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Inheriting Civilization and Serving Community: Preservation and Utilization of Local Newspapers in the Digital Process

Ronghui Su

Hunan Library
Changsha City, Hunan, China

and

Qingming Yang

Central South University
China

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Abstract:

The traditional types of local literature collections in our country include “local historiography”, “local chronicles”, and “genealogy”. They are three separate and complementary historical data systems. Modern literature types, in addition to the traditional and historical collections, are also reflected in the different literature carriers. At present, the collection of mainstream resources is still paper documents. Microfilm literature, audiovisual materials, photographs, etc are non-paper formats; online resources, database resources, multimedia resources, etc are digital resources; and in-kind resources such as maps, manuscripts, letters, famous calligraphies, paintings, medals, art, crafts, heritage, etc, which reflects the local culture, history and folklore, are also within the scope of library collection of local literature. Different types of document carriers have different collection values and features in the collection of local literature, and distinctive types of literature together constitute the regional civilization heritage resources of public libraries in local literature.

This paper largely takes the local newspapers as an example, discusses the historical value of local literature resources, as well as characteristics of changes in news media in the digital age. In the background of the new information environment in which physical media and digital media coexist, the article describes the latest developments and practices of all sectors of society in the integration of regional news media resources for digital preservation and utilization through actively digital resource construction in China. At the same time, the proliferation of new technologies at an accelerating speed impacts the development of news media.

1. Interpretation of local culture, Inheritance of regional civilization: Historical value of local newspapers.

Newspapers as a unique form of literature, become an important carrier for the community to directly express political demands, and disseminate economic, ideological, military, and cultural information, which have important historical value.

Authenticity

Newspaper news and articles are reported or written by journalists or those who personally experience it. News agencies and press distribute news dispatches. Most of them belong to the first-hand literature, which has a strong original documentary value. The news in the newspaper is generally about the current happenings or activities of people most of who are interviewed on site by journalists themselves. Consistency of time and space in terms of newspapers renders the historical data saved in the newspapers, compared to oral history in the future, memoirs, and historical data, etc, closer to the objective historical facts, and thus has higher authenticity. Even if different positions result in different newspaper articles, they can still be used for reference for researchers to explore the truth through multi-dimensional contrasts.

Continuity and orderliness

Newspapers often make continuous coverage of an event timely and systematically, which can be easily traced back to the ins and outs of a particular event, or a particular area, the developing course of a cause. The newspaper has the characteristics of continuous publication making its reports focus on some major historical events, and continues to reflect a region's economic development, culture and social changes at a certain stage. Thus it is clear that the record of historical events has continuity and orderliness.

Detail

The characteristics of newspaper editing and publishing render it to pay more attention to the depth of the excavation and detailed descriptions in reflecting the major historical events or activities of important historical figures. These specific historical data such as telegrams, talks and activity reports are of great significance for accurately grasping the reasons of events, and more objectively restoring the history. Even some trivial news, statistics, and wide variety of various types of advertising on billboards, as well as short and pithy account of articles etc., are also the information that scholars doing research on relevant subjects will spend every effort to find. For example, a scholar uses the "obituary" to solve the dispute on the date of death of a celebrity, troubling academic circles for many years. These contents, unique in newspaper literature, are hard to find in other literature.

Coverage

New things in all areas of society usually appear in newspaper reports, and its exceptionally rich contents range from the major domestic and international political and economic dynamics through social news, down to ordinary people's daily life. All are covered. As a record, it can be said that the newspaper literature is the archives of the whole society.

The reports in the newspapers are especially close to the record of history. Things written in the newspaper, although they are pieces and segments, are true to the record of history, studying its nature. Or we can say: "The report is history of the present, and history is the report of the past". The role of journalists is very approximate to historical researchers'. Today's journalists organize the discipline referred to in materials, which creates important future historical data for historical researchers. "Important historical value of newspapers is then evident."

2. Changes of local newspapers in the digital age

The first digital attempts by newspaper groups came from electronic versions of newspapers on the Internet in the early years. With the success of the business portal, newspaper sites have borrowed its comprehensive portal mode, but after many years, have failed to find a suitable model of development in the portal direction. So the local newspapers begin to reflect the core advantages of their own transition to digital media. First, in addition to the central news media, the resource benefits and influence advantages of the mainstream newspaper groups are regional. Second, advertisers and websites target user needs regionally. In addition to the major news, users also look forward to access to information and services around. Furthermore, combined with their own advantages to develop a regional portal, national commercial websites struggle to provide depth of coverage in all aspects of regional news, lifestyle information, local services and so on.

Newspaper digitization is an important part of the digital library construction, and also the fundamental way to improve newspaper information utilization. Digital methods derived by the local newspaper resources include: the making of a newspaper database, which has two types of access: sub-title and full text, and generally does not contain advertising and other information; traditional newspaper online editions; establishment of an independent online website for paper newspapers as a platform to provide users with richer information and more timely online news than the print version; electronic newspapers, that is publishing electronic text directly or turning newspaper content into electronic versions, released via mobile phones and other wireless network platforms. As digital technology continues to evolve, the local newspapers show a new variation in the process of digital transformation in news media.

2.1 More timeliness and depth of coverage

Online newspapers and digital newspapers are much better than traditional newspapers in terms of the timeliness. Now, while newspapers are published in print, they can be simultaneously released online. Publishing and distribution are almost simultaneous, which reduces the intermediate links. Consider the Guangzhou Daily Newspaper Group's portal platform *Dayoo*, for example. In 2007, the Group established a rolling news department as a bridge to communicate content planning departments of both traditional media and online media which effectively promotes interaction between the traditional media editorial team and network media content planning team and deepens the regional content planning and information mining capabilities.

2.2 Users have a more diverse and convenient means of access.

With the internet, e-newspapers can be accessed through computer terminals and even by cell phones. For example, the *Dayoo*, with the help of new features from the wireless platform, attracts an increasing number of regional users. Multi-channel delivery of the newspaper content on mobile platforms has been realized through a series of products and applications. Users have thirteen kinds of products available such as short message, SMS, MMS 9 version, 3 WAP versions, as well as Widget mobile newspapers, and IVR voice newspapers. The total number of subscribers has reached more than 10 million on every wireless platform.

2.3 Provision of more services to interact with the users.

The portal of digitization of local newspapers allows communication between newspapers and readers and between readers and readers. The portal makes use of forums, e-mails, chat rooms, and web-based surveys to carry two-way communication. The openness of the digital newspaper in news commentary and in reflecting public opinions is greater than traditional newspaper commentaries, letters, and contributions from readers.

2.4 Newspaper network integration: More contemporary.

Newspaper networks are integrated. Local newspaper industry creates a portal of service of the latest and most comprehensive regional information. One key in competitiveness lies in its high-quality content acquisition and production capacity, and the contents cover a broad and wide range. Meanwhile it has the print resource, indicating the main differences and competitive advantages, compared to the pure Internet portals. Moreover, newspaper network integration is not the simple copying of newspaper content from the site, and promotes the docking between the newspapers and websites further from the mechanisms, processes, and planning. For example, the *Dayoo*, analyzes the demand for information services in the area, selects the automotive, food, health, education and other key information channels to expand. As these channels have strong regional nature, they can form considerable viscosity on users. Based on these information service channels and with the help of the advantage of news media in the form of expression and technical means, the regional

influence of news media platforms is also expanding jointly with the traditional media to make a series of media planning

2.5 Technical means and form of electronic newspapers still in constant innovation

The proliferation of new technologies has been carried out based on acceleration. In 2006, the China Press and Publication Administration issued "Eleventh Five-Year Development Outline in Newspaper Publishing Industry" and started more than one digital newspaper lab programs. The digital newspaper laboratory will aim at nine categories including newspaper websites, mobile news, multimedia digital newspapers, digital platforms, two-dimensional code of mobile phones, e-commerce, outdoor digital media, electronic viewers, mobile editing systems, etc, as an innovative direction. "The Twelfth Five-Year Development Outline" issued in April of 2011, pointed out that currently the global news publishing industry has been undergoing a new technical innovation. Standard development, technical innovation, etc, in news publishing in every country will become more competitive.

3. Digital resource conservation and utilization of local media.

At present, digital network technology is in constant innovation and development, and physical literature resources and digital documentary resources dynamically co-exist. The Library will achieve effective conservation and utilization of local literature resources primarily through the digitization of the local print newspaper resources of library historical collection, integration management of the electronic newspapers, and database resources with timely updates. As for the Hunan Library, it focuses on the collection of the various local newspapers in print at all levels and at the same time, microfilms and digitizes timely local print newspapers. The durability of digital storage media has not yet been confirmed for digital newspapers. Therefore, at the same time integration of the printed newspapers, microfilm of newspapers and e-newspapers can ensure the complementary strengths to protect the preservation and utilization of the local newspapers.

In China, the joint construction efforts of digital media plays out at different levels such as the commercial models represented by China National Knowledge Infrastructure (CNKI), 'National Cultural Information Resource-sharing Project' as the representative of the Government's public cultural projects, and national public libraries. These groups use innovative practices in the database construction, collection management of digital resources, electron delivery and so on achieve the goal of sharing literature resources in the digital age.

3.1 CNKI as the representative of the digital resources construction and utilization.

The China National Knowledge Infrastructure Project(CNKI) was founded in June, 1999. The CNKI engineering group used self-developed digital library technologies with the international advance, constructed the world's largest CNKI digital library in

the amount of information of the full text. CNKI has established 16 kinds of various timely-updated databases concerning Chinese periodicals, newspapers, dissertations, patents and other academic repository. Among them, the China Academic Journal Network Publishing Database (CAJD) has collected a total number of 41,043,415 documents since 1994 (Some of the publications dated back to the founding). China Core Newspapers Full-text Database (CCND) has collected a total number of 10,566,096 since 2000. The newspapers are selected from about 1000 kinds of important newspapers publicly issued at home. Literature is updated daily by CNKI center website and database exchange service centre. Every Mirror Site can be updated daily via the Internet or satellite transmission of data. Album and CD-ROM are updated monthly. Forms of database products include WEB (online package repository), Mirrors, CD-ROM version and traffic accounting. The database is updated daily. CNKI is a favorite Chinese digital database of library users in China. For the literature resources of local newspapers not included in the large-scale comprehensive database, the library will establish the database with local characteristics, concerning a variety of topics, and the network newspaper navigation system as a supplement to improve the library means in the protection and utilization of local literature resources so as to meet the needs of different readers through microform production of the local newspapers.

3.2 Nationwide network project: National Cultural Information Resource-sharing Project

National Cultural Information Resource-sharing Project applies modern science and technology to process and integrate digitally Chinese splendid culture and information resources. Through a variety of channels such as local integration and acquisition of digital resources, the development of thematic databases, online information capture, and processing, a portal is constructed to bring together regional digital resources. It has opened up a new cultural and communication channel, one not subject to geographical constraints of time, and will play a significant role to quickly reverse the situation of lack of information, economic, and cultural backwardness in China's vast central and western regions, especially in poor areas .

The local digital resource construction is the core of the "Sharing Project". Libraries, museums, etc, are the main body of the local digital resource construction. The provincial sub-center of the National Cultural Information Resource Sharing Project is located in the Hunan Library. It is the integration center of construction of local digital resources, the data exchange center, resource management center and external service center. Relying on engineering-sharing platforms, the cultural information service system covers provinces, autonomous regions and municipalities directly under the Central Government and most of prefectures (city), counties (city), as well as parts of towns and streets.

The e-delivery of the digital resources depends on the construction of the network platform. The "Sharing Project", a government welfare project, takes the construction

of digital resources as the core, focuses on grassroots service network construction, adopts a variety of means of communication, and bases its way approach on regional common construction and sharing. Regional millennium civilization will be inherited and preserved through the local digital resource-sharing project, and extended to all corners of the poor and remote rural areas of the country, relying on the internet.

3.3 Library preservation and utilization of local digital resources

National Library and provincial libraries have their own focuses on the management of the electronic newspapers. The National Library collection approach to electronic newspapers includes collections from news agencies and press, network acquisition and purchase from data providers. Two ways methods in the integration of electronic newspapers are: (1) navigation website of the electronic newspapers established to integrate distributed online newspaper resources, providing readers with a convenient access channel; (2) collections from news agencies and press, network acquisition and procurement from electronic newspapers are integrated at the data level. The integrated data will be published through the touch screen experience system and online newspaper reading system, realizing the effective integration of the electronic newspaper resources and services. National Library on preservation of electronic newspapers adopts the PDF format, while using a mobile hard disk backup and disk backup are two ways for data backup storage. For the purchase from electronic newspapers, the copyright problem is easier to solve, but for resources gained from collections from news agencies, press, and network acquisition, copyright issues in China are not yet protected by relevant laws.

The Regional Public Library, led by the provincial public libraries in the networked digital resource-sharing information environment has assumed an increasingly important role. Take the Hunan Library as an example. At present, the work on the protection and utilization of local digital literature resources carried out by the Hunan Library include the following aspects:

- The electronic newspaper navigation site has been established on the home page of the Hunan Library, which now links 24 kinds of local e-newspapers of Hunan. Users can read online newspapers on the network, and library staff updates and maintains the navigation site on a regular basis. The local newspapers are the focus of the Hunan Library Collections. Local newspapers, whether they have online e-newspaper versions will be processed into microfilm newspapers, and provided to the users for searching.
- Establish a 'Hunan Online' database. The method is based on TRS (the Text Retrieval System). (TRS is China's largest search technology and content management technology supplier.) The system collects and updates daily regional news and information released by the regional websites and local online newspapers at all levels in Hunan.
- Establish "the World Hunan Website" with links on the Hunan Library Homepage. It includes two parts: local digital resources and interactive forums. Resources cover special databases of Hunan Celebrities, Special

Hunan, Hunan Genealogy, Culture and Education, Looking for Memories of the City, Hunan Writers and Works, Hunan Culture with the Outside World, the Story of Hunan, Hunan Clan Origins, Hunan Academic, Hunan Customs, etc. The World Hunan Forum is a communication platform on the website. It is based on Hunan, having the whole world in view and taking culture as a guide, which is a nice and pleasant place to acquire knowledge and exchange ideas. Forums largely cover Book and Film Reviews, Hunan Cultural Salon and Originality, etc.

4. Conclusion

The electronic re-evolution of the digital media process continues, far from being terminated. With the evolution of the news media digital environment, the framework of global news and information dissemination has changed fundamentally, and this change is mainly reflected in the way of media collection, mode of transmission, and mode of operation. Facing the arrival of the digital era, we should get to know the news media resources at two levels: the content of news, and the form of news. The digital media resources will continue to appear in new forms. The migration of traditional library readers to digital users is not yet complete. Preserving and utilizing local digital media resources, the library requires a combination of actual situations, keeps abreast of the times, and finds an effective way to properly protect and utilize local literature resources to achieve the purpose of the heritage of the civilizing mission and service to the community.

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