

Documenting Locality in a Digital Environment

Introduction

Due to the homogenization of regions in Korea, caused by the advancement in information and communications technology, the growth of transportation, and the rapid evolution from a rural society to an industrial society to an information society, it has been witnessed that the identity and history of Korean regions is disappearing. Nevertheless, the national policy focuses on a centralized management of public records. Locals' nongovernmental records are receiving far less attention, and consequently are facing decline.

By creating records from localities, which are the products of collective memory of regions, and then preserving these records, the *documenting localities project* aims to establish the new local archive, where memories and records communicate dynamically. The project is an attempt to establish the local community's dynamic identity by way of substantive work called documenting.

The *documenting localities project* is designed in three stages, lasting a total of 10 years; the project has just completed its second year of the first stage. The research conducted over the past two years includes the following four tracks: searching for documenting methodologies, investigating memories of spatial localities, documenting spatial localities, and studying digital archive portals.

First, while studying documentation methodologies, focus was given to the construction of an enduring archive; this was achieved by examining past research and examples of documentation strategies, and investigating success and failure factors of documentation. Eventually, focus was placed on the presentation of a participatory archive model that allowed distributed records to be accessed and used in an integrated manner.

Second, during the investigation of memories of spatial localities, the project supported the documentation process of *Busan's* (the second largest city of South Korea) space and transportation through the investigation of its historic and social values. Emphasis was placed on the context of the port of Busan, Busan station, and stations around Busan. In addition, studies were conducted on chosen sample spaces' place-change history, relevant policies, noticeable people or organizations, and narrations about people's experiences.

Third, when documenting spatial localities, existing records of the chosen sample spaces (e.g., the port of Busan and Busan station) and the sites of the records were investigated; selective records were also documented for the project.

Fourth, in studying digital archive portals that support user needs effectively and efficiently, a research model was developed by examining the recent trends of the content management and services of cultural heritage institutions; the model was then evaluated with user data.

Building community archives for documenting localities

Panel presenter: Moon Won Seol

Documenting localities and Community archives

Localities are values or characteristics of a region. Localities are not a given identity and are not stationary; rather they are constantly being created and changed through the activities of people in the region. It is, thus, necessary to focus on documenting memories of diverse agents (communities as well as individuals) in the region, instead of collecting and creating the records that represent the region objectively. Considering that the domain of public records cannot properly

embrace this need, it is critical for researchers and practitioners to understand the concept and needs of documenting localities.

How and what the community members remember about themselves have an impact on their current lives. While history education, mass media, literature and arts contribute to the construction of this collective memory, the most important pivot of collective memory construction is the community archives. The community archives assist this construction process by documenting, interpreting, and re-interpreting important events that occurred in the region or people's memories. The community archives should not simply speak the facts of the past, but should carry forward diverse – sometimes even contradictory – past memories and provide a framework to understand these memories.

Collective memory of a local community develops around the place. Unlike the abstract concept 'space', the term 'place' means an existent, concrete, and experiential space (Tuan, 1977). That is, when a space is intentionally interpreted through the systematic relationship of various components, it is considered as a place. The drive to document disappearing traces of a region is an attempt to record the history of physical changes of the region as well as people's experiences and memories of a place. This can be seen as the drive to recover the identity of a place.

Identity of a place exists not only in the physical exterior of a city or landscape but also on the experiences and minds of people who see them. Considering this, it is necessary that the scope of the locality documentation includes not only the policies and events, which impacted the history of physical alteration and changes of a space or place, but also people who experienced the place and their experiences of the place.

In consideration of the above mentioned reasons, the following two directions of locality documentation are suggested: first, locality documentation should include a strategy to actively document memories of 'people (and community)' and 'place', which may be excluded in the domain of public records; second, in addition to retrieving past memories through records, local archives should support local people in taking an active part in collecting and creating records and making their own narratives. By collecting records that recall the memories of local events and local environment changes, and by actively documenting the experiences of local people, it will be possible to contribute to the establishment of community identity.

Maeul Community Archive in South Korea

Currently there exist limited community archives in South Korea. The types of existing local community archives, however, include the following:

First, archives are constructed as a memorial service to revive the memories of disappearing places due to urban redevelopment or submersion. Currently in South Korea, there are an increasing number of services that document history, landscapes, and people's memories about the regions, which are disappearing or will experience dramatic changes as a result of urban redevelopment. Usually, public institutions, such as local governments or urban development corporations, are the main agents of these services.

Second, archives are created as a part of the *Maeul-building business* in relationship with the drive to restore local community. The *Maeul-building business* aims to improve the quality of residents' lives and establish their identity through restoration of local community. 'Maeul', a traditional living space in South Korea, had been established as an independent village with autonomy, supporting each other, since 15th century. Through radical industrialization strategies of the 1960s and through the consequent construction of cities, Maeul, which used to be a traditional living space based upon spatial closeness and personal bond, has been reorganized as a unit of administrative districts or dissolved for the convenience of governmental control and effective reproduction of capital. The modern city that replaced Maeul degenerated as a space for

accumulation and reproduction of capital; through this process, Maeul as a community of life and labor has disappeared. The *Maeul-building business* is being realized not only in the rural areas but also in cities; Maeul archives are being constructed to document the Maeul building and maintaining process, and to heighten identity of the Maeul community. Examples include the Sungmeesan Maeul archive at Mapo-district, Seoul (city community) and Pulmoo Maeul archive at Hongsung-county of ChungcheongNam-province (rural community).

Third, some Maeul archives are being planned with the new prospect of ‘private and public joint governance.’ Recently, Seoul (the capital of South Korea) set the construction of Maeul archives as one of the main priorities of *Maeul-building businesses*. Maeul archive projects will allow residents to document and preserve their daily lives to participate in making history of Maeul. In addition, the projects try to establish a foundation for residents to participate in management and activities of Maeul by publicly opening diverse records of Maeul via digital archives and allow residents to use them. It is believed that the private and public joint governance should be a prerequisite to prevent the self-reliance and autonomy of Maeul to degenerate to an isolated living community, and that archives have the potential to be a communication medium of the governance.

While there are not many archives in South Korea, it is predicted that the number will increase gradually. Since archives are being developed from various perspectives, there are issues surrounding them. Some of the issues raised are as follow:

- Archives as memories about places of dissolved communities
This type of archive is created at the past ‘place’ where the community based on the place has already disappeared due to the construction of high-rise apartment buildings. Criticisms of these archives include the potential that memories become something stuffed and turn into a spectacle. It is, thus, necessary to include a mechanism that keeps new interpretations of memories and collects records constantly.
- Archives constructed as a part of the *Maeul-building projects*
Budget and sustainability are two of the most difficult problems that a community faces when building and managing a community archive independently and voluntarily. Consequently, securing financial support from cultural heritage institutions and fostering civic archivists are critical.
- Community archives led by government agencies
The core concept of community archives is that the community members participate in the development and maintenance of archives as the principal agent. It is, thus, necessary to build policies and strategies that allow the community to actively and autonomously participate while the local government financially supports the development and maintenance of archives.

Prospects

In Busan, the second largest city in South Korea, the Sanbok-road archive service is under construction. Sanbok-road, a road crossing hillside, is a place that has a close relationship with the history of Busan; it was the residence of laborers during the Japanese colonial period, settlements of returned overseas Koreans after independence, and a large scale depot of refugees of the Korean war.

The city of Busan is developing Sanbok-road archive to reproduce the disappearing place memory, restore the local community, and establish the identity of the community. The focus has been on recording residents’ daily lives, not public records, although the local government promotes the project. By doing so, the hope is to strengthen the place attachment of the community residents

and the ‘placeness’ of the region. The success of this new attempt in South Korea will depend on the degree of residents’ participation and sustainability of the archive.

The Sanbok-road archive connects Sanbok-road’s official history (events and policy records), landscape images (photo records), and story (oral histories of residents regarding place experiences and life stories). Since residents’ lives unfold around places, it is important to collect and record stories involved in the places. Examples of such places include stores, barbershops, beauty parlors, stairs, and alleys.

The number of Maeul archives in South Korea will increase gradually. We should bear in mind that there are neighbors and people in the archives. Archives should take the role of the local communication center and allow the community to sympathize and understand residents’ lives, and further allow the residents to add their own memories and interpretations to the archives.

The impact of the Japanese colonial period on Busan’s space formation

Panel presenter: Jung-Sook Song

This section reports the second track of the past work, investigation of memories of spatial localities, especially within the context of the port of Busan and Busan station, and the formation process of modern day Busan through place-change.

In Korea, the construction and development of colonial modern cities was forced by foreign powers, especially Japan, during fights over colony under the imperialism. Busan, the first open port, is a representative example of a Japanese settlement that developed into a central city of the region. At the end of the 19th century during the heated competition with Russia, Japan built a military fort base at *Jinhae* bay; Busan and *Masan*, which are located at the bay, were developed as central cities at the time. This region was, in fact, a strategic location and military fort base for the world powers to conquer East Asian countries, important in both directions of the continental route to China and Russia and the ocean route to East South Asia and Europe. The construction of a modern city in Busan, with networks of roads, railroads, telegraphs, and sea routes, achieved Japan’s military, political, and economic goals (Kim, 2012).



Figure 1. *Dongrae-Busan-Gojido*

As is shown in *Dongrae-Busan-Gojido* (Figure 1), three sides of the port of Busan are surrounded by land; also since *Julyoung* island and *Oryuk* island form breakwaters for the area, it is naturally qualified to be a good port. In addition, because official Japanese politicians and traders resided at the port, Japan actively invested in the development of the port of Busan to maximize their political and economical gains.

Since ports connect marine transportation and overload traffic, developing a port alone results in a limited effect. Developments of marine transportation (e.g., *Pukwan* ferry connecting Busan and Japan), communication (e.g., installation of submarine wire connecting Busan and Japan), and overload traffics (e.g., railroads from Busan to *Seoul* to *Euju*) were built in parallel with the port of Busan.

When the Port of Busan was opened as a modern international port in 1876, a post vessel operated to/from Japan once every month. After the submarine wire was connected to the official Japanese residences of politicians and traders in 1883, a passenger sea route opened in 1885. In January 1905, *Kyungbu* railroad connecting *Choryang* (in Busan) and Seoul started its operation, while Japan also started its operation of the *Pukwan* ferry that connects Busan and *Shimono seki*.



Figure 2. Area where official Japanese politicians and traders were located, in 1903 (Source: Cho, 2005)

As Figure 2 shows, since the starting point of the *Kyungbu* railroad was *Choryang*, the railroad was not connected to the *Pukwan* ferry. To connect the 1.6 km (1 mile) stretch between the port of Busan and the *Choryang* station, the area located between the port of Busan and *Choryang* station was used to build the Busan station; through this process, the *Youngsun* mountain and the Britain consulate mountain were cut and a portion of the ocean was filled. Through this railroad extension project, Busan station opened in March, 1907. Since Busan station at that time was located at quayside, the marine transportation *Pukwan* ferry and the overload traffic *Kyungbu* railroad were directly connected.

As the number of travelers and trades between Korea and Japan increased, the size and speed of the vessels also increased. Traveling alongside the quay in both the port of Busan and the port of *Shimono seki* was inadequate, forcing small boats to load and unload goods between the main line and the berth; to address this, a No. 1 pier (international passenger wharf) was constructed and opened its operation on March 29, 1913. This was constructed in parallel with the installation of a continent connection, including a temporary bridge at *Abrok* river and the *Manju Anbong* railroad (connecting between *Andong* and *Bongchun*). Finally it became possible to bring railroads into the wharf and thus ferries and trains directly connected with each other.

The reclamation works conducted to secure the port facilities are as follows. Between 1902 and 1908, a total of 132,231m² (32 acres) was reclaimed for the maritime customs. *Bukbin* reclamation (east seashore of *Yongdoo* mountain where official Japanese politicians and traders were located) increased Japanese residences by a total of 132,231 m² (32 acres) between 1902 and 1909 (Figure 3). Between 1913 and 1932, *Busanjin* reclamation first reclaimed 479,338 m² (118 acres) of *Busanjin* offshore (Figure 4), and later 1,041,322 m² (257 acres) of ocean in *Wooam-dong*, which was easily connected to the railroad and thus an advantageous area for an industrial district

(Figure 5). In 1909, construction started to fill up the 101,123 m² (25 acres) of ocean with soil from the cut mountains (the *Youngsun* mountain and the Britain consulate mountain in *Joongang-dong*) and was completed in August 1912. Since there were over 2,000 fisheries around the eastern and southern costs of Korea near Busan at the time of Japanese colonial period, to promote the south port as an exclusive fishing port, 486,942 m² (120 acres) of ocean was reclaimed (Figure 6) and construction of berthage and breakwater took place between 1928 and 1940.



Figure 3. The first and second phases of Busan harbor construction (Source: Cho, 2005)



Figure 4. *Busanjin* reclamation – offshore (Source: Cho, 2005)



Figure 5. *Busanjin* reclamation – *Wooam-dong* and the third phase of Busan harbor construction (Source: Cho, 2005)



Figure 6. Busan south port reclamation (Source: Cho, 2005)

After the World War I (1914-1918), due to the increase in the quantity of goods transported, large, high speed vessels started to operate one after the other (e.g., *Geifukumaru*, 3,620 ton, May 1922). Since Japan built *Manchukuo*, a dummy government located in Manchuria, to accelerate invading China, migration of Japanese to Manchuria also increased dramatically. There was also a continuous increase of port development in Korea in response to the drastic needs of transportation (people and goods) via *Pukwan* ferry due to its being a logistics base for invasion of continent, increased war supply production, compulsory manpower draft of Koreans, and coerced requisition of goods.

Overall, the original city center of Busan (including port facilities and *Yongdoo* mountain where official Japanese politicians and traders were located) was developed by Japan to meet their military and economical needs. The center of the community, thus, shifted from *Dongrae* during the *Chosun Dynasty* (Korea at the time of Japanese colonial period) to near *Yondoo* mountain after independence.

In reviewing records that provide information regarding the impact of the Japanese invasion on Busan's space formation, it is noticed that the *Chosun Dynasty's* governmental records between the opening the port of Busan in 1876 and the time *Chosun Dynasty* became a colony of Japan are written in Chinese characters. While administrative policies at the time are recorded in history books (e.g., *Gojong sillok* and *Soonjong sillok*) and a considerable portion of *Chosun Dynasty's* and *Dongrae-bu's* governmental records are located in *Kyujanggak* within Seoul national university, it is not easy to understand them since they are not translated into Korean. Since Japan's colonial city construction in *Chosun Dynasty* was processed under the military policy decision, the records of this event were created by Japanese cabinet, department of the army, and ministry of foreign affairs, and they are located in various national institutions in Japan (e.g., National Institute for Defense Studies, National Archives of Japan, and Diplomatic Archives). These records written in Japanese are maintained with a strict confidential manner, and access to them is thus quite limited. The records created by the Japanese government-general of Korea and Japanese enterprises, that were in Busan during the Japanese colonial period, were written in Japanese; while some of them (e.g., the government-general's official gazettes) were made public, much of them are still located in Japan. Newspapers published during the colonial period are either written in mixture of Korean and Chinese or in Japanese. In general, many records were written in various languages (Chinese, Japanese, a mixture of Korean and Chinese, and Korean) causing difficulty in deciphering the content, and are located in disperse institutions in Korea and Japan, sometime with limited accessibility. Making the situation worse, the lack of bibliographical rapport prohibits proper understanding of the whole picture of the records created during this period.

User Satisfaction Factors with Cultural Heritage Portals

Panel presenter: Misook Heo

In this era of Internet technology, cultural heritage institutions have become increasingly more digital. As this trend continues, cultural heritage portals now distribute digital artifacts through multi-institution collaboration (Cha and Kim, 2010; Concordia, Gradmann, & Siebinga, 2010; Gibson, Morris, & Cleeve, 2007; Tanackoviæ & Badurina, 2008), provide users with the ability to personalize experiences (Giaccardi, 2006; Yoshida, Yasuda, & Yokoi, 2010), and allow these users to participate in resource management (Cox, 2007; Giaccardi, 2006; Farber & Radensky, 2008; Pruulmann-Vengerfeldt & Aljas, 2009; Timcke, 2008; Yakel, 2006). Examples of these portals include *Europeana*, *Picture Australia*, *Moving Here*, and *The Commons*. As cultural heritage archives have expanded, the user base has grown from mainly researchers to non-researchers (Adams, 2007; Huvila, 2008). Accordingly, researchers and practitioners are developing strategies to engage these new users (Cox, 2007; Durbin, 2008; Farber & Radensky, 2008; Huvila, 2008; Pruulmann-Vengerfeldt & Aljas, 2009), and recognizing that user needs are a critical factor of cultural heritage portals (Pruulmann-Vengerfeldt & Aljas, 2009); however, non-profit organizations do not often assess service quality and customer satisfaction (Bruce, 1995; Sargeant et al., 2002).

While there is a wealth of information surrounding users' general Web-based interactions, few studies examine factors influencing user satisfaction, especially concerning various age populations, possibly due to the contemporary nature of cultural heritage portals. It is reported that younger generations, such as users who were born after 1980 (often called Millennials), exhibit more active participation in Web activities that involve social interaction, information production, and multimedia consumption, when compared to older generations (Zickuhr, 2010). These younger generations express their opinions and reactions within online spaces, and exhibit control over their thoughts, actions, and others' accessibility to their online identities. It is also reported, however, that certain Web-based activities, such as visiting informational or financial websites, are more popular among Pre-Millennial; moreover, it is reported that certain Internet activities such as email, information consumption (e.g., searching), and online purchases are popular regardless of age (Zickuhr, 2010). While the generation gap is quickly diminishing, it appears that Millennials and pre-Millennials have different interests when using the Internet. Unfortunately, there seems to be little research on how that interest relates to satisfaction while using cultural heritage portals.

As with portals in general, cultural heritage portals are comprehensive information systems. Considering the volume of data and the variety of services that the portal offers, and due to the fact that the cultural heritage portal is relatively new to its users, it was reasoned that measuring user satisfaction of cultural heritage portals using one framework alone might not be sufficient. To address this, three widely used theoretical frameworks in the field of portal research were adapted in framing the measurement model. Data quality and service quality models were selected to provide measure of quality, and TAM was assumed to provide measure of user adoption.

The adapted instrument consisted of 11 dimensions, measured by 79, six-point Likert scale questions (i.e. data quality - four dimensions of intrinsic, contextual, representational and operational measured by 29 questions; service quality - four dimensions of reliability, responsiveness, assurance and empathy measured by 32 questions; and TAM – three dimensions of perceived ease-of-use, perceived usefulness and perceived enjoyment measured by 18 questions). In addition to demographic questions, example questions include: 'The quantity of data delivered by the cultural heritage portal is appropriate' (representational dimension of data quality framework), 'The cultural heritage portal's privacy policy is clearly stated on the portal' (assurance dimension of service quality framework), and 'Using the cultural heritage portal stimulates my curiosity'

(perceived enjoyment dimension of TAM). The final survey also contained an honour code statement to promote honesty in responses.

This study recruited general users, academic users, expert researchers, and professional users (e.g., librarians and archivists) in order to represent typical user groups of cultural heritage portals (Purday, 2009). The completed responses included 105 academic users, six expert researchers, 246 professional users, and 36 general users; 138 Millennial users and 249 Pre-Millennial users.

A confirmatory factor analysis (CFA) was performed to verify the factor structures as suggested by the adapted frameworks and the combined instrument model. Model fit was ascertained using multiple fit indices such as the Comparative fit index (CFI), Tucker-Lewis index (TLI) and Root Mean Square Error of Approximation (RMSEA). The validity of the indicator variables of each adapted framework (data quality, service quality and TAM) was first tested through CFA to assure that each construct was sound before the constructs were tested for validity. As the fit indices of these three frameworks were outside of model fit criteria, re-specifications were conducted. After improvements were made as suggested by the modification indices, these frameworks were combined to create a measurement model. The model, which consists of nine constructs (responsiveness, empathy, assurance, representational, contextual, intrinsic, perceived enjoyment, perceived easy of use, perceived usefulness) measured by 28 observed variables, was tested via CFA. Again, a minor model-respecification was made to improve the measurement model fit to the data.

With the final measurement model, tests of invariance were performed to verify that the defined factors via CFA are measuring the same underlying latent construct within each age group. Five models, each with an added criteria of constraint, were tested: Model 1- Configural invariance (freely estimated), Model 2- Invariance of first-order factor loadings (first-order weak invariance), Model 3- Invariance of second-order factor loadings (second-order weak invariance), Model 4- Invariance of intercepts (strong invariance) and Model 5- Invariance of residuals (strict invariance). Invariance of competing models was evaluated based upon the practical CFI difference (Δ CFI) approach and the RMSEA difference (Δ RMSEA) approach. All multi-group invariance test models were supported indicating the final measurement model is invariant between age groups.

The findings of the study provided evidence that the three frameworks complement each other in assessing the factors influencing user satisfaction, especially in regards to cultural heritage portals. While the three frameworks all assess user satisfaction, they measure unique dimensions of user satisfaction. This further implies that one framework is not sufficient in measuring user satisfaction within the context of portals. In addition, the findings of the invariance tests suggest that the factor structure is the same across age groups, and that inferences can be made about user satisfaction regardless of user age. While cultural heritage portals provide users with more opportunities to participate in the process of resource management, only limited user contribution is currently available. Cultural heritage portals are still needed for users to consume information as opposed to producing information. With this perspective, the results of the multi-group invariance tests confirm the findings of the recent online trend: key Internet activities, such as information consumption, are becoming uniformly popular across age groups. This, in turn, suggests that common factors may satisfy all users of cultural heritage portals; the final model can be used as a framework to assess user satisfaction of cultural heritage portals, and to build cultural heritage portals in a way that increases users' satisfaction, regardless of age group.

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