

A Morphological Study of Historical Area A Case Study: Kowloon Area, Hong Kong

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ABSTRACT

This study examines the morphological changes in the Kowloon Area of Hong Kong using a morphological component approach to land use, street patterns, and building patterns. This study used the historical method, which includes four stages: heuristics, criticism, interpretation, and historiography. The results showed that the morphological growth of the Kowloon Area showed significant growth and changes. The land use of Kowloon Area as a historical area has shown changes with an increase in the residential, trade, and service sectors and industry, which is balanced to increase the green area, on the other hand, a reduction in the agricultural and plantation sectors. The street pattern network of the Kowloon Area of Hong Kong shows there are many pedestrian lanes and areas for pedestrians, and there is currently a mixed pattern. The building types in the Kowloon Area of Hong Kong have been regarded as modern, contextual to the historical buildings from the colonial era within the area.

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Keywords: Kowloon Area, Historical Area, Morphology, Land Use, Street Patterns, Building Patterns

1. Introduction

Purwantiasning (2024) [1] mentioned that the morphology of a city is influenced by historical aspects that shape and influence the city's development. The function of time becomes very important in the process of understanding the morphology of cities. According to Danisworo (1989) [2], the city's development has been regarded as a process of manifestations that accumulate from physical and non-physical activities carried out by humans. Danisworo [2] underlined that the city can act as *an urban artifact*. It can be said that there are always significant changes and developments occurring in a town, in decades, even every year for some cities. Danisworo (1989) [2] also mentioned that some aspects, either physical or non-physical aspects, significantly affect these changes, ranging from population density, geographical

patterns, community activity patterns, and government policies related to the area.

Hong Kong was originally developed by the British. In 1860, China handed Hong Kong over to Britain because of the conflict between the two countries. At that time, China considered that there was no growth in the Hong Kong area.

Massive construction took place in Kowloon, starting with the start of the Kowloon railway line to Canton, followed by the construction of the Kowloon Pier and buildings whose height was limited due to its proximity to Kai-Tak Airport. This development made Kowloon an industrial and business area. However, after the Second World War, the Kowloon area was no longer a special industrial and business area. Still, it became a residential area for

the People's Republic of China, who fled to Kowloon.

The existing development is a process of morphological formation of the Kowloon area. The development of the Kowloon area covers the history of an area's development. Thus, the researcher studied the morphology of the Kowloon area to identify the causes and impacts of the morphology of the area.

The concept of morphological architecture is fundamental to all regional designs. This is because an area is a large area whose formation requires a long process. The application of morphological concepts in the Kowloon Hong Kong area can be one of the references for areas that are still in the process of developing. Therefore, morphological studies will play an essential role in the development of a city.

The growth of the Kowloon area in Hong Kong is certainly influenced by various factors, including its history, culture, politics, economy, society, and demography. It is interesting to examine how the Kowloon Area in Hong Kong's morphology has changed over the last century through the study of urban morphology theories since this area has been designated as a historical area in Hong Kong. Referring to Smiles (in Purwantiasning, 2024) [1] revealed that in the morphology of the city, there are three elements, namely *elements of land use*, street patterns (*street plan/ layout*), and types of buildings (*architectural style of construction and their design*)

Land use (elements of land use)

This temporary element can be used as a basis for rebuilding and planning new building functions to be created, namely by combining or reducing building lots and changing road patterns.

Street plan (road patterns)

Road network patterns are formed through a long process and are part or continuation of existing patterns.

Architectural style of building and their design (types of buildings)

The mass of buildings is vital in shaping the area's structure and road network. Building development can reach a saturation point, with built-up regions covering the entire plot area. After that, there will be an intervention process around plots and buildings and the subtraction or formation of new buildings and plots. The social, economic, and cultural forces that drive urban development influence these three essential elements.

In observing morphology, there are three components: regional land use that reflects regional activities, circulation patterns or road network patterns that connect regions, and building patterns and their functions (Soetomo, 2009) [3].

City-shaped *theory* states that the structural patterns of urban space manifest through social, economic, and political-administrative processes. These processes convey the meaning of architecture and manifest in the form of spatial pattern structures, land use, and architectural characters of buildings that describe the city's image (Spiro Kristoff, 1999) [4][5][6].

In previous research on the results of Wahjoerini's research, Ridho (2021) [7], entitled "Morphological Identification of the Kampung Melayu Area of Semarang City," can be concluded that based on the results of the analysis, namely when viewed from the figure-ground analysis, Kampung Melayu has regular and irregular building patterns and from linkage analysis has elements that connect between regions. In previous research on the results of Pradnyawan's (2019) [8] research, entitled

"Cities of former residency Kedu morphological studies of historical cities," the data show that in the perspective of urban archaeology, historical cities, in this case, former Kedu residency cities, pay attention to elements of their buildings, urban inner structures, and top mini toponymy that shows certain spatial functions.

2. Material and Methods

The research method used in this study is the historical method, namely "*The process of critically examining and analyzing the records and survivals of the past. The imaginative reconstruction of the past from the data derived by the process is called historiography*" (Gottschalk, 1968: 48) [9]. In general, it is understandable that historical research is a study and other sources that contain information about the past and are carried out systematically.

Historical education research is fundamental research for several reasons. Historical research intends to make a systematic and objective reconstruction of the training period by collecting, evaluating, verifying, and synthesizing evidence to support evidence to support the fact of obtaining solid conclusions. Where there is an entirely complete relationship between people, events, time, and place chronologically regardless of the pieces of objects observed.

3. Results and Discussions

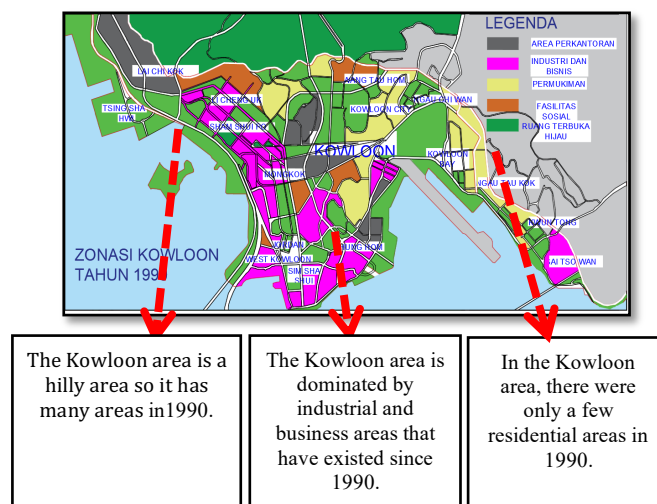
Morphological form is viewed from land use, road network patterns, and building patterns. The characteristics of these three components are input in the analysis of morphological forms (Oliveira, 2016) [10]. Component characteristics have their respective roles or contributions in morphological form. The combination results show the morphological shape of the Kowloon Area of Hong Kong, which

has changed in every period until now (Shenzen, 2010) [11].

3.1. Land Use of Kowloon Area of Hong Kong

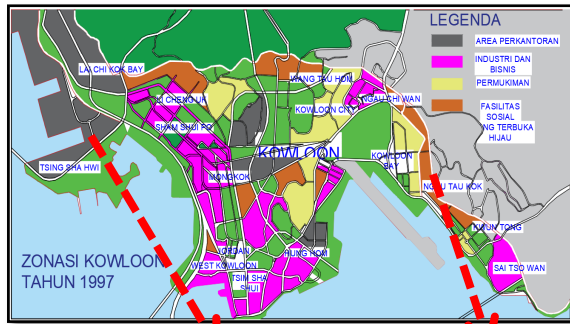
The following analysis describes significant changes and developments in the land use of the Kowloon Area of Hong Kong. The study has chosen four periods: 1990, 1997, 2009, and 2018.

In 1990, the area's zoning was still dominated by green areas such as hills and green open spaces. This area is also filled with industrial and business zones and residential areas. However, the industrial and business areas could be more developed.



Source: Authors, 2024
Figure 1. Land Use of Kowloon Area in 1990

In 1997, there were still many green areas, and other areas such as office, residential, and social facilities were growing. However, the areas with the fastest development were industrial and business areas, especially in the West Kowloon and Mongkok areas.

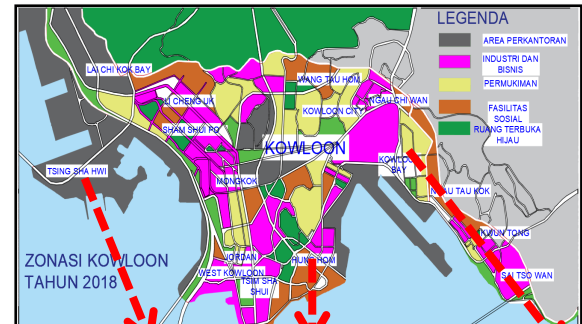


In most areas, Tsing Sha Hwi changed its function from a green area to an office area in 1997.

In the Ngau Tau Kok area, the function was changed from a residential area to a social

Source: Authors, 2024

Figure 2. Land Use of Kowloon Area in 1997



In the Tsing Sha Hwi area, it changed its function from a green area to an office area in 2018.

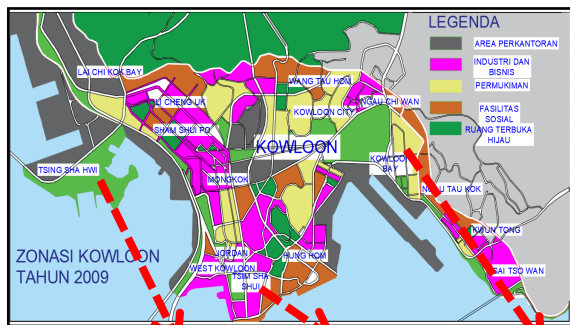
In the Hung Hom area, several areas changed their function from green areas to office areas in 2018.

In the Kowloon City area, there is a green area that changed its function to a business industrial area in 2018.

Source: Authors, 2024

Figure 4. Land Use of Kowloon Area in 2018

In 2009 the existence of green areas was getting minimal, then the areas that increased in size were office areas, residential areas and social facilities.



In the Tsing Sha Hwi area, it changed its function from a green area to an office area in 2009.

In the Shim Sha Shui area, several areas changed their function from industrial business areas to social facilities areas

In the Kowloon City area, several areas changed their function from green areas to residential areas in 2009.

Source: Authors, 2024

Figure 3. Land Use of Kowloon Area in 2009

In 2018, green areas no longer dominate; the areas that dominate at the moment are industrial and business areas. These areas are developed not only in the West Kowloon and Mongkok areas but also in the Kowloon Bay and Sai Tso Wan areas.

In 2018, the zoning of the Kowloon area mixed zoning, where office areas, business industry centers, settlements, social facilities, and green areas began to spread in the Kowloon area. In the Tsing Sha Hwi area, the green area began to be opened due to the transition of functions to office and industrial areas. In the Hung Hom area, some areas have also changed their function from green areas to office areas. In the Kowloon City area, a green area has changed its function into a business industrial area. This is because the Kowloon area is a very productive area, so many green areas have been converted into office areas and business industry areas. Thus, the Kowloon area has been a central industrial and business area as well as an area that is densely populated.

This then supports the emergence of new buildings and other developments to meet the needs of community support. The development is uncontrolled and grows organically because the land in the Kowloon area is not for residential but as a business and shopping center. Thus, buildings with residential functions are built in a widespread manner in the Kowloon area.

3.2. Street Pattern of Kowloon Area of Hong Kong

The area of Kowloon is densely populated with a high population busyness, and the residents there generally use public transportation. Dense and narrow land with a dense population so that there is no alternative road with sufficient width; the available roads are about 5-6 meters for the main road and pedestrian with a width of 2-3 meters and then can shrink at specific points to 1.5 meters, therefore between various public transportation ranging from buses, double-decker buses, taxis must be mixed with private vehicles so that it is pretty dangerous because as already explained that the residents of the city They like to use public transportation so they will walk to reach it, for example walking to the subway which sometimes they have to cross.

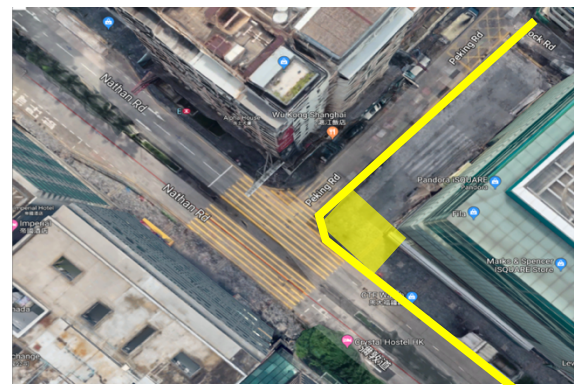
As already explained, people in Hong Kong prefer public transportation to support their daily activities. The various paths provided are also diverse, but what is widely encountered is a vehicle lane where there is a pedestrian on the side of the road with a shorter road width compared to the special lane for four-wheeled vehicles so that various public transportation ranging from buses, double-decker buses, taxis must be mixed with private cars so that it is pretty dangerous because the people there will walk to reach it—for example, walking to the subway, where they sometimes have to cross.

Pedestrians also have a path width that varies with the width of the main road. If the main lane is more than 5 to 6 meters wide, the pedestrian can have a width of 2 to 3 meters, while for the main road of vehicles with a width of less than 6 meters, the pedestrian will also be narrower.



Source: Private Dokumentation, 2020

Figure 5. Some pedestrian area in Kowloon Area



Source: Google Map, 2020

Figure 6. Some pedestrian area in Kowloon Area

3.3. Building's Types in Kowloon Area of Hong Kong

Kowloon is a business district with many shopping malls and lodging places, and it has an unplanned urban pattern. Mixed-use buildings dominate the area with mixed-use buildings with commercial functions and residences (generally apartments that someone can rent). The building, which stands along the streets of Kowloon City, has an average height of more than ten floors, where the first to second floors are commonly used for commercial areas. The shape of the buildings in the Kowloon area is often found in the shape of cubes that are squeezed against each other to create a 'shabby' impression. Visually, this building functions as a commercial with small

tenants, and on the upper floor is a residence as well as a hotel in the form of an apartment, so the characteristics of the architectural style applied to this type of building are not distinctive architectural styles.



Residential area as well as business center New building with modern architecture



Old apartment side by side with new building

Source: Private Dokumentation, 2020

Figure 7. Some building's types in Kowloon Area

Kowloon is dominated by mixed-use buildings used for commercial and residential purposes. These buildings were formed in Kowloon and have a unique architectural style. They are not obtained from other countries, unlike new mixed-use buildings with large tenants built in the modern era that can determine the architectural style to be applied. This can happen because it is related to the history

of the city of Kowloon, an immigration destination in the past. Even though this city is narrow, the shape of the building that was originally built according to the original plan is irregular. The shape of the building undergoes improper additions to space by utilizing the circulation space to 'stick' to the room, which makes the building unhealthy for the residents because no air and light enters the building except from the top of the building.

Conclusion

From the description and results of the analysis of the morphological components of the Kowloon Area of Hong Kong, several conclusions can be drawn as follows:

- The morphology of the Kowloon area can be seen through the zoning of the area, which has changed and developed over a certain period. This can be seen from the analysis of the zoning of the Kowloon area above, so it can be seen that the Kowloon area has an order of buildings that are spread out and are not arranged regularly with a certain pattern or grid. In the Kowloon area, it can be seen that the distribution of residential areas, offices, industrial and business centers, as well as the order of green open space, grow and develop randomly and do not have a unique orientation in the area.
- In 1990, the area's zoning was still dominated by green areas such as hills and green open spaces. In addition, this area is filled with industrial and business zones, as well as residential areas. In 1997, several green areas began to be developed, becoming industrial and business areas as well as residential areas. This is done to meet the increasing needs. This year, there was a massive development, such as the construction of a railway line and the expansion of the Tsing Sha Hwi area, a port area that became one of the alternative trade routes in the Kowloon

area. In 2009, the construction of offices and business industry centers began to grow and spread in several areas, and several social facilities were developed to support the needs of the people in areas close to industrial centers and settlements. This year, the number of green areas has also begun to decrease due to existing development. In 2018, the changes were not very significant. This is because the Kowloon area is an area whose development could be faster due to the minimal area, but there is a high population and needs.

Therefore, the Kowloon area is unplanned. Because the Kowloon area is a business and shopping district, many immigrants are interested in stopping by Kowloon. Promising businesses have made immigrants settle in Kowloon and caused the need for the Kowloon area to continue to increase. This then supports the emergence of new buildings and other developments to meet the needs of community support. The development is uncontrolled and grows organically because the function of the land in the Kowloon area is not for residential but as a business and shopping center. So, buildings with residential functions are built in a widespread manner in the Kowloon area.

Hong Kong is famous for its pedestrians so that pedestrian lanes can be found on every road adjacent to a motor vehicle lane. This also makes it easier for pedestrians to access the buildings that line the road. From the results of observations, it can be identified that in the streets in the Kowloon Area historical area, especially at the junction and intersection, the pedestrian path has a broader width than other pedestrian paths because, in addition to meeting from different directions, it is also a temporary place for the community there to be used as a gathering point or meeting point between pedestrians.

The types of buildings found in Kowloon are diverse but dominated by mixed-use buildings that function as commercial buildings, shops on the lower floors, and vertical settlements above. Suppose you look at the architectural style in the Kowloon area. In that case, the new buildings have a modern architectural style prioritizing function over aesthetics. Still, several historical buildings of British colonial heritage are also scattered in this Kowloon area, such as churches and former police barracks that are used as commercial buildings for shopping centers and hotels, and several historical parks are present in the Kowloon area.

Significant changes and developments in the Kowloon area show that this historic area is developing rapidly according to the needs of its people.

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