

Chapter 3

METHODOLOGY

The methodology of this research is composed of four principal parts as follows;

3.1 Documentary Research

The documentary research was conducted to obtain the background and history of HTGHs. It also includes policies, laws and building codes relating to the construction of HTGHs, and the socio-economic conditions affecting to the formation and transformation of HTGHs. Besides, all forms of data such as reports, newspaper articles, old pictures and photographs of immediate relevance to HTGHs will be collected and used as basic source materials. These data, however, will be checked for completeness, reliability, and relevance to the research problem.

3.2 Making Base Map

The map of Hue Citadel drawn in 2000 by City Planning Institute of Hue Provincial Office is utilized in this research as the base map for making field survey (Fig. 3-1). The map will be rechecked with the real present condition to produce accurate and reliable base map showing all surveyed HTGHs in the citadel area. In addition, the maps of Hue citadel produced in various periods are used in the research as the reliable sources for considering the relationship between Hue citadel and HTGHs within the area.

3.3 Field Survey

The research is mainly based on primary data derived from field surveys. The data maybe classified into three categories; physical, sociological and historical data. Physical data are embodied in the map of the citadel and in the plan of HTGHs. The

ground survey was undertaken to supplement the map of year 2000 by filling updated information and correcting the illegible parts of the map. Sociological and historical data are obtained from interviewing with the inhabitants. The content of interview form is shown in Appendix 2. The information thus was then verified through other sources and observation of the author.

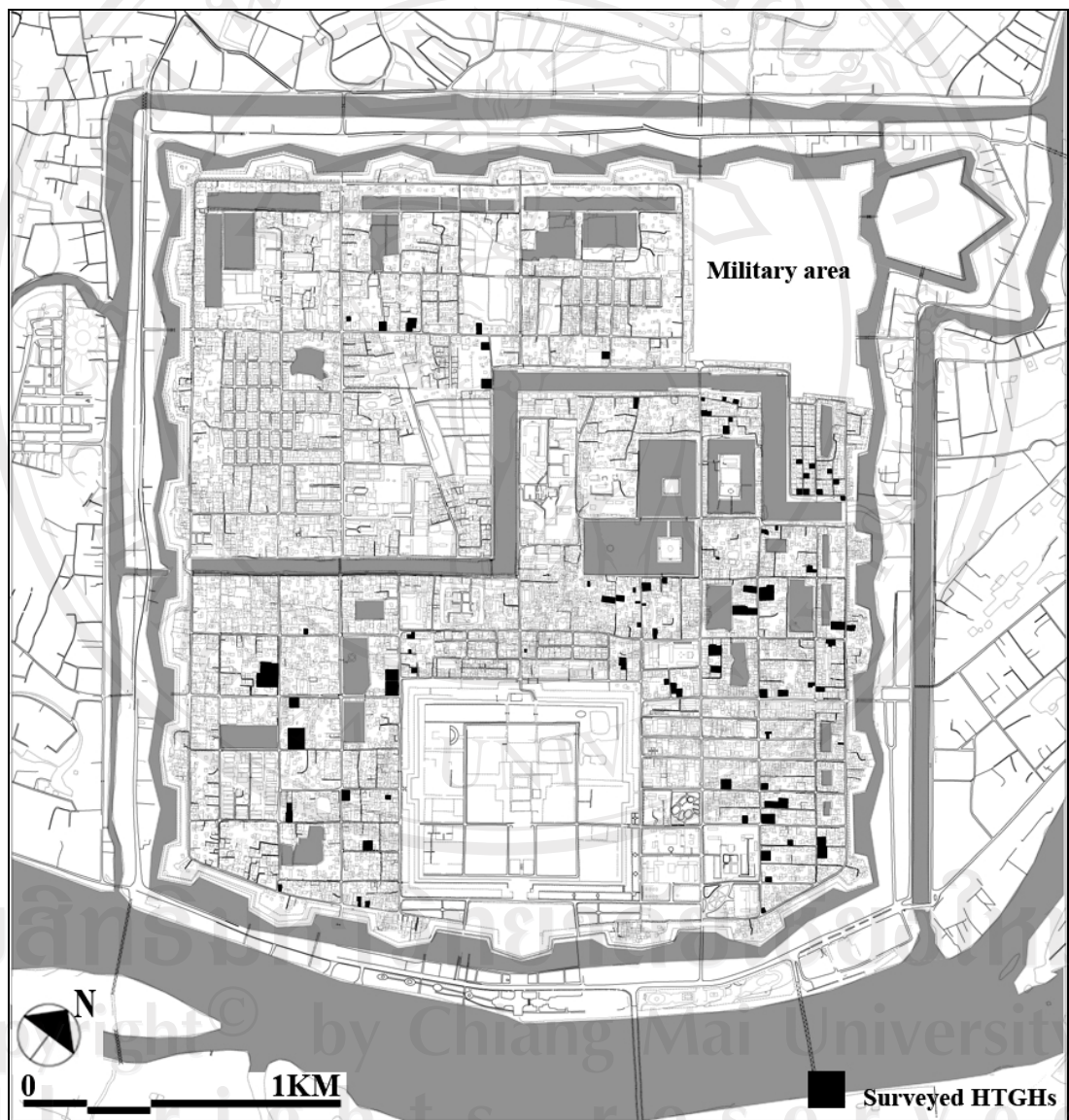


Figure 3-1: Map of Hue Citadel in 2000 and location of surveyed HTGHs

Tung, N. N., and Huong, T. T., conducted the field survey of the research twice from May to June 2006, and from September to November 2006. From our survey, 91 HTGHs were surveyed by taking photographs and among them, 59 houses

were measured while their dwellers were interviewed. The detailed activities of the field survey are as follows.

- Rechecking the accuracy and reliabilities of the data of 101 traditional houses derived from An, H. H. (Appendix 3)¹.

- Checking the location of HTGHs by using the base map of Hue Citadel (Fig. 3-1)

- Taking photograph of the present condition of HTGHs (Fig. 3-2)



Figure 3-2: The present condition of a HTGH

- Collecting fundamental materials and related documents

¹ The data of 101 houses include Ruong houses, Ancient French houses, and other houses, which have similar form to Ruong house.

- Conducting interview with the inhabitants for gaining information about formation and transformation of the houses (Fig. 3-3)

- Collecting data about site plan, spatial planning and physical characteristics of the houses by drawing

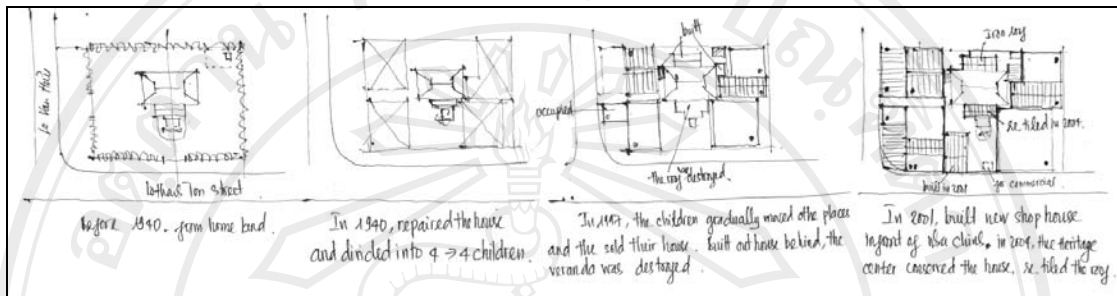


Figure 3-3: Sketch of transformation in a surveyed house

3.4 Data Analysis

The analysis of above mentioned data will be conducted to answer the following questions.

1) *What are the formation, typology and spatial organization that give the unique built form of HTGHs?*

The research is based on the study works of Tinh (2005), Thong (2001), and Thuy (1999) for finding criteria, building codes and rules that control and shape the unique physical characteristics, spatial organization, and typology of HTGHs. Discussion about citadel formation, characteristics of street system, and distribution of facilities will help to clarify the spatial formation of HTGHs.

2) *How the transformation process of HTGHs will be analyzed?*

The research will use the methods of previous study works of Tinh (2005) and Showa Women's University (2003).

1. Basic type of HTGHs based on the study work of Tinh (2005)

Tinh (2005) divided HTGHs in Thua Thien Hue province into four types according to the criterion of the number of *gians* in *Nha Chinh*. However, two of them (two *gians* and five *gians* types) were not found in the survey and the three *gians* can be divided into two types: three *gians* & two *chais* (See the right picture in Fig. 3-4) and three *gians* (See the middle picture in Fig. 3-4)². These basic types are useful as a rationale that the research uses for classifying the surveyed HTGHs based on the criterion of the number of *Gians* and *Chais* in their *Nha Chinh*s. The basic types of the surveyed HTGHs includes A (1 *gian* & 2 *chais*), B (3 *gians* & 2 *chais*), and C (3 *gians*) as illustrated in Fig. 3-4. From these basic types, the study will verify the relationship between the number of *gians* and the social status of the owners.

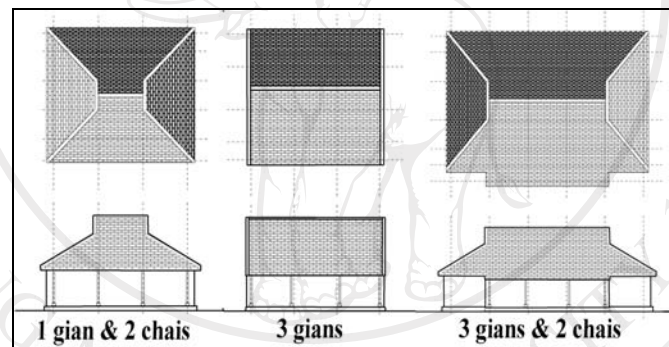


Figure 3-4: Three main types of HTGHs

2. Classification of HTGHs according to the distinctive features on façade of the surveyed HTGHs

HTGHs should be classified into groups for easily discussing their formation and transformation based on various features such as the difference of roof shapes, façade elements, and plans. This research also classifies HTGHs based on three particular features of *Nha Chinh*: plywood wall or brick wall, veranda columns or non-veranda columns, and one-layer roof or multi-layer roofs such as zigzag roof and cement roof. These specific features can represent the alteration of HTGHs in façade and also help to bring back the specific characteristics of HTGHs.

² In the study work of Tinh (2005), three *gians* type includes of three *gians*, three *gians* & two sides, three *gians* & two sides with front veranda, and three *gians* & two sides with front *gian*.

3. Layout analysis

The study work of Thong (2001) for the arrangement between *Nha Chinh* and *Nha Phu* and the research of Thuy (1999) for the elements of HTGHs are the model for analyzing the relationship and the alteration of these elements and the arrangement of lay out of HTGHs in the citadel area.

Orientation of *Nha Chinh*, the arrangement between *Nha Chinh* and *Nha Phu*, gate, alley, *Binh Phong*, *Be Can*, and the symbols of White Tiger and Green Dragon will be analyzed for arriving the characteristics and the relationship among these HTGHs.

4. The spatial organization and transformation process of HTGHs

The 59 surveyed HTGHs could be classified into different types according to the directions of transformation and the causes of transformation. The directions of transformation are horizontal plane, vertical plane, and combined plane. The causes of transformation will arrived based on the field survey.

From the above classification, the research will select typical HTGHs from each type as a representative for analysis, which are roughly described as follows;

- To discuss the number and percent of HTGHs in each type
- To clarify the spatial pattern of each type
- To discuss different directions of transformation of HTGHs in each type and the causes that influence on that transformation.
- To conclude the common and private characteristics of each type and also the relationship of these types.

Fig. 3-5 and Fig. 3-6 show an example of a HTGH in which the research reveals basic information about the formation and transformation that are used for the above steps of analysis.

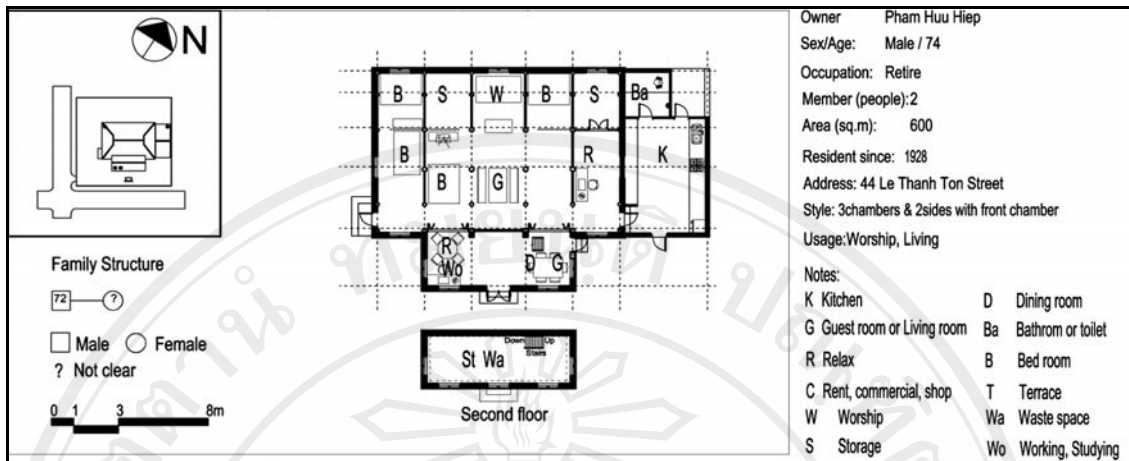


Figure 3-5: Basic information of a surveyed HTGH

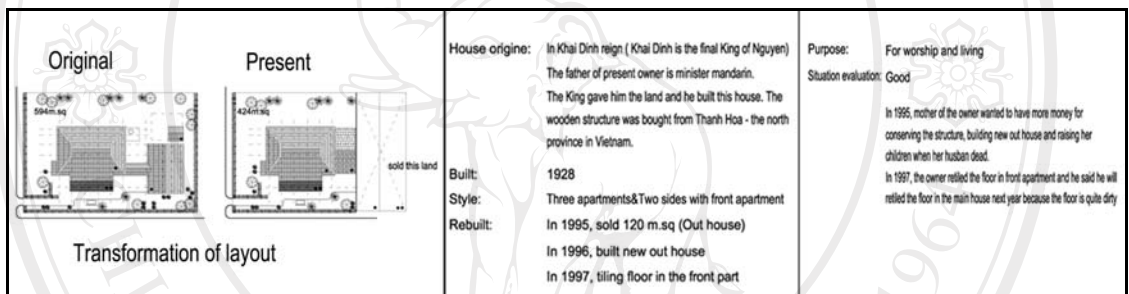


Figure 3-6: Transformation of a surveyed HTGH

3) *What are the preliminary approaches for conserving and applying HTGHs for contemporary use?*

The factors influencing the formation and transformation of HTGHs and the relationship between Hue Citadel and HTGHs will be the ground information for establishing some preliminary approaches for conserving HTGHs and applying them for contemporary use.