

Application and Research of Exhibition Design Methods in Urban Public Spaces

— — A Case Study of Commercial Space Design in Jinan University Town

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Abstract: This paper analyzes the multiple functions of the urban public space as a cultural display platform is analyzed and the key position and value of public space in modern urban planning are emphasized in this paper. The conceptual framework of urban public space display is constructed through interdisciplinary research, literature research, field research and deductive reasoning and the valuable experience and inspiration are provided by the analysis of successful cases at home and abroad to urban planners and designers.

In terms of specific design strategies, three methods (spatial nesting, structural cascade and morphological fusion) are proposed in this paper. The spatial nesting enhances the unity and identity of the space by visual multi-level and nesting effects based on the transparency principle. The structural cascade provides visitors with a comprehensive and layered spatial experience by clearly demonstrating the interaction between the structure and the potential structure. As for the morphological fusion, a unified and changing spatial experience is created by repeating and nesting spatial elements on different levels pursuant to the fractal philosophy.

The application of topicality, narrativity and multimedia interactivity of display design in the urban public space design is discussed in this paper. The introduction of topicality can give the public space a unique cultural identity and story background. The narrative design is capable of showing the memory and history of the city, telling the story of the community, reflecting the development vision of the city and showing cultural diversity. The application of multimedia interaction technology can greatly enrich the experience and interaction of space. With Jinan University Town commercial street public space as an example, how the above design methods is applied to the real case is shown. The needs of residents and students are met and the cultural display of Jinan is deepened by embedding the "parade corridor" into the strip square, integrating the concept of "72 springs" in Jinan and the design of cascaded structure and morphological fusion.

Key words: Space Display Design; Spatial Nesting; Structural Cascade; Morphological Fusion; Interactive Design

1. Exhibition Design Practice of the Commercial Street in Jinan University Town

The Design Concept and Application of Spatial Nesting

The core of the spatial design in the commercial street of Jinan University Town lies in the innovative concept of the "Procession Corridor." This design fully employs the principles of

transparency and the concept of spatial nesting. In the central area of the commercial street, the "Procession Corridor" creates a visually layered and deep exhibition space with its unique matrix arrangement of bubble forms. Each bubble unit is both independent and interconnected, symbolizing Jinan's "Seventy-two Springs." Through a transparent design language, they collectively form a dynamic cultural landscape.

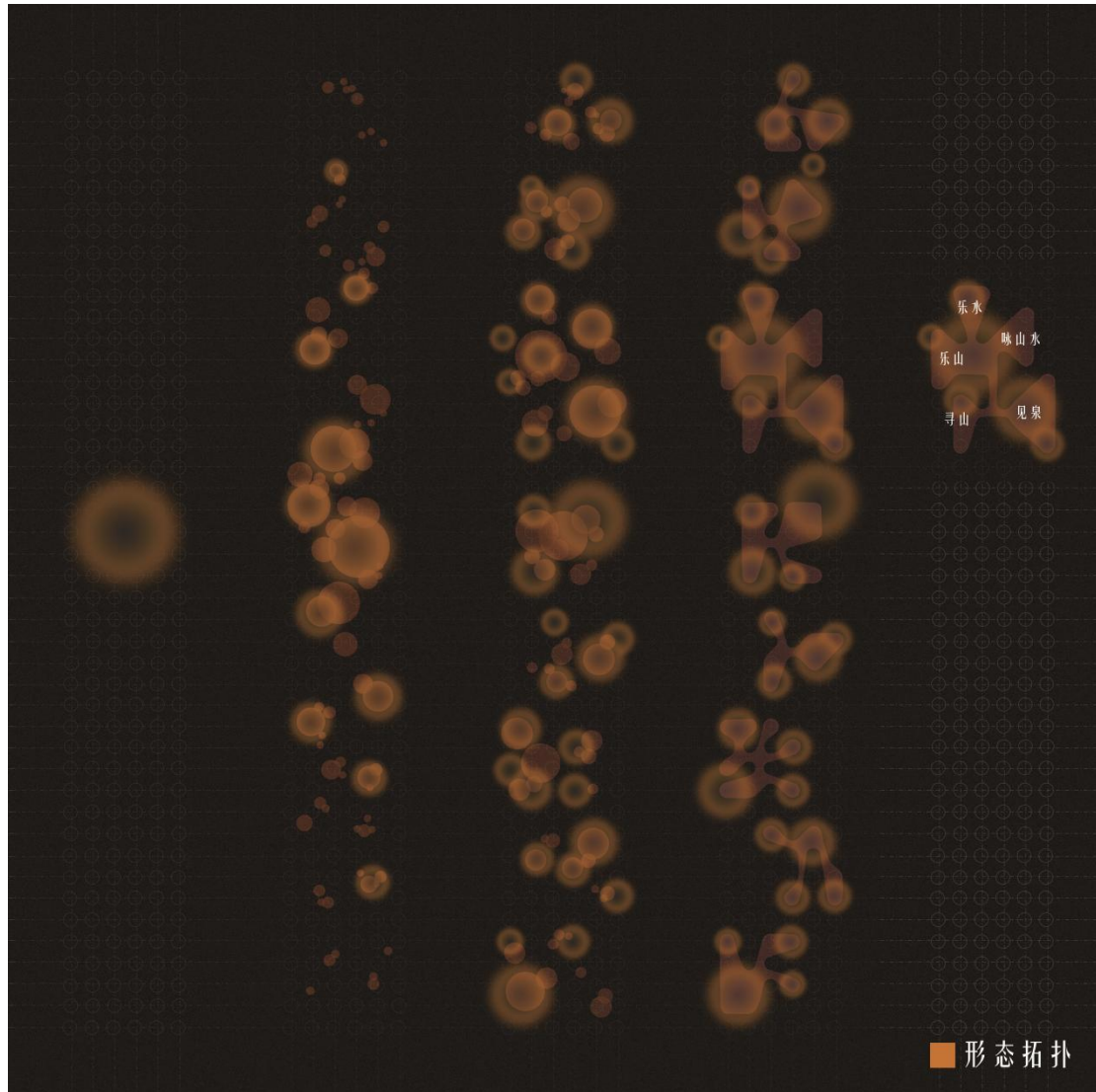


Figure 1. Morphological topology



Figure 2. Design of the Procession Corridor

2. Layout Strategy of Structural Linkage

Within this design concept, the "Procession Corridor" takes on a dual role: it serves as a core exhibition platform for the commercial street and as a crucial structural connection point. By adopting a matrix arrangement of bubble forms, it presents a unique aesthetic with rich visual layers and interwoven elements. More importantly, this corridor cleverly integrates multiple functional areas, such as markets, relaxation zones, and interactive experience areas. This structural linkage not only achieves a seamless physical connection of spaces but also fosters

a deeper exchange and integration of community culture and economic activities.



Figure 3. Structural space



Figure 4. Spring - Playfulness & Markets



Figure 5. Summer - Tents & Camping



Figure 6. Autumn - Art & Strolling



Figure 7. Winter - Sports & Ice and Snow

3. Innovative Practices of Morphological Integration

In the planning and design of the commercial street in Jinan University Town, "exhibition design" particularly highlights innovative practices of morphological integration. Under the theme of "Enjoying the Mountain," the designer skillfully merges the forms of natural rocks with architectural structures, creating a harmonious spatial experience. By mimicking the contours and textures of natural mountain bodies, the curves and folds of the building are brought to life, resonating visually with the surrounding natural environment and emotionally with the observer.

4. Cultural Expression through Narrative Design

In the spatial layout of the commercial street, narrative design enhances the experience of the audience by facilitating transitions between scenes, such as themed areas like "Searching for the Mountain," "Seeing the Spring," "Enjoying the Mountain," and "Enjoying the Water." Each scene acts as a narrative node, allowing the audience to gradually delve deeper into the culture and history of Jinan through spatial transitions and emotional guidance. This design approach not only enhances the narrative quality of the space but also boosts the audience's sense of participation and experience.

5. Integrated Application of Multimedia Interactive Technology

The application of multimedia interactive technology not only enhances the functionality and aesthetics of the commercial street but also fosters social interaction and cultural expression.

Based on this innovative design concept, the commercial street in Jinan University Town has become an important platform for showcasing urban culture, promoting nighttime economies, and enhancing community cohesion.



Figure 8. Night - Music & Evening Events

Based on an in-depth study of the theories of "spatial exhibition" and "urban public spaces," along with analyses of representative urban cases, this paper proposes methods such as spatial nesting, structural linkage, morphological integration, and multidimensional exhibition. By applying these concepts and design methods to current urbanization efforts in China, they provide practical reference value for consolidating urban culture and shaping urban spirit. Exhibitions in urban public spaces have been offering a new perspective and effective methodology for creating unique urban identities and promoting urban cultural development, which holds significant importance for advancing overall urban construction.

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