Breaking down Barriers between Physical and Virtual Spaces in Public Libraries
-- Leading Practices in Guangdong Province of China

Liu Honghui and Huang Qunqing
Sun Yat-sen Library of Guangdong Province
213 Wenming Road, Guangzhou 510110, China

Abstract
The future of public libraries seems foreseeable through leading practices in Guangdong Province, of which the economy development is first ranked and Internet popularity third ranked nationwide. In new buildings, computers are placed in traditional reading rooms together with print collections. On websites, virtual visitors are able to enjoy lectures or exhibitions happening in physical spaces. In Microblog or WeChat communities, netizens not visiting library websites can also be informed. We find that barriers between physical and virtual spaces have been broken down; most of the resources and activities could be accessed by users inside or outside the library.

Introduction
According to a report published in early 2013, the economic gross in Guangdong Province has been ranked the first for 24 years continuously among all provinces nationwide \[1\]. Favoring from financial support of the government, public libraries in Guangdong Province have been taking leading achievement in both physical spaces and virtual spaces.

For physical spaces, many public libraries have opened their new buildings in recent ten years, such as new Dongguan Library opened in 2005, new Shenzhen Library opened in 2006, new Guangzhou Library opened in 2012 and new Foshan Library opened in 2014. Facilities in these new buildings have been updated into new concept furniture, multimedia reading computers, self-service terminals, WiFi, air-conditioned, cultural decorations and green plants, as well as functional rooms for exhibitions, lectures, performance, training or class, etc.

For virtual spaces, many public libraries have built up their websites since 1990s, and then developed into digital libraries since early 2000s. Visitors online of these libraries are able to experience from the first About the Library, New Arrivals, then later OPAC, digital resources of books, journals, proceedings, dissertations, patent or standard documentations, and featured databases in multi formats of text, pictures, audio or AV, some of them are purchased common content, some of them are local and transformed from what happening in physical space.

As we look into a few leading practices, we find that barriers between physical and virtual spaces have been broken down, physical visitors are able to access more digital resources while visitors online are able to enjoy more activities happening onsite in the library.
Part One: Virtual Access in Physical Space

Visitors in public libraries can enjoy not only physical resources, but also access to virtual world. For those public libraries which still staying in old buildings, they provide WiFi within the whole building, while keep separate computer reading rooms available. For those having new buildings, they take opportunities to relocate, adding some computers in different floors while keep separate computer areas, or even breaking down barriers between physical space and virtual space, placing computers along side of collections, prints reading or screens reading are in same areas.

Sun Yat-sen Library of Guangdong Province is a provincial public library located in Guangzhou, with a history since 1912, collections up to 6.18 million items, a staff of over 300 and thousands of physical visitors each day in its main building in downtown of the city. We set up the first separate multimedia reading room in 1997, also an OPAC terminal area at the circulation hall soon after. All computers were updated into Liquid Crystal Display around 2003. Since the Reconstruction and Enlargement Project started in 2005, the multimedia reading room had to be removed in 2007.

When the library re opened by the end of 2011, we did not set up separate multimedia reading rooms like before, instead, we set up mixed layout physical spaces in the non dividers reading rooms, over 200 computers were distributed along side of print collections, and WiFi available. With green plants and fashionable style sofas, as well as cultural decorations in festival seasons, reading surrounding has become very nice and attractive. In 2013, we received 6,336,420 visitors; here they enjoyed print or digital reading and social contact with friends or family, all in one place.

(The first multimedia reading rooms set up in 1997 and the OPAC terminals area soon after)

(Mixed layout in physical spaces since 2011)
Part Two: Onsite Activities in Virtual Space

Public libraries usually have set up websites with columns like About the Library, Opening Hours, Borrowing Rules, New Arrivals and Upcoming Events; and many websites have been developed into digital libraries with content like OPAC, e-resources, online services like renew, reservation, or ask a librarian. Recently some websites further provide video or AV records of exhibitions and lectures which taking place in physical spaces. Therefore, visitors in virtual space can enjoy almost the same as those in physical space, crossing barriers of time and distance.

Sun Yat-sen Library of Guangdong Province began its automatic management in early 1980s. Through the Database of Guangdong Local literatures in 1986, the Library Microcomputers All-purpose Management System in 1988 and the first domestic ZSLAIS Provincial Library Automation Integrated System in 1994, our first website was set up in 1998. Since it was developed into a digital library in 2004, a wide range of e-resources has been added up. What is more important, it tends to deliver whatever happening in the physical space.

(Website of Sun Yat-sen Library of Guangdong Province, upper part and lower part, April 2014)

Among the Special Column are activities happening in physical space, which had been recording by digital camera onsite. For example, over 206 lectures, which were held weekly, have been put on website since 2009; each lecture includes video, pictures, text, interaction and comments onsite. Whenever people enjoy the lectures online, they can submit more comments. We also put online thousands of pictures from all exhibitions onsite since 2011. In 2013, we received 1,780,029 visitors on our website, for those not able to join the lectures or exhibitions physically by reasons of time or distance, they would miss nothing, as digital records on website are always there.
Part Three: Virtual Communities

Based on the large numbers of netizens in virtual spaces, a few social networks have been popular in China. There had been over 300 million Sina microblog users by the end of 2011, over 500 million Tencent Microblog users by the end of 2012, and over 600 million WeChat users by the end of 2013. Many public libraries have seized the opportunity to build up virtual communities on popular social networks, thus even people not visiting the libraries physically nor accessing the library websites can also keep up with what happening in the libraries.

Shenzhen Library is a large public library in Guangdong Province, its 3.4 millions of physical visitors and 2.9 millions online visitors in 2013 should partly attribute to its promotion in virtual communities. Its Sina Microblog official account has built up 2681 posts and 66839 fans, and its Tencent Microblog account has built up 1278 posts and 1196 fans by 29 June 2014 since Jan 2012. The library announces services and events happening, and fans can forward, comment or collect what they are interested, and even interact with a librarian or other fans.
Shenzhen Library is one of the tens of public libraries in Guangdong Province setting up WeChat official account to serve people on their mobile terminals. You can search OPAC, check your borrowing, renewing or reservation. You can bind your WeChat account with your Reader Card. Once you locate the library official account with your WeChat account and add to your attention, you will receive library events news everyday, such as lectures and reading salons, also new arrivals and reading ranks. It is a very popular way promoting library to young users group online.
Part Four: Mobile Spaces

Along with the fast economic development in the past 30 years, China has also been in a fast course of urbanization, transforming rural areas toward modern civilization. By the end of 2011, 51.27% of its 1.347 billion populations in the mainland have become residents in cities or towns. Public libraries have been providing mobile services to these communities in many ways, such as the famous model of Guangdong Mobile Libraries, featured with moving books among branches twice a year. But, here we look into services in a moving space.

Guangzhou Library drove a reading van into a school for deaf-mutes located on the outskirt only two months after its foundation in Jan 1982; the vehicle was updated into a mini passenger cargo dual purpose car in 1983, serving more communities, and became the first mobile library in Guangdong Province in 1987. The car was replaced with a refitting luxury air conditioned bus in 2000, holding 4,600 books, one laptop and two staff taking charge of transport and management. The mobile physical space has been improving, and virtual space combined later.
The bus was further updated into an intelligent bus in 2011, holding over 6000 books with RFID tags, a self-service borrowing machine, a Global Position System for people to locate it on the library website, a LED large screen display system, Wifi and two touch screen computers accessing the library website for OPAC, reservation, e-resources and inquiring. It works five days every week and makes rounds among communities on outskirts, where part of the users are new generation peasant workers, the main force of labor power for the local economic development.

Conclusion

To break down barriers from physical into virtual space, it might depend on the opportunity of a new building and re layout, as well as financial support for facilities like computers and Internet. With more and more young people bring their own mobile terminals such as iPad or cell phone into the public library, Wifi condition becomes important and necessary facility, helping virtual space available everywhere in the physical space, in the library building or even a mobile library. Visiting comfortable public libraries to get online has become a beautiful sight.

To break down barrier from virtual space to physical space, it might depend on digital resources of the library websites, including purchased common resources and local featured resources. As more people come to public libraries not for reading, instead for popular activities such as lectures and exhibitions, and as these onsite activities are picked up and further made into local featured resources online, then people who are not able to attend activities physically, they would miss nothing. And promotion in popular social networks like Micro blog and WeChat also help a lot.
Reference


Appendix with practical recommendations

Taking the opportunity of re-layout in its reconstruction project and reopening by the end of 2011 as a public place, Sun Yat-sen Library of Guangdong Province provides ecological surroundings, cultural decorations and facilities in the non dividers reading rooms, most importantly, barriers between physical and virtual spaces are disappearing – over 200 computers are distributed along side of print collections, and WiFi is available. In 2013, we received 6,336,420 visitors; together with friends or family, they enjoyed print or digital reading, and social contact.

(Pictures of Sun Yat-sen Library of Guangdong Province)

Visitors in virtual space can do almost the same things as in physical space –OPAC, read books, journals and news, ask a librarian, take part in activities, even watch shows and attend lectures. Sun Yat-sen Library of Guangdong Province has put over 200 lectures on its website since 2009; each lecture includes video, pictures, text, interaction and comments onsite. Whenever people enjoy the lectures online, they can submit more comments. We also put online thousands of pictures from all exhibitions onsite since 2011. In 2013, we received 1,780,029 visitors on our website, for those not able to join the lectures or exhibitions physically, they would miss nothing.
People online not visiting library websites can still keep up with what happening in physical space. There had been 309 million microblog users by the end of 2012, and public libraries seized the opportune time to create microblog communities in the popular social networks Sina or Tencent. For example, Shenzhen Library has published over 2213 posts and collected over 51253 fans in its Sina microblog official account by 10 Feb 2014. With the popularity of WeChat exceeds those of Microblog by 2013, many public libraries have been attended by WeChat users.

China is in the course of urbanization, transforming rural areas toward modern civilization. Public libraries help regenerate new communities, it can be considered as an economic driver while serving the new generation peasant workers, who are the main force of economic development. Sun Yat-sen Library of Guangdong Province is leading a mobile libraries system featured with moving new books twice a year between the 79 county branches. Guangzhou Library is leading a mobile library featured with its moving spacious bus and GPS system. For both mobile services, print, computers, Internet and digital reading are available in the same space.
Authors' Brief Information

Mr. Liu Honghui
Chief Librarian, Board chairman Guangdong Library Society
Sun Yat-sen Library of Guangdong Province
213 Wenming Road, Guangzhou 510110, China
Email: liuhonghui@zslib.com.cn

Ms Huang Qunqing
Professorial Librarian
Sun Yat-sen Library of Guangdong Province
213 Wenming Road, Guangzhou 510110, China
Email: qunqing@zslib.com.cn or qgh21@hotmail.com (Contact point)

(Completed by 30 June 2014)