States, and World Bank depository as well.

The library has 22,000 registered users per year, to whom 2 million items a year are circulated. Items are found via a card catalog, which provides author and subject access. The Department of Foreign Literature, with a staff of fifteen,

appears to be heavily dependent upon gifts from local embassies, other countries, and interlibrary loan. The national library also supervises the provincial libraries in Turkmenbashi, Dashoguz, Türkmenabat and Mary. The library advertises itself, notably by broadcasting television features on Thursdays and re-broadcasting them on Mondays, as well as hosting local artists' work for sale in the lobby. The library also mounts 200 book exhibitions per year locally and in the provinces. Article 7 of the 15 June 2000 library law addresses the national library's five goals:

1. to describe and preserve comprehensive collections of native and foreign material;
2. to contribute to the development of culture, education and science;
3. to record bibliographically all printed materials;
4. to conduct research and development projects for book and library science instructional materials; and
5. to participate in international cooperation.

The US Department of State's Internet Access and Training Program (IATP), which provides free Internet, sharing of information, and social networking, is administered by IREX locally, and housed in the national library.

Although they have a handsome building, it does need repair and updating for computerization, so the President has given them a striking new 23,000 square meter building, which will include an online public access catalog, located at the intersection of Archabil and Turkmenbashi avenues. The projected completion date is set for October 2006.

In addition, there is a State Children's Library, which is part of the national library, named after B. Amanov and founded in September 1935 to work with kindergartens and schools in the five regions. This unit promotes the love of reading via reading clubs and after-school programs. The library is divided into seven departments, dealing with: elementary school children; middle school children and teenagers; arts; collection development; cataloging; archives; and instructional and bibliographic work. One quarter of its 250,000-item collection, in closed stacks, is for younger children; many of its texts are in English from Russia. There are also circulating and reference, or reading, halls for its 12,000 registered readers, especially art and music school students, who circulate 100,000 items per year.

The Central Science Library

Receiving no less than 1 percent of the nation's income, the Central Science Library (MYK) is one of three branches of the Supreme Council of Science and Technology (VSNT), founded in 1924. The other two branches are the Institute of Language and Literature and the National Institute of Manuscripts²². The library's mission is to provide bibliographical resources for the 20 research centres or institutes²³ which take their direction from the nation's priorities. The collection numbers about 1.3 million items (making it one of the largest in Central Asia) and contains mostly foreign language materials. The library is staffed by a total workforce of 75. It has book exchange programs with the University of California and the Library of Congress and is also a World Bank depository library. User registration is free of charge.

University Libraries

In addition to the Agricultural University, the International Turkmen Turkish University,²⁴ and the Turkmen State University (TGU), there are nine institutes, including the Turkmen State Institute of Culture, which offers coursework in librarianship, and two pedagogical institutes for training teachers. Apart from the Turkmen State Pedagogical Institute in Türkmenabat and the State Institute of Energy in Mary, the remainder are located in Ashgabat.

The Turkmen State University

The Turkmen State University's library contains 650,000 book titles (the oldest book dates from the 18th century) housed in three buildings (the main building, a law library, and the theology division) and is staffed by seventeen librarians under the university librarian. The library also provides textbooks to students, who may check them out for a year. Recently, however, it has become more popular among students to purchase their books outright. Many of the English language texts come from Russia.

At the present, the library has a local area network and is automating its card catalog, with assistance from the ENSSIB: École Nationale Supérieure des Sciences de l'information et des Bibliothèques at the University of Lyon, supported by funding from a 2003 European Union Tempus higher education grant of EUR 292,000. Electronic catalog records are searched via SIGLA, a Russian library portal, established

by Moscow State University's Scientific Library. Otherwise, their current digitization projects include faculty lectures and student notes as well as theses and dissertations. In the short term, the librarians download hot topics (i.e., Astronomy, Biology, Energy, Mathematics, Medicine, Seismology, and Technology) from the Web; in the near future they are looking forward to offering library instruction to their students in a new library building with open stacks in late 2007.

School Libraries

The Ministry of Education is responsible for secondary education and oversees about 1,800 schools offering some or all of the secondary grades. "Secondary schools have 66,192 teachers who serve 831,000 students. The primary and secondary systems are being restructured according to Western models, including shorter curricula, more vocational training, and human resource development."²⁵ However, more recent analysis suggests that the Turkmenistan school system is in decline,²⁶ although schools are no longer closed from 1 September through 1 November for cotton harvesting outside of the capital because Turkmenistan has passed a Law on Guarantees of Youth's Rights to Labour in February 2005 (Child Labour Law, in other words) that bans child labour. However, the number of teachers has been decreased and English and Russian schools have been closed.

The actual size of a school's library depends on the capacity of the school. For example, a school building with 1,500 authorized students (but they can have more than 2,000 students, due to the fact that some other schools are being demolished and students are transferred to schools neighboring them) would have one room devoted to the library. The actual collections are Spartan – often, they lack the essential textbooks. Nonetheless, they do have recent books published in Turkmenistan such as the *Rukhnama* and others. Also, some fiction as well as a few English language books may be found in school libraries (although English language books are found only in schools where they teach English). Textbooks are loaned out for the entire academic year; other books circulate as well, unless the library owns only one copy. Reference works are non-circulating. No computers and no Internet access are available specifically for library purposes, but most of the schools in Ashgabat and some other cities have modest computer laboratories for their school children.

Education for Librarianship

The School of Librarianship at the Turkmen State Institute of Culture, the sole program of its type in the country, was founded in 1992 when the Ministry of Culture transferred the study of librarianship from the Turkmen State University, where it was started in 1974. Today, there are several faculties within the School of Librarianship: Libraries and Museum Administration; Theatre and Arts; and Preservation of Cultural Heritage. In addition, there is a unit devoted to the *Rukhnama*. The Libraries and Museum Administration faculty consists of two sections: Library Science and Bibliography and Informatics and Book Business.²⁷ The organization of the book trade was added to the curriculum in early 1990s, archival training and paper resources was added in 1996, and trends in museum administration in 2000. Two collections of books exist –45,000 in the dormitory for its library science and informatics students while another small working collection for librarianship is housed on the second floor. Only 12 students are enrolled each year from all over the country each summer, the actual number being determined by the nation's President and his Cabinet. The female to male student ratio is about 80/20. The typical curriculum covers up-to-date topics such as archives and manuscripts, cataloging, children's literature, library automation, the pedagogical-sociological aspects of reading, and reference as well as foreign languages, Turkmen language and literature, the history of Turkmenistan, the *Rukhnama*, and the policies of Neutral Turkmenistan. Small seminar-style classrooms are available for the seven full-time faculty members, and some rooms are devoted to IBM computers, but with only limited Internet access. Everything is in good repair. Students spend their first two years in the classroom, then two more years of internships in their local *velayats* (regions), and then after two more years of work in a state library agency, they receive their diplomas. Although it is the only library and archival education facility in the country, its modest intake and output may not be sufficient for the national demand for librarians; however, there is no formal, national survey of manpower needs for archivists, curators, or librarians.

Recommendations

As the national government fosters its development as an independent state and becomes a leader in Central Asia, the country's library and information economy must have more attention from its own government, its own national library, and its non-governmental organizations (NGOs), as well as support from relevant international organizations and foreign donors. Interested parties must work in true partnership –no more cast-offs, no more unwanted books, and no more second-hand periodicals. Relevant and lightly-used material would be much more appropriate. Certainly, any approaches to the government could be couched in terms of the President's value of 'reading through reflection.'

One hopes that the Turkmenistan Government will ensure that the promotion of reading, bookstores, and libraries are truly part of its national strategic development plans, so that the lack of scientific, technical, engineering, and medical information is not a constraint. The national policy in Article 3 of the 2000 law should be expanded upon in the near future to include such topics as copyright (because Turkmenistan is not a member of the Berne Convention or the Geneva Phonograms Convention) and privacy issues.

The establishment of a national library association, as well as a national booksellers' association, would go a long way toward encouraging, supporting and preserving Turkmenistan's indigenous culture. Such associations should push for more open access to international periodicals, especially those in the Russian language, and to foreign newspapers, available on the street and not just in supervised settings like the National Library. The library association could support the implementation of the national information policy of 2000 while the booksellers association could support a copyright law as well as a full deposit law for the country, which would encourage innovation. Finally, these associations would help document Turkmenistan's cultural heritage and could encourage the provision of current information resources which might answer the pressing social, technical, economic, political and ecological questions of the Cabinet, the government ministries, the National Assembly, and People's Council. The opening of the new national library building might be an auspicious time to hold the first meeting of such a library association. The

new Turkmenistan Library Association could co-sponsor in-service workshops, or continuing education seminars at the Turkmen State University as well as the Institute of Culture.

Local libraries and librarians might find willing partners through IFLA's 'Twinning Project' or ALA's Sister Library Project. Any library wishing to partner with the Turkmenistan National Library should e-mail their Department of Foreign Literature at ppibr@yahoo.com. In any case, Turkmen librarians can certainly apply for the IFLA/OCLC Early Career Development Fellowship. Local LIS faculty need exposure to the international library community; attending international conferences such as those of the American Library Association or the Association for Library and Information Science Education, their primary peer group, would be one way of achieving this.

Finally, the future of Turkmen librarianship will be determined largely by the character of the next generation of students. Proactive recruitment of outstanding students; sufficient financial support during their studies; an excellent faculty (who would benefit from Fulbright support) and an up-to-date curriculum in information resources, technology, and user needs; and a stronger information infrastructure would go a long way to ensuring a bright future in Ashgabat.

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Notes and References

1. U.S. Department of State, 'Background Note: Turkmenistan' at <http://www.state.gov/r/pa/ei/bgn/35884.htm> (accessed 12 April 2005).
2. *Library Literature* indexes only two articles on libraries (both in Russian from the 1980s) while ERIC contains none; and according to OCLC's FirstSearch, only 26 dissertations to date have been written on Turkmenistan. The best English language source on Turkmenistan publishing and libraries is 'Union of Soviet Socialist Republics, Printing: The Turkmen Soviet Socialist Republic,' in the *Encyclopaedia of Library and Information Science* (New York: Marcel Dekker, 1981, vol. 31). FirstGov lists 150 federal government documents, all of which seem to be from the United States Department of Energy.
3. Originally conceived as ETPS (a mnemonic for the four sectors of his taxonomy of the environment: economic, technical, political, and social) by Francis J. Aguilar (see his Harvard dissertation which was published as *Scanning the Business Environment*. New York: Macmillan, 1967). A little later in the 1960s, Arnold Brown for the Institute of Life Insurance reorganized it as STEP (or strategic trend evaluation process) as a way to organize the results of his environmental scanning. Thereafter, this macro external environment analysis, or environmental scanning for change, was modified yet again to become a so-called STEPE analysis (i.e., the social, technical, economic, political, and ecological taxonomy). In the late 1980s, James L. Morrison and Thomas V. Mecca, 'Managing Uncertainty,' in *Higher Education: Handbook of Theory and Research* (New York: Agathon Press, 1989), vol. 5, pp. 334–382 developed Ed QUEST, or 'Quick Environmental Scanning Technique,' which focused on education as the final E. Even more recently, the L for legislative or legal concerns has also been added, but seems redundant or duplicative of the political, but which could be useful in some contexts. Half seriously, I think the L should be used for libraries.
4. "Predominantly settled Turkmen are known as *chomur*, while mainly nomadic Turkmen are known as *charwa*," according to Adrienne L. Edgar, *Tribal Nation: The Making of Soviet Turkmenistan* (Princeton: Princeton University Press, 2004), page 23. Today, all of population is settled, though historically nomadic tribes were from the western part of the country.
5. See Table 2A 'Adult and Youth Literacy Figures' from Youth in Numbers Series, Europe and Central Asia, Draft November 2004, at <http://siteresources.worldbank.org/INTCY/Data/20333452/YIN-ECA.pdf> (accessed 2 June 2005). Notably, in August 2002, the President of the country reclassified age groups as: 0–12: childhood; 13–25: adolescence; 25–37: youth; 37–49: maturity; 49–61: prophetic; 61–73: inspirational; 73–85: wisdom; 85–97: old age; and 97–109: Oguzkhan.
6. See 'Chapter Five, Dueling Dialects: The Creation of a Turkmen Language,' in Edgar's *Tribal Nation*, pp. 129–164.

7. In 2003, according to the *CIA World Factbook* at <http://www.cia.gov/cia/publications/factbook/geos/tx.html> (accessed 2 June 2005).
8. Glenn E. Curtis, editor, *Country Studies: Turkmenistan* (Library of Congress, 1996) at <http://lcweb2.loc.gov/frd/cs/cshome.html> (accessed 11 June 2005).
9. *Turkmenistan: Overview of the Wireless Communications Market* (Ashgabat: US Embassy, 2004) at <http://www.bisnis.doc.gov/bisnis/bisdoc/040319TXWrIsComm.htm> (accessed 13 June 2005).
10. The best current scholarly work on Turkmenistan is by Adrienne L. Edgar (*Tribal Nation*, Princeton University Press, 2004) while the best current popular source is by Hugh Pope (*Sons of the Conquerors*, Overlook Duckworth, 2005), specifically his chapter 6, 'The Cult of Turkmenbashi: The Method in Turkmenistan's Mad Tyranny,' pp. 95–109.
11. World Bank. *Turkmenistan, Country Brief, 2004*. (see <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/ECAEXT/TURKMENISTANEXTN/0,,contentMDK:20139165~pagePK:141137~piPK:141127~theSitePK:300736,00.html> (accessed 2 June 2005).
12. 'His Excellency Saparmurat Niyazov "Turkmenbashi" President of Turkmenistan and Chairman of the Cabinet of Ministers' at <http://www.turkmenistanembassy.org/turkmen/gov/presbio.html> (accessed 9 June 2005).
13. The quotation varies somewhat, but was widely picked up in the US media such as *American Libraries* and *Library Journal* (<http://www.libraryjournal.com/article/CA527241.html?display=breakingNews> (accessed 4 July 2005) as well as internationally, for example, see Mike Russell, 'Our Low Shelf Esteem,' *The Herald*, Web Issue 2312, 18 July 2005 (accessed 18 July 2005). Readers should also note 'The IFLA/FAIFE Statements: Closure of Libraries,' *IFLA Journal*, 31 (September 2005): 271 at <http://www.ifla.org/V/iflaj/IFLA-Journal-3-2005.pdf> (accessed 23 January 2006).
14. The new, second volume was published during summer 2005, but is not available in English yet.
15. *Rukhnama*, pp. 60–63.
16. *Ibid.*, pp. 334–335.
17. *Ibid.*, page 342.
18. The US Embassy in Ashgabat maintains a list of 'Media in Turkmenistan' which includes four regional newspapers, eleven magazines as well as two radio/TV companies at <http://www.usemb-ashgabat.usia.co.at/media.html> (accessed 13 June 2005).
19. The ISBN is a tripartite number; for Turkmenistan, it begins with 5, which stands for the area code which includes Russia, and is followed by the publisher number, and finally a unique book number.
20. In addition, they have published flora and fauna dictionaries along with those on economics, herbal medicine, and animal husbandry among others.
21. 'About Libraries and Library Activities, 2000 Zakon'; translated by Elena Boudouvskaia.
22. Its agenda is to revive Turkmen traditions and writers, reprinting epochal literature, fairy tales (Yarty Gulak, would be a good candidate – it's the story of tiny, little fellow – literally, half ears – who loves a girl of ordinary size, but she has to marry a local khan and what he must do in order to obtain her), proverbs, and indigenous stories.
23. Including geology and seismology, oil and gas, desert wildlife, agriculture (especially cotton and animal husbandry), history and literature as well as manuscripts, medicine, oncology, ophthalmology, and pharmacology.
24. Claims to have the first and only WiFi hot spot in the country, according to *Wi-Fi Hotspot Directory* at http://www.hotspot-locations.com/modules.php?name=HotSpots&op=show_detail&which=12218&backlink=percent2Fmodules.php%20percent3DHotSpots%20percent26op%20percent3Dhotspot_query%20percent26hsl_countryhs%20percent3DTM%20percent26hs_city%20percent3DAshgabat (accessed 13 June 2005).
25. Country Studies, 'Education System' (1996) at <http://lcweb2.loc.gov/frd/cs/tmtoc.html#tm0026> (accessed 11 June 2005).
26. For a pessimistic view on the dumbing down of the country, see 'Turkmenistan's Education System in Downward Spiral' (4 June 2004) at <http://www.eurasianet.org/departments/rights/articles/eav050504.shtml> (accessed 13 June 2005).
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Sustainable Digital Library Development for Scientific Communities in China

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Abstract

The paper analyses the digital library services for China's scientific communities, explores the challenges toward sustainable digital libraries, presents a development strategy for digital libraries using Chinese Academy of Sciences as an example, and provides a layered design framework for a digital library in an e-science environment.

Keywords: Digital libraries; Sustainable development; Scientific communities; China; Chinese Academy of Sciences

Trends of Chinese Digital Library Development for Science and Technology

Generally speaking, digital library development in China can be grouped into local digital library projects, national specialized digital library systems, and national digital library programs. While local digital library projects have produced rich digital cultural materials from local libraries that can be accessed through networks, it is the national programs that make possible the wide and rapidly increasing availability of digital information resources, especially for scientific research and educational institutes.

Since the late 1990s several national digital library efforts have been made that gradually put in place a national digital and networked information infrastructure to support the nation's scientific research and education. A few examples are briefly described below.

Chinese Science Digital Library

The Chinese Science Digital Library (CSdigital library)¹ was initiated in 2001 by the Chinese Academy of Sciences (CAS) as digital information service platform to serve its 91 research institutes across the country. At the current stage, CSdigital library provides CAS researchers with full text scientific, technical and medical (STM) journals, conference proceedings, theses and dissertations (ETDs), patents, reference books, and e-books. For e-journals alone, CSdigital library now covers 4,000 core western STM journals and 10,000 Chinese ones. At the same time CSdigital library provides a wide range of networked services including union catalogs, federated database search, integrated e-journal browsing, document delivery, digital reference, MyLibrary customization, and remote authentication.

Chinese Academic Library and Information System

The Chinese Academic Library and Information System (CALIS)² was first funded in 1998 by the Ministry of Education (MoE) to organize a digital library consortium among academic libraries.

CALIS membership has grown very fast to 500 in 2005 with most of the members joining together under CALIS sponsorship to collectively negotiate acquisitions of e-journals, e-books, ETDs, etc., and many of them also taking part in building specialized subject gateways or digitization of special educational and cultural materials. With the help of CALIS, readers at most Chinese universities can now access far more materials than their local print collections allow. Again taking journals as an example, the average number of foreign STM titles in print format stands at less than 500 per university, but most universities can access more than 3,000 foreign STM e-journals, while many can cover more than 8,000.

National Science and Technology Library

The National Science and Technology Library (NSTL),³ established in 2000 by the Ministry of Science and Technology (MoST), is a virtual library consisting of seven special libraries from the basic sciences, agricultural sciences, medial sciences, and engineering, to form a national reserve library and a supply center for scientific information. NSTL supports its member libraries with acquisition of additional foreign journals, production of a central abstract database for all 13,000 foreign journals in its members' collections, and supply of requested documents with only nominal fees and fast turn-around time. Since NSTL is open to all in China as a reliable and timely service, its entire collaborative collection of foreign and Chinese materials serves as a back-up system for all libraries, even including those within CSdigital library and CALIS, who now can concentrate on building core e-resources that can be retrieved immediately by their clientele while relying on NSTL to provide additional coverage.

The Changing Information Environment

With systems like NSTL, CSdigital library, and CALIS, the information environment is changing very rapidly for Chinese scientific communities, especially those in advanced research institutes and universities. In this new environment:

- The dominant information resources for scientific users are now digital.
- The default and preferred way of accessing information for scientific users is now through networks. A 2005 investigation⁴ of 2,563 CAS researchers carried out by the Library of CAS

found that 2,223 had access to information resources mainly from their office or laboratory, and only 111 from various libraries.

- Most information services, even including reference services, are increasingly provided by collaborative effort among libraries through networks.
- Most physical libraries are increasingly integrated into virtual digital information systems that are now the first entry point for most scientific users.

While this trend has created a far more effective information space for scientific users and has provided libraries with great accessibility power, it also presents a revolutionary transformation of the information environment and of the ways in which libraries define themselves and operate their services. It is no longer 'business as usual'. Clear analysis of the challenges brought by the changes is a critical prelude to any effort to sustain development for libraries, digital or otherwise.

Challenges to Sustain and Develop Library Services

Challenges come from two major directions. The first is the challenge of effectively managing and sustaining the digital library itself to serve traditional information needs; the second goes beyond library services in the traditional sense to support new user needs and behaviors in the new e-science environment.

When digital information becomes a way of life for users as well as for libraries,⁵ we are faced with many new tasks that require drastically different knowledge, methods, and mechanisms. Just mention a few:

- Resource development becomes primarily a consortium effort so that any one library has to plan and work together with other, often different, libraries based on systematic analysis of coverage and strength, the distribution of user needs, availability of resources and methods of supply, and various supply chain structures.
- Resource structures of libraries are increasingly changing with the steady transformation from the print-plus model to the e-plus model and then to an e-only model, which asks for new strategies, new supply chain structures, new funding models, new organizational

procedures, and new coordinating infrastructures for print and e-copies.

- Digital preservation becomes a critical and regular operation for a sustainable library service, which requires new system infrastructure, financial support, technological and administrative expertise, and commitment to long term planning and management.
- Preservation of imported information resources manifests another challenge for any country where much scientific information comes from foreign publishers and most acquisitions of databases are only for the right to access. Securing perpetual copies for one's own scientific communities is of national importance and a network of shared responsibilities among distributed trustable archives is urgently needed.
- The first line of services switches from physical reading rooms to websites, while the main stream of services transfers from passive reading and circulation to active and interactive personalized services such as digital reference, selective dissemination of information, information analysis, specialized portals, virtual reading rooms, and information literacy. Collection-oriented workflows and library-centered service structures, though a century old, are no longer adequate, and new user-centered and service-oriented restructuring of libraries is called for.

However, addressing only challenges like these is not enough for libraries to sustain their development in the face of the drastic changes in the very environment where information is created and used. Fundamental changes lie ahead that call inevitably for new models of digital libraries:

- Science is increasingly operating in a digital fashion. E-science or cyber-infrastructure⁶ creates a networked infrastructure rich in data grids, computing grids, digital libraries, and laboratories. Here all kinds of scientific objects, including people, programs, facilities, data and documents, procedures and workflows, and even policies and strategies, can be and will be digitally represented, accessed, interconnected, and invoked through networked interaction. This calls for a new definition of information resources, information organization, and information service integration.
- Science is increasingly based on interactive virtual knowledge communities⁷ where networked information becomes interactive

research tools, online collaboration acts as the organizing mechanism, and virtual organizations dynamically support knowledge discovery and exchange. Effective services, far beyond simple search and delivery of known items, are demanded to help users to mine knowledge and knowledge relations among seas of various scientific objects, and to do so proactively along research workflows and among research interactions. A service system diffusing into and interacting with users' knowledge processes is essential for success in such a situation.

- Scholarly communication is taken new a turn when forces like Google Scholar/Print,⁸ the open access movement,⁹ and institutional repositories¹⁰ are creating a new information supply chain. Access to information is no longer solely intermediated by and channeled through a library; 'library services' can be more effectively provided by open or commercial systems. A distributed, producer-driven, value-enriched, and competitive market is here to stay, and providing access to information alone is no longer enough for a sustainable future, as predicted by a PEW study which found that any organization relying on intermediary services will be fundamentally changed within the near future.¹¹
- Digital libraries as they are today will be hard pressed. In many ways, most digital libraries are modeled after traditional libraries. While recognizing the merit of this, one has to realize the very nature and limitation of such digital libraries being resource-centric, document-centric, and library-centric. Facing the new environment, digital libraries have to contribute more directly and uniquely to the core knowledge learning or creation processes of users than can be done by other information providers; they have to organize and present digital content in context-sensitive and knowledge-aware manners; and they have to extend their vision of information activities and information services into the whole spectrum of users' problem-solving processes and users' information environments. Digital libraries need to be re-designed as integral parts of users' knowledge work environments instead of as stand-alones or add-on extras.¹²

Remodeling the Strategy for Digital Library Development

New models of information and knowledge services have to be invented. Libraries can either

lead the way or be marginalized. The Library of the Chinese Academy of Sciences (LCAS) takes these challenges as opportunities to develop its digital library strategy by envisioning a process to transform digital libraries into an e-knowl-edge infrastructure where:

- Digital objects in the research space are described, organized, interlinked and integrated as an open knowledge grid.
- Networked services are provided in a person-alizable and user-based way to retrieve, organize, link, visualize, re-purpose and re-distribute information on digital objects in the research space.
- Knowledge processing mechanisms are built within user information environments and embedded into user information processes to support knowledge discovery, knowledge organization and knowledge management.
- Collaborative mechanisms are developed for librarians to work together with researchers to develop the above structures and services, and to provide further value-added and personal-ized services.

Aiming to build a digital library diffusing into the research environment, LCAS investigated development trends in e-science and digital libraries, and surveyed CAS users for their current and future needs. Based on a new under-standing of the essence of digital libraries as live knowledge systems incorporating knowledge

content, context, and communities,¹³ the follow-ing framework of the CAS Digital Library is outlined.

Overall Layered Framework

The Overall Layered Framework (Figure 1) consists of three major layers: an Integrated Information Service (IIS) layer, a Discipline-based e-Scholarship Service (DSS) layer, and an Institution-Based Knowledge Service (IKS) layer. An Information Analysis module is provided to aid knowledge discovery, an Onto-logical Integration Service is planned to provide the semantic glue to integrate resources and services at various layers, and a Workflow Management Service module is envisioned to connect information processes between various layers.

The IIS is made of two parts: firstly, a distributed information resources system that provides access services for CAS users to various full text STM resources and search services, and supports digitization, preservation and retrieval of CAS-produced knowledge assets such as theses and dissertations (of more than 10,000 graduate students graduated yearly at CAS), journals (over 250 STM academic journals), technical reports, and papers published at international journals and proceedings (over 20,000 yearly). Secondly, an integrated service platform is built upon the resource system layer but extends in

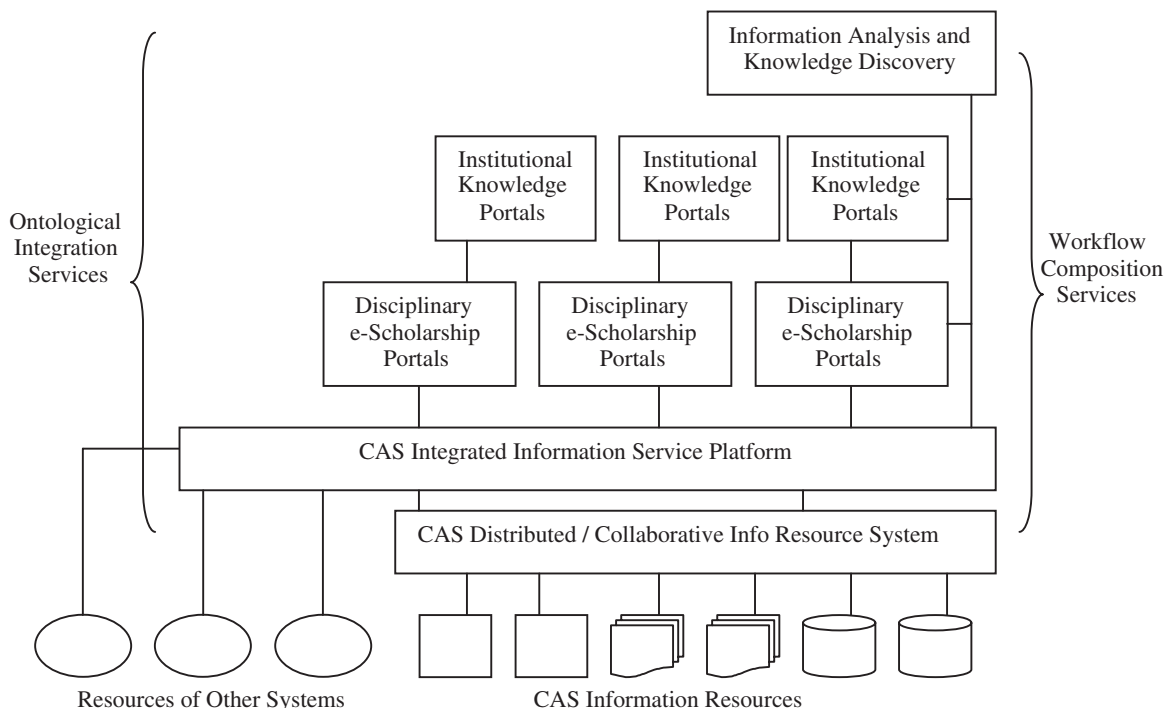


Figure 1. CAS digital library framework.

three directions: to integrate resources from NSTL, CALIS, and other digital libraries, to link resources from e-science, e-learning, and e-government, and to provide a seamless information experience (not just a search and retrieval process) where CAS users can make use of potentially multiple services from anywhere with one authentication, one input, in one logic process, to support their information exploration, access, and processing. Part of this is in place in today's CSdigital library, but a lot of user-based integration still needs to be woven in which will lead to restructuring of some of the current systems.

Discipline-based e-Scholarship Service Layer

The Discipline-based e-Scholarship Service Layer (Figure 2) consists of a series of Disciplinary e-Scholarship Portals. 'Disciplinary' may be a traditional discipline like physics, or a cross-field discipline like biophysics or advanced manufacturing. The emphasis here is to build around the scholarly communications process to support the whole spectrum of information activities, and to build an integrated information service from an e-science point of view instead of a library point of view. So this layer has multiple facets of service.

For the **Resource Facet**, *Information Resources* will cover STM literature, open access repositories, and other web resources; *Sci & Tech Data Resources* will provide organization and access to data grids in the field; *Educational Resources* will help discover and retrieve educational programs and courses, course-ware, teaching materials, and other learning objects; *Facilities*

Resources guides users to various research facilities in the field to support collaborative experiments; *Tools and Methods Resources* will help locate specific learning, research, and production tools and methods used in the field; and *Communications Resources* leads users to conferences, forums, journals, RSS feeders, and other communications services for the fields.

For the **Research Facet**, the portal will help organize and access the important institutions, research plans or initiatives, ongoing projects, people and communications and services providing materials and products needed or produced by the field, so that research activities in the field can be discovered, linked, analyzed, and easily utilized to facilitate one's own research.

For the **Service Facet**, a range of services are integrated to provide information alerting, selective dissemination of information, cross-database search, document delivery, and reference, to support research in the field. Many of these are provided by the services at the Integrated Information Services layer and may be customized according to the needs and resources of the field. In addition, the portal may host open access journals, blog services, mailing lists, and open conference systems to facilitate communications. A Discipline Knowledge Organization System service will be developed to organize these resources and services into a semantically meaningful knowledge network based on a research ontology,¹⁴ which can then be personalized. Such a portal will be linked with other portals and integrated into the IIS layer.

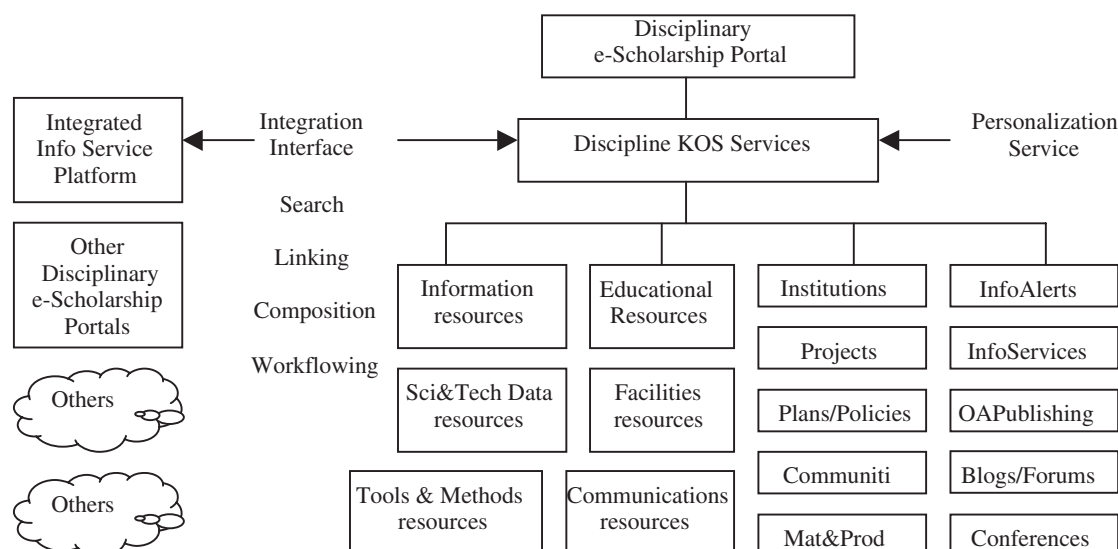


Figure 2. Disciplinary e-Scholarship Portal.

Institutional Knowledge Services Layer

The Institutional Knowledge Services Layer consists of a series of institutional knowledge service portals that serve individual CAS research institutes, laboratories, or project teams. Such a portal can be organized as dimensions. The **Information Service Dimension** may include the three facets (resources, research, service) in a disciplinary e-Scholarship Portal previously described, but obviously with institutional customization according to institutional needs and service spectrums. The **Knowledge Entity Dimension** will describe, organize, and provide access, on the one hand, to the ‘organizational’ knowledge entities of the institution such as its departments, projects, teams, people, and facilities, and on the other hand, to the ‘living’ knowledge objects including plans, activities, processes, news, and results. The word ‘living’ is important, for their dynamic nature, for revealing and capturing their changing states, and for linking them with other entities. The **Knowledge Platform Dimension** offers an institutional repository system to capture the knowledge assets of the institution but extends to promote knowledge processing tools and environment. For this, a number of ‘wares’ are provided. *DiscoveryWare* offers specialized search, visualization, and analyses tools; *CommunityWare* helps users to build their own web sites, forums, open conferences, or other forms of virtual community; *WorkflowWare* provides tools for organizing research processes with multi-tasking,

multi-partners, multi-scheduling, multi-control; *PersonalOrgWare* includes sets of tools for organizing personal information from or at multiple resources or sites, producing well-formatted papers, or producing course-wares. The emphasis here is to organize the knowledge objects, processes, and tools from an institutional and research point of view. Again, an Institutional Knowledge Organization System will be developed to organize them into a semantically meaningful knowledge network. Like the Disciplinary e-Scholarship Portals, Institutional Knowledge Service portals will be linked with other portals and integrated into the IIS layer. Within an institution, the portal will also be linked with the institution’s e-learning systems, co-laboratories, workflow management systems (WfMS), and its Enterprise Planning system (ERP, here as an integrated research management information system).

Conclusion

This is indeed an ambitious design that can only be implemented phase-wise. But what is important is the vision and the approach for digital library development from user knowledge processes. It is the author’s belief that the viability and sustainability of digital libraries lie in their diffusing into and support for user knowledge processes. The design outlined here is an experimental step toward this goal.

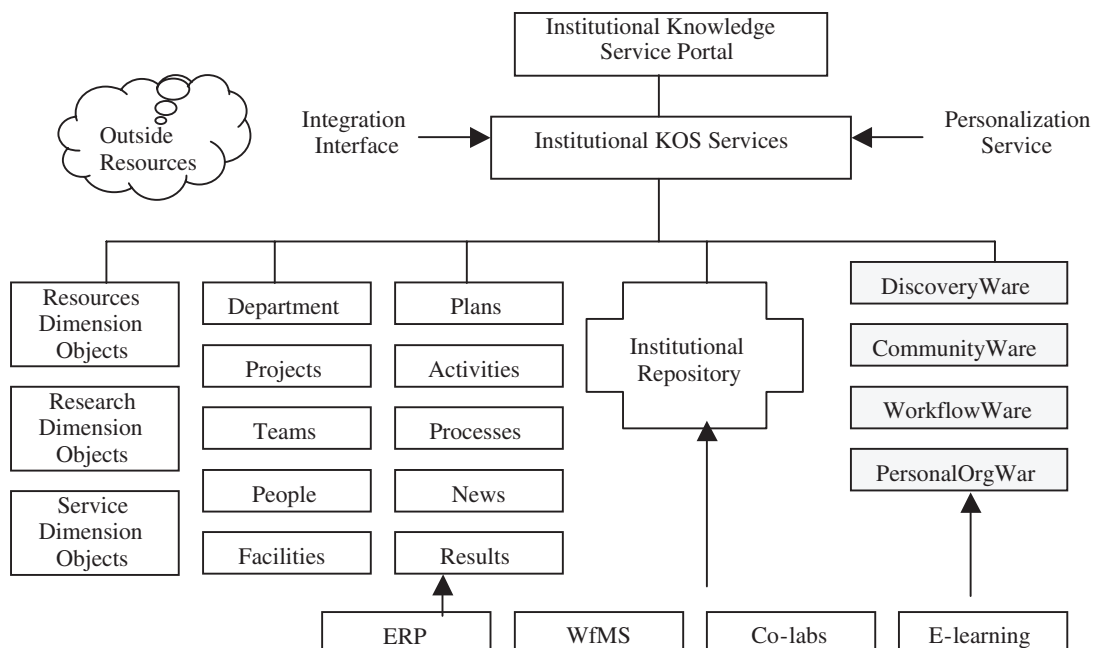


Figure 3. Institutional knowledge platform.

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Between East and West: libraries of the Russian Far East

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Abstract

Outlines the library network in the the Far East Federal District (FEDF) of the Russian Federation and describes the Far Eastern State Research Library (FESRL), the largest library in the FEDF. Its current collection is about 3 million items. The OPAC, created in 1994, contains 500,000 bibliographic records. Every year around 45,000 readers are registered. The FESRL is actively involved in library education and training and interlibrary cooperation. Library publications include regional bibliographical manuals such as *Books on the Far East* and *Literature on Khabarovsk Krai*, a bibliography *Published in Khabarovsk Krai*, monographs, conference proceedings, current bibliographic indexes, a directory-calendar of Far East events *Time and Events* and *The Far East State Research Library Bulletin*, a quarterly journal on the theory and practice of library science, bibliographic science and book science. The library plays the role of an educational, cultural and enlightenment center.

Keywords: Libraries; Far Eastern State Research Library; Russian Federation; Khabarovsk

The Far East Federal District

The Far East Federal District (FEFD) of the Russian Federation is a unique region from both geographical and climatic perspectives. Difficult climatic conditions (about 60 percent of the territory is characterized as being extremely uncomfortable for human life), remoteness from the central and western regions of Russia, low density of population (1.2 people per square kilometer), the local character of population dispersion, and a low level of development of the social, transport and communication infrastructure are the main features of the territory. The territory covers an area of 6,215,900 square kilometers, which accounts for 36.45 percent of the entire territory of the Russian Federation; however, the 7 million inhabitants constitute only 5 percent of the population of the Russian Federation.

The Library Network

There are ten large state universal libraries in FEFD, which in fact perform the functions of 'central libraries of subjects' of the Russian Federation. They include one national library (the National Library of Sakha-Yakutia), two Krai (administrative region) libraries (the Far East State Research Library and the Primorsk State Public Library, named after Gorky), five regional libraries (the Amursk Regional Research Library; the Kamchatka Regional Research Library, named after Krasheninnikov; the Magadan Regional Research Library, named after Pushkin; the Sakhalin Regional Research Library and the Birobidjan Regional Research Library, named after Sholom-Alleyhem), two district libraries (Koryak District Public and Research Library and Chukotka District Public and Research Library, named after

Tan-Bogoraz). There is also quite a rich net of municipal public libraries and libraries of educational and research institutions.

Seven research centers of the Russian Academy of Science are functioning in FEFD, and another 153 organizations are also involved in research and development. There has been a stable positive tendency in the field of science, innovation and information technologies during the last 5 years. The constant growth of allocations to these spheres testifies to this trend. The number of institutions that are involved in postgraduate studies has grown, likewise the number of staff in academic research institutions, organizations and universities.

All these factors, by definition, have to have an impact on the development of information and communication technologies (ICT) and the information environment across the territory. At present the fastest rate of development is peculiar to university libraries, particularly those considered the largest (the Humanitarian University in Khabarovsk and the Far East State University in Vladivostok), and others. All of them are actively using external e-resources and creating their own. More and more libraries are being considered as strategic partners in conducting research and developing the educational system.

As a whole, the library net in the Far East is characterized by a high level of heterogeneous distribution of libraries, serious differences in the number and quality of libraries in the different subjects of interest in the FEFD, and differing rates of development of libraries, both in different regions and within the same region. In general, the quantitative and in some cases qualitative level of library services provided to the population of FEFD is lower than in the rest of Russia. The needs of the population for access to information are not completely satisfied. Yet there are some leaders, which introduced good practice, first of all in the field of ICT, but also in the development of civil society.

The Far East State Research Library

One of the leaders is the Far East State Research Library (FESRL) – the largest library in the Far East, created at the end of the 19th century. Its current collection is about 3 million items, universal in scope and diverse in types of publications and carriers. Annual acquisitions are

growing each year and currently reach 100,000 items. Since 1994, after the adoption of the Federal Law on legal deposit, FESRL has been functioning as a legal deposit library and has become the main holder of information resources on traditional carriers in the Far East.

The Library Collections

The overall activity of the library, including collection development, is organized in compliance with regional social needs and the economic, demographic, national and cultural peculiarities of Khabarovsk Krai (Khabarovsk Krai is a large administrative region in the Far East and a part of FEFD) and the Russian Far East in general. Collecting literature published in and about the region is one of the priorities of collection development. The collection of publications on local history, economics, culture, etc. includes about 100,000 items, among them 30,000 titles of books. The volume and coverage of the collection is unique, not only for the Far East, but for Russia as a whole. Some of the rare titles are of interest to researchers from all over the world, since they exist nowhere else in the Far East and even in Russia. The special collection of rare books and periodicals contains 15,000 items, among them 32 manuscripts as well as books dating from the 15th to the 20th centuries, including incunabula, books in Cyrillic script, and titles published during the epoch of Peter the Great. At present the library is compiling a union catalogue of rare and valuable publications from the holdings of Khabarovsk Krai libraries.

The extension of the scope of international contacts of the Russian Far East with other countries of the Asia-Pacific region and the development of cultural ties with these countries have increased public interest towards learning the languages and cultures of neighboring Asian states. To answer these evolving needs the library is doing its best to enrich the collection of the Department of Foreign Literature, which at present houses about 70,000 items in 60 world languages. Affiliated to this department there is an International Information Center, which unifies in a single unit American, Japanese and German information centers previously working separately. The center provides access to current publications on history, economy and culture on different media. International book exchange is considered to be an important source of acquisition of foreign materials from the USA, Japan, China, Germany, etc.

The Library Catalogues

The collections are being reflected in a system of catalogues which exist on different carriers: paper and electronic. The OPAC, which began to be created in 1994, contains 500,000 bibliographic records. The OPAC became a reality for end users in 1998. The Information Library System that has been implemented is called 'MARC-SQL' and has been developed by a Russian vendor. The OPAC is mounted on the Internet. Other library services are also available via the Web.

The rapid development of information and telecommunication technologies is typical for all parts of the world. The FESRL tries to keep up to date, the automation of library and information processes being an important direction of work, although the demand for a new level of interlibrary interaction, cooperation and integration caused the creation of cooperative library systems. Special regulations issued by the Khabarovsk Krai Administration in 2005 provide the legal and financial basis for the development of cooperative technologies. In practical terms it led to purchasing and installation of OPAC-global software which will facilitate the integration of the libraries of the Far East regions with the rest of Russia and in general with global cyberspace.

Bibliographic Control

Special attention is given to bibliographical control of local publishing products. Among library publications are the following: regional bibliographical manuals, *Books on the Far East; Literature on Khabarovsk Krai*; a bibliography *Published in Khabarovsk Krai* (since 2000); a directory-calendar on the *Far East Times and Events* (since 1957); a *Catalogue of Theses Abstracts in the Far East State Research Library* (since 1999); a series of bibliographic indexes like *Scientist and Library, Musical Life of the Far East*; and a *Bibliographic Bulletin*. Apart from print editions an electronic database of books and articles on Khabarovsk Krai is being maintained. A traditional (print) regional union catalogue of all publications in the Far East is being compiled. This became possible due to the joint efforts of all central libraries of the FEFD. As a result, users of the Far East State Research Library can get access to numerous local publications.

Interlibrary Lending

For many years, the Far East State Research Library has been the largest regional centre of interlibrary loan. The unique collections of the library are used by other libraries, not only in the Far East, but also in other regions. Around 600 subscribers are served annually, including public libraries (32 percent), research libraries (20 percent), university and school libraries (10.2 percent), academic libraries (3.3 percent) and medical libraries (3.6 percent). A system of electronic document delivery was introduced to provide users with easy access to library collections.

Preservation Activities

The most important function of the library is preservation of its unique collections. The Far East State Research Library actively participates in implementation of the National Programme for Library Collections Preservation. For several years, under the Federal Programme 'Culture of Russia' the project 'Monuments of Book Culture in Khabarovsk Krai' has been under way. Within the project, unique photographs were converted to digital images and their master copies are under the watchful eye of curators. Work within the framework of the project 'Digital Library of the Far East' has just started. The most popular periodicals are converted to microfilm. In 2005, a target programme 'Preservation of Cultural and Historical Memory of the Nation: Libraries and Archives of Khabarovsk Krai' was launched in Khabarovsk Krai.

Currently, a national system of repositories is being developed, which will redistribute low use materials throughout the country. It is planned that one of these repositories will be based in the Far East State Research Library in Khabarovsk, the capital of the Far Eastern Federal District.

Library Users

One of the important tasks of the library is the provision of access to library collections. Unlike archive depositories, the Far East State Research Library is trying to meet the diverse demands of all social groups. A well-known scientist, Sinologist and researcher in Japanese language and culture, G.G. Permyakov, wrote in the book for important guests:

I'm delighted with plenitude and availability of books. My six books couldn't be created without you. . . .

Every year around 45,000 new readers from different social groups are registered. About 40 percent of the readers are specialists with graduate and postgraduate degrees. Since the beginning of the 1990s the number of students using the library has been steadily increasing.

The library has different digital products that constitute the basis for research and teaching: electronic databases, electronic publications and communication systems, particularly the Internet. The library was connected to the Internet in 1996. In 1999, an Internet reading room with 12 workplaces was equipped through a grant given under the programme IATP (Internet Access and Training Programme), conducted by the non-commercial organization, Project Harmony Inc.

Research Activities

The Far East State Research Library is also a research institution for studies in librarianship, bibliography, book science and other related sciences. In 2000, the library was accredited as a research institution, and this status was confirmed in 2004. The library has an Academic Council, responsible for defining strategic issues of research, guidance and publishing development. Major trends in research activities include scientific support for the development of the Far East State Research Library as well as the development of libraries of Khabarovsk Krai and the Far East, and bibliological and local history research. These research activities result in international and regional scientific and practical conferences such as 'Modern Library in United Information and Cultural Space of the Far Eastern Region', 'Priamurye in the Historical, Cultural and Natural Science Context of Russia', etc.

For several years, research activities in the field of the history of the book have been under way under titles such as 'Centres of Russian Book Science in China in 1917–1949', 'Book Collections of Russian Emigrants and Repatriates from China in Asian Region', 'Cyrillic Book-Learning in Libraries' Collections' and 'Western European Publications in the Rare and Valuable Books Department of the Far East State Research Library'. Library staff carry out regular work on the disclosure and study of books with auto-

graphs, bookplates and dedicatory descriptions; they examine the collection of pre-revolutionary periodicals.

For many years, the library serves as a methodological centre for libraries in Khabarovsk Krai and as a coordination centre for research and special libraries of the Far East. Methodological work is based on the results of scientific research and analysis of innovations in the field of librarianship. The library provides advisory assistance to the municipal libraries of Khabarovsk Krai and holds regional competitions of professional art.

Education and Training Activities

The library serves also as an educational centre. On the one hand, being an information institution the library assures educational processes. On the other hand, teaching is becoming a vital constituent of the entire library activity. Workshops have been held on the topics of 'Library Service: Problems and Perspectives', 'Information and Bibliographic Activity of Libraries: Current Priorities and Key Issues', 'Indexing in Card and Electronic Catalogues', and 'Library as a Centre of Ecological Information and Enlightenment'. An interregional scientific conference on 'New Tables of Library Bibliographic Classification: Organization, Technology, Principles of Use. Methods of Subject Analysis', a master class 'Modern Approaches and Methods in the Study of History of Book Science', a workshop on RUSMARC and a school for directors of the Central Library System of Kamchatka Region, among others, were also held.

Taking into consideration the current tendency to strengthen the role of the library in continuing education, the Centre of Continuing Professional Development for Library Specialists of the Far Eastern Region was set up in 2002 based on the Far East State Research Library. Its creation was approved by the Board of the Ministry of Culture of the Russian Federation. Organizational models for raising professional competencies as well as the main elements of curricula have been defined and the concept of continuing professional library education in the Far Eastern Federal District has been formulated. In 2004, the library got a license to carry out educational activity.

For quite a long period of time the FESRL has cooperated with the Khabarovsk State Institute

of Arts and Culture (the Russian equivalent of a library school). Different courses within the formal curriculum of teaching librarianship are being taught in the library, including 'Automated Search and Retrieval', 'Automation of Analytical and Synthetic Processing of Information', 'Information Technologies', 'Technical Tools Facilitating Library Work', 'Conversion of Documents to Other Media', and 'Natural-Scientific and Scientific-Technical Book'. The library also serves as a basis for practical training. Specialists of the FESRL serve as consultants and reviewers of students' term and graduation papers.

Publishing Activities

Publishing activity is a logical continuation of the research and methodological work of the library. The Printing and Publishing Department was established in 1998. The library publishes monographs, proceedings of scientific and practical conferences, current bibliographic indexes, and the directory and calendar on *Far East Times and Events*. A quarterly journal on the theory and practice of library science, bibliographic science and book science, *The Far East State Research Library Bulletin*, has been published since 1998. In 2001 there appeared a new methodological guideline *Library Orbit*. A number of titles appeared in connection with the 110th anniversary of the Far East State Research Library, among them *Chronicle of the Far East State Research Library*, *Book Monuments of the Far East State Research Library* and an illustrated publication *The Far East State Research Library: Pages of History*. A bibliographic index, *The Far East State Research Library*, is being compiled. In 1999, the library started to create a full text database of its own publications.

Cultural Activities

The library plays the role of a cultural and enlightenment center. It is a complicated but open and dynamic system whose development depends on a variety of internal and external factors. Clubs such as 'Flower-Grower', 'Retro', 'Tuning Fork', 'Open America', 'Japan Today', 'University of Gardeners', and 'English Club' are tailored to the recreational needs of different target groups. The 'Local History Club', created 6 years ago, united famous scientists of local studies in Khabarovsk. The Library organizes meetings with scientists, writers, and public figures for presentations of new works. Many events have an interregional character. For

example in 2005 a large exhibition project was completed to present a joint donation of a National Library of Sakha and a Presidential and Governmental Library of the Republic of Sakha. The donated book collection consisted of 500 editions of universal content and included belles-lettres, science literature about Yakutia and publications in the Yakut language. The main aim of the project was to single out collections of Yakut literature and upgrade and enrich FESRL's collection of national literatures, and to provide access to new acquisitions to representatives of the Yakut diaspora on the territory of Khabarovsk Krai.

Cooperative Activities

The library carries out task-oriented work to establish and maintain business relations with different institutions and organizations and with individual scientists and specialists. For many years of its existence, the library maintains close relations with the N.I. Godekov Khabarovsk Regional Museum of Local History and Economy, the Khabarovsk Krai State Archive, and libraries belonging to different parent bodies, including the largest libraries of the Russian Federation: the Russian State Library, the National Library of Russia, the Library of the Academy of Science, and the State Public Scientific and Technical Library of the Siberian Branch of the Academy of Science of Russia. Partnerships are also established with a number of foreign libraries, the Russian Library Association and other organizations. FESRL coordinates its work with educational and scientific institutions and maintains contacts with the Institute of Economic Studies of the Far East Department of the Russian Academy of Science, the Far East State Humanitarian University, the Far East Academy of Public Service, the Pacific State University and others.

Nowadays an urgent need for the creation of a unified information interaction and information environment for all actors in the book market (authors, publishers, polygraphists, booksellers) is clearly perceived in the Far East. FESRL does its best to contribute to this process: close ties have been established with the publishing houses 'Private Collection' and 'Trans-Amur Bulletin'. Many contacts evolve into business cooperation. In 2005, for example, due to its close ties with the book publishing sector, the library organized the first regional book fair 'Science Publishing in Khabarovsk Krai: modern tendencies and perspectives for the future',

where 28 exhibitors presented more than 1,000 titles. FESRL participates on a regular basis in the regional trade fair 'Pechatniy Dvor' in Vladivostok. Participation provides an opportunity to trace books produced in the region and to publicize the library's own publications to a large number of potential users.

Conclusion

This short overview of the activities of the FESRL gives a clue to understanding the role it plays in the social and cultural environment of the Far East. The library is an effective social institution which stimulates the development of the intellectual and spiritual potential of the largest region of Russia, the transmission of the new ideas and knowledge, and the upgrading of region science and economy. One of the most difficult strategic tasks in the territorial development of Russia is the development of Siberia and the Far East. Libraries should take an important part in this process.

From the Governing Board

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World Library and Information Congress: new site selection process

At its meeting in December 2005, the Governing Board discussed and approved changes to the procedure for selecting host cities for the IFLA World Library and Information Congress.

The new selection process reflects the previous method, but is much more transparent. It allows IFLA to target specific regions to ensure that the IFLA World Library and Information Congress is able to move around the world.

In 2003, IFLA contracted with Congrex Holland as our core professional conference organizer for the congresses from 2005 through 2009. This contract removes much of the burden of organization from local committees, allowing the Congress to be held in a wider range of countries. The new process continues to ensure input from the local professional community. It also removes the costs of the bid process, which previously had been a burden, from national associations.

The new process will operate as follows:

1. The Governing Board selects a geographic region in which it would like the Congress to take place.
2. The Governing Board asks its Professional Conference Organizer, Congrex Holland, to do the necessary research, obtain competitive quotations and put forward a short-list of suitable cities in that region.
3. In the decision-making process, the organized library profession in the relevant countries is also consulted (normally via the national association).

4. In light of the information provided, the Governing Board decides on the city that will host the Congress.

The first Congress to which this procedure applies is that of 2009. The region that the Governing Board has selected for 2009 is Southern Europe. This region includes the following countries:

Albania, Andorra, Bosnia & Herzegovina, Croatia, Gibraltar, Greece, Holy See, Italy, Macedonia (Former Yugoslav Republic of), Malta, Portugal, San Marino, Serbia & Montenegro, Slovenia, Spain.

Congrex Holland will be compiling a shortlist of candidate cities between January and March 2006. The host city will be announced at the IFLA World Library & Information Congress in Seoul, Korea, in August 2006.

For further information, please contact: Josche Neven, Communications Manager. E-mail: josche.neven@ifla.org

From the Divisions and Sections

IFLA Regional Office Moves

Following the retirement of Ms Pensri Guaysuwan, former IFLA

Regional Manager for Asia and Oceania, the IFLA Regional Office for Asia and Oceania in Bangkok is now closed. The new IFLA Regional Manager for Asia and Oceania is Mrs. Tan Keat Fong,

c/o National Library Board, 100 Victoria Street, Singapore 188064. Tel: (65) 6332 3347. Fax: (65) 6332 3616. E-mail: keatfong@nlb.gov.sg

Membership

New Members

We bid a warm welcome to the following 30 members who have joined the Federation between 1 January and 21 March 2006.

National Associations

Asociación de Bibliotecarios de El Salvador (ABES), El Salvador

Institutions

The Capital Library of China, China
Universidad Nacional de Colombia, Colombia

Development Policy Library/
Ministry for Foreign Affairs, Finland

Bibliothèque de Rennes Metropole, France

Médiathèque José Cabanis, France
Ministry of External Affairs Library, India

National Institute of Informatics, Japan

Biblioservice Gelderland, Netherlands

Pakistan Space & Upper Atmosphere Research Commission (SUPARCO), Pakistan

University of Dar-Es-Salaam, Tanzania, United Republic of

Personal Affiliates

Ms Mia Massicotte, Canada

Jeff Barber, Canada

Ms Natalija Kilikeviciene, Lithuania

Ms Felicia Edu-Uwem Etim, Nigeria

Ms Luiza Baptista Melo, Portugal

John Mark Moore, United Kingdom

Ms Jeanne Drewes, United States

Ms Farideh Tehrani, United States

Ms Elise Sheppard, United States

Ms Susann Rutledge, United States

Ms Jane Mirandette, United States

Ms Doris Wisher, United States

Ms Glenda Lammers, United States

Jim Cole, United States

Student Affiliates

Ms Somsri Vongdeelerd, Thailand

Ms Sally Quiroz, United States

Ms Christine Tuttle, United States

Ms Teri De Voe, United States

Ms Paige Fujisue, United States

IFLA Welcomes New Gold Corporate Partners

IFLA, on behalf of our members, wishes our new Corporate Partners welcome to the IFLA community.

ProQuest Information And Learning

IFLA is very pleased to announce that ProQuest Information and Learning has joined with IFLA as a Gold Corporate Partner.

ProQuest Information and Learning is a world leader in collecting, organizing, and publishing information worldwide for researchers, faculty, and students in libraries and schools. Known widely for its strength in business and economics, general reference, humanities, social sciences, and STM content, the company develops premium databases comprising periodicals, newspapers, dissertations, out-of-print books, and other scholarly information from more than 8,500 publishers worldwide.

Users access the information through the ProQuest® Web-based online information system, Chadwyck-Healey™ electronic and microform resources, UMI® microform and print reference products, eLibrary®, SIRS® and Voyager Expanded Learning educational resources, and XanEdu® online faculty and student resources. Through its sister company Serials Solutions, ProQuest also offers e-journal access and management solutions.

Sage Publications

Sage Publications has been the publisher of the IFLA Journal since January 2005. IFLA is very pleased

that they have also joined us as a Gold Corporate Partner.

SAGE Publications, a leading international publisher of books, journals, and electronic media, is a privately owned publishing company dedicated to the global dissemination of information.

Founded over 30 years ago with a mandate to make the best and most current scholarship accessible to a broad academic audience, SAGE recognizes that high quality scholarship requires dedication and commitment. SAGE works closely with authors and editors to produce the most outstanding work in the fields in which it publishes.

SAGE Publication acquires, develops, markets, and distributes knowledge. By disseminating scholarly and professional materials throughout the world, SAGE sets the standard for innovative, interdisciplinary, and international scholarship.

EBSCO Information Services

EBSCO, which has been a Bronze Corporate Partner for more than a decade, has decided to upgrade its membership to Gold Corporate Partner. We are thrilled that EBSCO has increased its support, and look forward to continuing our excellent relationship with them.

EBSCO Information Services is a worldwide leader in providing information access and management solutions through print and electronic journal subscription services, research database development and production, online access to more than 100 databases and thousands of e-journals, and e-commerce book procurement. EBSCO has served the library and business communities for more than 60 years.

Future IFLA Conferences

WLIC Seoul, Korea, 2006

The World Library and Information Congress, 71st IFLA General Conference, will be held in Seoul, Korea, from 20–24 August 2006. Congress sessions and related events which have been notified to *IFLA Journal* are listed below.

Hangzhou Pre-Conference, 14–16 August 2006

Theme: Chinese written and printed cultural heritage and library work

IFLA Rare Books and Manuscripts Section Preconference. The programme will include visits to modern libraries and the 400 years old Tianyi Ge Library, to traditional printing and paper making villages, and to a writing brush museum.

Further information: Jan Bos, Secretary, IFLA Rare Books and Manuscripts Section. Tel. +31 70 3140336. E-mail: jan.bos@kb.nl. Conference website: http://www.zjlib.cn/hpc2006ifla/index_en.html

Shanghai Pre-Conference, 16–17 August 2006

Theme: Library management and marketing in a multicultural world

Hosts: IFLA Management and Marketing (M&M) Section; Shanghai Pudong New Area Government.

Organizers: Shanghai Library; Shanghai Pudong New Area Library; Shanghai Life Sciences Library, Chinese Academy of Sciences.

Special Supporter: Communication and Cooperation Committee, China Society for Library Science

English is the working language. Chinese-English simultaneous

interpretation will be available during the Opening Ceremony. Registered participants are entitled to attend the Opening Ceremony of the 3rd Shanghai International Library Forum on August 17, 2006 free of charge. The theme of the Third SILF is 'Management Innovation and Library Services'.

Contact: Zhang Yijing, Shanghai Library. E-mail: yjzhang@libnet.sh.cn

IFLA Satellite Meeting: Scholarly Information on East Asia in the 21st Century

Organized by the Council on East Asian Libraries (CEAL) of the Association for Asian Studies. Sponsored by the IFLA Asia and Oceania Section (RSCAO), the Korean Library Association (KLA), and the Korean Education and Research Information Service (KERIS).

Contacts: Philip Melzer. E-mail: pmel@loc.gov; Joy Kim. E-mail: joykim@usc.edu

Acquisitions & Collection Development and Serials Sections Joint Programme

Working title: Evolving business models for hybrid collections

Contact: Pentti Vattulainen (Mr), E-mail Pentti.Vattulainen@nrl.fi.

Agricultural Libraries Discussion Group Open Session

Theme: Forging partnerships between libraries and extension services for improved access to agricultural information

Contact: Deva E. Reddy, Convenor, Agricultural Libraries Discussion Group. E-mail: devaerreddy@tamu.edu

Asia and Oceania Section Open Session

Theme: Open access – promoting implementation in Asia and Oceania

Contact: Gary Gorman. E-mail: gary.gorman@vuw.ac.nz

Classification and Indexing Section Open Session

Theme: Interoperability of subject access for multilingual and multi-script networked environment, particularly for Asia

Contact: Patrice Landry. E-mail: Patrice.landry@slb.admin.ch

Continuing Professional Development and Workplace Learning Section, Preservation and Conservation Section and PAC Core Activity Joint Programme

Theme: Preservation advocacy and education

Contacts: PAC Section: Sarah Toulouse. E-mail: sarah.toulouse@bm-rennes.fr. CPDWL Section: Susan Schnuer. E-mail: schnuer@uiuc.edu. PAC Core activity: Christiane Barylá. E-mail: christiane.barly@bnf.fr

Document Delivery and Resource Sharing Section. Satellite Meeting

Theme: Resource sharing, reference and collection development in the digital age – a practical approach.

Contact: E-mail: joan@andrew.cmu.edu. Fax: +1 11 412-6944. Website: <http://www.nl.go.kr/satellite/index.php>

Document Delivery and Resource Sharing Section Open Session

Theme: Best practice in document delivery and resource sharing

Contact: Poul Erlandsen, Section Chair. E-mail: poer@dpu.dk

Education and Research Division VII

Theme: Hidden biases in library concepts – cultural and linguistic differences in research and education

Contact: Ragnar Audunson. E-mail: Ragnar.Audunson@jbi.hio.no

Education and Training Section Off-Site Whole Day Workshop

Themes: Regional cooperation of LIS Education Institutes in East Asia; Education and lifelong learning among LIS teachers and educators

Contact: Mouna Benslimane. E-mail: moubens@yahoo.comGLH

Genealogy and Local History Section Open Session

Theme: Local History: a dynamic partnership of libraries, archives, and museums

Contact: Mel Thatcher. E-mail: thatchermp@gensocietyofutah.org

Geography and Map Libraries Section Open Session

Theme: Which name is it? The geographic naming of places.

Contact: Further information: Anita K. Oser, PO Box 2834, Cullowhee, NC 28723 USA. Tel. +1-828-293-5484. E-mail: oanitak@yahoo.com

Information Technology Section, with Audio-Visual and Multimedia Section, in association with National Libraries Section

Theme: New Access Technologies: Part 1 – Exploring the heritage; Part 2 – Tomorrow's retrieval.

Contact: Hanna de Vries. E-mail: hanna.devries@ubib.eur.nl

Knowledge Management Section and Statistics and Evaluation Section. Open Program

Theme: Statistical evaluation as a tool for knowledge management.

Contacts: Michele Farrell. E-mail: mfarrell@imls.gov

or

Margaret Haines. E-mail: margaret.haines@kcl.ac.uk

Libraries and Research Services for Parliaments Section and Government Information and Official Publications Section Joint Session

Themes: Government information: dynamic energy sources for business; bridging session on content management systems, information architecture and web design issues; the model e-parliament: powerful force for positive change in the knowledge society.

Contacts: Donna Scheeder, Chair, Libraries and Research Services for Parliaments Section. E-mail: dsch@loc.gov

and

Irja Peltonen, GIOPS 2006 Programme Chair. E-mail: Irja.Peltonen@vm.fi

Libraries for the Blind Section Open Session

Theme: Accessible web pages and accessible OPACS

Contact: Helen Brazier. E-mail: helen.brazier@nlbuk.org

Library Buildings and Equipment Section Open Session

Theme: Libraries in multi-functional complexes: facilitating the sharing and exchange of learning, knowledge and information across different types of institution through synergy and design

Contact: Andrew Cranfield. E-mail: anc@horsholm.dk

Management of Library Associations Section Open Session

Theme: Advocacy In action; new roles for library associations.

Contact: Keith Michael Fiels, Executive Director, American Library Association. Tel. +1 (800) 545-2433 ext.1392

National Libraries Section Open Session

Theme: National libraries: dynamic partners for the knowledge society

Contact: Ingrid Parent. E-mail: ingrid.parent@lac-bac.gc.ca

Public Libraries Section Open Session

Theme: Dynamic digitized services with audio visual content

Contact: John Lake. E-mail: john.lake@corpoflondon.gov.uk

**Rare Books and Manuscripts
Section Open Session**

Theme: West by East – East by West: cultural and technological exchange – old technology, new technology, collecting and describing rare materials.

Contact: Section Secretary, Jan Bos.
E-mail: jan.bos@kb.nl

**Reading Section and Libraries
for Children and Young
Adults Section Open Session**

Theme: Family reading.

Contact: Gwynneth Evans. E-mail:
gwynnethevens@sympatico.ca

**Reference and Information
Services Section Open
Session**

Theme: Marketing reference services in today's library – on-site and virtual.

Contact: Bodil Wöhnert. E-mail:
bow@esbjergkommune.dk

**Regional Activities, Division
VIII Open Session**

Theme: Information literacy for the knowledge society

Contact: Gary Gorman. E-mail:
gary.gorman@vuw.ac.nz

**School Libraries and
Resource Centres Section
Open Session**

Theme: Information literacy for young people: evolving models in a changing world

Contact: James Henri. E-mail:
jameshenri@hku.hk

**Science and Technology
Libraries Section Open
Session**

Theme: Workings of the ubiquitous library

Contact: Ray Schwartz. E-mail:
schwartzr2@wpunj.edu

**Social Science Libraries
Section and Government
Libraries Section Open
Session**

Theme: Partnership building.

Contact: Steve Witt. E-mail: switt@uiuc.edu

**Statistics and Evaluation
Section and Division I
General Research Libraries
Joint Program**

Theme: Quality measures on a national scale.

Contacts: Michael Heaney. E-mail:
michael.heaney@ouls.ox.ac.uk

or

Donna Scheeder. E-mail: dsch@loc.gov

**University Libraries and other
General Research Libraries
Section Open Session**

Theme: The role of academic libraries in online and blended learning and teaching

Contact: Gillian McCombs. E-mail:
gmccombs@smu.edu

Grants and Awards

**ASIST SIG-III InfoShare
Membership Award
Winners 2006**

The Special Interest Group for International Information Issues (SIG-III) of the American Society for Information Science and Technology (ASIST), has announced the

following winners of the InfoShare awards for 2006:

Ifeanyi (Ify) Faith Njoku – Librarian, Federal College of Fisheries, Nigeria

P.R. Goswami – Director, National Social Science Documentation Centre, Indian Council of Social Science Research, India

J.K. Vijayakumar (Vijay) – Assistant Director, Health Sciences Library, American University of Antigua, Antigua

L. Ariunaa – CEO, Intec Co. Ltd, Mongolia

The winners receive one year's free membership of ASIST.

Further information: <http://www.asis.org/SIG/SIGIII/index.htm>

IFLA Publications

Marketing Library and Information Services: international perspectives. Edited on behalf of IFLA by Dinesh K. Gupta, Christie Koontz, Angels Massisimo and Réjean Savard. Munich: K. G. Saur Verlag, 2006. xvi, 419 pages. ISBN-10: 3-598-11753-1; ISBN-13: 9-783598-117534. Price: EUR 68.00.

Marketing of library services has now been recognized as an essential agenda item for almost all kinds of libraries all over the world. As the term 'marketing' has different meanings for different colleagues, the bundling of dozens of contributions from a truly international group of librarians which is presented in this book, provides a broad scale on the topic. Therefore this book offers a useful tool for both working librarians and future librarians to understand vital issues relating to marketing of library and information services at the local, national and international level. The book is divided into six sections:

- Marketing concept: a changing perspective
- Marketing in libraries around the world
- Role of library associations
- Education, training and research
- Excellence in marketing
- Databases and other marketing literature

Handbook on the International Exchange of Publications. Edited on behalf of IFLA by Kirsti Ekonen, Päivi Paloposki and Pentti Vattulainen. 5th completely new edition. 2006. Munich: K. G. Saur Verlag, 2006. 158 pages. ISBN-10: 3-598-11752-3; ISBN-13: 978-3-598-11752-7. Price: EUR 54.00.

Since publication of the previous (fourth) edition of this handbook by UNESCO in 1978, drastic technological progress and very important changes in the political-economic sphere have taken place, with great impact on library work. The international exchange of publications continues to be an important mode

of collection building and is practiced by almost all major libraries.

The 5th edition of this handbook addresses these changes in all three parts: Practices (sources of documents, organization and methods), History and Current Examples (e.g. international book exchange: has it any future in the electronic age?) and the Directory (list of exchange centres, selected bibliography).

Networking for Digital Preservation: current practice in 15 national libraries. Ingeborg Verheul. München: Saur, 2006, 269 p. (IFLA Publications: 119) ISBN-13: 978-3-598-21847-7. ISBN-10: 3-598-21847-8. Price: EUR 78.00 (IFLA Members EUR 58.00)

Libraries all over the world have to deal with fast growing numbers of digital materials that need to be safeguarded. Publications in digital form, online or on CD, digitized images, and born-digital objects need to be preserved and kept accessible. Especially for national libraries, safeguarding the digital heritage is a major issue, because of their legal task to preserve the national heritage of a country.

Safe storage of the digital heritage and ensuring access for future use, requires libraries to have a trusted digital repository system in place, and to have an ongoing R&D programme aimed at developing preservation strategies, such as migration and emulation.

In 2005 digital preservation in libraries has become increasingly important. Two national libraries already have a fully operational digital repository in place, and in several other countries, the development of digital repositories is well under way.

When planning digital preservation activities and improving cooperation in digital preservation, an overview of recent developments in the field of digital preservation issues could be a valuable aid: Does

the day-to-day practice in storing and accessing digital objects illustrate a mutual need for certain standards? Are there currently any standards for the development and building of digital repositories, and how are these being applied? Are there common standards in research on permanent access? Or is it still too early to speak of standards, and is it only possible to distinguish best practices?

Read more on the state of the art of digital repositories, preservation strategies and current projects in the national libraries of Australia, Austria, Canada, China, Denmark, France, Germany, Japan, Netherlands, New Zealand, Portugal, Sweden, Switzerland, the United Kingdom and the United States of America.

International Newspaper Librarianship for the 21st Century. Edited by Hartmut Walravens. München: Saur, 2006, 298 pp. (IFLA Publications: 118) ISBN-13: 978-3-598-21846-0. ISBN-10: 3-598-21846-0. Price: EUR 78.00 (IFLA Members EUR 58.00)

This volume consists of presentations at recent events of the IFLA Newspapers Section (Oslo 2005, Canberra 2005, Buenos Aires 2004, Shanghai 2004, Berlin 2003 and Cape Town 2003) and documents the variety and intensity of newspaper activities worldwide. Emphasis is put on two main focuses: regional activities and current work in the fields of preservation and digitization. Another essential subject covered in this volume is the very complex issue of newspapers and copyright. This publication presents the current state of newspaper librarianship on all five continents. It reflects not only the remarkable progress made during recent years, but also the major challenges for the future.

IFLA Publications published by: K.G. Saur Verlag, PO Box 701620, 81316 Munich, Germany. Tel: +49-89-76902-300. Fax: +49-89-76902-150/250). E-mail: saur.info@thomson.com. Website: www.saur.de

From Other Organizations

A Glance at BOBCATSSS 2006

The whole idea of organizing an annual symposium for both LIS students, teachers and other professionals in the field came into being in the early 1990s. The 2006 symposium held in Tallinn, Estonia, from 30th January till 1st February, has clearly shown that the idea is still alive and relevant nowadays. And maybe especially nowadays when it becomes evident that, despite virtually ubiquitous information and communication technologies, face-to-face communication can still make a difference. And what can be a better opportunity for face-to-face communication with people studying or working in the same profession than an international conference where you can meet old friends and make new ones?

BOBCATSSS 2006 has offered a variety of lectures; the participants could also take part in diverse workshops, have a look at a number of posters and, last but not least, enjoy the accompanying social and cultural events. The overall theme of the symposium, i. e. Information, Innovation, Responsibility: Information professional in the network society, has included a wide range of more specific topics, ranging from information literacy to accessibility issues or from LIS education and research to the role of public libraries in the network society.

Although it was obviously impossible to participate in every section (there were three to five sections held at a time), there was a topic for interest for everyone involved.

The symposium has also proved that the city of Tallinn becomes more and more electronic – places without wireless access to the Internet and places where it is impossible or simply inconvenient to use a card to make a payment – are rather hard to find. So Tallinn has undoubtedly been the right city for a conference dealing with issues of the emerging network society. The conference has been very carefully prepared and its organizers truly deserve a special thank you for their excellent performance.

Now it will be a real challenge for us, LIS students and teachers from Prague, to maintain and possibly even improve the quality of the event. We are, together with our colleagues from Stuttgart Media University, responsible for organizing the next BOBCATSSS symposium. It will be held in Prague from 29th till 31st January 2007 and will be focused on the issues of marketing of information services (for more information please visit our website at <http://www.bobcatsss.org/>). And so we cordially invite you to come and see the results of our joint efforts in Prague early next year!

Linda Skolková, BA, Institute of Information Studies and Librarianship, Faculty of Philosophy and

Arts, Charles University, Prague, Czech Republic. Website: <http://uisk.ff.cuni.cz/>. E-mail: skolkova@chello.cz

International ISBN Agency Moves

After more than 30 years the International ISBN Agency is on the move. The international agency, which provides support and information to more than 160 ISBN agencies around the world, is leaving its long-term home at the State Library of Berlin. The move follows a decision by the Prussian Cultural Foundation to discontinue its support for the agency.

The agency's new home will be London. From April this year EDItEUR, the international body that develops and promotes book trade standards, will take over responsibility for the day-to-day running of the agency. The new Executive Director of the International ISBN Agency will be Brian Green. The changes do not affect the ISBN agency for the UK and Ireland which continues to be operated by Nielsen BookData from its office in Woking, Surrey (www.isbn.nielsenbookdata.co.uk).

For further information, please contact: Brian Green. Tel: +44 207 607 0021. E-mail: brian@bic.org.uk. Website: www.bic.org.uk

Other Publications

International Information Literacy Resources Directory.

Have you developed information literacy resources, created a course, developed standards or assessment tools or written a thesis on the subject? Would you like to give international visibility to your information literacy work? Then, we

invite you to participate in an exciting new web directory, the International Information Literacy Resources Directory.

This web repository has been designed by the Information Literacy Section of IFLA in a UNESCO-funded project. The aim of the directory is to enable sharing

of information literacy experiences around the world. Access to the database is free to anyone.

Visit the website at: http://www.uv.mx/usbi_ver/unesco, and contribute entries for the resources that you have found most useful in your own information literacy endeavors. It is your participation that will

enrich this website so that it can serve as a global clearinghouse for Information Literacy resources. You can begin submitting your records immediately.

Further information: Jesus Lau, General Project Coordinator, Chair, Information Literacy Section/IFLA, Director, Universidad Veracruzana, USBI VER Library, Veracruz, Mexico.

Bound by Law

Duke University's Law School has just published *Bound by Law*, a comic book designed to educate

people about copyright and fair use. It is aimed specifically at misconceptions about clearances in documentary film making, but it uses that particular use as a way to elucidate fair use doctrine more generally.

Bound by Law is available (1) free online under a CC license, (BY-NC-SA), (2) in hard copy form Amazon.com, and (3) from Duke directly at a very discounted subsidized price for orders above 50 (USD 4.00 per book including shipping). [All details at the link below.]

One of the authors' main goals in preparing this publication is to produce a high quality educational resource that people can use in classes from high school to grad school, from film school, to social studies to library school, as well as for the general public.

Website: <http://www.law.duke.edu/cspd/comics/>

Winston Tabb, Chair, IFLA Committee on Copyright and other Legal Matters (CLM)

INTERNATIONAL CALENDAR

2006

- 16–17 August, 2006, Shanghai, China.
WLIC Pre-Conference: Library Management and Marketing in a Multicultural World.
Contact: Zhang Yijing, Shanghai Library. yjzhang@libnet.sh.cn.
- August 22–28, 2006. Seoul, Korea.
World Library and Information Congress: 72nd IFLA General Conference and Council.
Theme: Libraries: dynamic engines for the knowledge and information society.
For more information: IFLA Headquarters, POB 95312, 2509 CH, The Hague, The Netherlands. Tel. +31 70 314–0884. Fax: +31 70 3834827.
- September 7–11, 2006. Moscow, Russia.
Cooperation in Acquisitions: East and West.
Further information: Dr Mikhail Afanas'ev, Director, State Historical Public Library of Russia. Tel. +7 495 625 65 14. Fax: +7 494 928 02 84. E-mail: maf@shpl.ru
- October 8–11, 2006. Wellington, New Zealand.
LIANZA Conference 2006.
Theme: Next Generation Libraries – He Huarahi Whakamua.
Contact: The Conference Company (TCC). E-mail: lianza@tcc.co.nz
- October 16–17, 2006. London, UK.
ILI2006. Internet Librarian International.
Further information: E-mail: info@internet-librarian.com. Website: www.internet-librarian.com.
- October 25–28, 2006. Mèrida, Spain.
InSciT2006. International Conference on Multidisciplinary Information Sciences and Technologies.
Further information: E-mail: inscit2006@instac.es. Website: <http://www.instac.es/inscit2006/>
- October 26–29, 2006. Nashville, Tennessee, USA.
Library and Information Technology Association National Forum 2006. *Theme:* NetVille in Nashville: Web services as library services.
For more information visit: <http://www.ala.org/ala/lita/litaevents/litaeventsprograms.htm>
- November 8–10, 2006. Sofia, Bulgaria.
Sofia 2006: Globalization, Digitization, Access and Preservation of Cultural Heritage.
For more information, visit the Sofia 2006 website: <http://slim.emporia.edu/globenet/Sofia2006/Index.htm>
- November 9–11, 2006. Baltimore, Maryland (USA)
FOIS-2006. International Conference on Formal Ontology in Information Systems.
Further information: Dr. Leo Obrst, The MITRE Corporation, Information Semantics Center for Innovative Computing & Informatics. Tel. +1 703-983-6770. Fax: +1 703-983-1379. E-mail: lobrst@mitre.org. Website: <http://www.formalontology.org/>
- December 4–8, 2006. Moscow, Russian Federation.
9th International Conference EVA 2006 Moscow. *Theme:* Culture and information society technologies, Century XXI.
Further information: Leonid Kuybyshev, Head of the Organising Committee. E-mail: leonid@eva.russia.ru
- December 5–8, 2006. New Delhi, India.
ICDL 2006. International Conference on Digital Libraries.
Further information: Debal C. Kar, Organising Secretary. Tel. +91-11-24682141, 24682111 or 24682100. Fax +91-11-24682144, 2468 2145. E-mail: ICDL@teri.res.in. Website: www.teriin.org/events/icdl

2007

2007. Durban, South Africa.
World Library and Information Congress: 73rd IFLA Council and General Conference.
Theme: Libraries for the future: progress, development and partnerships.
Further information from: International Federation of Library Associations and Institutions (IFLA), PO Box 95312, 2509 CH The Hague, Netherlands. Tel. +31 (70) 3140884. Fax: +31 (70) 383 4827. E-mail: IFLA@ifla.org. Website: <http://ifla.inist.fr/index.htm>.

2008

- August 10–14, 2008, Québec, Canada.
World Library and Information Congress: 74th IFLA General Conference and Council.
Further information from: International Federation of Library Associations and Institutions (IFLA), PO Box 95312, 2509 CH The Hague, Netherlands. Tel. +31 (70) 3140884. Fax: +31 (70) 3834827. E-mail: IFLA@ifla.org. Website: <http://ifla.inist.fr/index.htm>.

SOMMAIRES

Hee-Yoon Yoon, Duk-Hyun Chang et Young-seok Kim. **Libraries in Korea: a general overview. [Les bibliothèques en Corée: un aperçu général.]**

IFLA Journal, 32 (2006) No. 2, pp. 93–103

Décrit la situation actuelle des bibliothèques dans la République de Corée, y compris la Bibliothèque Nationale de la Corée, la Bibliothèque de l'Assemblée Nationale, la Bibliothèque de la Cour Suprême, les bibliothèques publiques, académiques, scolaires et spécifiques. L'informatisation, le développement équilibré, la promotion de la lecture, les changements légaux et réglementaires et les mécanismes institutionnels sont les éléments clés des efforts pour continuer le développement des bibliothèques en Corée.

Jingfeng Xia. **Scholarly Communication in East and Southeast Asia: traditions and challenges. [La communication du savoir en Asie de l'Est et du Sud-est: les traditions et les défis.]**

IFLA Journal, 32 (2006) No. 2, pp. 104–112

Expose les grandes lignes de la tradition de la communication du savoir dans quatre pays d'Asie de l'Est et du Sud-est. Compare les similitudes et les différences dans l'histoire et dans les conditions actuelles des pratiques de recherche et de publication en Chine, au Japon, en Corée et au Myanmar. Surligne les défis soulevés par les progrès des technologies de l'information et de la communication. En analysant les déséquilibres existants dans le développement, le papier évalue les différentes solutions instaurées ou proposées par ces pays. Il découvre que chaque pays a ses propres caractéristiques relatives à la communication du savoir, rendant le monde divers et coloré.

La Société Bibliothécaire de Chine. **The Vigorous Advancement of Libraries in China. [Le progrès**

vigoureux des bibliothèques en Chine.]

IFLA Journal, 32 (2006) No. 2, pp. 113–118

Expose les grandes lignes du développement des bibliothèques en Chine, y compris la Bibliothèque Nationale, les bibliothèques universitaires, les bibliothèques publiques, les bibliothèques spécifiques et d'autres types de bibliothèques et le travail de la Société Bibliothécaire de Chine.

Kimio Hosono. **Changes in University and Public Libraries in Japan. [Les changements dans les bibliothèques universitaires et publiques au Japon.]**

IFLA Journal, 32 (2006) No. 2, pp. 119–130

Décrit les facteurs et les institutions influençant les bibliothèques universitaires et publiques au Japon, la structure organisationnelle et les caractéristiques fondamentales de ces deux types de bibliothèques. Les grandes lignes du rôle et des activités du Ministère de l'Éducation, de la Culture, des Sports, des Sciences et de la Technologie, de l'Institut National d'Informatique, de la Bibliothèque Nationale de la Diète et de l'Association Bibliothécaire du Japon sont exposées. Les bibliothèques universitaires sont confrontées à des problèmes liés aux restrictions budgétaires, aux augmentations des prix des journaux, à la capacité insuffisante de rayons, au développement de la collection, aux emprunts interbibliothécaires, à l'expertise du personnel. Les bibliothèques publiques sont confrontées aux problèmes liés à la fusion des administrations locales, au Système Shitei Kanrisha (sous-traitance de la gestion des autorités locales), aux restrictions budgétaires et aux qualifications médiocres du personnel. Les bibliothèques publiques sont en train d'introduire des services d'information concernant le commerce et l'industrie et concernant la santé des consommateurs, ainsi que des systèmes d'onglets CI.

John V. Richardson Jr. **The Library and Information Economy in Turkmenistan. [La bibliothèque et l'économie de l'information au Turkménistan.]**

IFLA Journal, 32 (2006) No. 2, pp. 131–139

Un rapport sur la situation actuelle des bibliothèques nationales, universitaires et scolaires au Turkménistan, qui couvre les contraintes sociales, politiques, économiques et technologiques dans le développement de son économie de l'information. Ce compte-rendu comporte les détails de la loi de 2000 relative à la politique nationale de l'information et les remarques présidentielles non officielles d'avril 2005 ainsi que plusieurs recommandations pour l'amélioration de l'état des circonstances.

Zhang Xiaolin. **Sustainable Digital Library Development for Scientific Communities in China. [Le développement des bibliothèques numériques à soutenir pour les communautés scientifiques en Chine.]**

IFLA Journal, 32 (2006) No. 2, pp. 140–146

Le papier analyse les services bibliothécaires numériques pour les communautés scientifiques en Chine, explore les défis par rapport aux bibliothèques numériques à soutenir, présente une stratégie de développement pour les bibliothèques numériques en prenant l'Académie Chinoise des Sciences comme exemple, et fournit un cadre de conception en strates pour une bibliothèque numérique dans un environnement de la science par électronique (e-science).

Irina V. Filatkina. **Between East and West: libraries of the Russian Far East. [Entre l'Est et l'Ouest: Les bibliothèques de l'Extrême Orient de la Russie.]**

IFLA Journal, 32 (2006) No. 2, pp. 147–152

Expose les grandes lignes du réseau bibliothécaire dans le

District Fédéral d'Extrême Orient de la Fédération Russe et décrit la Bibliothèque de Recherche d'Etat de l'Extrême Orient, la plus grande bibliothèque dans le District Fédéral d'Extrême Orient. Sa collection actuelle compte environ 3 millions d'éléments. L'OPAC, créé en 1994, contient 500.000 enregistrements bibliographiques. Tous les ans, environ 45.000 lecteurs sont enregistrés. La Bibliothèque de Recherche d'Etat de

l'Extrême Orient est activement impliquée dans l'éducation et la formation bibliothécaire et dans la coopération inter-bibliothécaire. Les publications bibliothécaires comprennent des manuels bibliographiques régionaux tels que des Livres sur l'Extrême Orient et de la Littérature sur Khabarovsk Krai, une bibliographie publiée à Khabarovsk Krai, des monographies, des comptes-rendus de conférences, des index bibliogra-

phiques actuels, un calendrier/répertoire des événements en Extrême Orient 'Temps et Evénements' et le bulletin de la Bibliothèque de Recherche d'Etat d'Extrême Orient, un journal trimestriel sur la théorie et la pratique de la science bibliothécaire, la science bibliographique et la science des livres. La bibliothèque joue le rôle d'un centre d'éducation, de culture et d'instruction.

ZUSAMMENFASSUNGEN

Hee-Yoon Yoon, Duk-Hyun Chang und Young-seok Kim. **Libraries in Korea: a general overview. [Bibliotheken in Korea: Ein allgemeiner Überblick.]** IFLA Journal, 32 (2006) No. 2, pp. 93–103

Dieser Beitrag beschreibt die aktuelle Situation im Hinblick auf die Bibliotheken in der Republik Korea, einschließlich der Nationalbibliothek von Korea, der nationalen Sammelbibliothek, der Bibliothek des obersten Gerichtshofs sowie im Zusammenhang mit den öffentlichen Bibliotheken, Unibibliotheken, Schul- und Spezialbibliotheken. Die Informatisierung, die ausgeglichene Entwicklung, die Förderung der Lesefähigkeit, die Änderung der gesetzlichen und behördlichen Vorgaben sowie institutionelle Mechanismen gelten als Schlüsselkomponenten der Bemühungen um eine weiterführende Entwicklung der Bibliotheken in Korea.

Jingfeng Xia. **Scholarly Communication in East and Southeast Asia: traditions and challenges. [Die akademische Kommunikation in Ost- und Südostasien: Traditionen und Herausforderungen.]** IFLA Journal, 32 (2006) No. 2, pp. 104–112

Dieser Beitrag umreißt die Tradition der akademischen Kommunikation in vier ost- und südostasiatischen Ländern. Dabei stellt er die Ähnlichkeiten und Unterschiede

in der Geschichte der Länder einander gegenüber und beleuchtet auch den heutigen Status Quo im Hinblick auf die Forschung und Publikationspraktiken in China, Japan, Korea und Myanmar. Zudem beleuchtet der Artikel die Herausforderungen, die sich aus dem Fortschritt der Informations- und Kommunikationstechnologien ergeben. Anhand einer Analyse der bestehenden Missverhältnisse in der Entwicklung werden diverse Lösungen ausgewertet, die von den fraglichen Ländern implementiert oder vorgeschlagen worden sind. Dabei stellt sich heraus, dass jedes Land seine eigene Art der akademischen Kommunikation hat, was für eine interessante Bandbreite und Diversifizierung der Welt sorgt.

Die Bibliotheksgesellschaft in China. **The Vigorous Advancement of Libraries in China. [Die Bibliotheksgesellschaft in China. Die intensive Fortentwicklung der Büchereien in China.]** IFLA Journal, 32 (2006) No. 2, pp. 113–118

Dieser Text befasst sich mit der Entwicklung der Bibliotheken in China, einschließlich der Nationalbibliothek, der Unibibliotheken, der öffentlichen Bibliotheken, der Spezialbibliotheken und anderer Bibliotheken. Zudem wird die Arbeit der Bibliotheksgesellschaft in China besprochen.

Kimio Hosono. **Changes in University and Public Libraries in Japan.**

[Neuentwicklungen bei den Unibibliotheken und den öffentlichen Bibliotheken in Japan.] IFLA Journal, 32 (2006) No. 2, pp. 119–130

Hierbei geht es um die Faktoren und Institutionen, die die Unibibliotheken und die öffentlichen Bibliotheken in Japan beeinflussen; zudem geht der Text auch auf die organisatorische Struktur und die grundlegenden Charakteristika beider Arten von Bibliotheken ein. Ebenfalls besprochen werden die Rolle und die Aktivitäten des Kultusministeriums, das auch für Sport und Technologie zuständig ist, des Nationalinstituts für Informatik, der Nationalbibliothek für Ernährungsfragen und des japanischen Bibliotheksverbands. Die Unibibliotheken kämpfen mit dem Problem der Budgeteinschränkungen, der steigenden Kosten für die Fachzeitschriften, der unzureichenden Regalkapazitäten, der Weiterentwicklung der Sammlungen, der Fernleihe und der Expertise der Bibliotheksmitarbeiter. Die öffentlichen Bibliotheken haben Schwierigkeiten im Zusammenhang mit der Zusammenlegung örtlicher Regierungsstellen, dem Shitei Kanrisha – System (dem Outsourcing der örtlichen Regierungsverwaltung), Budgeteinschnitten und schlecht ausgebildeten Mitarbeitern. Die öffentlichen Bibliotheken führen Dienstleistungen im Zusammenhang mit Business-Informationen und der Verbrauchergesundheit wie auch IC-Tagssystemen ein.

John V. Richardson Jr. **The Library and Information Economy in Turkmenistan. [Die Bibliotheks- und Informationswirtschaft in Turkmenistan.]**

IFLA Journal, 32 (2006) No. 2, pp. 131–139

Dies ist ein Bericht über die aktuelle Situation der Nationalbibliothek, der Unibibliotheken und der Schulbibliotheken in Turkmenistan, wobei die sozialen, politischen, wirtschaftlichen und technologischen Einschränkungen in der Entwicklung der Informationsökonomie angesprochen werden. Hinzu kommen Detailinformationen über das Gesetz zur nationalen Informationspolitik aus dem Jahr 2000 und auch die spontanen Bemerkungen des Präsidenten vom April 2005 sowie diverse Empfehlungen zur Verbesserung der heutigen Sachlage.

Zhang Xiaolin. **Sustainable Digital Library Development for Scientific Communities in China. [Entwicklung von zukunftsfähigen Digitalbibliotheken für die Forschungsanstalten in China.]**

IFLA Journal, 32 (2006) No. 2, pp. 140–146

Dieser Text analysiert die Entwicklung der Digitalbibliotheken für die Forschungsinstitute in China. Zudem untersucht er die Herausforderungen für langfristig tragfähige Digitalbibliotheken. Zur Sprache kommt außerdem eine Entwicklungsstrategie für Digitalbibliotheken am Beispiel der chinesischen Akademie der Wissenschaften; schließlich beschreibt der Artikel einen vielschichtigen Design-Rahmen für eine digitale Bibliothek in der E-Science – Umgebung.

Irina V. Filatkina. **Between East and West: libraries of the Russian Far East. [Zwischen Ost und West: Bibliotheken des russischen fernen Ostens.]**

IFLA Journal, 32 (2006) No. 2, pp. 147–152

In diesem Artikel geht es um das Bibliotheksnetz im fernöstlichen Bundesdistrikt der russischen Föderation; er beschreibt die fernöstliche Staatsforschungsbibliothek, die größte Bibliothek im fernöstlichen Distrikt der russischen Föderation, deren aktuelle Sammlung etwa drei Millionen Gegenstände umfasst. Die im Jahr 1994

gegründete OPAC besitzt 500.000 bibliographische Aufzeichnungen. Jedes Jahr werden ungefähr 45.000 Leser registriert. Die fernöstliche Staatsforschungsbibliothek bemüht sich aktiv um die Bibliotheksausbildung und einschlägige Schulungen sowie um die Zusammenarbeit zwischen den Bibliotheken. Die Bibliothekspublikationen beinhalten regionale bibliographische Handbücher, wie beispielsweise Bücher über den fernen Osten und Literatur über Khabarovsk Krai, eine Bibliographie aus Khabarovsk Krai, Monographien, Konferenzberichte, aktuelle bibliographische Indices, einen Veranstaltungskalender für den fernen Osten (Time and Events) sowie den Bulletin der fernöstlichen Staatsforschungsbibliothek, eine vierteljährlich erscheinende Zeitschrift, die sich mit der Bibliothekswissenschaft in Theorie und Praxis, den bibliographischen Wissenschaften und den Buchwissenschaften befasst. Dabei übernimmt die Bibliothek die Rolle eines Zentrums für Bildung, Kultur und Aufklärung.

RESÚMENES

Hee-Yoon Yoon, Duk-Hyun Chang y Young-seok Kim. **Libraries in Korea: a general overview. [Bibliotecas en Corea: una visión global.]**

IFLA Journal, 32 (2006) No. 2, pp. 93–103

Describe la situación actual de las bibliotecas en la República de Corea, incluyendo la Biblioteca Nacional de Corea, la Biblioteca de la Asamblea Nacional, la biblioteca de la Corte Suprema, bibliotecas públicas, académicas, de escuelas y especiales. La informatización, el desarrollo equilibrado, el fomento de la lectura, cambios legales y normativos y los mecanismos institucionales son componentes clave de los esfuerzos para proseguir el desarrollo de bibliotecas en Corea.

Jingfeng Xia. **Scholarly Communication in East and Southeast Asia: traditions and challenges. [Comunicación académica en el este y sudeste asiático: tradiciones y desafíos.]**

IFLA Journal, 32 (2006) No. 2, pp. 104–112

Sintetiza la tradición de la comunicación académica en cuatro países del este y sureste asiático. Compara las similitudes y diferencias en las condiciones históricas y actuales de las prácticas de investigación y publicación en China, Japón, Corea y Myanmar. Destaca los desafíos que los avances en informática y comunicación han traído consigo. Al analizar los desequilibrios existentes en el desarrollo, este documento evalúa varias soluciones que

estos países han implementado o propuesto. Descubre que cada país tiene sus propias características en lo que a comunicación académica se refiere, lo que convierte al mundo en un lugar más heterogéneo y variado.

La Sociedad Bibliotecaria de China. **The Vigorous Advancement of Libraries in China. [El avance vigoroso de las bibliotecas en China.]**

IFLA Journal, 32 (2006) No. 2, pp. 113–118

Sintetiza el desarrollo de las bibliotecas en China, incluyendo la Biblioteca Nacional, las bibliotecas universitarias, públicas, especializadas y otros tipos de librerías, así como la obra de la Sociedad Bibliotecaria de China.

Kimio Hosono. **Changes in University and Public Libraries in Japan.** [Cambios en las bibliotecas universitarias y públicas de Japón.]

IFLA Journal, 32 (2006) No. 2, pp. 119–130

Describe los factores e instituciones que han influido en las bibliotecas universitarias y públicas de Japón, la estructura organizativa y las características básicas de estos dos tipos de bibliotecas. Se sintetizan el papel y las actividades del Ministerio de Educación, Cultura, Deportes, Ciencia y Tecnología, el Instituto Nacional de Informática, la Biblioteca Nacional del Diet y la Asociación de Bibliotecas de Japón. Las bibliotecas universitarias se enfrentan a problemas relacionados con costes de presupuestos, aumento en el precio de los diarios, falta de capacidad en las estanterías, desarrollo de la colección, préstamos entre las diferentes bibliotecas y cualificación del personal. Las bibliotecas públicas se enfrentan a problemas relacionados con la fusión de gobiernos locales, el sistema Shitei Kanrisha (subcontratación de la gestión local del gobierno), cortes en los presupuestos y personal poco cualificado. Las bibliotecas públicas están introduciendo servicios de información comercial e información sobre la salud del consumidor, así como sistemas de etiquetas CI.

John V. Richardson Jr. **The Library and Information Economy in Turkmenistan.** [Las bibliotecas y la economía de la información en Turkmenistán.]

IFLA Journal, 32 (2006) No. 2, pp. 131–139

Un informe sobre la situación actual de las bibliotecas nacionales, universitarias y escolares en Turkmenistán, que cubre las limitaciones sociales, políticas, económicas y tecnológicas en el desarrollo de la economía de la información. Este informe incluye detalles de la ley promulgada en 2000 sobre la información nacional y los desacertados comentarios presidenciales de abril de 2005, además de varias recomendaciones para mejorar el estado de la situación.

Zhang Xiaolin. **Sustainable Digital Library Development for Scientific Communities in China.** [Desarrollo digital sostenible de las bibliotecas para las comunidades científicas en China.]

IFLA Journal, 32 (2006) No. 2, pp. 140–146

Este documento analiza los servicios digitales de las bibliotecas para la comunidad científica, explora los desafíos para lograr bibliotecas digitales, presenta una estrategia de desarrollo para las bibliotecas digitales usando a la Academia China de las Ciencias como ejemplo, y proporciona un marco de diseño estratificado para bibliotecas digitales en el entorno de la e-ciencia.

Irina V. Filatkina. **Between East and West: libraries of the Russian Far East.** [Entre oriente y occidente: Bibliotecas en el oriente ruso.]

IFLA Journal, 32 (2006) No. 2, pp. 147–152

Sintetiza la red bibliotecaria en el Distrito Federal Extremo Oriental de la Federación Rusa y describe a la Biblioteca de investigación del estado oriental, la mayor biblioteca del estado federal. La colección actual está compuesta de unos 3 millones de elementos. La OPAC, que fue creada en 1994, cuenta con más de 500.000 registros bibliográficos. Cada año se registran unos 45.000 lectores. La Biblioteca de Investigación del Distrito Federal Extremo Oriental está involucrada de manera activa en la formación bibliotecaria y en la cooperación entre bibliotecas. Entre las publicaciones de la biblioteca se encuentran los manuales bibliográficos regionales, como libros publicados sobre la literatura oriental y literatura sobre Khabarovsk Krai, una bibliografía publicada en Khabarovsk Krai, monografías, actos de conferencias, índices bibliográficos actuales, un directorio de los acontecimientos en el estado y el boletín de la Biblioteca de investigación del estado oriental, un periódico trimestral sobre la teoría y la práctica de la ciencia bibliotecaria y de los libros. La biblioteca desempeña el papel de un centro educativo, cultural y de ilustración.

Рефераты статей

Хе-Йоон Йоон, Дук-Хиун Чанг и Йанг-сеок Ким. **Libraries in Korea: a general overview.** [Библиотеки в Корее: общий обзор.]

IFLA Journal, 32 (2006) No. 2, pp. 93–103

Описывает современную ситуацию библиотек в Республике Корея, включая Национальную библиотеку Кореи, Библиотеку Национальной Ассамблеи, Библиотеку Верховного суда, общественную, академическую,

школьную и специальную библиотеки. Использование современных технологий, сбалансированное развитие, пропаганда чтения, изменения в законодательной сфере и механизмы функционирования организации – все это ключевые составляющие усилий с целью продолжения развития библиотечного дела в Корее.

Джинфенг Ксия. **Scholarly Communication in East and Southeast**

Asia: traditions and challenges. [Коммуникация в научной сфере в Восточной и Юго-Восточной Азии: Традиции и трудности.]

IFLA Journal, 32 (2006) No. 2, pp. 104–112

Дает представление о коммуникации в научной сфере в четырех странах Восточной и Юго-восточной Азии. Сравнивает сходства и различия между прошлым и настоящим в области исследований и публикаций

в Китае, Японии, Корее и Мьянмаре. Подчеркивает трудности, связанные с развитием информационных технологий и новшеств в области коммуникации. Путем анализа существующего дисбаланса в развитии дает оценку различным решениям, проведенным в жизнь или предложенным этими странами. В работе обосновывается тот факт, что каждая страна имеет собственные показатели коммуникации в научной сфере, внося в мир разнообразие и местный колорит.

Библиотечное общество Китая. **The Vigorous Advancement of Libraries in China.** [Значительный рост библиотек в Китае.] IFLA Journal, 32 (2006) No. 2, pp. 113–118

Подчеркивает факт развития библиотек в Китае, включая Национальную библиотеку, университетские библиотеки, публичные библиотеки, специализированные библиотеки и другие типы библиотек, а также работу библиотечного общества Китая.

Кимико Хосоно. **Changes in University and Public Libraries in Japan.** [Изменения в Университетских и публичных библиотеках в Японии.] IFLA Journal, 32 (2006) No. 2, pp. 119–130

Описывает организации и факторы, оказывающие влияние на университетские и публичные библиотеки в Японии, их организационные структуры и основные характерные особенности обоих типов библиотек. Определяются роль и деятельность Министерства образования, культуры, спорта, науки и технологии, Национального института информатики, Национальной парламентской библиотеки и Ассоциации японских библиотек. Университетские библиотеки сталкиваются с

проблемами, связанными с урезанием бюджета, ростом цен на выпуск журналов, недостатком места на полках, увеличением коллекции, межбиблиотечным обменом и экспертизой сотрудников. Публичные библиотеки сталкиваются с проблемами объединения локальных органов управления, системой Шитей Канриша (Shitei Kanriisha) (делегирования со стороны муниципального управления), недостаточно квалифицированного персонала и урезания бюджета. Публичные библиотеки вводят услуги в области деловой и потребительской информации, а также системы с электронным радио-ярлыком.

Джон В. Ричардсон Юн. **The Library and Information Economy in Turkmenistan.** [Библиотека и Информационная экономика в Туркменистане.] IFLA Journal, 32 (2006) No. 2, pp. 131–139

Обзор ситуации в современных национальных, университетских и школьных библиотеках Туркменистана, дающий информацию о факторах, сдерживающих развитие информационной экономики в социальной, политической, экономической и технологической областях. Этот обзор включает в себя детали закона Туркменистана по информационной политике 2000 года, а также импровизированные президентские замечания в апреле 2005 года и несколько советов по улучшению состояния дел.

Занг Ксиаолин. **Sustainable Digital Library Development for Scientific Communities in China.** [Создание постоянно действующей цифровой библиотеки для научных обществ в Китае.] IFLA Journal, 32 (2006) No. 2, pp. 140–146

В этой работе подвергаются анализу цифровые библиотечные услуги, предназначенные для научных

обществ Китая, рассматриваются сложности в отношении постоянно действующих цифровых библиотек, предлагается стратегия развития цифровых библиотек на примере Китайской академии наук и обеспечивается ступенчатая разработка системы цифровой библиотеки в научном окружении.

Ирина В. Филаткина. **Between East and West: libraries of the Russian Far East.** [Между Востоком и Западом: Библиотеки Российского Дальнего Востока.] IFLA Journal, 32 (2006) No. 2, pp. 147–152

Дает представление о сети библиотек в Дальневосточном федеральном округе Российской Федерации и описывает крупнейшую библиотеку данного округа – Государственную исследовательскую библиотеку Дальнего Востока. В настоящее время коллекция библиотеки включает около 3 миллионов экземпляров. Созданный в 1994 году публично доступный каталог (ОРАС) включает 500 000 библиотечных записей. Каждый год регистрируются порядка 45 000 читателей. Данная библиотека принимает активное участие в процессе библиотечного образования и тренингов, а также межбиблиотечного сотрудничества. Среди литературных публикаций – региональные библиографические справочники, такие как книги по Дальнему Востоку и литература по Хабаровскому Краю, библиография, опубликованная в Хабаровском Крае, монографии, материалы конференций, текущие библиотечные индексы, календарь директориальных Событий Дальнего Востока, бюллетень государственной исследовательской библиотеки Дальнего Востока, кварталный журнал по теории и практике библиотечной науки, науки библиографии и книг. Библиотека играет роль образовательного, культурного и просветительского центра.

IFLA JOURNAL – NOTES FOR CONTRIBUTORS

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