

On the Status Challenges and Value Reaffirmation of Contemporary Libraries: With Reference to the Rise and Limitations of “Knowledge Payment” (Post-print)

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Abstract

[目的/意义] In the digital era, libraries have been facing an endless stream of competitors and continuously losing users. Knowledge payment, emerging in the latest wave of the internet, has become the most recent competitor to libraries. However, existing research has yet to examine the role and impact of knowledge payment in social knowledge exchange, nor has it further reconsidered the implications for the library profession. [方法/过程] This study employs comparative and historical research methods to conduct an analysis with reference to the rise and limitations of knowledge payment. [结果/结论] The rise of knowledge payment is attributable to abundant talent resources and a flattened knowledge exchange market. Behind the challenged status of contemporary libraries lies the dissolution of librarians’ professional subjectivity and intermediation. Libraries should abandon the “center” mindset, re-evaluate their historical mission at the current stage, and reaffirm their value and respond to challenges through the professional output of both libraries and librarians. Knowledge payment still exhibits two major limitations: its inability to resolve information distortion and its hindrance to information equity. Compared with competitors in other knowledge exchange markets, contemporary libraries continue to possess irreplaceable unique value.

Full Text

Preamble

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On the Challenge to Status and Reaffirmation of Value of Contemporary Libraries: Taking the Rise and Limitations of “Pay-for-Knowledge” as a Reference

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Abstract

[Purpose/Significance] In the digital age, libraries have been facing endless competitors and continuously losing users. The pay-for-knowledge trend in the latest wave of internet development has become libraries’ newest competitor, yet relevant research has not yet examined the role and impact of pay-for-knowledge in social knowledge exchange, nor has it returned to consider the implications for the library profession. **[Method/Process]** This study employs comparative and historical research methods, using the rise and limitations of pay-for-knowledge as a reference for analysis. **[Result/Conclusion]** The rise of pay-for-knowledge stems from abundant human resources and a flattened knowledge exchange market. Behind the challenge to contemporary libraries’ status lies the decomposition of librarians’ professional subjectivity and mediation. Libraries should abandon “central” thinking, re-examine their historical tasks at the current stage, and reaffirm their value and respond to challenges through the professional output of libraries and librarians. Pay-for-knowledge still has two major limitations: it cannot solve information distortion and it hinders information fairness. Compared with other competitors in the knowledge exchange market, contemporary libraries still possess irreplaceable unique value.

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Since ancient times, people have paid for knowledge acquisition, but the “pay-for-knowledge” discussed in this paper differs from traditional concepts. It originates from a new wave in the internet industry that emerged in 2016, representing a product of the internet reaching a certain stage of development [1], specifically covering business types such as online Q&A communities, subscription columns, self-media, online consulting, online education, commercialized MOOCs, and online reading clubs. It is estimated that China’s pay-for-knowledge industry will reach 292 million users in 2018 [2], with a total industry scale of 23.5 billion yuan by 2020 [3]. This means internet pay-for-knowledge will soon become a popular method of knowledge acquisition, with considerable per capita spending. In contrast, China’s public libraries’ per capita book purchasing budget is expected to exceed 2 yuan by 2020 [4-5].

Therefore, reflecting on the challenge to libraries’ status and the consequent value inquiry should be an important proposition in contemporary library science. Representative viewpoints in relevant research include: Zhang Xiaolin

[6] pointed out that to avoid marginalization and replacement, libraries must continuously prove themselves in three aspects: direct user benefits, contribution differences, and subjectivity; Chu Jingli and Yang Zhigang [7] believe that libraries do face risks of extinction and replacement, requiring redefinition of development strategies and professional characteristics; Xu Jianhua et al. [8] proposed that reshaping faith in professionalization can fundamentally solve the problem of library marginalization; Wu Jianzhong [9] noted that libraries must reshape themselves amidst change and keep pace with social development to highlight their professional value. These studies point out the connections between libraries' status, value, and factors such as users, profession, and social environment, which are highly enlightening and valuable for reference.

In terms of pay-for-knowledge research, the current library and information science community only views pay-for-knowledge as another innovation in internet business and social fields. Related research remains limited to discussing the internal mechanisms of business models and user behavior, such as examining users' usage intentions [10], payment willingness [11], operational models [12], market mechanisms [13], and copyright issues [14], but has not yet noticed the role and impact of pay-for-knowledge in social knowledge exchange, nor has it returned to deeper consideration of the library profession. Therefore, using the rise and limitations of pay-for-knowledge as a reference, this paper employs comparative and historical research methods to discuss the status and value issues of contemporary libraries.

2. Contemporary Libraries' Status Challenge: Taking the Rise of Pay-for-Knowledge as Reference

2.1 Behind Users Paying for Wisdom: The Decomposition of Librarians' Professional Subjectivity

The knowledge provided by pay-for-knowledge platforms features vertical segmentation and high operability, mainly covering vocational skills, investment and financial management, hobbies, and popular science knowledge [15]. From the perspective of information science, what users pay for is more "wisdom" in the DIKW chain, namely "knowledge that can be flexibly applied to solve problems" [16].

Modern people desire direct access to wisdom. Compared with stock knowledge primarily organized in book form, modern people facing increasing novelties need incremental wisdom more urgently. Many popular pay-for-knowledge contents relate to this, such as the subscription column "Wan Weigang · Elite Daily Lesson," which "tracks new breakthroughs in Western elites' thinking in economics, society, technology, and other fields every day" [17].

Modern people lack time. Under the occupation of work, social activities, and entertainment, people have less time for self-development and hope to acquire wisdom directly within limited time. Pay-for-knowledge has "squeezed out"

“new” time and market through mobile internet, with its theoretical origin being the “attention economy” theory that emerged in the 1970s [18]. Currently popular audio pay-for-knowledge products allow users to shift attention to hearing during scenarios with surplus attention, such as commuting, exercising, and doing housework.

Modern people are accustomed to obtaining answers through online channels. The prototype products of pay-for-knowledge, such as Yahoo Answers and Baidu Knows, were already popular in the early 21st century. With advances in multimedia, mobile payment, and communication technologies, pay-for-knowledge Q&A products have significantly improved user experience and introduced new business models like Q&A communities, real-time Q&A, and paid auditing.

Thus, pay-for-knowledge has rapidly become libraries’ newest competitor because its innovation caters to various characteristics of contemporary people. More deeply analyzed, its key supporting element is abundant human resources, including: frontier practitioners and skill experts who provide wisdom from personal practice and problem awareness; content production teams who study public time allocation and transform content and structure into easily understandable expressions; technical personnel who continuously adapt and optimize user experience and enhance dissemination effects using digital technology.

In contrast, the public welfare library industry struggles to attract the first two types of talent. Under the influence of the Lib2.0 concept, the library industry has built many new services such as subscription channels, user communities, wikis, and blogs, but most of these were merely mechanical replicas completed independently by technical personnel, lacking vitality and competitiveness. Meanwhile, commercial companies continuously expand their territory with the support of a complete human resource matrix, posing challenges to libraries.

Today, new technological concepts such as big data, IoT, and AI have once again attracted widespread attention in the library community. Library scholars holding “technology-driven theory” actually have a blueprint in their subconscious for libraries’ future status: knowledge is increasingly being datafied and computable, and once libraries and their librarians master certain breakthrough intelligent technologies, they can solve the contradiction between massive resources and wisdom discovery, and libraries will return to their former central position in social knowledge exchange.

Consequently, some library scholars have begun to pin their hopes on the introduction of new technologies, namely “technology-saving-library theory,” attempting to approach the grand goal of providing knowledge services and wisdom services to the whole society through hardware and software construction, librarian technical training, and even generational replacement of librarians. However, these explorations are increasingly distant from the core knowledge domain of library science, their theoretical expectations partially deviate from the actual situation of the current librarian workforce, and their interaction

with library work practice is severely insufficient.

“Finding books for people, finding people for books—finding knowledge for people, finding people for knowledge—finding solutions for people, finding people for solutions” [19]. The presumed subject of the library evolution chain has always been librarians. Today, the enormous volume of resources, users, and business has far exceeded traditional librarians’ professional imagination and knowledge structure. Still requiring librarians to solve Ranganathan-style precise matching problems, or requiring librarians to supply wisdom to all walks of life, such grand goals are obviously unrealistic.

Currently, library operations are continuously being outsourced, crowdsourced, and machine-sourced, with commercial companies constantly intervening and new information institutions and positions continuously emerging. Librarians’ professional subjectivity is accelerating its decomposition. Many librarians’ professionalism, creativity, and agency are ignored, belittled, and discriminated against, to the extent that librarians lose faith in their profession and exhibit “self-deprecation” [20]. This is an important reason for the challenge to libraries’ status. Referring to the abundant human resources in the pay-for-knowledge industry, we should re-examine librarians’ professional wisdom and occupational characteristics to find where library human resources hold advantages.

2.2 Behind the Flattened Knowledge Exchange Market: The Decomposition of Library Mediation

Behind pay-for-knowledge behavior is first and foremost knowledge exchange. Information asymmetry in the knowledge domain was very serious in the print literature era. As an intermediary, libraries presented scattered and disordered literature to readers, thereby achieving efficient knowledge exchange. This also placed libraries at the center of social knowledge exchange for a long time and formed several documentation techniques such as acquisition and cataloging. However, these techniques relied too heavily on librarians’ subjective judgment. Two new situations have caused libraries to no longer be an efficient knowledge exchange intermediary: Information asymmetry in the knowledge domain has been alleviated, and users can easily know where knowledge is produced, who produces it, from whom to obtain it, and how to obtain it; Traditional documentation techniques were formed in low-circulation periods and are no longer applicable in information-explosive environments. Instead, collective user behavior demonstrates more wisdom, such as reader-driven acquisition and social tagging.

The world is becoming flat [21], and behind the rise of pay-for-knowledge is a flattened knowledge exchange market. Libraries’ mediation has undergone decomposition. Second, payment is a transaction of funds. Libraries were once efficient users of public funds. However, it must be admitted that the reason users do not prioritize libraries is that pay-for-knowledge products and services are more efficient in some aspects. Additionally, centralized use of public funds

can easily cause waste [22]. Therefore, libraries as intermediaries for using public funds have also experienced some decomposition.

Mr. Wu Weici made a classic definition of libraries [23]: “Mediation is the essential attribute of libraries... literature meets readers through libraries, and readers establish connections with literature through libraries.” Although libraries’ essential attributes remain debatable, mediation is undoubtedly one of libraries’ most important attributes. Since entering the information age, libraries’ mediation has been weakening [24] and decomposing [25]. A large amount of knowledge exchange no longer requires libraries as intermediaries, and the decomposition of mediation has caused libraries’ status to begin facing challenges from other competitors.

One theoretical approach to responding to changes is to expand the conceptual connotation of libraries, constructing libraries as “library = {public welfare libraries, commercial digital libraries, information centers, bookstores, databases, ...}”. However, such a concept might instead provide legitimation for the ultimate collapse of libraries’ status, just as the iSchool and iField movements have gradually disintegrated the library and information science discipline [26].

Another theoretical approach is to break free from the shackles of mediation. The decomposition of mediation does not mean libraries are declining; it only indicates that old intermediary models and “central” thinking cannot reflect libraries’ value in the new historical period. Libraries need a new theoretical model to get rid of the past “library-centered erroneous cognition” [27] and explain the “anomalous phenomena” [28] of librarians’ professional subjectivity decomposition, mediation decomposition, and status marginalization. Therefore, the author proposes a new library theoretical model to replace the original intermediary model, as shown in Figure 1 [Figure 1: see original paper].

3. Contemporary Libraries’ Value Reaffirmation: Taking the Limitations of Pay-for-Knowledge as Reference

Under the new model, pay-for-knowledge and libraries have equal status, so there must be differences in professionalism between the two. This study continues to analyze libraries’ tasks and value propositions by examining the limitations of pay-for-knowledge. The analytical framework for discussion is shown in Figure 2 [Figure 2: see original paper].

In this analytical framework: Reasonable status cognition is the prerequisite for value generation; otherwise, anomalous phenomena such as mediation decomposition will occur; Value is abstract, and libraries’ value must be projected onto specific tasks to be understood by the public; The tasks undertaken by libraries will ultimately reflect libraries’ status; The three form a closed loop, and once in a stable state, they will determine libraries’ mission, strategy, vision, and future.

3.1 Pay-for-Knowledge Cannot Solve Information Distortion

The internet, particularly the sharing economy model, can to some extent solve information distortion caused by information asymmetry [29], because the internet can inform information recipients in advance about author information, work reputation, etc. The pay-for-knowledge domain is the same, where knowledge providers' like counts, follower numbers, and number of answered questions all influence users' payment behavior [30].

A unique advantage of pay-for-knowledge is its attempt to solve information distortion caused by absorption failure, namely that users' cognitive abilities limit the effect of knowledge absorption. Pay-for-knowledge, on the one hand, connects experts with professional audiences to find common discourse and values, thereby obtaining profits in vertical segments; on the other hand, it uses industrialized, standardized, pseudo-personalized, and even low-intelligence production processes to ensure continuous knowledge output, thereby obtaining profits from more mass users.

In comparison, libraries' work in this area is much smaller in scale. However, pay-for-knowledge cannot solve information distortion caused by knowledge power. The discussion of the "knowledge/power" relationship is a classic proposition of French philosopher Michel Foucault (1926-1984). Foucault believed that power domesticates, produces, and legitimizes knowledge, but power is also one of the functions of knowledge. Groups mastering knowledge will have the power of judgment [31].

The knowledge power of pay-for-knowledge comes from three levels: The ubiquitous internet is a powerful medium where knowledge is "disenchanted" by industrialized production methods, and the public loses their sense of awe for knowledge, which becomes a commodity easily accepted by the masses [32]; Pay-for-knowledge promotes "head worship" and "big-V worship," where knowledge celebrities have high attention and fan groups [33], making it easy for them to output value judgments to the public; Knowledge output can create "crowds" [34], which have strong acceptance of internal power but resist external knowledge intervention, i.e., they are easily brainwashed. Under the combined effect of points 2 and 3, knowledge commodities are "re-enchanted," their meanings exaggerated into blind worship, ultimately causing the public to be manipulated by the power in the pay-for-knowledge domain, gradually becoming "one-dimensional people" who lose vigilance and only have identification.

Libraries were once holders of knowledge power, but they never abused such power. Over the long years, libraries helped knowledge resist the hazards of time, war, disaster, and ideology. Today, libraries' status continues to weaken, and they no longer control knowledge power, but librarians' professional faith in maintaining knowledge freedom remains unchanged.

On the one hand, through professional work in collection, organization, preserva-

tion, and restoration of documents, librarians can eliminate the false and retain the true, inherit documents, preserve versions, and provide material-level possibilities for information fidelity and knowledge freedom. This is a unique task that other institutions cannot undertake and that libraries alone possess.

On the other hand, “opposing all censorship” [35] at the material level is impossible in reality. Libraries must resist knowledge power at the spiritual level, mainly through reading services. Modern libraries emerged in the print era, when humans also began to shift from reading aloud to silent reading. The loneliness, introspection, immersion, and monotony brought by silent reading cultivated human rationality [36]. The birth of monumental works like *Das Kapital* in modern libraries was due not only to rich resources but also to scholars’ free rational thinking during the reading process in libraries. Therefore, the ultimate goal of libraries’ reading services is to equip readers with the thinking weapons to distinguish truth from falsehood, thereby resisting the infiltration of knowledge power.

Librarians have long been engaged in reading services and possess professionalism beyond other professions in book selection, difficulty judgment, value judgment, reading guidance, interpretation, writing bibliographic abstracts, and reading research. Therefore, librarians’ professional subjectivity can fully be embodied in reading promotion work. In addition to “making people who don’t love reading fall in love with reading, making people who can’t read learn to read, and helping people with reading difficulties overcome reading barriers” [39], librarians must also do everything possible to attract readers to “deep reading,” gradually cultivating habits of rationality and thinking [40].

“I am your personal reading boy; I read books for you and then tell you about them.”—This is the promotional slogan of the pay-for-knowledge program *Luogic Show*. Reading-based pay-for-knowledge programs like *Luogic Show* and *Gao Xiaosong’s Compass* seem to provide shortcuts to reading, but they only superficially reconcile the internal contradiction between modern people’s loss of “reading ability” and their urgent need for knowledge. They can indeed provide some spiritual wealth, but their main significance may be limited to providing “short-term conversation supplies for urbanites” [41].

Under the combined effect of fast-food consumption expectations, industrially refined verbal expressions, and fast-paced audio-visual media, users are mostly passive viewers and listeners, lacking the necessary thinking processes of understanding, deduction, reasoning, reflection, insight, and criticism required in learning. Under the inertia of consumerism worship, many users subconsciously believe that consuming knowledge equals possessing knowledge. However, if users only pay money, time, and low-level energy consumption without investing mental agency and creativity, then “what is possessed is only possession itself” [42]. In the internet environment, knowledge is accelerating its materialization and alienation, which may instead restrict human freedom and development. In this sense, libraries must reaffirm their value in the field of knowledge freedom.

3.2 Pay-for-Knowledge Hinders Information Fairness

Currently, mainstream pay-for-knowledge products are priced from 1 yuan to several hundred yuan. The MOOC website Coursera has launched mainstream priced courses at \$49 and master's degree education at approximately \$20,000. As knowledge products continue to innovate and transaction volumes grow, more and more knowledge will be priced. However, when knowledge is universally priced, the more valuable the knowledge, the more expensive it becomes, and wealth differences in society can increasingly determine the inequality of knowledge distribution. In the information society, knowledge is the best method for creating income, and the Matthew effect of knowledge and wealth interacting with each other will only exacerbate the dilemma of information unfairness.

At the same time, pay-for-knowledge not only provides a common discourse basis for group communication but also, as a symbol, marks differences between social groups, increasing the communication barriers between different social groups. Current pay-for-knowledge is becoming an encoding tool for the middle class, with its user group mainly being middle-class and “middle-class reserves” [43] in first- and second-tier cities, as well as college student groups under the “middle-class dream” [44].

From a more macro perspective, the commodification of knowledge will produce an unfair benefit distribution system. Market entities in advantageous positions will capture profits by dominating rules, causing users to pay increasingly higher prices. For example, after academic journals were controlled by publishers, they increased the economic burden in scientific communication; open access journals have not completely improved the scientific ecology, with some even finding “new cheese” for large publishers [45].

Currently, on most pay-for-knowledge platforms, users clicking the registration agreement have already granted the platform rights such as content exclusivity, free content use, content redevelopment, and infringement claim rights [46-48]. These increasingly detailed and even unreasonable private copyright rules undoubtedly thicken the barriers to knowledge sharing.

In summary, users are no longer equal from the starting point of knowledge acquisition (personal wealth differences) to the endpoint (value differences after knowledge distribution), causing information unfairness [49]. The logic of how pay-for-knowledge creates information unfairness is shown in Figure 3 [Figure 3: see original paper].

Information fairness is an important foundation of social fairness. Upholding information fairness is one of librarians' professional beliefs. Libraries' practice of information fairness is mainly reflected at two levels: Service fairness, where libraries provide free, equal, open, and undifferentiated support; Resource fairness, where libraries provide the public with opportunities to access rich information resources [50]. However, libraries' past “central” thinking has caused certain problems at both levels.

On the one hand, contemporary libraries pursue a high-efficiency information fairness, with the logic of covering more people with limited public funds. The more people served, the fairer it is. Therefore, they prefer to invest heavily in densely populated urban centers and often use liveliness as an extremely important evaluation criterion for activities. This obviously replaces value rationality with instrumental rationality, deviating from the basic value orientation of information fairness.

On the other hand, “central” thinking causes libraries to hope to maintain fairness beyond library users, attempting to participate in the fairness of entire social information distribution, such as participating in maintaining the intellectual property system and publishing system. However, libraries’ de facto weak status means they can only be subordinate to these systems. As guardians of knowledge, libraries should aim for knowledge openness, attempt reasonable breakthroughs under these systems, and adhere to OCLC’s motto: “All knowledge must be shared” [52].

For example, copyright research has been increasing in library science in recent years, especially after the rise of MOOCs. Many scholars believe libraries’ role will be copyright consultants. The author agrees this is a way to exert librarians’ professional subjectivity. However, related research overemphasizes changes in the copyright system environment while insufficiently studying libraries’ agency. In fact, the librarian profession has formed rich knowledge about resource production, resource collection and navigation, reader education, metadata, copyright policy, and other issues through long-term work practice. Therefore, guided by this knowledge, librarians can avoid infringement risks and provide readers with more resources. Specific work includes: attempting to participate in self-media and self-publishing to increase self-built resources; providing authors with sharing license agreements; increasing navigation of free alternative online resources and providing users with information retrieval education and support; actively voicing for public policy; supporting knowledge resource openness work in metadata, open protocols, and open standards; and jointly combating publishers’ monopolistic behavior.

In summary, pay-for-knowledge is a new symbol of knowledge privatization development. The commodification and privatization of knowledge will inevitably cause information unfairness. Libraries are the main force in bridging knowledge gaps and advocating knowledge re-opening. Contemporary libraries should clearly shift to information poverty alleviation and knowledge openness to reaffirm libraries’ value in the field of information fairness.

3.3 Reaffirmation of Contemporary Libraries’ Value

Through the reference of pay-for-knowledge, contemporary libraries’ value in knowledge freedom and information fairness is implemented in specific tasks such as document preservation, reading promotion, information poverty alleviation, and copyright consulting. We can further expand and place contemporary

libraries in the broader knowledge exchange market: What is libraries' unique value compared with other institutions? Where are librarians' occupational characteristics and professional advantages? The author believes discussions can unfold from the following three angles:

- (1) Core knowledge of library science. Libraries are the research objects of library science. The core knowledge of library science has accumulated around “effective query and effective acquisition of information” [53]. People trained in library science and library work will have a more acute sense of smell and richer technical means for querying and acquiring information. Therefore, the competitiveness of the contemporary library profession actually lies not in “giving fish” but in “teaching fishing.” Librarians empower users' information behavior by indirectly intervening in the communication process between users and knowledge. Whether reading promotion, information literacy training, or document organization and reference consultation, these tasks must be built upon the solid foundation of library science's core knowledge. Contemporary librarians should have full professional confidence in this regard.
- (2) Functions of libraries. Public libraries are the main implementers of government public cultural policies. Domestic public libraries undertake many tasks such as national reading promotion, farmer's book houses, and public lectures, while many foreign public libraries have become community activity centers, even undertaking some community civil affairs, resident file information registration, and reemployment assistance work [54]. University libraries are auxiliary teaching units in higher education institutions. Many university libraries have found growth opportunities within universities by expanding service content, such as space services, subject services, life services, technology experience services, psychological health services, etc., and these services have received widespread recognition. Some university libraries also provide support for school decision-making by collecting and analyzing discipline development data, scientific research data, and big data on teachers and students, further enhancing libraries' discourse power. It is particularly worth noting that developing these services is not purely driven by policy and funding but relies on the comprehensive scale advantages accumulated by libraries over the long term, including information resources, space facilities, talent, technology, geographical location, user impressions, and other elements. The marginal cost for other institutions to develop these services will be far higher than that of libraries. Therefore, these continuously accumulated advantages will be the guarantee for libraries' continuous functional expansion and service innovation.
- (3) Value pursuit of libraries. The library cause has gradually formed over a long history, and human conceptual cognition of “libraries” has enduring continuity. The form of libraries is determined not only by the market economic environment and “how they try to transform” but also

by “what humans need them to be.” On the one hand, libraries are the ultimate metaphor for culture in human language and the banner for maintaining knowledge freedom, information fairness, and information ethics. Therefore, libraries’ value pursuit will always run counter to capital profit-seeking, and librarians always have the professional consciousness of respecting and inheriting culture. This is the value foundation that distinguishes libraries from other institutions. On the other hand, libraries pursue humanistic warmth. Libraries can alleviate the negative energy brought by phenomena such as isolation, unemployment, poverty, illness, prejudice, ignorance, and boredom in human society and are the real bond of many people’s memories and emotions. Other institutions can hardly generate similar humanistic value. In the slightly cold AI era of the future, libraries may not only avoid extinction but also become one of the few warm places.

Conclusion

Libraries are not victims of the digital age, but they need to timely abandon “central” thinking, accept role transformation, and collaborate with pay-for-knowledge, information centers, publishers, consulting institutions, research institutions, etc., to work together to solve the “sharp contradiction between society’s deepening urgent needs for knowledge discovery, knowledge learning, and knowledge innovation and the insufficient, inadequate, and unbalanced knowledge service capabilities in China currently” [55]. More importantly, contemporary libraries should understand the era’s development and changes from the discipline’s own perspective, respond to challenges with the unique value of libraries and the library profession, and regain professional confidence and career faith. This study is only a preliminary analysis conducted under the reference of pay-for-knowledge. The mission of contemporary libraries still requires further exploration by the academic community before we can more realistically discuss the future of China’s library cause.

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