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To cite this article:

Zhou, W. (2024). An Activity Theory Study of China's Rural Book House Project: Two Dialectical Dynamic Mechanisms. *International Journal of Librarianship*, 9(1), 3-26.

<https://doi.org/10.23974/ijol.2024.vol9.1.312>

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An Activity Theory Study of China's Rural Book House Project: Two Dialectical Dynamic Mechanisms

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ABSTRACT

This study explores why China's rural information projects tend to be inefficient by identifying the dynamic mechanisms driving the construction and development of China's Rural Book House Project (RBHP). A qualitative survey was used to collect data from 35 participants in the RBHP and to analyze the data through the lens of activity theory. Two dynamic mechanisms were found, namely power coordination and benefit protection, with the former characterized by compulsion, self-interest, and inefficient punitive measures and the latter by the participants' differing objectives when pursuing benefits. The interaction of these mechanisms drove the RBHP forward. The findings of the study suggest the development process of the RBHP and other similar projects need to be reanalyzed from an integrative, dynamic and connected perspective. By way of concluding, insights concerning the measures the Chinese government could take to resolve the issues confronted in rural information service development as well as the need for information professionals to take a critical stance toward their community practice are offered.

Keywords: Rural Book House Project, Activity theory, Community information service

INTRODUCTION

Community information service is the traditional work of library professionals. It aims to meet community residents' (especially disadvantaged groups) information needs and achieve holistic community development. As might be expected, research on this topic forms an important field in library and information science (LIS). Based on different community development paths, two main approaches to the constructing and running of a community information service have been applied. The first is a "bottom-up" approach, which works through community self-help and empowerment. The typical project of this approach involves the community librarianship movement, community networking movement, and community informatics. The second is a "top-down" approach that relies on government-funded projects (Yu and Yu 2013). Most of the rural information facilities established by China's government belong to the latter category. Compared to other international projects in the same mode, China's rural community information service has some distinctive features. For example, most are run by central government administrative authorities and are characterized by wide coverage, unilateral execution, and significant social benefits. However, research has revealed that the development process of these projects has often presented as a low-efficiency model involving a cycle of "construction-stagnation-reconstruction-stagnation" (Han

2016) since the founding of the People's Republic of China (PRC). This type of development cycle represents a major challenge for those determined to improve China's rural information service. We believe that international community information services can provide fruitful practical and academic suggestions for China. At the same time, China's distinctive community practice has the potential to promote theoretical innovation in community information service research. In this context, this study focuses on the Rural Book House Project (农家书屋工程, RBHP), the most typical and recent project of the Chinese rural information service, to reveal and reflect on the dynamic mechanism(s) involved in the construction and development of China's rural information service.

THE INTRODUCTION OF RBHP

The RBHP is a national cultural project intended to benefit rural residents. It was initiated by the State Administration of Press, Publication, Radio, Film and Television of China (中国新闻出版总署, SAPPRFT) and nine other ministries and commissions directly under the authority of the State Council of the PRC in 2007, then run by rural residents themselves. It aims to establish a small book house that makes publications available for purchasing, renting, and borrowing in each administrative village. In terms of the holdings that can be borrowed, each book house has a minimum of 2000 books, newspapers, magazines, and electronic audiovisual products. Rural residents face difficulty in accessing such materials.^[1]

The costs of running rural book houses and stocking them with publications are jointly paid for by special funds of central government and three levels of financing (provincial, municipal, and county). In most areas, items are purchased directly from the Xinhua bookstore (新华书店), which is a state-owned book distribution enterprise. At the same time, the RBHP encourages individuals and social organizations to donate publications to rural book houses. In terms of organization, the RBHP is under the jurisdiction of the local Culture and Broadcast Bureaus (文广新局, CBBs),^[2] while each rural book house is managed by a rural committee (村委会), an autonomous administrative organization (similar to a village government) staffed by residents. The committee is responsible for assigning an administrator for the book house and supervising their work. It is noteworthy that the rural committee is not under the local CBB, but under rather a higher level of government, such as the county government.

The RBHP is distinct from public libraries, which are run by a different bureaucratic system in China. As noted above, the RBHP was initiated by SAPPRFT, while public libraries are the responsibility of the Ministry of Culture. However, at the city and county level, public libraries are generally the responsibility of the CBB. Therefore, the main impetuses for public libraries' becoming associated with the RBHP are a directive or invitation from the CBB. In addition, rural

^[1] According to data released by China's National Bureau of Statistics, 35.3 percent of the country's population in 2021 was rural.

^[2] The CBB is a comprehensive culture department in the Chinese bureaucratic system that operates at the provincial, municipal and county levels. It covers culture, radio, TV, news, publishing, sports, and tourism. In most cities, public libraries fall under its management.

book houses are not within the public library system, because the lowest level of public library in China is the county public library. This means that as institutions providing professional information service, China's public libraries cannot serve rural areas directly. Rural information facilities are never referred to as "libraries" in China's official discourse.

Based on information published on the RBHP official website, as of 2012 central and local governments had invested more than 12 billion yuan (approximately 2 billion US dollars) and established 600,449 rural book houses, to which a total of 940 million books, 540 million newspapers and magazines, and 120 million audio and video products and electronic publications had been distributed. Rural residents have an average of 1.13 books per capita. The project's construction phase was completed three years ahead of schedule. In the subsequent maintenance phase (which is ongoing), government authorities have continued to provide financial support at an annual rate of 2,000 yuan (approximately 350 US dollars) to each rural book house.^[3] Therefore, whether in terms of coverage, number of participants, or capital input, the RBHP is a rare and substantial project in the field of community information service internationally. However, although the relevant Chinese government departments believe that the RBHP has achieved very gratifying results, various media reports (Tang, 2014) and investigations (Zhao 2011, Luo 2021) have shown that there are still many problems affecting the project as a whole, such as rigid management, unstaffed book houses and slow updating of publications. The status quo of the RBHP shows remarkable similarities to and historical continuity with the developmental trajectories of previous rural information projects. It is likely that if the developmental mechanism of the RBHP is not identified and reworked, the RBHP may follow the same path as previous rural information service programs, moving from stagnation to disappearance. Furthermore, future programs are highly likely to repeat this negative developmental cycle, even if they are provided with a great deal of human, financial and material resources. In order to draw lessons from the RBHP for China's rural information service and global LIS community practice, it is particularly necessary to explore the dynamic mechanism(s) involved in the development of the RBHP.

This study therefore addresses the following questions: (1) What dynamic mechanism(s) has/have driven the construction and development of the RBHP? (2) What insight can be offered for the reform of China's rural information service based on this study's findings? and (3) How can this study's findings contribute to global LIS community practice?

REVIEW OF LIS COMMUNITY PRACTICE

Research on the RBHP fits within the field of LIS community practice. LIS studies that concentrate on community practice resulted from the library profession's having initiated or having participated in a series of projects on community practice since the 1960s, such as the community librarianship movement and the community networking movement as well as the interdisciplinary field of community informatics that emerged. These LIS community practices have also become part of social community practice, alongside community educational practice or medical practice. The community librarianship movement was initiated by the British and United States library

^[3] These data are available on the website of China Rural Book House Project: <https://www.zgnjsw.gov.cn/booksnetworks/contents/403/250517.shtml>

profession in 1970s. It advocated that public libraries needed to change their service model and provide active reading services to community residents (especially disadvantaged persons). The community networking movement, in which United States public libraries have been involved since the 1990s, aims to achieve information and communication technology (ICT) access equity and the holistic development of local communities. As an interdisciplinary subject, community informatics, which has drawn inspiration from the community networking movement, has focused on bridging the digital divide in addition to encouraging community development (Williams 2009, Stillman 2014). These projects have sought to ensure equality in information access across all types of community residents and organizations as well as promote the economic, political, and cultural development of communities and increase community resident information literacy.

Research around these projects in the LIS field has explored the processes involved in their development and sustainability so as to guide the construction of new community libraries and information service projects that yield the maximum social benefits with minimum investment. LIS community practice research carried out by international scholars has tended to focus on the three community movements mentioned above and has applied several theoretical perspectives, the first of which is social capital theory. This strand of research pays more attention to the influence of community libraries and community networks on the social capital of communities. Some scholars have proposed that community libraries and networks increase the social capital of communities by providing more information or chances for information exchange to residents (Wellman 1997, Doody 2004, Tiwari 2019). In contrast, other scholars have proposed that although ICT can produce positive social capital, it can still reduce the overall social capital of communities, because ICT encourages community residents to put more energy into constructing social capital in terms of virtual community rather than real community (Walther 1995, Kraut 1999, Cordell 2005). Another strand of the research uses the lens of sociotechnical theory, which asserts that a production system consists of a technical system (such as a factory or a machine) and a social system (such as social relationships or work organization practices). These two systems are independent, open and can be integrated, with changes in either system affecting the other. This perspective provides insights for researchers in the community networking and community informatics field in terms of the need to pay attention to integrating ICT into the local historical and cultural context of communities. In relation to technical design, scholars have proposed that traditional ideas need to move from being centered on an information system to being user centered. A typical user-centered method is the human-computer interaction method (Calabrese 1996, Virnoche 1998, Gurstein 2003, Masten 2014). A third strand of research is grounded in critical theory, specifically the approaches of critical pedagogies and critical discourse analysis. Scholars informed by the former contend that community libraries should move from the providing of information expertise to the providing of equitable and effective education, promoting knowledge creation through participatory learning and dialogue in order to promote community democracy and achieve equity (Majekodunmi 2011). In terms of the second branch of critical theory mentioned above, Black (1997) applies critical discourse analysis theory to reveal the reasons for the decline of the community librarianship movement. His research showed that most community libraries were created to relieve the crisis caused by competition between public libraries. Therefore, such libraries remain confined within the discourse system of the public library (Black 1997). Werbin (2006) also reports on specific issues within the community networking movement, finding that the primary reason why the issues arose was because of the contradictions generated by these different discourses.

Research in China on the RBHP has mostly focused on exploring strategies for the sustainable development of the RBHP. Some scholars propose that the development planning of the RBHP should be guided by national policies such as “reading for all”(全民阅读), “targeted poverty reduction”(精准扶贫), and “rural revitalization”(乡村振兴)(Deng 2013, Zong 2019, Yu 2020). These researchers are keen to explore the possibilities that the RBHP can contribute to the implementation of relevant national policies or that the implementation of national policies can provide opportunities for the development of the RBHP. Other studies contend that the development of the RBHP should apply lessons from theories in other subjects. Zhu (2019), for example, draws on marketing theory in constructing the 5R marketing model (Relevance, Receptivity, Responsive, Recognition, Relationship) for development of the RBHP and Pan (2019) applies technology management theory proposed the technology roadmap to push the RBHP out of dilemma. Other researchers have proposed that the most effective approach for reforming the RBHP is the promotion of the integration of the RBHP within the public library system (Zhang 2013, Qu 2019). While this latter viewpoint has become dominant in the field, there remain many barriers hindering cooperation between the RBHP and public libraries and tensions within the RBHP itself remain unresolved.

While previous studies have made valuable contributions, there is still potential for improvement. Most Chinese researchers have offered practical suggestions for the RBHP, but these have not been informed by in-depth analysis of the RBHP’s developmental and operational mechanisms. As a consequence, some research findings cannot be operationalized. In addition, most of the research has not addressed the social theories that have been applied in LIS community practice by international scholars, so that the findings by and large cannot inform theoretical innovation. On the other hand, the community practice research of international LIS scholars has the limitation of having only focused on certain aspects of research object, such as social capital theory values capital, sociotechnical theory values technology, and critical theories value political texts, for example. The RBHP is a huge and comprehensive project that spans the social, economic, political, and cultural dimensions of life. It is thus unlikely the theories discussed above can provide integrative insights regarding the problems within the RBHP.

THEORETICAL PERSPECTIVE

The present study applies activity theory as an integrative analytical perspective. Activity theory emerged in the 1920s in the field of Soviet psychology and was later adopted in other educational, management, and LIS domains by Western scholars. It views activity as an analytical unit and aims to explore the processes involved in the generation and development of personal and collective activity through the analysis of six activity elements and their relationships, namely subject, object, tool, rule, community, and division of labor.

As Figure 1 shows, a subject refers to a person or collective entity who carries out an activity, which has an object as its goal. A tool is a intermediary used by a subject to achieve the activity goal; it adjusts the relationship between a subject and an object. A community refers to the ancillary actors in the activity. Rule refers to the laws, regulations, policies, and action codes that the participants in the activity must obey. Division of labor refers to the division of tasks and stratification of social class. Activity theory not only defines the specific elements of an activity and their relationships, but also emphasizes the historicity, dynamics, and contextualization of

activity. It proposes that each activity element is the product of history (for example, that tools, rules, divisions of labor, and objects all reflect historically bound social characteristics). These elements and their relationship are in a constant process of development and change and the driving force for activity development consists of the structural contradictions existing between these activity elements (Wilson 2010).

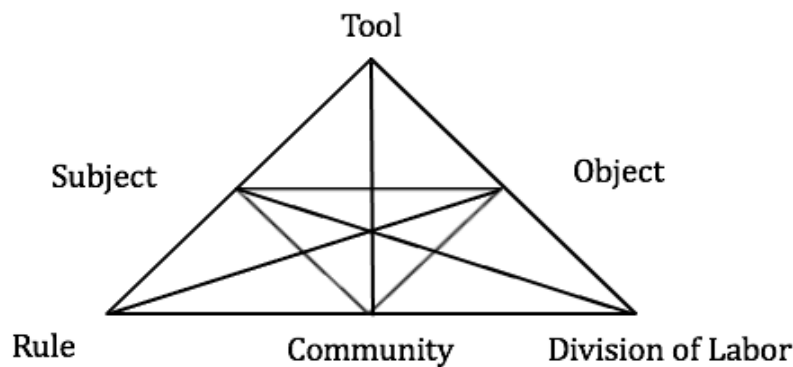


Figure 1. The Mode of Activity Theory

Activity theory is also widely used in LIS, mainly in relation to the topics of information literacy, the information system, and information behavior. With regard to the first topic, scholars such as Barhoumi(2016) regard ICT and libraries as tools employed within information literacy cultivation activities from the perspective of activity theory, with their primary conclusion being that the design of tools should be informed by the contextual characteristics of specific activities. With regard to the second topic, scholars such as Mursu (2007) use activity theory as the framework for evaluation, specifically to investigate whether an information system can adapt to a change of environment. Information behavior is the topic that has seen the widest application of activity theory. This theoretical perspective enables researchers such as Xu(2007) to effectively explore the relationship between information behavior and the context that influence this behavior. More specifically, activity theory facilitates the identification of the elements of the context (such as the subject and object of behavior, the rules that behavior should obey, and the participants who assist the subject in achieving the object together and their division of labor), how the context affects information behavior, and how information behavior reshapes the context.

Activity theory can also provide compelling insight into the dynamic mechanism(s) involved in the RBHP. First, where previous research has taken the rural book house as the analytical unit, this study takes the construction process of the RBHP as the analytical unit. With

the processes involved in the development and changes in the RBHP being the focus, activity theory is especially relevant to the present investigation. Second, the conceptual framework of activity theory can illuminate all the elements of the activity system of the RBHP, not just the economic, political, and cultural factors that affect the development of the RBHP. Third, because the RBHP involves a wide range of participants with different values, experiences, work fields, and activity goals, conflicts will emerge when these participants work together toward a common goal. Activity theory can facilitate the identification and analysis of these latent contradictions, which are the driving forces of the RBHP's development.

RESEARCH DESIGN AND DATA ANALYSIS

Research Method

The fieldwork method, which included in-depth interviews, observation, and text analysis, was applied in this study to gather data. In-depth interviews were used for investigating the motives, roles, obligations, actions and recruitment process of the actors associated with the RBHP. Observation was conducted in relation to the environment and operating conditions of rural book houses. Text analysis was undertaken of the various types of policies and regulations concerning the RBHP formulated by central and local governments. Additionally, work summaries and daily work records of RBHP managers were analyzed.

Study Sample

The data were gathered from 13 rural book houses in 8 cities in 4 provinces located in the northeast, southeast, western and central areas of China. As the research goal was to explore and reflect on the dynamic mechanism involved in the development of the RBHP, most of the interviewees were designers, implementers, and managers in the RBHP. The analytical unit was the construction process of the RBHP in a single city. The study comprised eight analytical units in total. Information concerning the interviewees is presented in Table 1. In addition, the sample study includes a staff member of SAPPRFT.

Table 1. Interviewees by Position and City

Number of interviewees City	Staff of the Culture Broadcast Bureau and	Staff of a public library	Village head	Manager of a rural reading house	Total
C1	1	1		1	3
C2	2	1	1	1	5
C3		1	1	3	5
C4	1	1	2	2	6

C5	2	1		1	4
C6	1	1	1		3
C7		1		1	2
C8		1	2	3	6
Total	7	8	7	12	34

Data Analysis

The interview data were analyzed through multiple rounds of coding. The initial coding was deductive coding. Meaningful interview fragments in terms of activity theory such as subject, object, tool, rule/norm, community, division of labor, actions and outcome were identified. These interview fragments were then coded through conceptualization and categorization. Ten concepts in all were identified: (1) institutional rules, (2) cultural rules (norms), (3) authoritative tools, (4) professional tools, (5) authoritative compulsion, (6) ineffective punishment by authority, (7) the goal of social responsibility, (8) the goal of economic benefits, (9) the goal of obeying authority, and (10) the current primary task. The following two examples presented in Table 2 demonstrate the steps of the data analysis.

Table 2. Coding Process Examples

Interview data	Initial coding	Conceptualization	Categorization
(An administrator of a rural book house): The regulations required us to check the contents and quality of donated publications so as to guarantee the publications' applicability for rural residents. However, sometimes this requirement was difficult to meet. For example, an entrepreneur might donate books for our rural book house for philanthropic purposes, but not know what types of books were appropriate for rural residents. As another example, a retired official might write a book that did not sell well, so unsold copies would be disposed of at the rural book house. When we encountered such situations, we were reluctant to receive these books, but we had to consider the entrepreneur's kindness or the retired official's prestige.	<p>1. The administrator of a rural book house should check the contents and quality of donated publications according to the relevant regulations.</p> <p>2. The administrator of a rural book house may have to receive some publications inconsistent with the regulations, because interpersonal relationships need to be considered.</p>	<p>1. The administrator of a rural book house should follow the <u>institutional regulations</u> in relation to RBHP activity.</p> <p>2. The administrator of a rural book house should be sensitive to <u>cultural norms</u> in relation to RBHP activity.</p>	Dual rules in one activity system.

(A staff member of the Culture and Broadcast Bureau): The Rural Book House Policy (RBHP) fund is a special fund provided by the financial departments of central and local governments. These monies cannot be used in other ways. However, our investigation showed that at least in our city, most county governments did not provide the funds to rural book houses. Sometimes they would falsely assert to their superiors and subordinates that that "I have done that" or "I will do that soon" or divert the special fund to other aspects that they thought more important, such as local economic development and social stability.	Some local governments have been reluctant to provide funding to the RBHP or have diverted such funding because they thought that the limited resources should be assigned to more important aspects.	The participants in the RBHP tended to give more priority to their <u>current primary work</u> .	The participants' priority ranking for multiple divisions of labor.
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During the second round of coding, the original interview transcripts were reexamined, focusing mainly on the relationships between the obtained 10 concepts, with six contradiction relationships identified. These were: (1) the contradiction between the goal of social responsibility and the goal of economic benefits, (2) the contradiction between the goal of obeying authority and protecting economic benefits, (3) the contradiction between institutional rules and cultural norms, (4) the contradiction between the goal of obeying authority and the current primary task, (5) the contradiction between authoritative tools and professional tools, and (6) the contradiction between authoritative compulsion and inefficient punishment by authority.

During the third round of coding, the above concepts and their interrelationships were further examined to see how they were integrated to form a dynamic mechanism for advancing RBHP development. Two dynamic mechanisms were identified in this process: power coordination and benefit protection. These concepts, their relationships, and the dynamic mechanisms are explained in detail in the following sections.

RESEARCH FINDINGS

Analytical Framework of the RBHP Activity System

Based on activity theory, the analytical framework of the RBHP activity system was determined. As shown in Figure 2, in this system the subject is the SAPPRT and other departments or organizations from the community. The social object is to meet rural residents' needs for reading materials and increase their level of literacy. It is the shared object (goal) of the subject and the community, which was also the precondition for formation of the RBHP activity system. Despite the existence of the social object, the subject and the community have differing self-interest objects. For example, the subject planned to develop rural markets for publications and create more economic benefits for China's publishing industry through the RBHP, whereas the communities needed to protect their own interests in the RBHP activity. In order to accomplish the activity

objects, the subject applied administrative authority as a tool to compel the community to provide assistance. Therefore, the community had a third object, which was the obeying of the subject's administrative authority. The rules observed by the subject and the community included institutional rules and cultural norms. The former refers to regulations formulated by administrative departments, while the latter refer to social customs rooted in a specific history and culture. The division of labor of the subject and the community included provision of publications and financial support, rural reading house management, and professional guidance.

To delineate the structure of the RBHP activity system more clearly, this study divided the overall activity system into three activity units based on differing divisions of labor within the RBHP activity system. The first unit comprises the activity unit of a sponsor support in the form of funding and publications to stock book houses. In this activity unit, the SAPPRT is the subject. The CBB, local financial departments, and social donors comprise the community. Administrative authority is a tool to help the subject and the community achieve their respective objectives, which include achieving social responsibility and protecting their economic benefits. The second unit comprises the activity unit of management, where the supervision of the specific work of the RBHP takes place. Here the community consists of village committees and administrators of rural book houses. Administrative authority is again used as a tool. In addition to having the same objects as the sponsor activity unit, the third object of this activity unit involves the need to obey administrative authority. The third unit comprises the activity unit of professional guidance, where the development of the RBHP is influenced. The community in this unit consists of public library professionals and professional knowledge and ideas are used as a tool. The object of public libraries in this activity unit involves achieving social responsibility and the obeying of authority. This study explores the dynamic mechanism(s) involved in the development of the RBHP through the identification and analysis of the relationships among these activity units and activity elements.

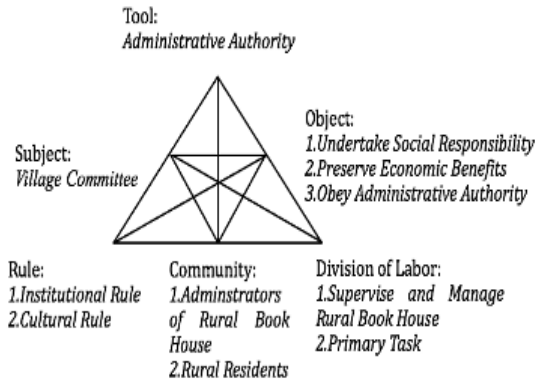
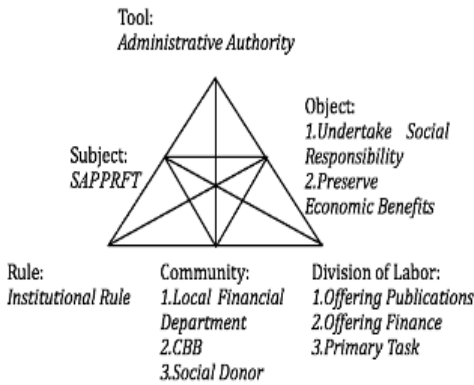
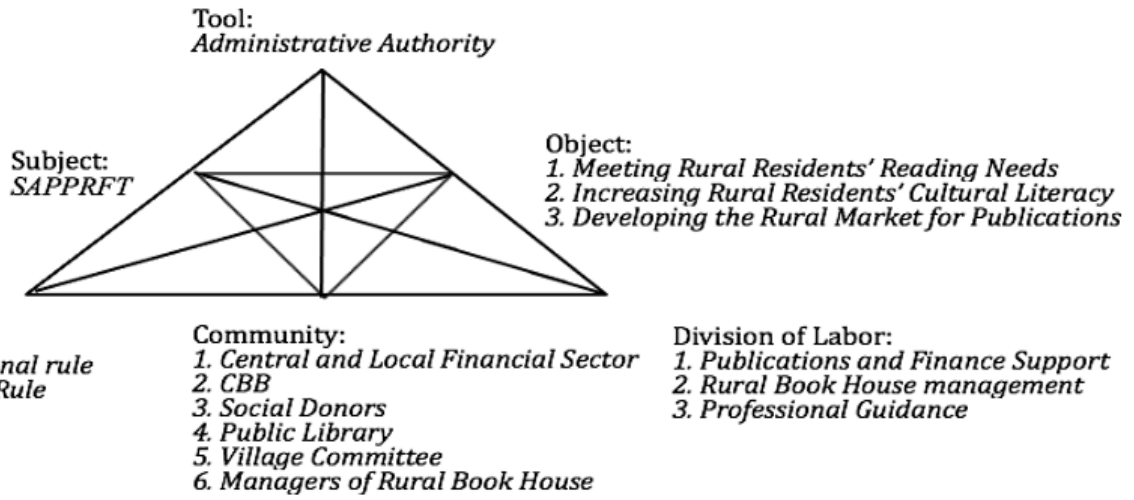


Figure 2. Theoretical Framework for Analyzing the RBHP

Contradictions in the Activity System of the RBHP

Contradiction between the social benefit object and the economic benefit object

This contradiction indicated that the subject had differing activity objects. On the one hand, the subject aimed to meet the reading needs of rural residents and increase their level of literacy. On the other hand, the subject planned to open up the rural market for publications and increase the economic benefits for the publishing industry. Because the subject was guided by this dual object, the institutional rules formulated by the subject to ensure that the dual object could be achieved had notable inconsistencies. For example, some policy texts state that the publications offered should cater to rural residents' needs, but in fact the subject always controls the content and resources in terms of publications.^[4] The RBHP promised that a free public service would be provided, but book selling was still the core function in the initial design. The costs of running the RBHP are covered by some communities, but their benefits were not been considered in the RBHP design, such as how the salaries of administrators of rural book houses would be paid.

Contradiction between the objects of the obeying of authority and the protecting of economic benefits

This contradiction indicated that the community had differing activity objects. The community needed to meet requirements set by a higher authority (regulated by some policy texts) on the one hand and protect their own economic benefits on the other. For example, rural committees would obey the regulations when it came to assigning administrators and providing sites for rural book houses. However, they still needed to reduce costs. Therefore, most rural committees assigned part-time administrators and had book houses share space with other administrative departments. Most administrators were staff of rural committees as well. It was found that in confronting this contradiction, the community often chose to balance the two aspects of the contradiction or neglected some regulations and relevant authority in order to protect their economic benefits. When we asked an administrator why he had closed the rural book house, he stated,

I know the regulations said the rural book house can't be open less than 20 hours a week, but now it is crop-planting time. I am available to look after the rural book house only when I have finished my affairs at home.

Contradiction between institutional rules and cultural norms

This contradiction indicated the tension in these dual forms of rules/norms. The community had to not only obey institutional rules but also respect cultural norms. Cultural norms tended to be followed when institutional rules could not be imposed authoritatively. For example, the leaders

^[4] The guiding policy text of the RBHP stipulates that the proportion of publications recommended by the state for purchase for rural book houses should not be lower than 70 percent. Moreover, most publications in rural book houses are purchased from local XINHUA bookstores. Some interviewees thought this strategy was intended both to prevent the misuse of purchase funds and to ensure the political correctness of publications displayed in rural book houses.

of rural committees would be expected to obey institutional rules governing the supervision of the work of administrators of book houses, but they also needed to maintain good relationships with their colleagues (those administrators). Therefore, they often ignored administrators' rule violations. While administrators were expected to punish book house patrons who had damaged books, they also had to maintain good relationships with fellow villagers and a stable social environment in the village. Consequently, administrators tended to ignore the behavior that led to the books' being damaged. In addition, public libraries have been requested by higher authorities to join the RBHP although public libraries do not belong to the same bureaucratic system. Public libraries have usually adopted a cautious or negative approach to join the RBHP to avoid being misunderstood as acting to derive benefits for themselves. As the chief librarian of Q city said,

Generally, we do not get deeply involved in the publications' procurement process of the RBHP. Although we can meet readers' needs professionally, we give some suggestions at most, because after all, a large amount of money is involved. If we involved overtly, some people might misunderstand our actions as self-interested, which would give our library a bad reputation.

Contradiction between the objects of the obeying of authority and the current primary task

This contradiction was representative of one type of conflict between the object and the division of labor in the community. It arises from the community's being requested to join in the RBHP activity and assist the subject to achieve the activity object according to institutional rules, while also being expected to invest the necessary energy and financial resources for their current primary work. For example, village committees needed to manage rural book houses according to institutional rules, but they also needed to focus on more-pressing tasks such as maintaining the security and stability of the village and furthering economic development. In another example, administrators of rural book houses needed to manage the book houses but also needed to complete their own work and family duties. One example is a village accountant who worked part-time as an administrator of the RBHP. Based on our investigation, when the community faced this type of contradiction, they often tended to give priority to the current primary task. As one administrator of a rural book house stated,

Rural book houses share the same space with village offices. Sometimes the villagers come to borrow books at the same time as the village committee is having a meeting. We usually suggest that they wait for a while. After all, the work of the village committee is more important.

Contradiction between the authoritative tool and the professional tool

This contradiction indicated that there were inconsistencies in tool use between the subject and the community. Using an authoritative tool refers to the subject's exercising authority as a tool to accomplish the activity object and coordinate the relationship between the subject and the community. Using a professional tool refers to public library professionals' using their ideas and knowledge as a tool to accomplish the object. In the RBHP's activity system, this type of conflict manifested in terms of public libraries' often questioning the authoritative tool. They were

generally critical of the poor quality of some of the publications distributed in rural book houses and pointed out that the content did not cater to rural residents' tastes. Therefore, they raised concerns regarding the professionalization of the subject and its object of pursuing economic benefits, because these ideas and behavior were contrary to the expected behavior of public library professionals. It was found that when the public libraries faced this contradiction, they often adopted a passive strategy to deal with the requirements of their superiors and only engaged in low-stakes activity such as supervising the delivery and distribution of publications.

Contradiction between compulsion and inefficient punishment by authority

This contradiction expressed a tension within the authority tool as used by the subject that involved a type of compulsion, namely, the obligating of the community to undertake RBHP responsibilities but with inefficient punishment of the failure to do so. Inefficient punishment occurred for two reasons. First, the management system of the RBHP is not coordinated, with higher authorities in some communities not having the capacity to manage these communities directly because different bureaucratic systems are involved. For example, the village committee is part of the administrative system, whereas the CBB forms part of the system of publications; therefore, the latter cannot manage the former effectively. Second, the punitive clauses within the institutional rules are too weak, because they do not address the fundamental interests of potential violators. As a result, issues arising due to poor performance in terms of RBHP management are not considered to be serious and merit only verbal criticism.

Dynamic Mechanisms for the Development of the RBHP

Two types of dynamic mechanisms for the development of the RBHP were identified based on the six kinds of contradiction described above. As shown in Table 3, they were power coordination and benefit protection.

Dynamic mechanism of power coordination and its influence

The dynamic mechanism of power coordination refers to the coordinating function of authoritative power in the RBHP construction and development process. It manifests in terms of the SAPPRT's, as the subject of the RBHP activity system, applying authoritative power in coordinating the relationship between the subject and the object. It also manifests in terms of certain institutional rules formulated by authoritative power being used to coordinate the relationship between the subject and the community. This power coordination involves compulsion, self-interest, and inefficient punitive measures.

The compulsion manifested in cases where the community was forced to undertake the task of constructing and running the RBHP, which was constrained by authoritative power. Inefficient punitive measures manifested in relation to the uncoordinated management system of the RBHP, with weak punitive clauses. Self-interest refers to the outcome sought by the exercise of authoritative power, which was to achieve the maximum benefit for the subject. Here the subject aims to ease the contradiction between the dual objects (namely, to achieve maximum benefits for both the social object and the economic object at the same time) and shift the burden of the costs of running of the RBHP to other participants. However, this assignment generally neglected some

participants' interests and work conditions. For example, the SAPPRFT assigns costs in terms of funding, publication purchases, human resources, and management to the community that consists of local governments, rural committees, the administrators of the RBHP and public libraries, but the regulations neither consider how to identify the interests of each portion of the community nor the conditions in which the community operates. For example, the mandating that rural committees provide space and high-quality facilities for rural book houses does not take into account the fact that many villages are still relatively poor.

The power coordination mechanism affects the development of the RBHP in four ways. First, compulsion served as a safeguard to help ensure the dynamic construction and development of the RBHP by providing the unified deployment and management of human resources, financial resources, and other relevant materials. Second, the self-interest involved generated an excessive workload for the community, which led the community to query the authority and feasibility of the institutional rules. Third, the use of authoritative compulsion and punitive measures tended to make the community regard "responding to a superior's authority" as the only object driving the community to join in RBHP activity. This resulted in a lack of initiative and formalistic responses. For example, in order to prevent publications loss, some rural book houses chose to close. In addition, it appears that there were instances of subterfuge in relation to official inspections of rural book houses to create a good impression. Finally, the reality of inefficient punitive measures meant that the community could easily deviate from the original object of the RBHP in favor of protecting their own economic interests.

Dynamic mechanism of benefit protection and its influence

The dynamic mechanism of benefit protection refers to the subject's and the community's pursuing or protecting their economic benefits when engaged in this activity in relation to the RBHP.

In a well-designed and orderly activity system, the subject and the community act to achieve the common object while being driven by their interests or other motivations and all participants' pursuit of benefits can be satisfied through negotiation. However, we found that there was a lack of coherence in terms of the pursuing of benefits among the participants in the current activity system of the RBHP. In general, participants were inclined to protect their own economic benefits and refused or were reluctant to help the subject to achieve its object of pursuing economic benefits.

Regarding the influence of this dynamic mechanism, most communities adopted passive strategies for enforcing institutional rules. For example, in order to protect their economic benefits, some local government finance departments diverted or embezzled the special funds of the RBHP. To reduce costs, rural committees shared office space with rural book houses. These passive actions meant that the object of the RBHP could not be achieved effectively, with the RBHP reduced to being an "image project" with only token engagement.

The interaction of the two-dynamic mechanism

These dynamic mechanisms did not work independently. Rather, they affected the development of the RBHP by mutually reinforcing and constricting each other, as shown in Figure 3. As a motivating force, power coordination obliged the community to join in the RBHP process of construction and development and assist the subject in achieving the object of ensuring social and

economic benefits. At the same time, the benefit protection mechanism drove both the subject and the community to act to safeguard their respective economic benefits, which generally conflicted with the object of the RBHP's activity system. Based on our analysis, it would appear that strengthening the constraining power of the relevant authority and balancing the community's economic interests would be an effective approach to addressing the issues confronting the RBHP. However, this study's findings also suggest that the identified contradictions would be difficult to resolve within the current activity system of the RBHP.

Types of contradiction	Characteristics of the contradictions	Content of the contradictions	Strategy applied by the participants to respond to the contradictions they face	Outcome of the strategy	Dynamic mechanism consists of contradictions
Contradiction between the participants' differing dual objectives	Contradiction between the objectives of social responsibility and economic benefits	The SAPPRFT aims to improve both the social and economic benefits of China's publication industry at the same time through the RBHP	The SAPPRFT uses its authority as a tool to mitigate the conflict between the dual objectives and aims to ensure maximum benefits by forcing the community to provide some assistance	Economic benefits of the community are reduced	Dynamic mechanism of power coordination involves compulsoriness, self-interest, and inefficient punitive interventions
Contradiction between the participants' tools and the community's tools	Contradiction between an authoritative tool and a professional tool	Contradiction between bureaucratization and professionalization in the RBHP's operational principles	Public libraries generally compromise in relation to authority but apply passive strategies to respond to authority	Public libraries are reluctant to join the RBHP or only undertake nonprofessional work	
Contradiction in applying the participants' tools	Contradiction between compulsion and ineffective punishment in relation to authority	Contradiction between compulsion and ineffective punishment in relation to institutional rules	Participants generally choose to neglect the institutional requirements	(1) Rural book houses are unattended (2) Rural committees neglect rural book houses (3) The special fund for the RBHP has been diverted	
Contradiction in the differing rules and expectations	Contradiction between the institutional regulations and cultural norms	Contradiction between the regulations and standard social norms	Participants (especially at the basic level) prefer to apply social norms	(1) Rural committees ignore the infractions of administrators of rural book houses (2) Administrators of rural book houses ignore rural residents' damaging of book house materials	
Contradiction in the differing expectations of the community	Contradiction between the community's needing to obey authority and protecting its economic benefits	Contradiction between the community's needing both to obey institutional regulations and protect its economic benefits	Community tries their best to balance the two objectives or otherwise neglects authority (regulations) to protect their economic benefits	Rural committees have to share official space with rural book houses and recruit part-time administrators for rural book houses in order to save money	Dynamic mechanism of (economic) interest protection has led to inconsistent responses
Contradiction between the community's objectives and the division of labor	Contradiction between the community's needing both to obey the regulations and complete its own current primary work	Contradiction between the community's needing both to obey the regulations in relation to the RBHP and complete its own current primary work	Community generally gives more priority to their own current primary work	(1) The special fund for the RBHP has been diverted by some departments (2) Rural committees have occupied the space set aside for rural book houses to engage in official work (3) Administrators have closed rural book houses while doing personal work	

Table 3. Formation of the Dynamic Mechanisms involved in the RBHP

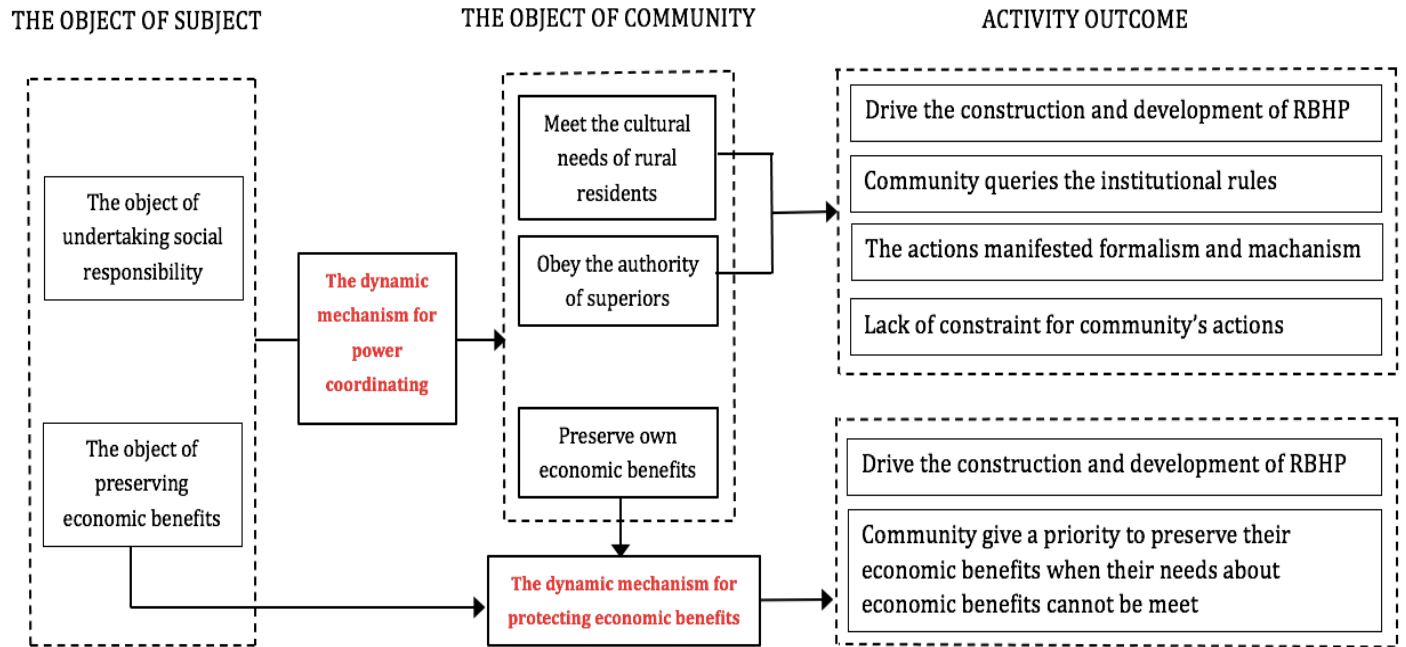


Figure 3. Dynamic Mechanisms of the RBHP

CONCLUSION AND IMPLICATIONS

This study applies an activity theory perspective focused on the identification and assessment of the dynamic mechanisms involved in the RBHP that tend to push rural projects into a cycle of decreasing efficiency, rather than putting forward a specific developmental proposal. Two dynamic mechanisms are identified: power coordination and benefit protection. This study finds that these dynamic mechanisms generate many barriers that hinder the integrative development of the RBHP and public libraries, among them institutional barriers, interest barriers, and concept barriers. Therefore, it would appear that if these barriers cannot be broken down, the RBHP can only be developed outside the public library system and consequently there will be little or no guidance or support from the library profession.

This study makes two theoretical contributions. First, it introduces activity theory into the research field of the RBHP and rural information services. The theoretical framework of the study provides a structure-agency integrative analytical perspective that enables the identification of the various elements that affect the RBHP construction and development process and the relationships among those elements. Second, this study shows that activity theory is applicable to the delineation of dynamic mechanisms, which helps to extend the theoretical possibilities and practical scope of activity theory.

This study makes the practical contribution of identifying the dynamic mechanisms involved in RBHP construction and development. It also identifies various structural contradictions in the current RBHP activity system that are likely to be similar in other rural information projects in China as well as in international projects run in a hierarchically authoritative manner. The evolution and influence of these structural contradictions may be the primary reasons why China's rural information projects are repeatedly undertaken only to fail soon after. More specifically, most participants overprotect their own economic benefits due to a lack of consistent financial support and clear policies for the distribution of funds or the punishment of misconduct. Furthermore, the participants' interest conflicts could not be mitigated due to an overreliance on the use of administrative power and the tendency of power holders to protect their interests. Finally, the barriers hindering cooperation between rural information facilities and public libraries have existed for a long time due to the contradiction between the authorities and professionals. This study's findings suggest that the institutional design of the RBHP—and by extension that of other rural information service projects—may be deficient and that relying primarily on administrative authority may have to be reconsidered when constructing rural information facilities. It may be necessary to comprehensively rethink how rural information projects are to be run, perhaps even integrating them within the public library system and authorizing professionals in that system to take charge of their design and management.

Finally, this paper contributes to study of the practice of international LIS community information service. Although the findings reveal the deficiencies of China's rural information service projects, it cannot ignore the advantages of this top-down model of information service. The administrative power of the central government has substantial capabilities in terms of service standardization, service coverage, and the unified allocation of social resources. It appears that these capabilities are well-suited to addressing the deficiency of Western community practice, which mainly rely on spontaneity and bottom-up efforts. For example, the main reason for failure of community librarianship and the community network movement is that they lack unified planning and sustainable support (Black 1997). In the practice of global community information service, the integration of the advantages of the two modes (bottom up and top down), namely localization and centralization, should be investigated in further research.

This study does have some limitations. The RBHP involves a large number of participants and the sample of this study cannot cover all of them. For example, the XINHUA bookstore and some booksellers were not been considered in this study because these actors were not as prominent in the domains we investigated. But this does not deny their important role in other domains. Therefore, continuing to expand the number and breadth of samples is a needed step in future research.

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Appendix

Interview outline is as follows:

- 1、What works or task do you undertake in RBHP ?
- 2、Who assigned this tasks to you ? have you ever tried to refuse ?
- 3、What is the most important work in your routine life ?what is your profession?
- 4、How do you deal with the contradiction between your profession and the task of RBHP?
- 5、Can you talk about the detailed process of local rural book house for construction and operation ?
- 6、Why did you join in this project?
- 7、Can you talk about your routine work related to the rural book house?
- 8、What benefits can you achieve in this work?
- 9、What institutional rule should you obey when your work on RBHP?
- 10、Can you fully implement these rules of RBHP? Why?
- 11、Do you punish subordinates when they violate regulations? Why?
- 12、As the librarian, how and why do you join in this project?
- 13、Do you know the reason why the government construct this project?
- 14、Where does the RBHP purchase or collect publications?
- 15、How does the special funding of RBHP run?
- 16、Who and how select address of the rural book house?
- 17、How many people read or borrowed books in rural book house every day?
- 18、Have you ever hold any reading promote activities in book house? Why?
- 19、How do you evaluate this project?

Acknowledgement

I would like to thank Professor Yu Liangzhi (Nankai University in China) and Professor Kate Williams (University of Illinois at Urbana-Champaign in the United States) for their encouragement and guidance throughout this project. Special thanks to the interviewees who provided data for this project. I also would like to thank Editage (www.editage.cn) and Dan McNaughton for English language editing.

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