Design research in the practice of memory place-making

Zixin Tang
School of Architecture and Urban Planning, Nanjing University, Nanjing, China
and School of Design, Nanjing University of the Arts, Nanjing, China

Andong Lu
School of Architecture and Urban Planning, Nanjing University, Nanjing, China, and

Yue Yang
Institute of Architecture Design and Planning Co., Ltd, Nanjing University, Nanjing, China

Abstract

Purpose – The purpose of this paper is to explore the possibility that design research involving a series of actions is an appropriate approach to memory place-making. It tries to explore how memory expressed in public space and how memory place becomes an agency system and re-organize fragments of memory in practice specifically.

Design/methodology/approach – Taking the memory project of Nanjing Yangtze River Bridge (NYRB) as an example of design research and re-establishing new cognitions of contemporary memory place-making through the elaboration and analysis of the design process of a series of teaching, exhibition and public participatory activities.

Findings – Design research is oriented towards multi-discipline campaigns of agency and actions and acts as thinking patterns and integration mechanisms, so that the memory place-making can be incorporated into the scope of planning and design. This paper suggests that contemporary memory place-making should pay more attention to the spiritual experience of individual participation and the identity relations behind these emotional memories. On one hand, social bonds are established between people and have involved more public participation. On the other hand, multiple resources are integrated through a series of practical activities and design research, and the memory place becomes a catalyst for individual memory, emotions and communication thus redefining memory place-making.

Social implications – NYRB is a controversial mid-20th century national monument. In the social context of contemporary China, design research has helped to redefine and shape this national icon into a contemporary memory place where people can share memories of the bridge.

Originality/value – It is project-based in the sense of adding the dimension of memory to the practice of place-making through design research.

Keywords Memory place, Place-making, Public space, Design research

Paper type Research paper

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1. Introduction
The concerns of memory can be traced back to ancient Greece and Rome (Yates, 2013), but it was not until the present century [1] that memory studies began to develop as an emerging interdisciplinary field, and intersectional studies have been conducted through the fields of history, anthropology, psychology and sociology, among others. To date, many scholars have tried to summarize the category of “memory studies” from a theoretical perspective (Olick and Robbins, 1998; Rossington et al., 2007; Qian and Zhang, 2015). From the theoretical foundations of 1920s and 1930s and the 1980s “memory waves” to the current concept of “cosmopolitan memory”, memory studies have achieved remarkable results, especially in the fields of history and literature.

In the memory, places acquire a stronger associative force than time because places have a more tangible nature (Simmel, 2015). Similarly, there is no memory free from a spatial framework, taken as a reference used to localize and support the memories of events lived or transmitted (Martínez Gutiérrez, 2011). Reviving the memory of any event is simpler when we localize the spatial reference; memory turns physical space into a place with social significance. In people’s memories and emotions, place is constructed through repeated encounters and complicated relationships (Relph, 1985). It might be impossible to talk about memories without a place, essentially, memory place is a location and an environment, a field managed and controlled by a certain materiality.

Memory place is definable in the three senses of the word: material, symbolic and functional; all in different degrees but always present (Nora, 1984). In terms of the spatial dimension, as far as place research in phenomenology is concerned, Tuan (1974, 1977) and Relph (1976) have developed the connotation of place on the basis of phenomenology and existential philosophy, believing that place expresses the concept of attitudes towards the world and emphasizes subjectivity and experiences rather than the ruthless spatial logic (Cresswell, 2014). Therefore, the study of place and memory should not be independent of each other as the relationship between them is part of a broader set of social issues.

Nanjing Yangtze River Bridge (NYRB) carries historic, cultural and emotional memories since the foundation of the People’s Republic of China. This paper establishes its discussion based on the NYRB, exploring the possibility that design research involving a series of actions is an appropriate approach to memory place-making. In the social context of contemporary China, design research has helped to redefine and shape this national icon into a contemporary, memory place for people with different backgrounds in which they can share memories of the bridge.

2. Memory place-making
Place-making is an assemblage of related practices on the basis of the phenomenon of place, which aims at daily life, social interaction and cultural identity that occurs in public spaces. In relation to earlier practices of place-making, Whyte (1959) and Jacobs (2016) proposed human-centred urban public space theories and focussed on liveable street issues. Correspondingly, scholars have put more emphasis on place than on physical environment. The emphasis of academic research shifted from the physical environment to how space supports the relationships between individual people and between people and historic culture (Burgess, 1979; Norberg-Schulz, 1980; Seamon, 1982; Casey, 1996). Starting in the 1990s, accompanied by globalization and its social cultural conflicts, research and practices about place-making have gradually turned from community building to concerns with community identity, public participation, historical places preservation and other related issues (Dicks, 2000; Newman et al., 2005; Hernández et al., 2007).
Nora (1989) observed that, “since there is no longer an environment for memory, there is only place for memory”. Memory place-making helps to maintain cities as meaningful places of lived memories, and some scholars are inclined to focus on how the inter-relationship of place, different identities and memory contribute to the meaning-making processes that occur within memory place (Mowla, 2004; Aden et al., 2009). For instance, the site of 9/11, which was transformed into a museum (Van Dyke, 2016), and the East Side Gallery, which repurposes the Berlin Wall (Barthel, 2017), are recognized practices in memory place-making that have been undertaken at the city and national scale.

Today, social media and digital technology have hugely reshaped interactions between people and public space, and this has brought about a trend of diversification of memory place practices. For example, some museums have implemented network infrastructures dedicated to memory place and converted the collective memories of place into digital forms thus providing new narratives of memory place with new digital media technology (Van Mensch, 2005). Place-making also provides a design-thinking framework and connection to the real city in the field of architecture education (Ng, 2018). As the theme for design studio work, students defined and solved design issues from personal experiences and memories of place (Ng, 2013). The theory–design link also provides opportunities for meaningful and deep design outcomes that affect place-making.

The attention on and protection of historical and cultural memory place in recent decades have often served as catalysts for urban renewal. Much research has focussed on how to use memory place in the city as a mechanism to realize urban renewal (Pendlebury and Porfyriou, 2017). In recent years, the upsurge of “nostalgia” in China has brought “protective damage” to the memory of the place. To meet the needs of urban development, scenic landscape constructions and the proliferation of pseudo folk customs continually take place and have brought about side effects related to the revival and prosperity of culture (Zhang, 2017). Objectified and externalized memories are abstracted from daily life and become symbols, which are displayed and publicized without the context of place. New methods need to be explored for the separation of research and practice.

Through design research, how is the memory become the entry point of design and expressed in public space? How does memory place become an agency system and re-organize fragments of memory in practice? This paper uses the design research – memory project of NYRB as an example – to reconstruct understandings of contemporary memory place-making. This is a new attempt to explore how urban space and memory interact and connect as well as how they together engender a model of new experience and information spreading through a series of practices.

3. Public space of memory

The NYRB is a 20th century monument in China. It was regarded as a particular era of the great wonders (Plate 1). To date, the NYRB, as a symbol, has acquired various meanings. It was an industrial accomplishment that called for the whole country to complete its construction. Romanticism emphasizes that the charm of remembrance lies in memory because it has “the spirit and feeling of remembrance” (Le Goff, 1992). On one hand, it epitomized the spirits of national rejuvenation and self-reliance, but on the other hand, it constitutes an indispensable part of Chinese collective memory as a daily symbol.

The social construction of space implies, on the one hand, its externalization (production of form and meaning) and on the other hand, its internalization. A distillation of the group takes shape in the symbolism of space; and the spatialization of its network of group relations and identity is insinuated. (Martínez Gutiérrez, 2011). Tens of thousands of people volunteered to participate in the construction of the NYRB. The fragmented memories
formed by the builders with various backgrounds from different regions have both tiny personal feelings and grand national emotions.

However, what makes the bridge special is that the NYRB did not initially exist as a place to be approached and experienced. Its image forming in the public domain via mass media and its unique historical context have established extensive connections with many people. Its publicness is different from the “public” discussed in the contemporary context which is closely related to people’s daily life. But the symbol of the spirit at the national level.

Thus, the construction of the NYRB is dualistic. It is not only a mega project that overcame huge difficulties but also the construction of a political subtext at the national level. With the changes of historical context, the symbolism once attached to the NYRB is dissolving, and the political and social contracts supporting grand narrative no longer exist. These strong and complex relationships lack substantial support by subsequent social environment.

As a memory place, the bridge reflects the evolution of time and space. The self-renewal and development are related to the changes of historical and social context, which is a collective creation. Today, urban public places become new fields of living. Also, the bridge has strong inclusiveness – reflecting history, projecting memory and presenting complex and dynamic space usage patterns. It also brings the possibility – if diverse personal memory of the bridge is reconstructed, it will inspire certain characteristics of the place and serves as a witness and bond for people’s relationships with each other.

4. Constructive agency system
The national infrastructure has added a certain monumental character to the NYRB. The value of NYRB may be as the representative of a utopia, an image of a modern monument. The completion of the NYRB coincided with the peak of the Cultural Revolution. A demonstration of the reasonability and advancement of Maoism and China’s political system were urgently needed, so the bridge was quickly organized into a nationwide “whole media” publicity symbol from top to bottom.

In the 1970s, the great power of media was concentrated in a few carriers such as the bridge, making it a place that inspired people’s passions through mass media stories and products such as propaganda posters, calendars and bags that have been decorated with paintings of the bridge by those who live near it. Around this, non-local, public visual icon, the spiritual sustenance relationships between people and the NYRB was created. When
such memory enters social life, these goods become endowed with multiple meanings; they are not only objects but also carriers of people’s emotional memory and social relations.

It should be noted that what arouses and sustains these relationships is, in a sense, the image of the NYRB as a public symbol rather than the NYRB itself. The memory of bridge forms agency for people to connect with each other, and the place is the material evidence of the memory created by the media.

Memory has a corresponding carrier, and information is attached to the place along with memory. When people are deeply immersed in a place, the place is only a precondition, and the elements that constitute the bridge and the public space jointly create an imaged scenario. At the moment, the bridge serves as a container, and the memory become an agency for people to communicate with the physical environment, which prompt us to think about what design language, methods or media technology can be used to make the place a memorial scenario.

The place is the location where the agency happens, and memory is the purpose that place-making wants to achieve. The memory as the agency system can be constituted through an immersive experience of correlation between memory place with relative actions and the way of perception. Here, “place” is a conceptual tool that takes these elements into account. The constructive agency system integrates the interdisciplinary and comprehensive aspects of the place, providing a platform for place-making. Issues with these underlying mechanisms deserve further attention.

5. Design research in practices

5.1 Memory project of Nanjing Yangtze River Bridge

The memory project was initiated by LanD Studio in 2014[2]. The project’s design strategy focussed on the agency role of artefacts and images in creating a narrative architecture (Lu, 2018). To celebrate the 50th anniversary of the bridge (1968–2018), the government began planning a renovation project in 2014, and at the same time, the memory project was initiated. The bridge was closed in October 2016 for a renovation period spanning over two years, reopening in December 2018, in time for its 50th anniversary. The memory project includes a series of teaching, exhibitions, participatory performance and mass-media activities to facilitate memory rejuvenation and space regeneration. It discussed the mechanisms that make the bridge a memory agency, and through actions, the memory is turned into the public expression of urban space.

Existing academic research reveals a memory carrier. The critical issues now include how to use design research to transform history, monument and memory into contemporary place and how to transform research into public space through creative practice.

5.2 Design studio

Since 2015, Professor Andong Lu from Nanjing University has taken charge of graduate courses around “urban design” and “concept design”, and he is also the initiator of the memory project of the NYRB. These courses had different themes each year, with the bridge as their research subject, and they attempted to combine academic research with design, teaching in which students would go through the learning process from research to design then to research again. In the preliminary survey and research, students gradually deepened their understanding of memory in many ways, such as through diagrams and mapping and gained a gradual grasp of meaning construction of place memory in the process.

In the space regeneration project, students first made a comprehensive analysis and illustration of the NYRB and its impact on the surrounding urban environment from the five
perspectives of people, city, architecture, park and railway, and presented an ideal plan for the bridge’s space regeneration in the following design. Using the subject “Memory-Agency-Form” from a daily object, students explored the “agency form” of memory, and the form or mechanism by which memory is carried and conveyed, and a prototype with architectural significance was presented through a demonstrative design. The bridge contains individual experience and collective memory at different levels, which was the basis for students to create various images of place memory. In the subject “Memory-Place-Narrative”, individual identity and daily life, as a new perspective from which to explore urban problems, are conducive to renewal of memory place (Table 1).

Memory offers an opportunity that brings personal experience and changes once it is attached to a specific place. The bridge is a material and tangible place that is equated with eternity, so that means it can be designed. Design results reflect the students’ attention to their mental experiences of subjective participation. The attempt at new narrative forms shows the spatial characteristics of the site hidden in history and memory, and at the same time, it can re-examine and reflect on previous studies (Figure 1).

Students tried to define “memory” in place through the relevant theme. The design studio’s work around the bridge for three consecutive years provided an opportunity for experiential learning and an understanding of place. At the same time, the meaningful and deep outcomes provided some reference for design and public participation in the development of the memory project at that time.

<table>
<thead>
<tr>
<th>Course</th>
<th>Theme</th>
<th>Discussed issue</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015 urban design</td>
<td>Public space regeneration project of the NYRB</td>
<td>How to redefine the possibility of public space through the bridge</td>
<td>Provide utopian prospects for the future of the NYRB</td>
</tr>
<tr>
<td>2016 concept design</td>
<td>Memory-place-narrative</td>
<td>Features, occurrence mechanism and meaning construction of common memory</td>
<td>Design a contemporary, public and creative memory place</td>
</tr>
<tr>
<td>2017 concept design</td>
<td>Memory-agency-form</td>
<td>How to design memory place</td>
<td>Design a catalyst for memory under the bridge: buildings/structures/landscapes/other mechanisms</td>
</tr>
</tbody>
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Table 1. Design studio scheme

**Note:** Design Studio Scheme is summarized based on the Professor Andong Lu’s annual teaching brochures from 2015–2017

Figure 1. Lingzheng Zhu and Yu Gui, Bridge Park Space Reorganization Project of Nanjing Yangtze River Bridge © LanD Studio
5.3 “Everyone Owns the Bridge for Three Minutes”

“Everyone Owns Three Minutes of Bridge” was one of the most important events held by the memory project of the NYRB in September 2017. It called for people to share their memories of the historical architecture. In three short minutes, participants could honour the bridge’s historical memory in their own way through recitation, listening, reading and even just walking.

For example, Ning Shen ate boiled salted duck on the bridge, and three minutes later, his performance was over. He thought this food was the most representative symbol of Nanjing daily life, and said:

I would like to indicate a feeling to eating boiled salted duck freely. The bridge and this daily food are both carriers of memory. Eating a duck is my understanding of the bridge and everyday life.

Historian Gang Liu played Red Flag Fluttering on the trumpet in the hope of expressing his feelings for the bridge: “The trumpet is loud and delicate, which can best express my feelings. During the planned economy period (1970s), we rode motorcycles on the bridge, we cheered and chatted”. Artist Song Gao collected doorplates of the old places that had been demolished in Nanjing. He and his daughter displayed doorplates to the sound of violins (Plate 2). Within two hours, nearly 90 thousand people watched the live broadcast of this event synchronously through different websites or media platforms according to statistics.

The event attracted a lot of attention from the public during the preparation phase and received many propositions for the memory project, as well as plenty of applications to participate. During this activity, the public expressed their connections with the bridge memory through their own modern art behaviours. The bottom-to-top public participation established ritualistic feelings related to the place throughout the entire course. At each stage, the sense of affiliation formed by attention and support enhanced the place recognition among the public and constituted the sense of affiliation in memory places.

5.4 London Design Biennale

In September 2018, the memory project of the NYRB represented mainland China at the London Design Biennale (Plate 3). The theme of the second edition of the Biennale was emotional states, and the Chinese pavilion responded to it by considering the emotional significance of an iconic structure – NYRB – and explored how this collective memory came into being, reclaiming a collective monument as a shared place of memories and emotions through research and design.

According to curator Andong Lu’s design, the main part of the exhibition featured three white emotional rooms connected by a red translucent corridor about 17 m long. On the inner side of the corridor, the visitors could observe 18 old objects through virtual reality and experience the daily meaning of the bridge symbol in “House of Things”. The red corridor provided the audience with three windows to observe history, showing the bridge memory from three angles:

Plate 2. Ning Shen ate boiled salted duck and Song Gao showed doorplates © LanD Studio
(1) reverberation of sounds;
(2) synchronization of images; and
(3) monumentality in the age of media.

These halls, respectively, displayed sound memories related to the bridge, collected from its surrounding environment; portrait photos from all over the country; and items reflecting the classic angle of the bridge.

The exhibition aimed to reproduce the environment at the time, dividing the commemoration into many different scenes to build a bridge of memory across time and space. “Connections” of those memories took place on the site that established some kind of emotional attachment between people and places (Figure 2). The map of identity study classified the ways in which people and memory are related to each other, exploring memory with relationships between different identities. In total, 53 kinds of agencies or ways in which people have relations with the bridge were classified and converted into diagrams (Figure 3). The exhibition tried to convert each form of memory into a scene and helped visitors to become involved in it. Media technology was shown to support and create emotional states between people and the collective monument.

On the one hand, the exhibition paid significant attention to the experiences of persons with places of memory. On the one hand, it was noted that technology and digital media affected feelings and experiences of memory place and also changed people’s narratives of past memories and their perception, cognition and understanding of place, so an understanding of memory place in a broad social (cultural) environment is needed.

5.5 Bridge memory lounge

In the same month, after the London Biennale (September 2018), the public welfare project “Bridge Memory Lounge” in Nanjing activated the bridge’s abandoned engineering structures and transformed them into artworks for experiencing the bridge through the agency of memory and provided the public with an excellent place to experience memories of the bridge in the Bridge Park, adjacent to the bridge construction site. It turned the research into a site that could be experienced through bottom-up participatory actions.

During the 27-month maintenance period of the bridge, the construction department replicated a section of steel beam as a temporary training platform in the bridge park, providing a rare opportunity to experience the bridge’s spatial scale, engineering technology and classical perspective. Under the steel beam is a children’s painting exhibition on the
theme of the bridge. Visitors could sit or lie in the garden, enjoy paintings and get to know children’s impressions of the bridge (Plate 4). By using the stairs and platforms on the construction site, a narrative route was designed to cross the inside of the steel beam and climb to the top to view the bridge, which was the climax of the exhibition. Visitors climbed stairs to reach the steel beam platform and finally embraced a widespread classical historical perspective of the bridge that could not be directly viewed previously (Plate 5). Visitors could take photos from classic angles that appear in the media. It is an emotional and memorializing way for them to resonate with the bridge. In addition, spontaneous dancers presented the spatial relationship between the body and the exhibition equipment through a modern dance performance under the steel beam that expressed their emotional attitudes towards the NYRB. A comprehensive bridge memory landscape was created through the combination of real steel bridge beams, exhibition and dance performances.
As a scenario for place-making and redefinition of memory, the exhibition reproduced historical memory through a series of diverse opportunities for public participation. The abandoned engineering structures will be reused and transformed into an active contemporary public space, while the national symbolic significance of the bridge will be redefined as a memory field shared by the public.

**Figures**

**Figure 3.** Map of identity: the relationships and sentiments to the bridge are categorized into 53 kinds of identities.

**Note:** On this map, the 53 identities are arranged according to their time of engagement, the nature of the relationship and the level of emotional bound to the bridge (Drawn by Jiayue Qiu)

**Source:** © LanD Studio

**Plate 4.** Bridge memory lounge (from left to right, up to down)

**Note:** Children’s painting gallery, spontaneous dancer, tree planting activity and children paint under the bridge

**Source:** © LanD Studio
6. Conclusion

In socialist countries, most place-making activities are organized in a top-to-bottom way. The NYRB represents a top-to-bottom place construction integrated with 20th century media broadcasting. After the transformation and dismissal of its political and cultural context, this place leaves a large vacancy in terms of both emotions and memories.

Once the context of grand narrative fades, the memorial culture of passionate victory in the era of the nation-state may be deconstructed, just as the bridge gradually returned to normal. As its scope has gone beyond the boundaries of nation-states, memory constantly spreads and travels via various media in numerous forms and is constantly transformed and reconstructed in time and space (Qian and Zhang, 2015). Therefore, memory is a flowing movement, not an object limited by “field”. What exists is not a single-dimensional memory but a multiplicity of memories of various social groups, cultures and power relations (Olick, 2013).

Thus, a new narrative form is needed for memory place-making. Within the Chinese social context, LanD Studio proposed a new approach – design research – which puts architects in charge of memory place-making. This approach enables us to avoid a simple representation of memory. Design research requires us to take the complexity of memory and use it as a premise. We preserve the complexity of memory and turn it into a sharing field and activated agency. Meanwhile, we infuse new values into memory places through a series of actions.

In other words, memory place-making is not about defining objects but rather contemplating the setting of actions and memory as an agency throughout the design research process and being concerned with the mechanism of emergence of memory in place. Design research is oriented towards multi-discipline campaigns of agency and actions and acts as a hub for thought modes and integration mechanisms. In the process of place-making, architects are not merely designers but also integrators who handle issues with assistance from multiple disciplines and channels. This means, as a mechanism, design research makes memory place-making incorporated into the scope of planning and design. The design has entered the relevant social issues and intervened in the place-making.

In the memory project of the NYRB, bridge memory served as a catalyst for contemporary places through academic research and public participation. As the slogan of
the memory project put it: Memory Enlighten Life. No matter whether “Everyone Owns the Bridge for Three Minutes” or the “Bridge Memory Lounge” was the site for memory place-making, these kinds of events or exhibitions were not only a practice to activate the place through public participation but also the practice of urban regeneration.

The difficulty with contemporary memory place-making is how to apply the memory to the public area and to connect the place. Therefore, during the practice, we chose to emphasize the individual level by acknowledging the difference of each unique memory to balance the grand narratives brought by the monumental memory place. Meanwhile, identity can be used as an entry point for design research.

The design studio emphasized that design is not only the expression of memory materials but design enables collective memory to be shared. In this context, the emotional state produced by memory is both the source and the goal of the design. Besides, the importance of media in place-making practice – a critical way of reshaping public memory recognition – cannot be ignored. The medium of transmitting or preserving memory can hardly be affected by material environment. The memory project represents a combination of both physical interference and media in a complementary way to accomplish memory place-making.

Memory place-making should concern the affectional experience of the participation of the subject and identity relations behind these emotional memories according to the different relationships between people. Focus on the individual is the key to design; on the one hand, by establishing social bonds among people and enhancing intergenerational exchanges and cultural recognition among social groups for wider public participation; on the other hand, through a series of activities and exhibitions, the symbolic bridge becomes a catalyst for individual memory, emotions and communication thus redefining the place of the NYRB.

We should consider how contemporary memory place-making should respond to the future or emerging technological and social conditions. As an agency and a tool for place-making, memory not only contributes to the history and culture of the city so that memory place becomes a creative place and has agency to resonate with memory and feelings but also provides an opportunity for city innovation and provides an opportunity for a future-oriented innovation theory of urban public place by exploring the place-making of humanistic-led technology.

Notes
1. Memory Studies, the first academic journal in its field, began publication in 2008, while the Memory Studies Association was founded in the Netherlands in December 2006.

2. LanD Studio is a Nanjing-based think-tank for place-making that carries out design research into emerging urban and architectural issues. It was co-founded by Professor Andong Lu and fellow former Cambridge University researcher Pingping Dou.

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**Further reading**


**Corresponding author**

Zixin Tang can be contacted at: tzx@smail.nju.edu.cn