



# A STUDY ON THE CHANGE OF TRADITIONAL VILLAGES IN THE PERI-URBAN AREA OF HANOI

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**Summary:** Vietnamese villages have been developed for thousands of years. They contain the tangible heritage such as traditional physical fabric, cultural landscape and traditional houses reflecting the local customs and ritual belief and intangible heritage such as local festivals, customs and community structures. Recently, the Hanoi Construction Master Plan to 2030 and vision towards 2050, which was approved by the Prime Minister in July 2011, pointed out clearly that traditional villages are crucial elements in Hanoi heritage network. Since 1990, the booming of the New Urban Area in Hanoi's peri-urban area has had several impacts on the traditional villages which have been kept intact for a long time. The paper clarifies the change of traditional villages in this area. The "change" here refers to the change in the socio-economy and the transformation of physical features. The paper consists of three main parts: (1) clarifying the main structural elements of physical fabric of traditional villages (2) giving a portrait the change of villages in Hanoi's urban development history (3) analysing the change of villages in the city periphery through case study. The research methodology is mostly based on mapping and on-site interviews. The findings will be referenced for zoning and detailed plan in order to keep cultural values in the context of rapid urban development.

**Keywords:** Hanoi; traditional village; peri-urban; transformation.

Received: September 12<sup>th</sup>, 2016, revised: September 26<sup>th</sup>, 2016, accepted: October 13<sup>th</sup>, 2016



## 1. Main structural elements of traditional village's physical fabric

Historically, Vietnamese villages are rural autonomous community of economic, faith, culture, being independent to deal with all matters [1]. The average population was around 910 people, covering an area of approximately 210 ha [3]. The main structural elements of physical fabric of village are clarified based on Kenvin Lynch's theory on mental maps, in detail, edge, path and node.

Edge: perceived boundary

Despite the diversity in pattern due to the differences in geographic location and local economic, most villages in Hanoi have the same perceived boundary, including paddy fields in the outer ring and village gates, bamboohedges encircling the inner space

Path: channels in which people travel

Traditionally, village roads comprised two main types: 5-meter width village road (đường làng) and 2.4 to 3.5-meter width alley (ngõ xóm). The village roads provided linkage between activity nodes. Village roads ran parallel to one another and from there, going deeper inside by dead-end alleys. The patterns of village lanes were created and changed by local characteristics, such as housing density, geography and hydrographical conditions. Travelling inside villages was like falling into a maze, since all the roads and alleys looked similar, making it difficult for outsiders to identify [3]. Most villages used bricks or limestone tiles for the middle part of the road, while roadsides were left unsealed. Buffalos played in the mud by roadside. An interesting custom was that if a man wanted to get married, he had to contribute bricks to pave a 20-30 m length of road. By mean of this contribution, many villages had their roads paved with bricks [12].

Both sides of a path were mostly occupied by houses. Since the location and orientation of a house were chosen carefully to avoid bad lucks, the entrance door to a house neither opened directly to the village road nor overlooked an alley or a stream [5]. The front facade of the main building should not face any corner of a fishpond or

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corner of the communal house. However, in some unavoidable cases, villagers used some kinds of magical charms such as stone dogs on the ground or screen in front of the main building to expel evils from straight laneway [3]. Main buildings face the south or the south east direction to avoid direct sunlight in the morning and in the afternoon, hot winds from the west, typhoons and storms from the east, cold wind from the north in winter and to improve ventilation with cool wind from the south. An attached building was put in the west direction to prevent fire [5].

Nodes: as focal points: Communal Hall:

Under the Later Le (from the 15th century), concrete efforts were made to rebuild Vietnamese society on Confucian principle of a good and efficient government. In order to co-opt villages, as a highly autonomy unit into a centralized bureaucratic system, the Le imported from China a kind of god - the god of village - who was regarded as "a little king" in the rural area, leading to the construction of communal hall, or "dinh", a village center with a throne for little kings [7]. Communal hall located inside a bamboo rampart circle, at the entrance or in the middle of village. Its location was prominent so that outsiders could observe communal hall from the distance [15]. Originally, three functions had been designated in communal hall, including administration, religion and culture. In fact, these functions had never been clearly distinguished one to another but have interacted with and overlapped each other [16]. The layout of Communal Hall followed strictly Feng Shui regulation. The Feng Shui required that back or on the two sides of communal hall should be elevated terrain in order to serve as "throne arm" and in front must be water which had meaning in "accumulating divine favors", "accumulating happiness" and accumulating all kinds of good fortune [16].



## 2. The change of traditional villages in urban development history of Hanoi

The history of Hanoi urban development has lasted for more than 1000 years. In the feudal time, the city consisted of two main components: the citadel and the market area covering an area of 1.2km<sup>2</sup>, bordered by natural features including Red River in the northern and eastern parts, To Lich River in western part [4]. Hanoi had been expanded toward south, south west, west and recently east direction. The city of Hanoi, nowadays, covers an area of more than 3000km<sup>2</sup> with a population of 6.2 million (<http://vnexpress.net/tin-tuc/thoi-su/dia-gioi-ha-noi-chinh-thuc-mo-rong-tu-18-2105260.html>). In the history of urban development, Hanoi boundary was extended several times, in which the year 1961 and the year 2008 were significant when Hanoi area was expanded remarkably. In 1961, as a result of centralizing industry development, the high rate of urban population and the achievement of economic sector had led to the expanding of Hanoi from 152km<sup>2</sup> to 461km<sup>2</sup>. In 2008, Hanoi area was tripled again, from 924km<sup>2</sup> to more than 3000km<sup>2</sup>. The four central districts including Ba Dinh, Dong Da, Hai Ba Trung, Hoan Kiem are marked as urban core area. The suburban area is agricultural ring providing food for the city citizens.

The history of Hanoi urban development along with the change of traditional villages can be divided into four periods:

Feudal time: Coexisting between feudal city's elements and villages: In the feudal time, city was seen as agglomeration of villages. Along with the citadel and the market area, the existing of hundreds of agriculture villages inside city wall marked the difference between Chinese city structure and Vietnamese one (Prof. Nguyen Quoc Thong, Presentation on "Hanoi Urban Morphology", AIAC 2015, NUCE). The absence of dividing boundary between the city and countryside was indicative for the easy mixtures and flexible absorption of concept of urban society in Hanoi [2].

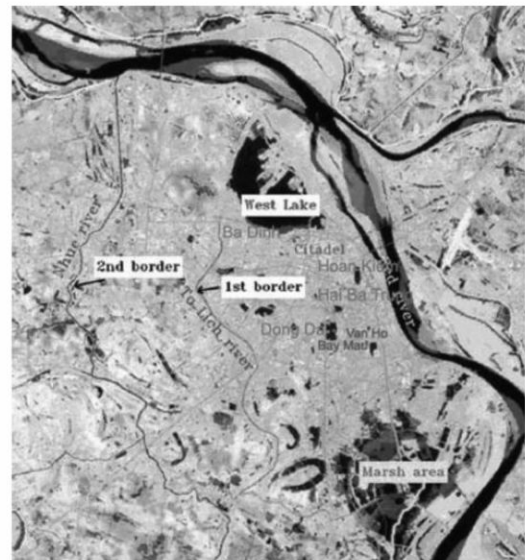


Figure 1. The expansion of Hanoi boundary [4]



Figure 2. Hanoi in 1873 [8]

French colonial time (1873-1954): Destroyed villages to build western quarter: Hanoi was made the capital of the French Indochina while French needed the Red River as the commercial trading route to Southern China. After 1883, the French took control and started to reside in a more permanent sense in Hanoi [2]. In order to implement a part of 'la mission civilisatrice' to impose the French culture in the city, the urban planning approach reflected the ideas in metropolitan France, similarities with buildings and infrastructure in Paris. Until 1945, the French had destroyed most villages in an area of 780 ha to construct French settlement [9]. Nowadays, in the French quarter, there exist very few villages but structures have been blurred since the village physical fabric was divided and infilled development has occurred.

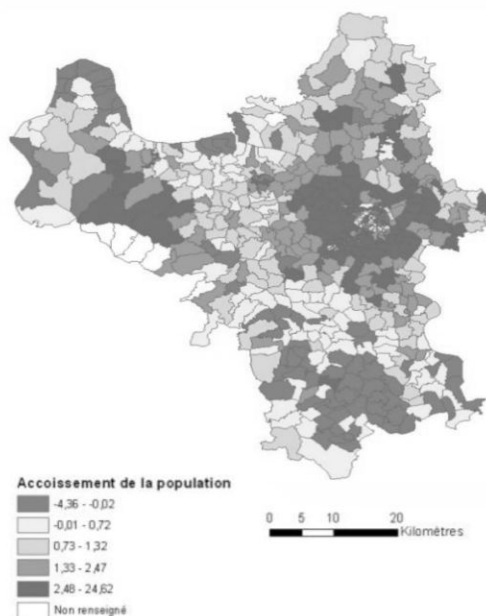


**Figure 3.** The change of Hanoi in French Colonial time [8]

In 1990s: Land subdivision in villages in central urban districts: The continuing housing shortage and incapability to supply enough housing based on socialist ideal of a total subsidized housing system by the state (1954-1986), in combination the ongoing war, forced new experiments with housing in the late 1980s as an alternative to provide capital and fast housing [2]. The Housing Law became official in 1991, and in 1993, it was fully introduced as "The Housing Act". The most important implication of this Act was that houses could be legally inherited and exchanged [2]. Since the late 1980s, it has been estimated that the private sector is responsible for over 80% of urban housing construction and improvement [6]. It has resulted in sub-divided land influenced by approaches as they have been used in other developing countries [2]. The consequence is rapid densification villages which is growing on embedded process of self-regulation and local rural and religious rules combined with the new condition in which land and housing have become a means to earn a living [2].

Since 2000: Profound change in villages in urban fringe due to the establishment of New Urban Areas: Since 2000, as the connection of Hanoi to global market demanded a different approach to housing development, New Urban Area (Khu Do Thi Moi), which is largely aims for high-rise towers to intensify the use of space as other countries in Pacific Asian region, has fast developed in the rice field in urban fringe to lower the landclearance cost. It is estimated that the rate of increasing construction land in green field in peri-urban area is at around 10km<sup>2</sup>/year [10], resulting in the change of population and land use in villages in this area.

Population change: Hanoi became a pole of development of labour market, attracting large migration flow from rural areas to Hanoi, especially in newly established districts in 1990s where the population increase rate is estimated from 2.48% up to 24% per year. (Sylvie Fanchette, 2015, presentation in NUCE ).



**Figure 4.** Population change in Hanoi (Sylvie Fanchette, 2015, presentation in NUCE )

Change in land use: Within the villages in urban fringe, the agricultural land, vegetation land and other land use were converted to residential land, resulting in increased building density, improved the infratructure and losing green area [14]. The paddy fields had been narrow down for new construction projects. The natural vegetation land and water surface is aslo replaced by buildings. With the new taste, villagers have built new 3-4 storey urban house replacing traditional ones. These afore-mentioned had affected badly to traditional environment of village's landscape. Moreover, as observation, lost agriculture production land has resulted in the increased unemployment and fast development of spontaneous family-size trading activities.



### 3. Analysis the change of villages through case study: Dich Vong Hau

The village of Dich Vong Hâu with a population of 4800 people (2006), which was established in 14th century as an agriculture village, comprised the core of Dich Vong Urban Ward in the western part of Hanoi. The area was converted from rural commune to urban ward in 1997. In 2003, the Hanoi Department of Architecture and Planning approved the project of Cau Giay New Urban Area to build on 287.8ha agriculture land of Dich Vong Hâu village. The Project was expected to be the new administrative and commercial center of Hanoi. Dich Vong Hâu village had been planned to be a low-rise urban neighbourhood comprising of villas and garden houses. The 50m-width road, part of it runs through the village, forms the main skeleton of area. (Description of Cau Giay New Urban Area Project).



**Figure 5.** Location of Dich Vong Hâu Village (Google map)

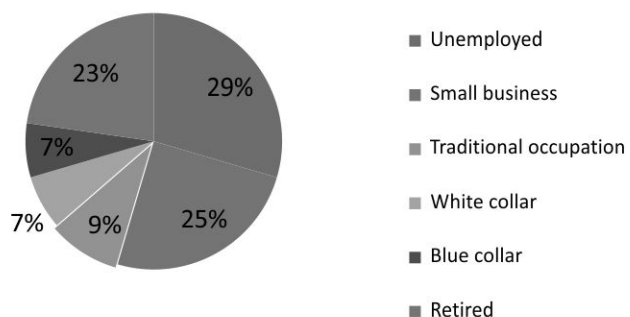


**Figure 6.** Cau Giay New Urban Area Plan (HAAP, 2008)

#### a. Change in socio-economic

Dich Vong Hâu villagers have produced traditional green rice flake since the 14<sup>th</sup> century. Until 1993, 80% of household families worked on rice flake producing, while the rest sold it to city dweller (<http://vnexpress.net/tin-tuc/thoi-su/com-lang-vong-trong-con-loc-do-thi-hoa-1987723.html>).

The job transition has been prompted since 1997 when Dich Vong Hâu was upgraded to urban settlement. Later on, the change of agriculture land to New Urban Area in 2003 has sped up the disappearance of traditional occupations, resulting in only 9% work force on traditional occupation and 29% unemployment. Farmers started to divide and sell housing land, construct low-price renting house for students from the universities nearby and migrants from rural area; or to do small trading business such as food stalls, daily goods shops.



**Figure 7.** Social structure of Dich Vong Hâu based on occupation character (Source: Author, 2009)

According to individual survey in 2009, around 28% of Dich Vong Hau's population identified as "non-villager", or in other words, recent-resided or temporary population. Most of "non-villager" migrated from rural area in recent years. The statistics clearly showed that nearly 50 percent of "non-villager" had moved in village after 2003, 94 percent of "non-villager" lived in rural area before. Furthermore, most of them could be categorized as low-income people. More than one-third of "non-villager" population was students studying in the universities nearby; 18 percent were blue collar workers working for small enterprises; 23 percent rented small shops inside village to provide services for student.

#### b. Transformation of physical features

**Edge:** The village's edge comprising of rice paddy fields, village gates, bamboo hedge has been replaced completely by the construction of new office buildings, housing and commercial complexes.

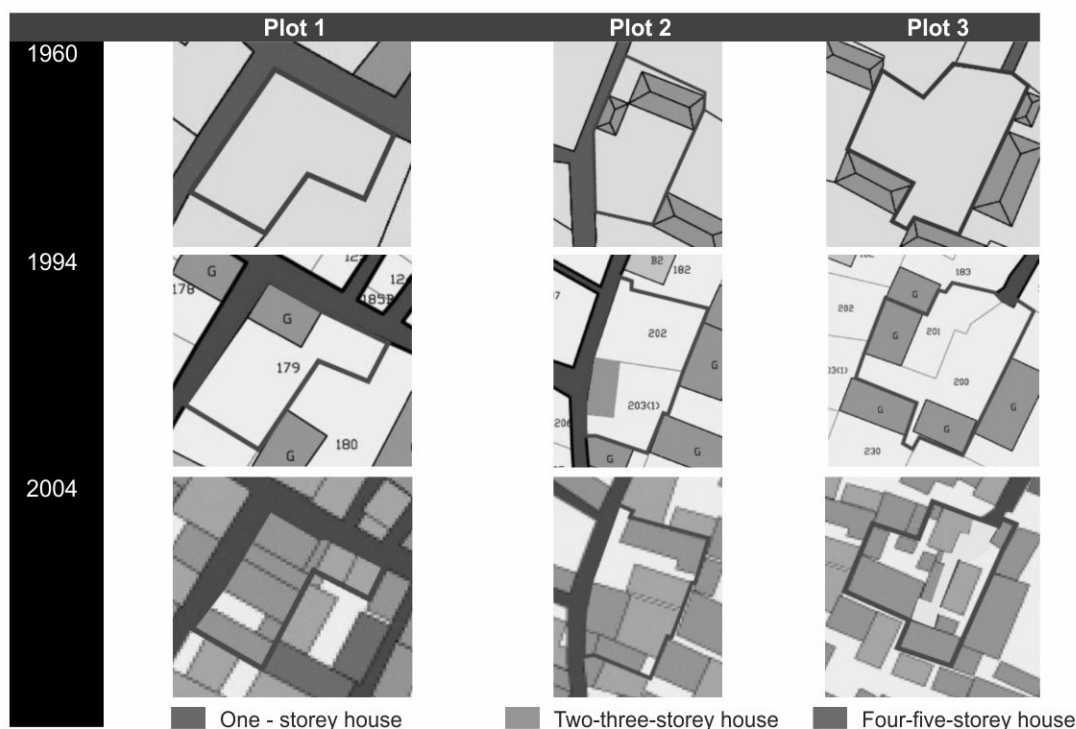
**Path:** Apart from a new 50m-width road running through village, the street structure has been kept intact. However, the function of the street has been changed mostly due to the increase in trading activities. Trading activities have converted a quiet main road to a vibrant commercial one. A detailed analysis on trading activities in village pointed out that while trading activities in city main street is primarily restaurant (account for 94%) , most of trading activities in village main road is shop for daily goods (account for 73%).

While the street pattern has remained, its landscape has changed drastically due to the change of housing on both sides. In general, the subdivision process has taken place. In details, the large lot 150-200m<sup>2</sup> has decreased from 40% in 1960 to 28% in 1994, while the medium lot 50-100m<sup>2</sup> went up from 3% in 1960 to 22% in 1994

To study the individual housing transformation in details, three plots with different location characters have been chosen: Plot 1: Facing the village main road; Plot 2: Facing the alley; Plot 3: Located in the middle of block and approached via alley.



**Figure 8.** Trading activities in Dich Vong Hâu (Source: Author, 2009)



**Figure 9.** Housing form transformation in Dich Vong Hâu (Source: Ministry of Natural Resource and Environment)

It could be seen that in the period 1994-2004, there was a drastic change in housing density. The building coverage ratio increased from around 20 percent to more or less 50 percent for plot in the middle of block, more than 70 percent for plot facing alley and more than 90 percent for plot facing a village main road. The floor area ratio, however, has been kept rather low, around 1.

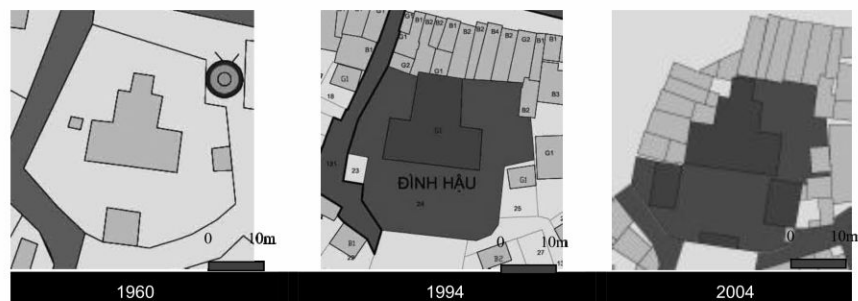
Land subdivision before 1990s were took the form of traditional inheritance in which parents divided the land equally for their children (as in plot 2 and plot 3). Since the 1990s, the ways of dividing have been diversified, taking the form of migrant buying small plot (around 30m<sup>2</sup>) (as in plot 1) or local villagers investing on houses for rent (as in plot 2 and plot 3)

Housing Function Transformation: Between 1994 and 2004, there was a boom in renting activities in Dich Vong Hau. There is a contrast image between three or four storey house for land owner's living and several one-storey houses with simple design and structure for renters.



**Figure 10.** Housing function transformation in Dich Vong Hau  
(Source: Author, 2009)

Node: Communal Hall: While the main building has been unchanged since 1960, secondary buildings have changed. After 1960, as a result of government's prohibition on religious activities, secondary buildings were demolished. In 1990s, there was a movement on revival of old customs among local people. Local people donated money and rebuilt historical religious buildings, thanks to local village code (hương ước). Thus, the main gate, left-wing and right-wing buildings are constructed. These activities of local people have helped to strengthen the symmetry in architecture of Communal Hall. Despite the willing of local people on Communal Hall conservation, the boundaries are encroaching by individual urban-plot houses, which are attributed to weak construction management. Moreover, the construction of individual three to four storey houses surrounding has decreased the solemn and imposing image of Communal Hall.



**Figure 11.** Form of Dich Vong Hau Communal Hall in 1960, 1994, 2004



#### 4. Conclusions

The traditional villages have been developing inside Hanoi city as crucial components from feudal time. Despite the varieties in patterns due to the differences in geographic location, local economy and hydrographic, most villages have the same main structural elements including (1) the edge: paddy field, village gate, bamboo hedge (2) the path: village road and alley on which the landscape mostly constitute by housing on both sides (3) the node: communal hall. The urban development history of Hanoi has witnessed the different management patterns towards the villages, resulting in different transformation process of villages in Hanoi: the elimination of villages in colonial period, densitification process in villages in central districts in central economic time and profound change of villages on urban fringe recently. The closely examination on one case study in urban fringe has shown clearly the change in socio-economic and transformation of physical features. The village in urban fringe are the concentration places of poor migrants from rural area. The loss of agriculture land has resulted in fast increasing of unemployment rate, resulting in increasing informal economic activities including house renting and small size business. In consideration of physical features, the edge has totally disappeared due to rapid urbanization; the pattern of path has been kept but its function and landscape have drastically changed mostly due to housing transformation including increasing building density, change on housing approach and change on housing function - housing nowadays is considered as the means of living; the communal hall has been renovated but the construction of surrounding buildings has negative impact on historic environment. With regard to physical feature, it is recommended to keep the road and alley network, to regulate and manage building density and to conserve the communal hall as focus point of spatial plan. In consideration of social issues, it calls for new policy to decrease the unemployment rate, to revive the traditional occupation. The aforementioned recommendation should be realized soon in order to maintain the cultural landscape, typical village living environment in the context of rapid losing the traditional value.

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