The New Directions of Typological Study in Han-Houses

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Abstract: There are three fields in the development of typological study: first is the debate on architectural theory for establishing design method. Its purpose is “creation”; the second is based on a viewpoint that types mean the deep structure. They thought types as species and classified with system. It in tent to seek the deep understanding, it’s a “research”; and furthermore, New Urbanism that use types as the language of urban design, aim to “control” environment by analysis on type. Anyhow, at the viewpoint of types as the social entities, the deep understanding on types conduces to the debate on such social and cultural issue, therefore, this article will focus on “type control” on traditional environment.

In the view of types mean the deep structure; it reveals that a new direction will be established necessarily on typological studies, especially in Han-Housings researches: types have to be classified, by their deep structure. They can be differentiated, but cannot be separated absolutely and simply at the same time. Inevitably, typology will move toward complexity.

Key words: typological study, understanding, classify, descriptive language, evolution

1. The Development of Typology

In architectural typology: time, geography, race, ethnics, function, and structure are considered major categories whereas formation is among the minor categories. However, function and structure fail to give an in-depth picture of the essence of the category. J.N.L. Durand embarked on the categorization with geometry, hoping to get beyond simple descriptive categorizations and to analyze the significant features. Geometry proved to be an effective approach to formal study. In the 19th century, De Quincy laid the foundation of typology and claimed that topology is the transcendental nature where architecture is embodied. He debated on the origin of architecture and asserted that form came from form; architecture is a conventional conception with which the common opinions for the society are expressed. Therefore, history is composed of series of derivation.

In general, typology throughout its development, can be categorized into three fields. The first area is the models of architectural theories, derived from J. N. L. Durand’s geometrical analysis and modern scholars’ (e.g. Aldo Rossi) design methodology. These models serve for the “creativity” targeting architecture and city. The second area of typology is the retrospection by John Habraken and Guido Francescato in the 19th century on De Quincy’s statement that typology is a set of essential internal structure. According to the retrospection, types are considered species of spatial forms and the environment is comprehended systematically, with the purpose of “conducting comprehensive research” on the target species. Finally, the typological language adopted in New
Urbanism and architectural management for the use of urban design serves to “restrict.”

2. Typology of Houses

Traditionally, houses are not the theme of architectural research. The history and theories of architectural research had been lacking systematic methodology until the second half of the 20th century when typology revived in Europe. The residential research is partially based on the collection of fundamental data and anthropological argument. The pioneers of Chinese residential research are Dun-chen Liu and Zi-ping Liu, whose research is mainly on commonly descriptive categories like time, geography, ethnics, and geometry. The research has provided substantial data, although efficient system is still needed.

Therefore, a new typological method on Han-Houses is required. Typological research seeks to read the structure more deeply in addition to comparison and description. Only with the knowledge can we distinguish the categories and the relationships among types, which are referred to as the essence of evolution among types shown by relationship.

3. New Directions of Typological Study

3.1 Derivation of Types

Derivation of types includes the range of types. Typology is not a fixed form. Instead, the system of typological description is capable of spontaneous derivation, whose examples may be found but not have the opportunity to be presented. Take the model of Han-Houses as a simple example. In the typological description system, the prototype is the model of “one bright and two dark” facets and the rules of growth and termination are included. There are indeed real cases that are derivative of the growth rules. A massive group of residential housing was found in Gushan Town, Yong-chen, Fujian Province, without finishing of spatial form but with complete finishing of the exterior appearance, which shows great extent of social consensus.

![Diagram of typological study](image)

Figure.1 Rules of growth and termination of the model of Han-Houses

3.2 Evolution of Types

Three linguistic-like issues emerge when architectural typology and linguistics are combined: origin, evolution, and use. Evolution becomes an inevitable process of residence as a living being. The discussion of the origin is beneficial to the understanding of the evolution and type differentiation. With the identification of the prototypes, we can understand the internal momentum of and historical change at different times in the situation where the types alter by itself or hybrid with another. From the typological perspective, the relationship between residence and ethnics is simply corresponding. Compared to the villages of foreigners, the architecture of those of locals is not transplanted completely. As for the discussion of origin, the San-ho-yuan1 (Fig 2.) of Taiwan and

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south-east area in China shares the same concept of wings. The wings with more than ten rooms in southern Taiwan that never appeared in China but are predictable derivative forms according to the rules of derivation. The house types in the original villages have been mixed with the San-ho-yuan due to the immigration to Taiwan, immigration scale, or construction-related factors and thus appear in various forms in Taiwan now. The hybrid structure can be found in massive buildings like Rong-de-tang in Yuan-lin of Taiwan (Fig 3.).

As for the observation of semi-autonomic evolution of form, the relationship between form and construction is identified. Take the type-(wei-long-wu) of Hakkha as an example (Fig 4.). The half-moon pond in the front and the half-circle room behind the main building form the concept of “surround,” meaning the core building encircled by the other buildings. The concept can also be found in Taiwan. The residence in middle of Taiwan, with the same ancestral origin, tries hard to imitate the form of wei-long-wu in the original villages, but obviously the techniques did not move along with the form. Although the residence has been greatly influenced, wei-long-wu was presented as the circular boundary behind in middle of Taiwan. The concept of “surround” can be seen as a formal concept which exists in response to social need. This concept of spatial form has been constantly interpreted with entity. Obviously, formal concepts can still be detached from constructed buildings and be represented even after the disappearance of construction technology. Furthermore, the same example of wei-long-wu can be applied to illustrate the relationship between form and use.

4. Descriptive Language of Type

According to the theories of typological research, the first step to construct knowledge is to describe the target under research. As a social entity, typology includes geography, living, spatial form, entity form, and decorative language. The new direction of typological study at Han-Houses must carry multiple meanings at different levels, emphasizing space allocation, and procedurally and comprehensively describe the changing patterns and relevance between types over time. For this reason, there are five layers of the coding of Han-houses:

1. Base Schema -- space allocation that determines their belief, tradition, and liberation of dwellers, as concept: “surround” that mention above.
2. Operational Schema -- operational procedures regarding space allocation.
3. Form Tactics -- structure and techniques.
4. Building Tactics -- structure and techniques.
5. Surface Program --
imagery. These five layers could be relevant or irrelevant to each other at different levels.

Therefore Base Schema decides the coding of space allocation conceptually, and Operational Schema accomplishes it. As a matter of fact, most of the formative differences of the same type of houses were due to different conditions at the time they were built. The Operational Schema, second to the concepts of Base Schema, might have to be adjusted or modified according to the conditions then.

With dynamic and multiple-layered descriptions, the new typological study is able to record the procedures of the development of Base Schema and Operational Schema. And since the Operational Schema always had been adjusted according to practical conditions during construction, dynamic and multiple-layer descriptions are to replace the shape grammar that is apt to describe forms and techniques. Unlike the research on architectural forms, this study emphasizes the planning and building concepts and goals of Han-Houses. The typological coding is not suggesting deconstruct or reconstruct every element of each study object. In fact, descriptions of building concepts are to present the diversity of forms; consequently they can’t be used as absolute and reversible productive language.

Though this study follows a part of the absolute categories condition that pioneer research has set up, there are still many contradictions and disagreements between them. The goals of this study attempts to propose a more flexible category system in order to fully present the complex reality of types.

4. References and Citations