
AI translation · View original & related papers at
chinaxiv.org/items/chinaxiv-202307.00389

Pursuing Excellence: New Challenges for Research Libraries in the Postprint Era

Authors: Wu Jianzhong

Date: 2023-07-26T00:00:00+00:00

Abstract

[Purpose/Significance] In recent years, with the continuous integration and expansion of library and information science services, the professional boundaries of librarianship have become increasingly blurred, characterized by deepened interactions with other professions and gradual penetration into domains such as information consulting, data analysis, and publishing and communication. Investigating the new challenges confronting research libraries holds significant importance. [Method/Process] Proceeding from the relationships between libraries and the aforementioned three professions, and from the perspective of research libraries, this study examines the further extension of library services from reference services to research consulting services, from print-based to data-driven paradigms, and from collection to publication, analyzing the new challenges and opportunities that this transformation presents for library development. [Results/Conclusion] Research libraries should assume a leading role in this transformation, committing to the exploration and development of research consulting services, data-driven services, and scholarly communication services.

Full Text

Preamble

Vol. 63 No. 1, January 2019, ChinaXiv Cooperative Journal

Seeking Transcendence: New Challenges for Academic Libraries

Wu Jianzhong

University of Macau Library, Macau 999078

Abstract

[Purpose/Significance] In recent years, with the continuous integration and extension of library and information services, the boundaries of the library profession have become increasingly blurred. Libraries have not only deepened their interactions with other professions but have also gradually penetrated into domains such as information consulting, data analysis, and publishing and communication. It is therefore significant to explore the new challenges facing academic libraries.

[Method/Process] From the perspective of the relationships between libraries and the aforementioned three professions, and focusing on academic libraries, this paper explores how library services can further extend from reference services to research consulting services, from print-based to data-driven models, and from collection to publication, analyzing the new challenges and opportunities that transformation brings to library development.

[Result/Conclusion] Academic libraries should play a leading role in this transformation, committing themselves to exploring and developing research consulting services, data-driven services, and academic communication and dissemination services.

Keywords: academic libraries; library transformation; academic communication; data management

Classification: G250

DOI: 10.13266/j.issn.0252-3116.2019.01.001

Introduction

In recent years, a wave of transformation has emerged in the global library community. Not only are various countries actively exploring transformation, but the International Federation of Library Associations and Institutions (IFLA) is also leading this trend. The 2018 IFLA World Library and Information Congress in Kuala Lumpur, with its theme “Transform Libraries, Transform Societies,” pushed library transformation to a new climax.

Every profession has its own professional characteristics and boundaries. What then are the special characteristics of the library profession? Where are its boundaries? In the print-dominated era, librarianship was a relatively traditional profession. From collection and processing to circulation and preservation, libraries formed a self-contained closed system, interacting with the outside world only at the circulation stage. In contrast, related professions such as information consultants, data analysts, and publishers maintained broader connections with society.

Libraries are products of social development and must evolve in step with society. As society enters the information age, the library profession, like other professions, needs to keep pace with the times. Consequently, every aspect of library operations has begun to change and open up in the internet environment, with increasingly frequent exchanges between different segments and with the outside world. Each segment can now open up to the external environment and generate new value through such exchanges. However, library transformation differs from that of other professions in that it has moved abruptly from a relatively closed system to a more open professional environment than most, lacking mature models for reference and professional standards to follow. As business development continues to deepen and extend, its boundaries have become increasingly blurred, not only strengthening interactions with other professions but also penetrating into domains such as information consulting, data analysis, and publishing and communication. From the perspective of the relationships between libraries and these three professions, and focusing on academic libraries, this paper explores how library services can further extend from reference services to research consulting services, from print-based to data-driven models, and from collection to publication, examining the new challenges and opportunities that transformation brings to library development.

1. Library as an Information Consultant

Can libraries become information consulting institutions? This has been a contentious issue in the library community in recent years. Previously, libraries provided reference services while scientific and technical information institutes offered information consulting services. Even at the U.S. Library of Congress, the information consulting services of the Congressional Research Service and the library's reference services were handled by two separate departments. Recently, Chu Jingli and Tang Guoyuan published a paper titled "Libraries and Think Tanks" [1], which generated considerable response nationwide. Moreover, in 2016, the National Science Library of the Chinese Academy of Sciences and Nanjing University jointly launched the journal *Think Tank: Theory and Practice*, elevating research and practice on libraries and think tanks to a new level. Libraries are undergoing transformation and innovation, with traditional theories and service systems constantly being broken and new concepts and forms continuously emerging. Librarians are also constantly achieving self-transcendence. The author agrees that academic libraries should have think tank functions, which would facilitate innovation and expansion of library functions, but believes it is more appropriate to call this function decision-making consulting services.

1.1 The Convergence Trend of Reference, Subject, and Decision-Making Consulting Services in Academic Libraries

Parliamentary libraries represent the most typical example of decision-making consulting services in libraries. The U.S. Library of Congress established its Congressional Research Service in 1914. Although this department belongs to the library, it is primarily engaged in decision-making consulting services, providing specialized information consultation and research analysis reports for members of Congress. In 2017 alone, the department provided 61,400 consulting services [2]. In many countries' parliamentary libraries, library and research services are two separate departments, with libraries focusing on information management and research services concentrating on intelligence consulting. According to a 2006 survey by the IFLA Parliament Library and Research Services Section, half of the world's parliaments have research service institutions, and libraries and research service institutions are generally located in the same department [3].

Previously, although both departments were located within parliamentary libraries, their operations were completely unrelated. Now, a trend toward further integration has emerged. Ian Watt of the European Parliament Library believes that a new trend is emerging to cover both information services and research services. Even when libraries and research institutions are integrated, they remain separate professional domains. In recent years, we have seen the convergence of the two. The trend demonstrated by both services is that as parliamentary work becomes more professional, technical, and challenging, there is a need to enhance the disciplinary professionalism of services [3].

The IFLA Parliament Library and Research Services Section issued the *Guidelines for Legislative Libraries* in 1993 (revised in 2009) [3], which, while highlighting the improvement of library and research service levels, called for enhanced cooperation between the two groups. The guidelines emphasize that research services require diverse skills: on the one hand, librarians' organizational, classification, and retrieval skills; on the other hand, researchers' analytical, writing skills, and disciplinary knowledge. Regardless of how parliamentary services are organized, these two types of personnel should work together [3].

In 2015, the Inter-Parliamentary Union and IFLA jointly published the *Guidelines for Parliamentary Research Services*, which further clarified that libraries and research services should be integrated, proposing that "research services can be established within libraries or as independent institutions, but must have close ties with libraries" [4]. The guidelines also further standardized service outputs and products, such as comprehensive results including literature reviews, factual and background research, and customized results including brief comments or oral reports.

Among domestic university libraries, many have already engaged in such services, particularly Tsinghua University and Shanghai Jiao Tong University, which have incorporated decision-making consulting services into their business

scope. These university libraries' decision-making consulting services have been developed as an extension of subject services [5].

1.2 The Necessity of Decision-Making Consulting Services in Academic Libraries

Decision-making consulting services represent a new business area for libraries, with neither existing models for reference nor relevant business standards. In recent years, this service has rapidly developed in universities and other research institutions, some spontaneously and others at the request of the university. The reasons are mainly threefold: First, the need for university reform and development. In addition to teaching and research, universities have in recent years vigorously enhanced their knowledge transfer and social service capabilities, known as the “third mission.” To meet the needs of the new situation, some universities have established policy research departments. Since these departments require extensive resources, they expect libraries to provide the needed information. Second, the need for comprehensive university evaluation and performance assessment. As performance assessment primarily adopts quantitative methods, relevant university departments often require libraries to use various evaluation tools to participate in assessments and submit comprehensive analysis reports based on these evaluations. After a period of accumulation, librarians have gradually mastered research and consulting skills and have had opportunities to participate in discussions with high-level decision-makers, with some even becoming members of the university's think tank. Third, the self-driven requirement for deepening and extending library services. Professionals are often naturally inclined to challenge themselves. When large numbers of traditional technical operations such as cataloging and processing are outsourced, librarians' work focus shifts to the front line. Through communication with different users, they have more opportunities to release their energy, continuously improving their capabilities, broadening their scope, and enhancing their adaptability in solving complex, personalized problems. The process of interacting with users is both a mutual learning process and an emotional exchange process. Librarians are developing from focusing on “reference” to focusing on “relationship” [6], finding their own value and pleasure in solving problems together with users. As knowledge workers, librarians, due to their own information literacy, often produce consulting reports that are more impartial and objective than those of other consultants.

1.3 Strengths of Academic Libraries in Providing Decision-Making Consulting Services

The development of decision-making consulting services in academic libraries not only benefits the development of their parent institutions and enhances library service capabilities but also facilitates the cultivation and solidification of high-end functions of knowledge bases. Through the continuous expansion of research services, libraries can accumulate research resources, cultivate talent with

knowledge service capabilities, promote the formation of a user-centered service system in university libraries, and maximize the exploitation of their own resource and talent advantages. Such innovative business requires summarization and refinement to form a set of library service standards.

In the future, decision-making consulting services will become a normal part of academic library services. We need to institutionalize decision-making consulting services and incorporate them into the library reference service system. Although decision-making consulting services represent a high-end business for intelligence agencies, from the perspective of long-term library development, there is a need not only to enhance research functions and services but also to cultivate a group of high-end talents oriented toward decision-making services. Libraries with appropriate conditions can attempt to incorporate this into their own development strategies, formulate relevant service standards, and treat it as a regular business activity. At the same time, we should actively participate in the research and design of our parent institutions' development plans, actively cooperate with the development and evaluation of various research and teaching institutions, thereby enhancing librarians' own research capabilities and responsiveness.

2. Library as a Data Center

Currently, the most common type of library knowledge base is the institutional repository, which was established to meet the needs of open access. However, existing institutional repositories are still based on a print model, focusing primarily on the publication-type achievements of faculty and students. Some universities have further expanded their institutional repositories and broadened openness by purchasing back copyrights of their own journal articles or books from publishers. In recent years, people have further questioned whether open access is the ultimate goal of academic communication. In fact, the open data and open science movements that have emerged after open access have shown us that open access needs further development and enhancement. Are there deficiencies in the current open access model? For instance, many measures taken to expand open access are actually exacerbating the inequality and unsustainability of payment-based academic communication. Consequently, COAR (Confederation of Open Access Repositories) has proposed “beyond open access,” meaning that our goal is not just open access but to establish a sustainable, global knowledge commons that represents the needs of different communities and regions, allows all researchers to participate broadly, and promotes positive transformation and innovation in scholarly communication. To this end, five basic requirements for achieving this goal have been proposed: First, enhance the capacity of local institutions to preserve and provide diverse and valuable research products; second, connect local services with national, regional, and global networks through interoperable standards and practices; third, reallocate funding to support value-added activities such as peer review for the network; fourth, improve

broader qualitative and quantitative indicator procedures for evaluating scholarly contributions; and fifth, introduce principles and governance to ensure the commons represents the needs of the global research community [7].

Since April 2016, COAR has launched a research project called “Next Generation Repositories” [8]. What is the core of next-generation repositories? Its aim is to develop institutional repositories into a distributed, global network infrastructure for scholarly communication platforms, with value-added services deployable at the top layer, thereby elevating the system to be research-oriented, open, conducive to innovation, and convenient for collective management by academic communities [9].

From an operational perspective, promoting data-driven academic communication is one of the most important tasks. However, universities and research institutions have not paid sufficient attention to this aspect. Based on research data alone, not many universities and research institutions have incorporated this into their research management systems. So, do universities and research institutions need to include research and experimental data generated during the research process in their institutional repositories?

According to relevant UK statistics, publicly funded research in the UK alone amounts to as much as £3 billion annually, yet the visibility of these research outputs is very low [10], meaning that the results of public investment and their copyrights mostly flow to commercial publishing institutions. In addition, considerable laboratory data and research data are scattered among researchers, making sharing difficult. Government departments and academic funding organizations have issued policies allowing research data to be eligible for awards or funding applications in order to elevate the status of data-driven research outputs and liberate them from being “second-class citizens.” However, how to effectively manage these resources has become an important issue currently facing us.

The Japanese academic community has been closely following this initiative. On November 7, 2017, the National Institute of Informatics (NII) announced that it would collaborate with the European Organization for Nuclear Research (CERN) and the National Institute for Materials Science (NIMS) to jointly develop the next-generation institutional repository system “WEKO3” [11]. This system not only collects completed works but also includes research data, emphasizing that data should be used not only for verification but also for reuse, thereby generating new research outcomes.

The biggest challenges facing research data management mainly involve three aspects: First, insufficient researcher participation; second, lack of policies from parent institutions; and third, weak storage and preservation infrastructure. Some articles point out that although research libraries in many developed countries (such as Australia, Canada, Germany, Ireland, the Netherlands, New Zealand, and the UK) are in a leading position in the field of research data management, they are still generally in the stage of promotion and training, and

have not yet launched technical services such as providing data catalogs and preserving actual data [12]. Although China has achieved scale in institutional repositories, there is still a large gap with international counterparts, not to mention research data management. Some explorations by libraries at Peking University, Tsinghua University, and Shanghai Jiao Tong University are worth noting.

3. Library as a Publisher

Over the past decades, libraries have accumulated vast resources, including not only journals, books, and conference proceedings but also non-traditional materials such as datasets, grey literature, and web pages. The focus of library work has also shifted from preservation to service, with libraries participating in transmission and dissemination. All of this requires libraries and publishers to rethink their respective roles in creating and exchanging knowledge [13].

In fact, libraries have already ventured into the publishing field, helping authors and publishers with copyright verification, forming editorial boards for new journals, establishing alternative peer review mechanisms, attempting to recompile and reuse alternative academic products similar to textbook content, providing academic conference management (including conference publications) through open conference systems, establishing dataset archives and publishing systems, and creating scholarly communication toolkits [14].

Library scholarly publishing has become a professional field. Some scholars define it as a series of activities led by university libraries to support the creation, dissemination, and preservation of scholarly, creative, and/or pedagogical works [15].

According to a survey conducted by the Association of Research Libraries among its member libraries at the end of 2007, 44% of the 80 surveyed institutions had launched publishing services, while 21% were planning to do so. This proportion would be even higher if small universities were included. In 2013, the Association of American University Presses (AAUP) also conducted a survey, in which 65% of the 83 surveyed institutions (with libraries and presses each accounting for half) believed that library publishing was becoming increasingly important [16].

Of course, there are differences between libraries engaging in publishing and traditional publishers. Some scholars point out that libraries' unique advantages lie in: (1) providing high-quality publishing services (peer review and interactive); (2) making good use of the internet environment; (3) leveraging citation capabilities; (4) promoting interaction with original sources; (5) maintaining and preserving digital content of e-books; (6) ensuring economic practicality; (7) preserving content across formats; (8) establishing standards; (9) enhancing services; and (10) responding to necessary measures. Other scholars believe that libraries engaging in publishing helps regain legitimate rights to information, as-

sume leadership roles in information creation and dissemination, commit to the “de-journalization” of networks, and establish more sustainable digital learning resources [17].

Currently, there are still many issues to be resolved between libraries and publishers, such as the issue of embargo periods. Although publishers have been cooperating with libraries to promote open access, they still adopt restrictive measures from their own interests, such as using embargo periods to extend the time before open access is allowed. In 2016, COAR issued a statement on embargo periods, hoping to shorten or even eliminate them in future open access policies [18]. In the same year, the organization also issued the “Joint COAR-UNESCO Statement on Open Access” with UNESCO, emphasizing three points: first, to accommodate the needs of institutions with limited research funding and institutions in developing countries; second, to prevent further concentration of the international publishing industry; and third, to seek ways to reduce costs [19].

Open access is the major trend in academic communication and dissemination. In its November 2016 report *The Transition Towards an Open Science System*, the EU Competitiveness Council emphasized setting rapid open access as an initial goal for 2020 [20]. However, open access is only a means; its purpose is to share knowledge. In the global push for open access, many issues need to be overcome, such as inequality and unsustainability in scholarly communication. To this end, COAR has proposed the goal of establishing a sustainable global knowledge commons in its vision for next-generation repositories. Libraries should leverage their capabilities in resource management, cataloging skills, and project planning to play a more important role in the development of open access, open data, and open science. In the process of transformation, libraries must be good at innovation and transcendence, and academic libraries in particular should play a leading role in transformation, committing to exploring and developing research consulting services, data-driven services, and academic communication and dissemination services.

References

- [1] 初景利, 唐果媛. 图书馆与智库 [J]. 图书情报工作, 2018, 62(1): 46-53.
- [2] Library of Congress. CRS annual fiscal report 2017[EB/OL]. [2018-01-31]. https://www.loc.gov/crsinfo/about/crs17_{annrpt}.pdf.
- [3] 卡宁厄姆. 议会图书馆指南 (2009 年修订版)[M/OL]. [2018-10-20]. 王琳, 刘英赫, 译. 卢海燕, 审. <https://www.ifla.org/files/assets/services-for-parliaments/publications/ifla-140-zh>.
- [4] IPU/IFLA. Guidelines for parliamentary research services[EB/OL]. [2018-01-31]. <http://archive.ipu.org/pdf/publications/research-en.pdf>.

- [5] 蔡颖. 学科服务的实践与思考——图书馆学理论与实践研讨培训班(第三期)专题访谈实录[EB/OL]. [2018-05-22]. <http://www.sal.edu.cn/view/news.aspx?id=12859>.
- [6] OCLC. Seeking synchronicity: revelations and recommendations for virtual reference[EB/OL]. [2018-01-31]. <https://files.eric.ed.gov/fulltext/ED522679.pdf>.
- [7] COAR. Building a sustainable knowledge commons[EB/OL]. [2018-09-13]. <https://www.coar-repositories.org/files/COAR-beyond-open-access-1.pdf>.
- [8] COAR. Next generation repositories recommendations[EB/OL]. [2018-09-13]. <https://www.coar-repositories.org/activities/advocacy-leadership/working-group-next-generation-repositories/>.
- [9] COAR. Defining the next generation repository[EB/OL]. [2018-09-14]. <http://ngr.coar-repositories.org/>.
- [10] DCC. The value of digital curation[EB/OL]. [2018-09-14]. <http://www.dcc.ac.uk/digital-curation>.
- [11] 新田孝彦. 平成 28 年度末でのデジタルリポジトリ連合 (DRF) 解散について [EB/OL]. [2017-09-13]. <http://drf.lib.hokudai.ac.jp/drf/index.php?plugin=attach&refer=Digital%20Repository%20Federation>.
- [12] COX AM, KENNAN MA, LYON L, et al. Developments in research data management in academic libraries: towards an understanding of research data service maturity[EB/OL]. [2018-01-13]. <https://doi.org/10.1002/asi.23781>.
- [13] LIPPINCOTT SK. Library as publisher: new models of scholarly communication for a new era[EB/OL]. [2018-09-14]. <http://dx.doi.org/10.3998/mpub.9944345>.
- [14] ACRL. Scholarly communication toolkit: library publishing programs[EB/OL]. [2018-09-15]. <https://acrl.libguides.com/scholcomm/toolkit/librarypublishing>.
- [15] SKINNER K, LIPPINCOTT S, SPEER J, et al. Library-as-publisher: capacity building for the library publishing subfield[EB/OL]. [2018-09-13]. <http://dx.doi.org/10.3998/3336451.0017.207>.
- [16] AAUP Library Relations Committee. Press and library collaboration survey[EB/OL]. [2018-09-13]. http://www.aupresses.org/images/stories/data/librarypresscollaboration_{{report}}
- [17] PEREYASLOVSKA K. Publishing accessibly? Open Access and your library as a “Publisher”[EB/OL]. [2018-01-13]. <http://accessibility.arl.org/2015/06/publishing-accessibly/>.
- [18] COAR. Statement about embargo periods[EB/OL]. [2018-09-15]. <https://www.coar-repositories.org/activities/advocacy-leadership/aligning-repository-networks-across-regions/statement-about-embargo-periods/>.
- [19] COAR/UNESCO. Joint COAR-UNESCO Statement on Open Access[EB/OL]. [2018-01-13]. <https://www.coar-repositories.org/news-media/coar-and-unesco-joint-statement-about-open-access/>.

[20] General Secretariat of the Council. Council conclusions on the transition towards an open science system[EB/OL]. [2018-01-13]. <http://data.consilium.europa.eu/doc/document/ST-9526-2016-INIT/en/pdf>.

Author Biography: Wu Jianzhong (ORCID: 0000-0003-2102-985X), Library Director, Research Librarian, PhD. E-mail: jzwu@umac.mo

Received: 2018-10-16 **Revised:** 2018-11-14 **Page Range:** 6-12 **Responsible Editor:** Xu Jian

Citation: Wu Jianzhong. Seeking Transcendence: New Challenges for Academic Libraries[J]. Library and Information Service, 2019, 63(1): 6-12.

Next Issue Contents

The Three Dimensions of Xi Jinping's Reading Thought (Wu Yunzhi, Yu Yang)

Special Topic: New Paradigm of Data-Driven Research (Cui Haiyuan, Guest Editor)

Evolutionary Game Analysis of Copyright Protection for Digital Content Products (Zhao Yan, Wang Wenju, Ni Yuan)

Accurate Identification of Cultural Needs: An Empirical Study of Rural Residents' Literature and Information Needs (Yan Beini, Meng Wenjing)

Optimal Allocation of Provincial Public Library Resources in China: An Empirical Analysis Based on Development Efficiency Differences and Convergence

Research on the Breadth of Academic Paper Influence Based on Innovation Diffusion Theory (Liang Guoqiang, Hou Haiyan, Gao Tong, et al.)

Note: Figure translations are in progress. See original paper for figures.

Source: ChinaXiv — Machine translation. Verify with original.