



Applied Research on Spatial Narrative in Rural Architectural Design

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Faculty of Engineering and Information Technology
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PREFACE

The 17th-century English philosopher Thomas Hobbes, divided regions of the universe into three realms: heaven, air, and earth. Correspondingly, poets have divided the regions of mankind into three regions: court, city, and country.

Traditional rural is a settlement defined by industrial structure (agriculture, animal husbandry), and the rural spatial environment is an important carrier of regional culture. Its development is the solidification process of the social, historical, cultural, and other aspects of the rural. Therefore, large or small Spaces in the rural are implicit in the cognitive code of history, connected with "yesterday" and "today", carrying people's collective memory and nostalgia. The rural itself contains the attribute of narrative, and has the conditions and demands of spatial narration.

Rural architectural space has the temporality, spatiality, dynamic character and story of spatial narration. The regional potential of spatial narrative theory, including historical potential and environmental potential, provides intuitive theoretical tools for the study of narrative space.

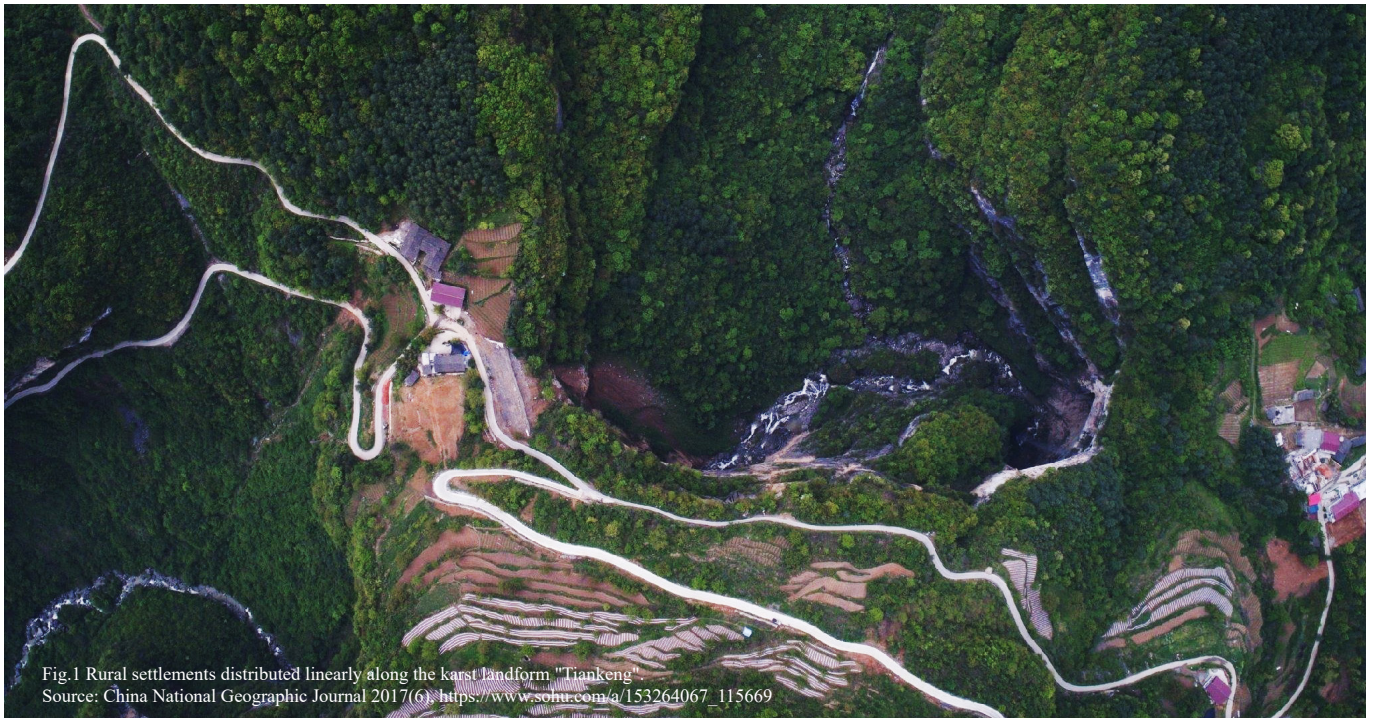


Fig.1 Rural settlements distributed linearly along the karst landform "Tiankeng".
Source: China National Geographic Journal 2017(6). https://www.scribd.com/a/153264067_115669

INTRODUCTION

RESEARCH BACKGROUND

With the development of economic globalization and the information age, architecture has gradually become a kind of seal of politics, capital and culture, and is divorced from the spirit and life experience of the existing places in the region. The modern space production pays attention to the relation of material function and ignores the relation of social and cultural emotion. However, consumers and users in the information age are more enthusiastic about the diversified emotional experience under the aesthetic vision of daily life. At the same time, the functional paradigm of modern architecture is insufficient to measure or interpret the complex relationship and semantic characteristics of pioneer architecture. Therefore, the field of architecture constantly seeks new research paradigm from the interdisciplinary perspective and reconsiders the creative activities of architecture. From the late last century, with the introduction of architecture by postmodern philosophy, semiotics, geographical psychology, phenomenology and cultural anthropology, there has been a cross-research between architecture and narratology.

It was in the 1960s, with Robert Venturi's "Complexity and milling in Architecture (1966)" as the landmark starting point, that architects began to reflect and widely discuss the significance in which modernism has created uninteresting stereotype spaces in the living environments of different cultures, regions and ethnic groups. Aldo Rossi's "The Architecture of City(1966)", Christopher Alexander's "The Timeless Way of Building(1979)", Christian Norberg-Schulz's "Genius Loci:" Towards a Phenomenology of Architecture(1979)", Kenneth Frampton's "Towards a Critical Regionalism: Six Points for an Architecture of Resistance (1983)", Wang Shu's "Fictionalizing City (2000)", etc., all of them focus on spatial connotation from the critical perspective of modernism. Among many theories that reflect on the connotation of space, space narrative provides a new research direction as a multidisciplinary cross-disciplinary architecture theory.

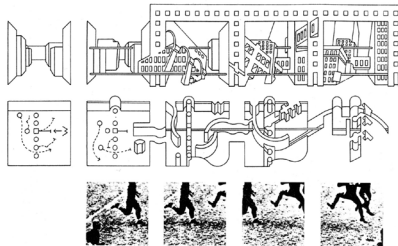
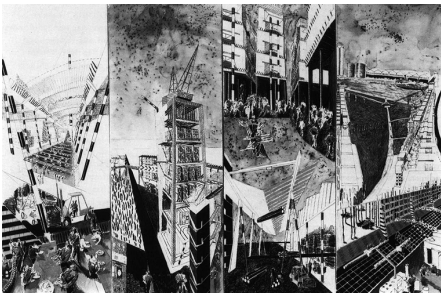
STATEMENT OF THE PROBLEM

It is proposed that spatial narrative can guide the practice of rural architectural design, by introducing the development status of spatial narrative in the field of architecture and landscape. As an economic form, social form and human settlement space, the countryside is not only a carrier of nostalgia, but also a field containing complex problems. In the contemporary era where capital is pervasive, the countryside is a meaningful narrative material that can be experienced, viewed, played with, and consumed. The significance of spatial narration for rural architecture design lies in its application. Using the narrative design of space to realize the internal meaning and external construction of rural architecture.

THESIS STATEMENTS

THESIS 1

Narrative, as a basic way of human cognition of the world and social communication, has accompanied the development of human society. Space narrative, as a kind of design procedures, is a progress of postmodern architecture design. It thinks about the meaning of architecture beyond the ontology, uses the method of spatial narrative to make modern architecture jump out of the "concrete and mortar quagmire", and responds to a series of severe and complex problems in the contemporary context.



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Fig.2 Student project, Giant Sized Baby Town, under direction Nigel Coates.http://www.scapegoatjournal.org/docs/03/03_Moran_LondonPlus10.pdf

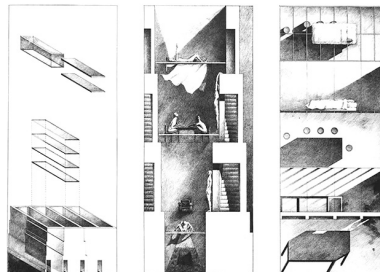
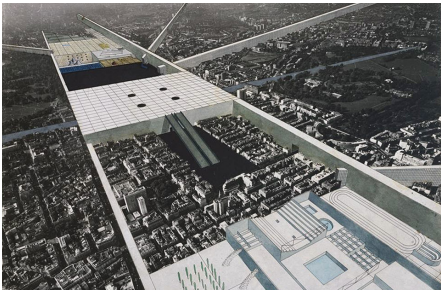


Fig.3 The Manhattan Transcripts. Bernard Tschumi. <http://www.byronlast.com/2013/03/bernard-tschumi-manhattan-transcripts.html>

Fig.4 Exodus, or the Voluntary Prisoners of Architecture. Rem Koolhaas. <https://socks-studio.com/2011/03/19/exodus-or-the-voluntary-prisoners-of-architecture/>

Fig.5 Sketch of a vertical glass house. Zhang Yonghe. <https://book.douban.com/review/8732393/>

THESIS 2

Spatial narrative can present the different social cultures, the spirit and state of human civilization in history. The application of spatial narrative is to incorporate architectural design into the narrative dimension, emphasizing the relationship between the physical space of the building and the spirit of the place, the relationship with the external environment, and the relationship with the experienter (people).

THESIS 3

The combination of narrative theory and rural architectural space design focuses not only on the content of narrative, but also on the inspiration and influence of narrative thinking and methodology on architectural creation ideas. In specific narrative design, spatial narrative design includes three elements: narrative discourse, narrative content, and narrative mode. And through narrative spatial script, spatial elements, spatial structure, narrative space, spatial realm five aspects to carry on the design practice.

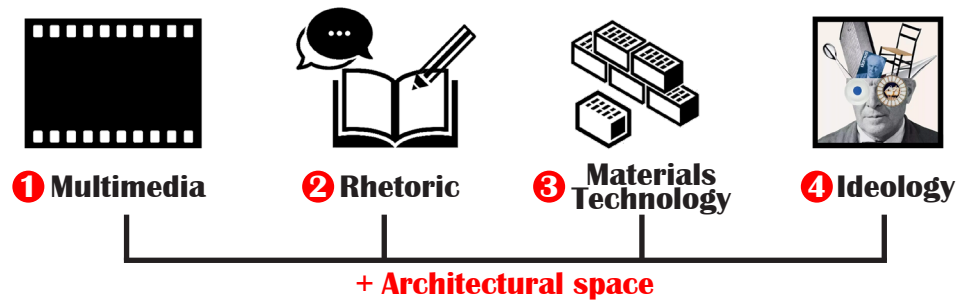


Fig.6 Four Ways Narrativity Intervenes in Architectural Spaces (Draw by author) _Chapter 2

THESIS 4

The unique history, culture, customs and architecture of the countryside provide materials for spatial narrative design. These materials become the expression elements of the rural architectural space, arousing the emotional resonance of people. Therefore, the countryside is the appropriate object of spatial narrative design, and the study and application of spatial narrative are helpful to and guide the rural design and practice.

The spatial design of rural architecture from the perspective of narratology can be understood as the translation from connotation to space.

1.The design of spatial sequence is the direct materialization of the narrative plot, so the analysis of the literary narrative plot can guide the design of the spatial sequence.

2.The atmosphere experience of space is analyzed from the information transmission level of "narrative discourse" of architecture, and involves the operation of "narrative perspective" theory in space.

3.Spatial elements are the materialized results of "narrative discourse", which can be classified and analyzed to propose how to enhance the narrative expression potential of each spatial element.

Table 3.2 The Composition Mechanism of Spatial Narrative (Summary by author) _Chapter 3

Program	Content	
Spatial Script (Text)	Narration Theme	Historical/ Natural/ Realistic/ Future orientation
	Scenario Organization	Sequence: Normal/ Negative/ Anachronous/ Parallel
	Spatial Scale	Height perception/ Width perception (Ceiling, Wall)
Spatial Elements (Story)	Spatial Shape	Flowing Cavity space/ Fractured & Weightless space/ Gestalt Space
	Spatial Opening	Door/ Window
	Spatial Nodes	
	Spatial Ramps	
Spatial Organization (Time)	Surface Structure	Single-stranded: Limitative/ Paralle/ Series/ Cyclic structure Multitink/multiple strand: Radiative/ Nested/ Multi-thread synchronization
	Deep Structure	Hyperlink: Three-Dimensional spiral/ Three-Dimensional Mesh/ Segregate Form body to Mind/ Form function to memory
Narrative Space (Action)	Material	Traditional materials/ Modern materials
	Technology	
	Spatial Meaning	
Spiritual Realm of Space (Spirit)	Rhetorical Strategy	Metaphor/ Contrast and Repetition/ Collage/ Irony and Exaggeration/ Suspense
	Perceptual Expression	Vision/ Hearing/ Touch/ Smell and Taste
	Natural Medium	Water/ Shadow/ Wind, etc.

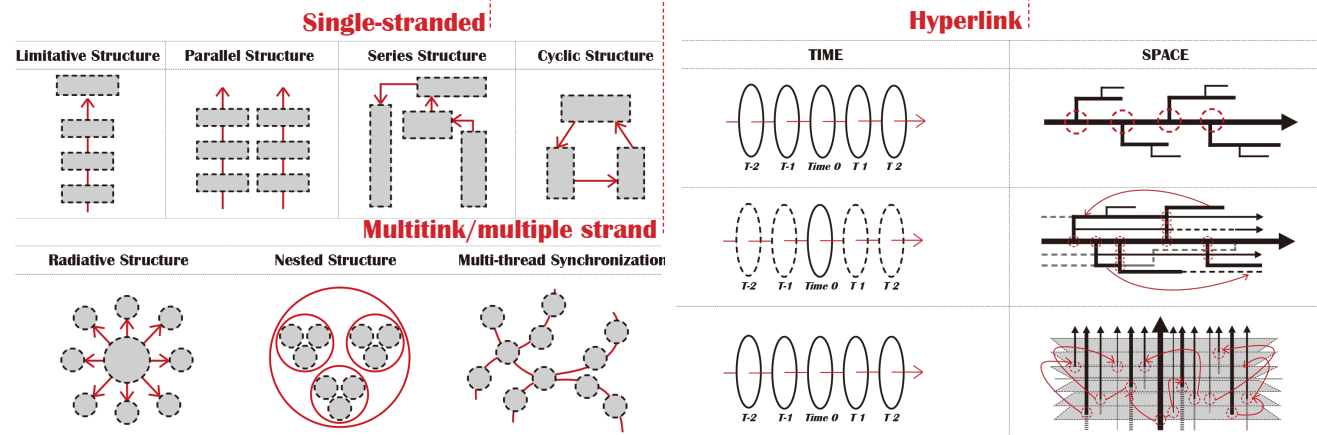


Fig.7 Single-stranded diagram (Draw by author) _Chapter 3

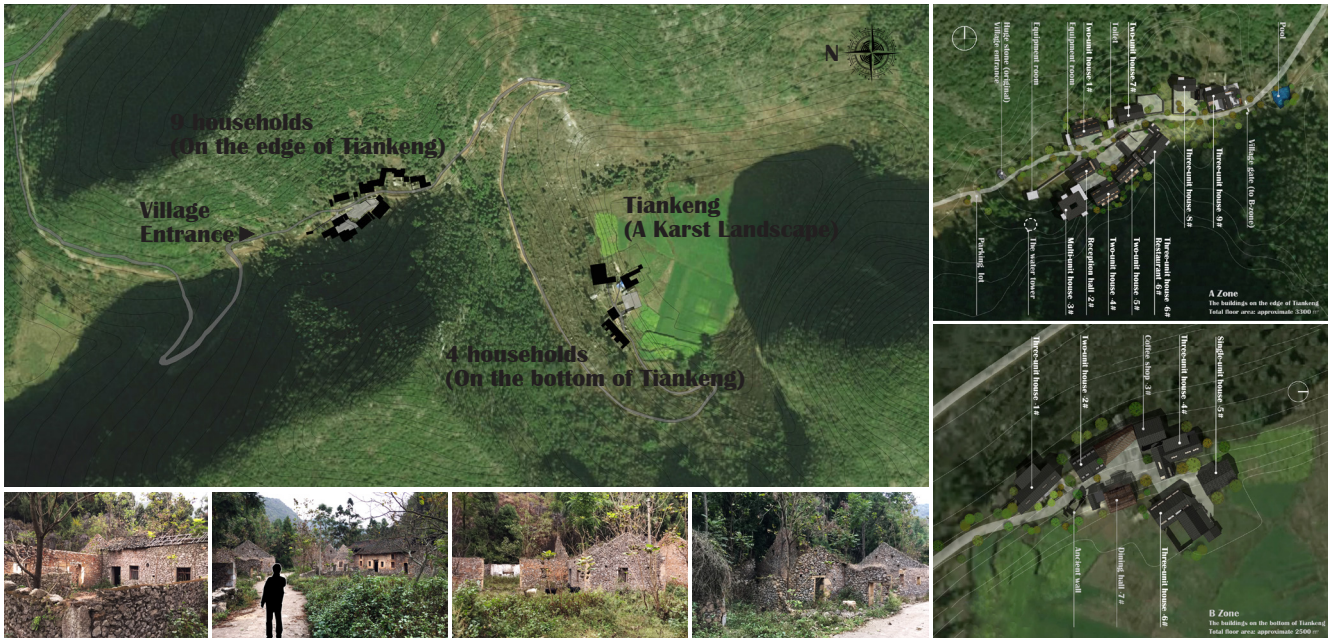
Fig.8 Multitink/multiple strand diagram (Draw by author) _Chapter 3

Fig.9 The Process Of Narrative Structure From Linear To Nonlinear (Draw by author) _Chapter 3

THESIS 5

Symbiosis strategy and place theory run through the spatial narrative application design of rural architecture. The symbiosis of New-Old Building, and the symbiosis of Architecture-Environment, is to regard the traditional village space as "human-architecture-nature" at the level of design strategy as the overall symbiosis of three symbiotic units and the village environment. The sense of place (local) and local construction is to emphasize the local natural environment elements and historical and humanistic elements in the design practice. It includes protection and restoration of the original natural landscape pattern, reproduction of architectural texture, restoration of architectural space, excavation of local context, protection of customs and customs, innovation of cultural characteristics and so on.





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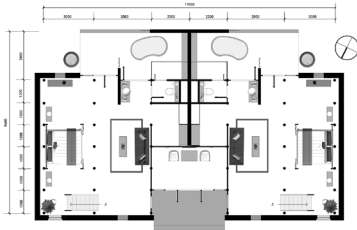
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Fig.12 Existing Building Plan of Stonemason Village. (Draw by author) _Chapter 4

Fig.13 Stonemason village field survey status. (Photographed by author) _Chapter 4

Fig.14 The Master Plan-A Zone of Stonemason Village - The buildings on the edge of Tiankeng. (Draw by author) _Chapter 4

Fig.15 The Master Plan-B Zone of Stonemason Village - The buildings on the bottom of Tiankeng. (Draw by author) _Chapter 4



Building Floors: Two
 Building Structure: Slate house (Column and tie construction)
 Building Materials: Wood and Stone
 Guest Room Number: 2

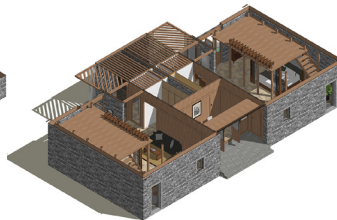
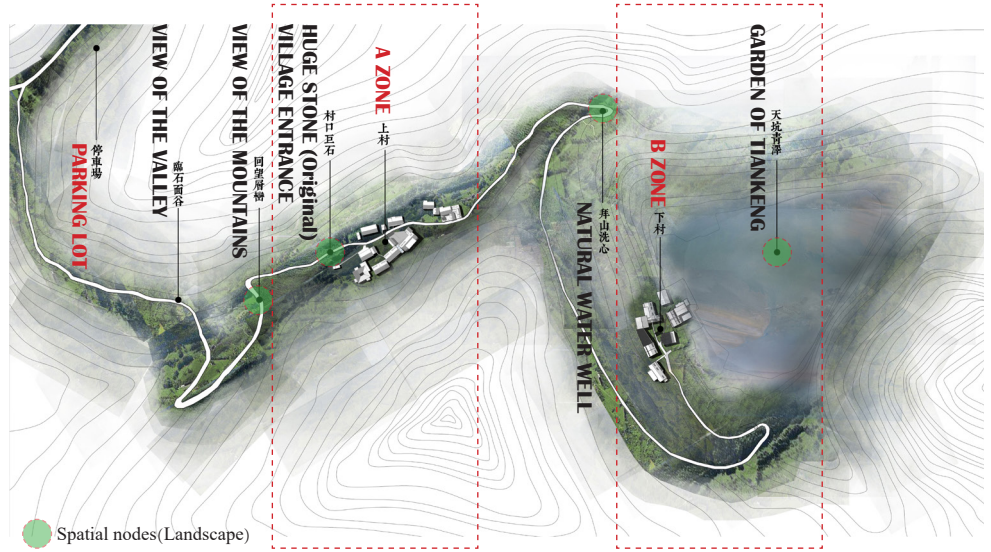


Fig.16 The Master Plan- Stonemason Village. (Draw by author) _Chapter 4

Fig.17 First Floor Plan of Two-unit house·1#, 4#, 5#. (Draw by author) _Chapter 4

Fig.18 Elevation of Two-unit house·1#, 4#, 5#. (Draw by author) _Chapter 4

Fig.19 Axonometric of Two-unit house·1#, 4#, 5#. (Draw by author) _Chapter 4

Fig.20 Sectional View on First Floor of Two-unit house·1#, 4#, 5#. (Draw by author) _Chapter 4

Fig.21 Sectional View on Second Floor of Two-unit house·1#, 4#, 5#. (Draw by author) _Chapter 4

Fig.22 Interior Design Rendering of Two-unit house·1#, 4#, 5#. (Draw by author) _Chapter 4

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Fig.23 Using the traditional Chinese painting style, the village narrative scenario is designed in a collage way -Architectural renderings of A-Zone of Stonemason Village. (Draw by author)_Chapter 4

Fig.24 Using the traditional Chinese painting style, the village narrative scenario is designed in a collage way -Architectural renderings of B-Zone of Stonemason Village. (Draw by author)_Chapter 4