

A STUDY ON THE LANGUAGE SYSTEM OF HAKKA ENCLOSED HOUSES IN SHENZHEN

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ABSTRACT

Hakka enclosed houses are one of the five major dwellings in China and are a typical manifestation of Hakka culture. Today, the traditional form of family living has disappeared, and many of the enclosed houses are no longer inhabited. As a result, a large number of existing relics are deteriorating. Therefore, it has become an urgent research topic for us to find effective ways to protect and reuse this valuable regional cultural specimen, as well as to apply its architectural language to modern design. However, during the process of concrete practice, many designs lack depth and only focus on surface aesthetics. Therefore, this paper aims to explore, from a modern perspective, the following: studying the typological characteristics of Hakka enclosures, reviewing important literature and theories on architectural design language, and constructing a scientific research system for Hakka enclosed houses' architectural language. Qualitative and descriptive research, literature review, field investigation, and observation were used to collect data. The research results were then analyzed, focusing on the contents and main points.

Keywords: Enclosed houses, Architectural languages systems, Hakka culture

INTRODUCTION

With the process of global integration and the rapid development of science and technology, new buildings and interior forms are emerging one after another. Due to the different times, there are also differences between modern architecture and ancient architecture. However, no matter how our way of life changes and how the times move forward, we can never separate ourselves from the relationship with historical tradition. We are always in the interweaving of history and reality, always a unity that combines tradition and reality (Zhang, 2004). Due to the influence of the "international style," the regionalization and nationalization of interior design in our country are being marginalized. Therefore, it is crucial and urgent to explore a systematic design methodology theoretically. This paper aims to construct the Hakka enclosed houses architectural language system and tries to find a scientific, reasonable, feasible, and effective way to elaborate and analyze this issue. It carries out exploratory and tentative research and analysis on the system of enclosed houses architectural language, aiming to achieve certain reference and operability.

Research objective

To analyze the architectural language of Hakka enclosed houses, sort out the type characteristics of enclosed houses and the development and application of architectural language, and build the system of Hakka enclosed houses architectural language in Shenzhen.

LITERATURE REVIEW

1. Research theoretical basis

1.1 Study on Hakka enclosed houses in Shenzhen area

In July 2000, Shenzhen participated in hosting the "2000 International Academic Seminar on Hakka Dwellings" as one of the host cities, and the conference proceedings included many papers on Hakka dwellings in Shenzhen. In 2001, Yang Yaolin, director of the Shenzhen Museum, and Huang Chongyue, member of the China Cultural Relics Association, published the Hakka Fortress in Southern Guangdong, which showed the world the style of more than ten large walled buildings in Longgang area of Shenzhen. In June 2002, Professor Liu Lichuan from Shenzhen University published a Study on Hakka in Shenzhen, which studied the origins and development of Hakka dwellings in Shenzhen by taking the Huang clan in Kengzi area of Longgang as a case study, and sorted out the historical origins and development of Hakka dwellings in Longgang from the perspective of clan development. This book is the first book to comprehensively and systematically introduce the history and culture of Hakka in Shenzhen, and has actively promoted the dissemination and popularization of local Hakka culture (Yang, 2011).

1.2 Architectural Language

The study of architectural design language starts early and goes deep. Starting from the proposition that "architecture is not a language", many scholars have put forward different views. There are three main views: architecture as a language, architecture as a language, and architecture as not a language. As far back as 1745, Germaine Beaufland wrote in his Essay on Architecture: "The molding and other components that make up a house are to architecture what words are to language." (Collins, 1987). Here, "architave" is compared to "word", establishing the corresponding relationship between architecture and language, and the view that architecture is analogous to language.

In 1860, Seza Daly proposed that "architecture is a language", connecting the architectural styles formed in history with the changes that the language has undergone (Bu, 2000).

Cesare Brand believes that architecture is architecture, in addition to the inherent laws of its own structure, it is only an important pile of bricks, wood and stone, and nothing else. He urged people to decisively abandon the analysis of architectural semiotics. This argument denies that architecture has cultural significance and goes against the universal meaning that architecture has both practical and spiritual functions.

From the end of the 19th century to the beginning of the 20th century, the semiotic Moki Ferdinand de Saussure also used architecture to explain the problem of language, and the columns and beams in the architecture are symbols, and the relationship between the components can be a sentence relationship, association relationship, etc.

In the 1960s and 1970s, it was the heyday of the development of architectural theory, and the debate about architectural language was endless. John Samson's "The Classical Language of Architecture" (1964) fully affirmed the language of columns and proportions in classical architecture, and recalled the language of classical architecture in the era of modern architecture. Bruno Sevay's The Language of Modern Architecture (1973) contradicts Samson by arguing that classical architecture is not a language, but that the language of modern architecture is a universal rule and method of emerging from history. Saivie emphasizes

modern architectural language such as function, asymmetry and timeliness. Charles Jenks's *The Language of Postmodern Architecture* (1977) emphasizes the "double decoding" of architectural expression, using the term "postmodern" to refer specifically to "designers who are aware that the art of architecture is a language." Table 1 summarizes classical, modern and postmodern vocabulary, grammar and context. Some people will summarize the architectural language, get the pattern language, image language, space language and so on. The research of this period draws on the concepts and methods of linguistics, pointing out that architectural language is a readable text.

Table 1 Development of architectural design language

Content	Classical	Modern	Post-modern
Vocabulary	Column type, Arch	Ground level elevated, Long lateral Windows, Separate pillars, Roof garden	Historical element, Architectural symbols
Grammar	Parallelism, Symmetry, Rhythm	Function, Asymmetry, Flow	Emphasis, Metaphor, Symbol
Context	Tadition	Transform, Develop	Double decoding of classical and modern

Source: Canhui Xia

CONCEPTUAL FRAMEWORK

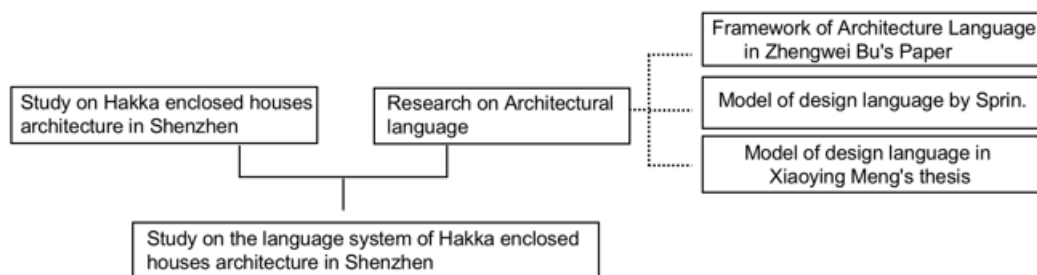


Figure 1 Conceptual framework

Source: Canhui Xia

RESEARCH METHODOLOGY

In this study, researchers established a research framework and adopted qualitative and descriptive research methods, including literature review, field visits, data collection and analysis.

Step 1: The research scope of the research object is as follows: First, consult Hakka related literature and collect a large amount of information about the construction of Hakka enclosed houses in Shenzhen. The second is field investigation, close observation of the status quo and application of Hakka enclosed houses in Shenzhen, collect the types, styles and cultural information of enclosed houses.

Step 2: Through literature research, collect and study books and documents related to architectural language, such as classical architectural language, modern architectural language, and the application of architectural language in practical design cases. Through the field investigation of "Hongwei" and "Hechu New Residence" in Shenzhen, the types and main

composition of enclosed houses were collected. Visit the Hakka Museum of China to gather information about the language of architecture.

Step 3: Collect relevant data through qualitative research and then conduct data analysis. The researchers classified and analyzed the data into the following three conditions:

1. Descriptive analysis. This paper introduces the concept and application of Hakka enclosed houses and architectural language. Through collecting the materials of the enclosed houses, architectural language, field investigation and observation records, the paper summarizes the types and characteristics of the enclosed houses and the meaning of architectural language.

2. Classification and analysis. This study will analyze the design language system on the basis of language.

3. Comparative analysis. According to the development and application of design language, this paper makes a comparative analysis on the content of architecture language and landscape design language.

Step 4: Summarize. The conclusion can be drawn by studying the theory of Hakka enclosed houses and architectural language.

RESEARCH RESULTS

1. The enclosed houses

The enclosed houses, the traditional residence of the Hakka people. It is a large residential house built by Hakka people to gather together. All enclosed is closed by strong walls, some in the four corners of the turret, the front door as the main entrance and exit, usually made of trinity earth, pebble or black brick masonry (Figure 2, 3).

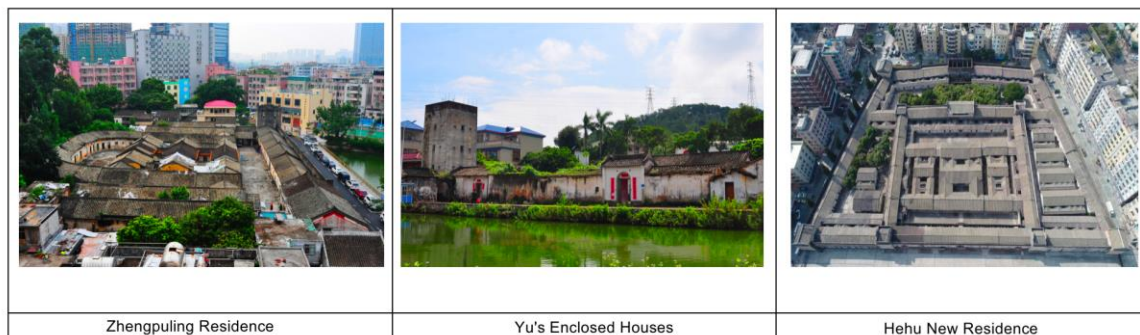


Figure 2 Hakka Enclosure in Shenzhen

Source: Baidu

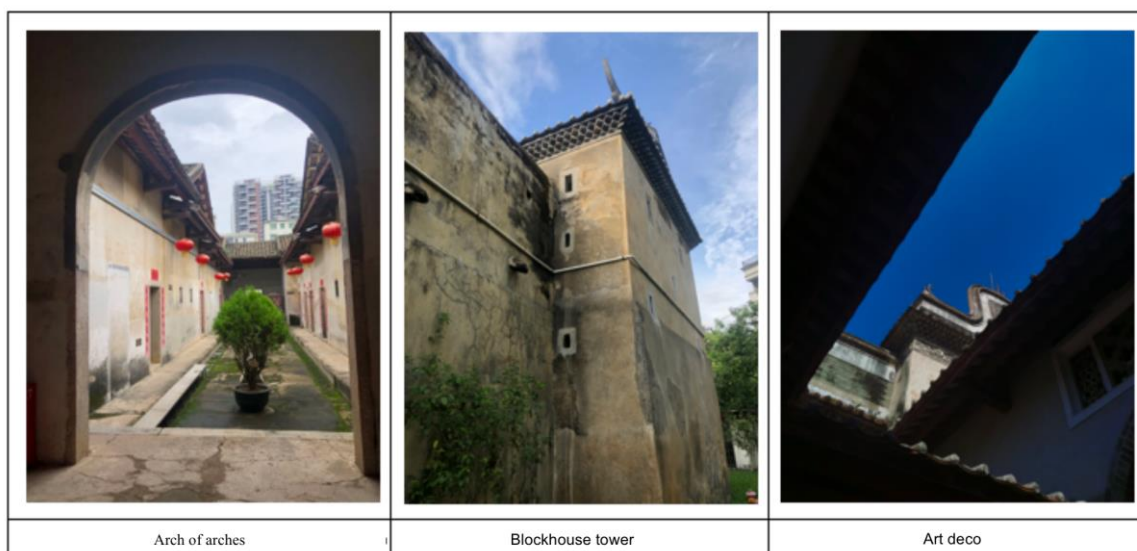


Figure 3 Part of the Hehu New Residence

Source: Canhui Xia

According to the cultural types of historical buildings, there are the following categories:

1) Huizhou types of Hakka system: Dawanshiju, Hehu New residence, Longtian Residence, Qingpai residence Residence.

2) Hakka system Xingmei types: Hongwei, Chengdou Nei Wei, Longwan Residence, Toyota Residence, new Qiao Residence.

3) The Hakka use of Guangfu type of enclosed houses: XiKeng enclosed houses, Nanling enclosed houses, JiXia Lao enclosed houses, Wangmu enclosed houses, Tangkeng enclosed houses.

4) Hakka imitation Guangfu type enclosed houses: seven star house, Jane Lake house, Tianxin house.

5) Heyuan type of Hakka system: Wangtongshan Bell clan enclosed houses, Ma LiuDongsheng enclosed houses.

On the whole, the Hakka enclosed houses in Shenzhen usually consists of an outer enclosed houses part and an inner core part, both of which are composed of the building and the site space, and generally have a relatively regular left-right symmetry (Figure 4). The following are the main components of Hakka enclosed houses in this area:

- 1) Core buildings: ancestral hall and hall.
- 2) Enclosing residential buildings.
- 3) Turrets.
- 4) Inner space.
- 5) Wo Ping and Feng Reservoir.



Figure 4 Master plan of Hung Wai
Source: Hakka House and Culture in China

2. Architecture design language system

Design language is also a kind of communication tool for human beings, and it is a symbol and tool for human beings to express and transmit design ideas. Design language does not have the sound shell of language, but only contains two systems of vocabulary and grammar. There are many kinds of design languages: programming language, architectural design language, landscape design language, and so on.

Just as language is composed of vocabulary and grammar, design language also has corresponding language rules, but because the structure of design language is more complex than that of ordinary language, the academic community has not formed a unified understanding. Some scholars put forward their own views on the content of design language and landscape design language, among which Bu Zhengwei, Spahn and Meng Xiaoying systematically put forward their own content and framework.

2.1 Zhengwei Bu's architectural language framework

In 2000-2001, zhengwei Bu published a series of articles on architectural language in *New Architecture*. He draws on the system of linguistics, which consists of words, sentences, paragraphs and chapters to form the core part of the structural framework of architectural language. Words are the smallest units, including such things as doors, Windows, walls between Windows, cornice, pedestals, steps, beams, columns, etc. When we connect some words in a certain order, we form a complete composition unit - sentence; the sentences are connected according to certain rules to form paragraphs. Then, this core part is associated with its extensional content and features - semantics, morphology, style and context, and then the architectural text is formed through rhetoric, forming the framework of architectural language, as shown in Figure 5. This constitutive system is obviously influenced by Morris's semiotic thought, focusing on the transmission of symbols and meanings through architectural language, and finally forming an excellent architectural text (Bu, 2000).

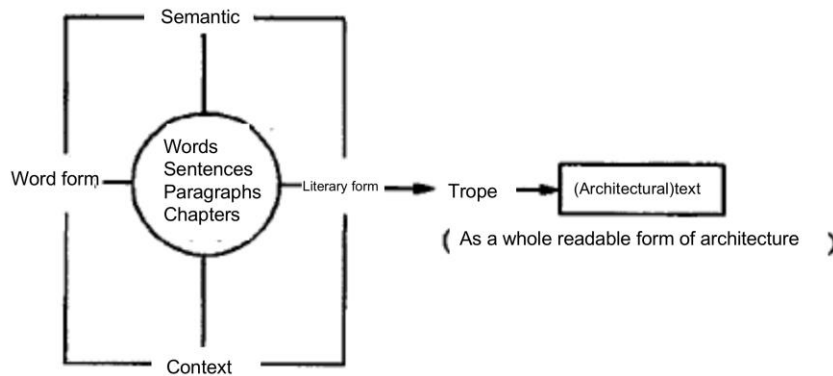


Figure 5 Framework of Architecture Language in Bu Zhengwei's Paper
Source: Zhengwei Bu

Zhengwei Bu also describes architectural language as the first system of the form language of space entities and the second system of the picture language of environmental scenery. The first system includes the form, light, color, texture, etc. that make up space, which basically belongs to the category of language and form; the second system includes environmental factors such as landscape, furnishings, painting, sculpture, etc. Only by integrating these two systems can a good design be formed. Zhengwei Bu also elaborated on the grammar of architectural language, which includes three parts: lexical rules, grammatical rules and rhetorical rules, and is further divided into several sub-categories to comprehensively summarize the content of grammar (Bu, 2000).

2.2 Spahn's landscape language framework

Spahn expressed the content of landscape language in Landscape Language as landscape elements, landscape context, landscape grammar and landscape application, among which the application of landscape is divided into pragmatics, landscape poetry and dialectics. This content construction method is roughly carried out according to the linguistic model of lexico-grammatical-language use. In addition to the physical elements, Spahn pays more attention to the non-physical elements such as sky, clouds, sound, wind and smell, taking people as the starting point and emphasizing that the landscape is a dynamic process. As shown in Figure 6.

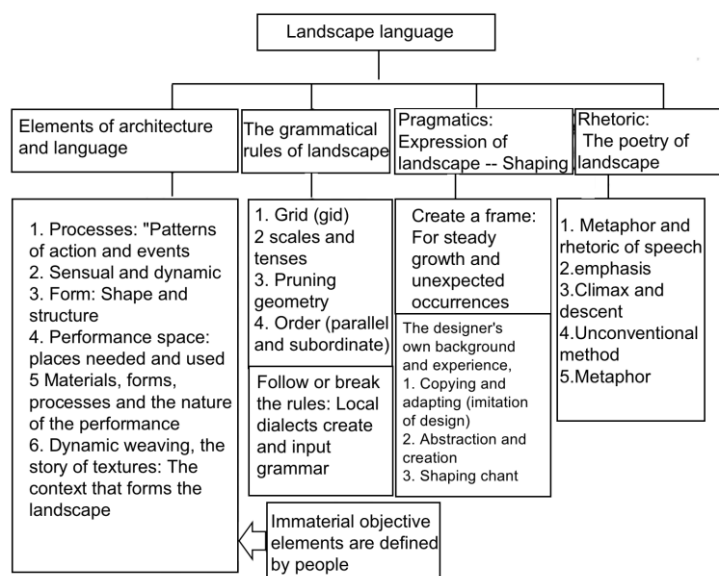


Figure 6 Model of design language by Sprin
Source: Xiaoying Meng, 2006

2.3 Xiaoying Meng's landscape language framework

In the process of studying Nordic landscape architecture and design language from 1920 to 1970, Xiaoying Meng referred to the basis of previous works and constructed the basic framework of landscape architecture language from vocabulary and grammar rules. Vocabulary includes both material elements of landscape architecture and abstract elements, that is, forms expressing material elements, such as geometric shapes, reflecting the characteristics of Nordic modernist gardens. Grammar rules are the expression of the combination of garden elements. As shown in Figure 7.

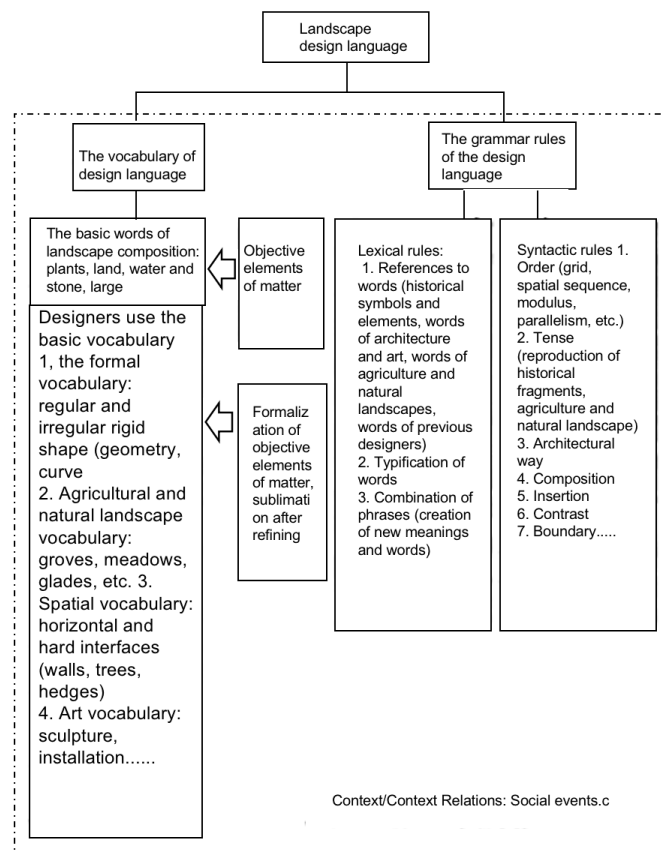


Figure 7 Model of design language in Xiaoying Meng's thesis
Source: Xiaomei Meng, 2006

2.4 The framework of architectural language of Hakka enclosed houses in Shenzhen

From the above analysis, it can be found that each person has a different framework for the content of design language, which is mainly affected by the back enclosed theory and research purpose. In general, there is no fixed opinion on the content and hierarchical structure of design language in the academic community, and there are great differences between them.

The object of this study is the architectural language of Hakka enclosed houses in Shenzhen, and the main research is to try to combine these design elements that can represent the architectural language of enclosed houses in Shenzhen with modern interior design, to breed new content in the existing tradition, to find out the compatibility point with history from the characteristics of The Times, and to express it in modern interior design. So as to realize the inheritance and application of the architecture language in modern interior design, it has a clearer purpose and directivity, and is more characteristic. There are many unique architectural elements and design techniques in Shenzhen Hakka enclosed houses, which are rarely seen in other types of architectural, so the architectural language of Shenzhen Hakka enclosed houses

is built from this starting point. As a subset of architecture, the scope and content of the Hakka enclosed houses architectural in Shenzhen are more specific than that of the whole architecture research. The research scope is narrowed down and the goal is more clear, so it is suitable to build a more simplified and specific framework.

The architectural language of Hakka enclosed houses in Shenzhen is composed of two parts: structural frame system and composite system. The vocabulary in the structural frame system: refers to the architectural elements, which are analogous to the building components and are the basic units of the building; Grammar: includes syntactic and rhetorical content, mainly studies the combinatorial relations between words, with emphasis on spatial organization and formal coordination. The composite system in composition includes the first system of the form language of the spatial entity and the second system of the picture language of the environmental scene (Figure 8).

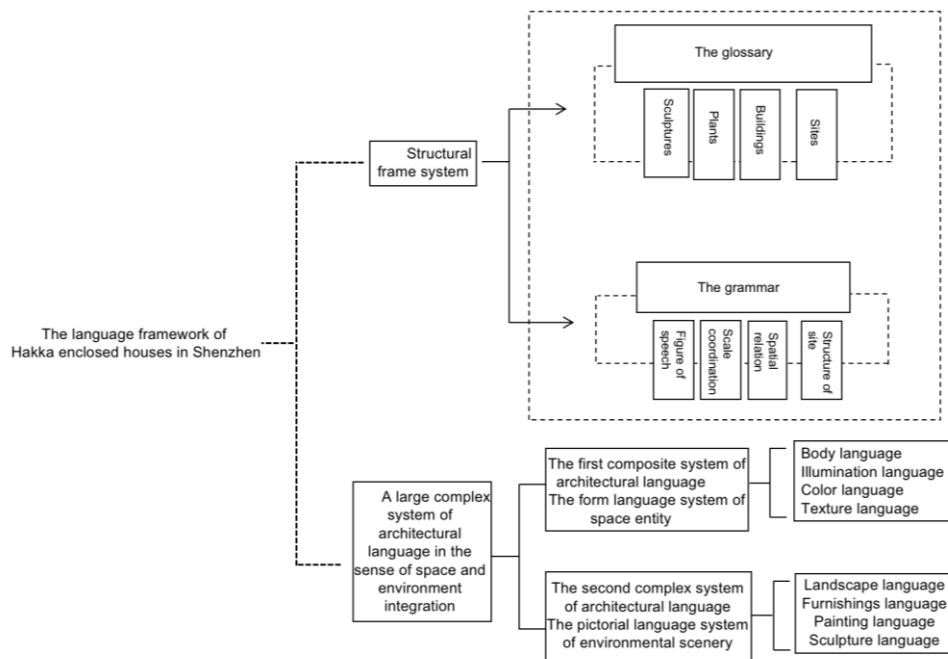


Figure 8 Hakka enclosed houses in Shenzhen
Source: Canhui Xia

CONCLUSIONS

Starting from the design language, this paper constructs the whole system of Hakka enclosed houses architecture language.

1. Define the concept of enclosed houses architecture language.
2. Summarize the characteristics of the enclosed houses architecture.
3. This paper summarizes the development of Hakka enclosed houses architecture language
4. Put forward the system of Hakka enclosed houses architecture language.

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