Urban morphology and the case study of French concession Tourane in Vietnam (1888-1950)

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Abstract
The development of the urban space of Tourane City (today Da Nang City) began with commercial activities along the banks of the Han River, where indigenous peoples had their first contacts with foreign traders. The French were not the first foreigners to recognize the role of this land. However, with the period of their domination in this city, French planning had an obvious impact on the development of urban morphology of Tourane. Because of continuous renovations and urban expansion, the values of French planning and architecture are seriously threatened. By linking various sources and literature on colonial urbanism, as well as by applying the research methods of urban morphology, this study aims to highlight the characteristics, roles and significant impacts of French on the process of urban development and social transformation of Tourane during the French colonial period (1888-1950).

Keywords: French colonial; Tourane Indochina; urban morphology; urbanism.

1. Introduction
Study the planning of a colonial city is an area of research that needs a combination of variety of data and tools, aims to explore the formation and development of the city in specific historical contexts. Da Nang (or Tourane, the former French concessional city) is a city with the formation and development associated with the presence of the French during their rule (1888-1950). About Ha Noi in the history of Vietnam, it is the land of a thousand years of development going from prosperity to the failure of the Vietnamese dynasties Ly, Tran, Le, Trinh. About Hue, it is the old capital of Vietnamese feudal society. Sai Gon is known as the “Pearl of the Far East” of the former government of South Vietnam. In case of Tourane, knowledge of the urban evolution of this city is relatively limited, incomplete and insufficient. In fact, Tourane was the most important city in central Vietnam during the French colonial period in term of economy, the second largest city in southern Vietnam during the Vietnam War and the most important city in central Vietnam today. Addition to materials in the fields of town planning and architecture, other materials relating to the study can be obtained by researching the history of the city, including material from political, economic, social and religious fields. In this study, the material is collected from different sources (books, theses, journal and conference articles, plan and maps...) in several languages (Vietnamese, French, English). Besides, site surveys and documents referenced from national archives centres (National Archives of Overseas in Aix-en-Provence, France and National Archives Centre IV in Da Lat, Vietnam) contributed to a better illustration of the work of French urban planners in this concessional city. It is necessary to clearly define the role and impact of the French on the urban formation and development of Tourane. The results of this research, due to studies of urban morphology, clarify the characteristics of urban evolution of the French concession Tourane during their domination: urban spatial layout, land usage, and urban form: street, plot and building. In this approach, the study aims to synthesize the available resources to recreate the relatively complete image of Tourane’s colonial urban space, and explain the urban morphology of this city in the French rule.

2. Urban morphology and the study of former French colonies
2.1. The study of urban morphology
Urban morphology is the study of the form of human settlements and the process of their formation and transformation, as mentioned by Moudon (1997). Maps or similar drawings are basic inputs for analysing the arrangement of functional areas of the city, as well as elements that contribute to urban landscape. A study of urban morphology deals with physical form of a city during its movement, and the comparison between different cities of similar conditions. Moreover, this subfield studies the impacts between the social forms and the physical layout of a city, in a dual way mutual relationship. Studies of urban morphology can be approached in variety of methods. The method of Conzen — a German geographer, founder of the Anglo-German school of urban morphology — analyses three levels of components of urban form, from overview to details: street, plot and building. Besides, the method of Muratori — an Italian architect who is regarded as one of the pioneers of typo-morphological investigations of urban form — relies on the history and memory of urban form. Meanwhile, the method of Rossi — an Italian architect and designer who
achieved international recognition in four distinct areas — concentrates on typology and urban morphology around the themes of typology, function, classification and permanence.

2.2. French colonialism and urban policy in the colonies

Besides natural and local characteristics, urban form evolution of a colony strongly depend on the policies of European colonists. In this process, the colonial policy of empires is not immutable. For example, the style of the British in India changed significantly from the period of East India Company to the Viceroyalty; the effect of Spanish colonialism to urban development in the 16th century was far from that of and 19th century; or the French urban policies in Indochina differed between the mid-19th century and the mid-20th century. During this colonization, the colonists played a superior role in every aspect of colonial life. Regarding the Southeast Asian port cities during their colonial periods, Horvath (1969) stated that they “served as a microcosm of colonial society and as a political, military, economic, religious, social, and intellectual entrepot between colonizers and colonized”.

The French colonial empire is constituted from overseas colonies, protectorates and mandate territories under French rule from the 16th century onward. It is divided into the First colonial empire (after 1534), and the Second colonial empire (after 1830). In the early stages of colonization, the French colonists tended to be extremist, as in case of Algiers and Sai Gon (Mowla, 2000). In the mid-19th century, as the French captured Algiers, the destruction of the existing city (streets, monuments, as well as population) seemed to be the primary goal, replacing the indigenous settlements by a simple European pattern with grid planning. Similarly, the French installed a number of French cultural emblems (coffee bar, racetrack, opera house, post office, palaces, administrative buildings for the new government) before the burning of the ancient city of Sai Gon in 1859. Functional zoning, or land usage, is another positive characteristic of French colonial cities. In most of these cities, the extensions had more rational zoning plans that determined the pattern of growth in these cities, especially since 1919, thanks to the law Cornudet of 1919 which stipulated “extension and improvement plans” in cities of over 10,000 inhabitants, include cities at colonies. Beside the indigenous quarters, the French colonial cities of early twentieth century basically comprised five functional zones in their European quarter (or French quarters): administrative area, residential area, recreational area, commercial area, and industrial area.


3.1. Historical background

In 1306, during the movement towards the south of the Vietnamese, the two regions named Chau O and Chau Ri of the Champa kingdom were annexed by the Vietnamese. Since then, despite harsh times, natural disasters and the dangers of an unknown land, the number of immigrants had increased. From the beginning to the end of the 15th century, the territory of Dai Viet was extended to the south, parallel to the weakening of the State of Champa. Since then, the influence of Champa had been gradually pushed south of Dai Viet; and the land of Tourane was therefore more influenced by the Dai Viet people, with immigrants from the north. According to Vo V.D. (2019), the first villages had been established and were relatively well organized. These were the villages of Hoa Khue, Thac Gian, Lien Tri and Cam Le, whose names still exist today. In particular, residents of the villages of Hoa Khue and My Thi on the right bank of Han River had to plant sharp stakes on the river to prevent crocodiles from entering. This means that the Han River was still deep and dangerous for indigenous people. The accretion of the two banks was still incomplete. The population was not numerous in this wild area, and the settlements were concentrated. It was only when the Tourane received more contact with foreign traders, the land had a development opportunity.

The first French in Tourane, from the 17th century, were missionaries. According to reports from missionaries about advantages of the port of Tourane (which they described as Gibraltar of Southeast Asia) and of local products, in the 18th century, the French East India Company sent representatives to establish relations with Lord Nguyen in Dang Trong, for the opening of their agency in Tourane. After changes in the policies of French government in the Far East, particularly their relationship with the lords in Vietnam, since 1817, the French have been tougher on Vietnam, with the more frequent use of copper warships and cannons. France had an obvious interest in Vietnam because of the need to expand its forces in the Far East, since Vietnam was a prosperous land and had not been influenced by any western country, Nguyen (2015) stated.

Following the treaty on 3 October 1888 between the Vietnamese feudal empire and the French colonists, the first concession border of the French in Tourane included five villages all located on the left bank of the Han River (Thach Thang, Hai Chau, Phuoc Ninh, Nam Duong, and Nai Hien Tay) (Figure 1). In attempt to enlarge the city of Tourane, the French put their pressure on the Vietnamese king Thanh Thai to sign the treaty on 15 January 1901, which ceded fourteen other villages to the colonial government. These villages included eight villages on the left bank (Xuan Dan, Thac Gian, Binh Thuan, Ha Khe, Thanh Khe, Xuan Hoa, Yen Khe, and Lien Tri) and six villages on the right bank of the Han River (Vinh Yen, Nai Hien Dong, Tan Thai, An Hai, My Khe, and Man Quan) (Figure 1). Thus, until 1901, the concession city of Tourane had crossed the Han River to reach the Son Tra peninsula and put 19 indigenous villages under the ownership of French colonists (Vo V.D., 2019). From this concession territory, the first French urban planners applied
the pattern of a European city following the grid plan, gradually installed urban infrastructures, organized the functional areas and built colonial constructions to serve their long-term plan.

![Figure 1.](image)

**Figure 1.** The location of concessional villages in Tourane, following treaty 1888 and treaty 1901 (Drawn by Author).

### 3.2. Urban spatial layout and land usage

*Urban spatial layout:

The original image of Tourane at the end of the 19th century associated with large dunes, swamps and ponds. Photos of the indigenous settlements in Tourane also connected with images of thatched cottages next to dunes or ponds.

When analysing the map of “The development of Tourane road network on the background of natural elements” (Figure 2), the following characteristics were noted for the link between the natural barriers and the construction of this city:

- During the construction of the first installations (1888-1918), the French took advantage of the relatively flat land located on the West Bank of the river. The choice of road directions during this period limited interventions on natural elements as dunes or swamps.
- In the next phase (1919-1939), with the need to expand the city, new roads were constructed to connect the more distant domains towards the bank of the river (the central area).
- During the last period (1940-1950), the new roads were principally small and short roads for the completion of existing neighbourhoods. Many urban projects required physical intervention on the natural elements: levelling the dunes, levelling all or part of the ponds and swamplands.

In terms of road opening, this research selects the years 1918, 1939 and 1950 to assess the basic characteristics of the French transport system (street and railway). During the first phase (1888-1918), the French built 28 new streets in the centre of Tourane. This number reached 32 streets at the end of the second phase (1939) and 44 streets in their last year in Tourane (1950).

- The street network was planned in a grid plan, with the first two principal axes (the north-south axis connects the city centre to the south and the east-west axis connects the city to the west). They are the basis of the axes for the streets built later.
- Almost of the streets of Tourane during the French rule (64% of the total) were built during the first phase (1888-1918) and they formed the basic pattern of the street system. Only a few of them (9%) were built in the second phase (1919-1939). The last 27% were built in the last phase (1940-1950) as additional streets in the central area.
- The railway system covered the centre boundary (east, north and west) to avoid crossing points between the street and the railway. This system linked the harbours along the river to the loading dock (to the north) and to the main station (to the west).

*Urban land usage:

Regarding land usage, from the end of the 19th century, Tourane was basically planned according to the standards of a French colonial municipality with basic functional areas (Figure 3):

- Administrative (and military) area: The first buildings of the French at Tourane were installed in this area. These were the barracks located on the old citadel grounds, along with other functions such as military hospital, chapel. In addition, early from the 1890s, administrative buildings were arranged along the West Bank of Han River, and mainly
concentrated to the north of the central area. These constructions included: city hall, court, post office, treasury, banks, customhouses, and other administrative offices.

- Residential area (for Europeans): Dwelling for French civil servants and European residents in Tourane were stacked close to the administrative and military areas, and were relatively separate from the indigenous quarters. The physical barriers of this separation were the river ways, dunes, and the commercial district where Europeans and Asians in Tourane participated in commercial activities together.

- Recreational area: The recreational places at Tourane were rated as deprived, because of the limited population of Europeans during the French rule (only about 100 Europeans in Tourane in 1900). Most of the recreational activities of French in Tourane took place in the building “Cercle de Tourane”, a public entertainment facility (for Europeans only), located nearby the administrative area. Later planning projects of Tourane (plan in 1931 of the Cadastral Office, or plan in 1944 by architect Louis-Georges Pineau) interested in the addition of recreational facilities (racecourse, park) but most these ideas were not carried out.

- Commercial area: Located in the middle of Tourane urban centre, this was considered as an artificial boundary between European areas and Asians areas (majority of Chinese and Indians — those who played a key role in trading with Europeans — and a small percentage of wealthy Vietnamese families). The Han market — the largest market of this city — was built in 1893, and was the centre of the busiest commercial spot in Annam (central Vietnam during French rule). Subsequently, the great demand for freight led the colonial government to install a railway station adjacent to Han market in 1913.

- Industrial area: In case of the French concession Tourane, there was no clear industrial area, as it used to be only a trans-shipment city in the transportation of colonial mining and planting products in Indochina, rather than a manufacturing city. Therefore, only a few shipyards scattered in the northern and southern regions of the city are included in this group.

3.3. Urban form: street, plot and building

Another step in the analysis of the urban morphology of Tourane is the establishment of urban fabrics. By definition of Philippe Panerai (1981), “The urban fabric consists of the superposition or the interweaving of three sets: the network of path, land divisions, and constructions (buildings).”

In case of Tourane, the urban centre plots — particularly the plots along the river — were the places where most of the value architectures were made during the French colonial period. The urban fabric of Tourane centre was built for this area (2 kilometres long in north-south direction, and less than 400 meters in east-west direction from the banks). To produce this urban fabric analysis maps, the inputs were used through the two main methods of map processing: the method of stacking maps and the method of separating layers of maps. The information is supplemented by statistical sources, old photos, surveys, etc.
Figure 2. The development of Tourane road network on the background of natural elements (Drawn by Author).

Figure 3. The functional areas of Tourane in 1950 (Drawn by Author).
The urban fabric illustrates the distribution of buildings (public works and dwelling) on the plots of the centre of Tourane during the colonial urban evolution. In addition, this analytical map also helps clarify the link between the sets: the network of path (streets), land divisions (plots), and constructions (buildings) (Figure 4).

4. Discussions

Basically, the urban development of Tourane in the French rule follows the concepts of a French colonial municipality in the late 19th and early 20th centuries:
• The complete abolition of indigenous villages by a new city of European standards.
• The flaunting of French culture with imported architecture and the brand-new urban lifestyle.
• Urban planning was in grid pattern, developing from river banks along north-south and east-west axes.
• The urban land usage of the central area consisted of five main areas. There was a clear separation between the European area and the Asian area (of indigenous people).

The personal characteristics of this city can be explained as follows:
• The restriction on some functional areas — recreation area and industrial areas — was due to the small European population and the nature of a maritime trans-shipment city. In addition, it was possible to include projects that intended to supply more parks and entertainment areas for the city but could not be implemented finally.
• The advantage of waterway and maritime transportation had created a bustling city with many racial groups involved in trade activities. In particular, the indigenous Vietnamese were even strongly competed by other Asians like Chinese and somewhat Indian.

This research is only the first step in understanding the nature of French planning at the concession Tourane. To clarify the role of the French in the urban evolution of Tourane, it is necessary to clarify each work that has been done in each phase of its development, in the specific contexts of French Indochina in the history.

Similar studies are needed for other French colonial cities during the Second French Colonial Empire. From there, it will draw more overview about the nature of the morphological development of a colonial city, and Tourane in particular.

References