The influence of Chinese architecture on the development of architecture in Medan City

I F Pane1,2,*, H T Fachrudin1 and P S Pane1

1Department of Architecture, Faculty of Engineering, Universitas Sumatera Utara, Padang Bulan, Medan 20155 Indonesia.
2Laboratory of History, Theory, and Criticism of Architecture, Department of Architecture, Universitas Sumatera Utara, Padang Bulan, Medan 20155 Indonesia.

*Email: imam.faisal@usu.ac.id

Abstract. This paper aims to trace the development of Chinese architecture in Medan. Chinese architecture is architecture that was brought by traders and plantation workers during the Dutch colonial period and collaborated with local architecture. This collaboration has colored the development of modern/postmodern architecture that developed until now. For this reason, this article notes the harmonious collaboration between Chinese architecture and local architecture. The research location is in the city of Medan because this area has had a long history of the entry of Chinese influence through plantation workers during the colonial period. The object of study is building in the city of Medan with Chinese architectural characteristics. The method used is a descriptive qualitative approach in order to elaborate and examine the facts on the field and analyze them with the theory used. The results showed that Chinese architecture plays a role in forming the architecture which developed in the city of Medan and the existing spaces are the result of culture from generation to generation that present the meaning according to their needs.

1. Introduction
Medan City in Indonesia has a long history related to the entry of ethnic immigrants who have colored the development of this city. Apart from the ethnic immigrants in this city, there are also various ethnicities that come from ethnicities in North Sumatra and outside of North Sumatra. Along with its development, this city becomes a multi-ethnic city that lives in peace and take care one another. One of the ethnic immigrants is Chinese ethnic, who came at the same time as colonialism that hit the archipelago region. The opening of plantations, especially in the city of Medan and its surroundings, had a big impact on trade in this area. This city became a trading city which was visited by traders, especially from Europe and its surroundings.

Rapid development was inevitable because it was along with the movement of the Malay sultanate from Labuhan to Medan City on May 18 1891 and previously the colonial party had moved the capital of the Residency of East Sumatra from Bengkalis to Medan on March 1, 1887, so that the city developed rapidly. The contribution of Chinese ethnic to the development of the city can be seen from their initiation to build a trade and establish a business area that integrates with residential houses; some examples of this area still exist today such as the Kesawan area in Medan [1].

This proves that the Chinese ethnic have had a big impact on the architectural development of the city of Medan. Chinese ethnicity is an ethnic group that is able to maintain its existence in a place without eliminating its arts and cultures. The culture that enters and merges with the existing local culture, the city of Medan which has Malay culture also undergoes acculturation and this is impacted to the development of architecture in this city.
2. Literature Review

Chinese architecture is one that influences architectural works in the city of Medan, especially in Kesawan area, most of the population in Kesawan is Chinese ethnic. In his book, Davis G. Khol describes the characteristics of Chinese architecture in Southeast Asia, including the courtyard, fenceless structural elements (some with decorative ornaments), the distinctive roof design and the usage of distinctive colors [2]. One of the characteristics of Chinese architecture is the use of courtyard which is an open space in residences in which this space is private and surrounded by gardens / parks. This courtyard functions as a meeting place between guests and residents of the house at once as a place to socialize. There are usually tables and chairs for welcoming guests and the floor is lower than the hallway that surrounds it (Fig. 1 and 2).

![Figure 1. Courtyard](image1)
![Figure 2. Courtyard at Tjong A Fie house](image2)

Another distinctive feature is the structural elements that are open with distinctive decorative ornaments and contained on wood carvings in building construction. Usually this carving is out from building which is part of the structure and is located at the ends of the roof. This carving has variations depending on the function of the building. For example, houses building in Beijing have carvings and ornaments on the ends of the roofs (Fig. 3).

![Figure 3. Structural element of the roof](image3)

Furthermore, there is distinctive roof shape of Chinese architecture. Some types of roof models which are often found are models of Wu tien, Hsuan shun, Hsuan shan, Gang shan and Tsuan tsien.
models (Fig. 4). Not all roof shapes in Chinese architecture are found in Indonesia, the most often one is the shape of the Ngang Shan roof, which is a gable shape with stone wall on the side of the building.

Figure 4. a) Roof of Wu Tien’s model, b) Roof of Hsuan Shun’s model, c) Roof of Hsuan Shan’s model, d) Roof of Ngang Shan’s model, e) Roof of Tsuan Tsien’s model

The last one is color (Fig. 5). The usage of color in Chinese architecture has a symbolic meaning [3]. The meaning of ornaments on Chinese architecture; Red is a symbol of fire element (Huo), which symbolizes joy, hope, luck and happiness; Green is a symbol of wood element (Mu), which symbolizes longevity, growth and immortality; Yellow is a symbol of earth element (Tu), which symbolizes strength and power; Black is a symbol of water element (Shui), which symbolizes despair and death; white is the symbol of metallic element (Chin), which symbolizes sorrow or holiness. The color that is rarely used is blue, does not symbolize any element, but it is associated with the gods. [4].

Figure 5. The use of color on Chinese architecture

Chinese architecture emphasizes on harmony with nature, incorporating several important principles from ancient theories, such as orientation, symmetry that reflects the change of summer and cold and day and night, and also pure geometric shapes [5]. The principles of Chinese architecture building use Feng Shui, because the concept of Feng Shui believes that every human being must be in harmony with nature. In addition, Chinese architecture emphasize a lot on aspect of spatial planning, construction, details and symbols that create Chinese architecture looks unique.

The continuity of Chinese culture can be seen from the consistency of its very distinctive architectural identity so that it becomes an icon of their existence in the areas they live in [6]. Chinese
Architecture is a work of architectural art brought by plantation workers and traders during the Dutch colonial period and collaborated with local architecture. One of the Chinese architectural buildings that has become an icon of the city of Medan, and has a big influence on the architecture of Medan city which is still very popular place to be visited and to be taken photos by society is Tjong A Fie building located in Kesawan area. The Tjong A Fie building is currently protected as a historical heritage of Medan City which shows a mixture of local culture, historical values, and knowledge. The Tjong A Fie building predominates and differ from others, which most of the buildings are designed like shop houses. The gate has a very thick Chinese characteristic, seen from the ornaments found on the walls and roof tops and the placement of two lion statues in front of the gate, in which these ornaments have their own meanings (Fig. 6). Meanwhile, the main building adopted local architectural styles.

Figure 6. The gateway of Tjong A Fie

Ethnic Chinese has major influence on development in the city of Medan. This ethnic lives in groups in a Chinatown area, namely Kesawan, on the south side of the esplanade (Merdeka field) [7]. The buildings in this area are dominated by shop houses with Neoclassical and Renaissance architectural styles [8]. This is closely related to the Dutch colonialism which also brought the influence of architecture that developed in Europe to the city of Medan [9].

3. Method
The method in this research is descriptive qualitative method, facts in the field related to the history of the entry of Chinese ethnic and living in Indonesia and the use of secondary data in the form of pictures that showing the rapid development of this city because of the presence of western and eastern influences at that time.

This method is used to elaborate and examine the facts in the field and analyze them with the theory used [10, 11]. The results obtained from this study signify that Chinese architecture plays a very important role in designing the developing architecture in the city of Medan.
4. Results and Discussions

Some buildings in Medan city have the impacts on Chinese architecture; one of them is buildings in Hindu Market area, Medan. The most population there are Chinese ethnic with designed house like shop houses (Fig.7).

This row of shop houses and markets is a typical Chinese food seller that is sold directly by the Chinese ethnic themselves, with Chinese architecture which is seen on the name signposts, carvings, windows and the entrance with its ornaments. On the doors and windows, it can be seen the form of Chinese ornaments and decorations at the entrance, there are red strands of rope that characterize Chinese architecture. In the picture above, it is very clear that Chinese architecture has a big influence on the architecture of the city of Medan, here we can see from the shape and ornament of the windows in which the curved window form at the top with form and colors that have meanings including green and red.

The Hindu market, where almost 80% of traders are Chinese ethnic, have retails with architectural forms that take the form from Chinese roof model, namely the Ngang Shan roof with green color, where the green color means the symbol of the wood element (Mu), which symbolizes longevity, growth and immortality [4].

The construction of houses of worship such as monasteries or temples in Medan has a shape with Chinese ornaments, including the roof. The roof of this temple uses the roof type of Wu tien’s model, the color of the walls which have meanings including red and yellow, and other ornaments, such as dragon carvings on the walls, columns and building guardrails. Where the dragon symbol gives meaning to protect the property and it is a symbol of strength and justice. [4] (Fig.8).
Apart from the house of worship, the influence of Chinese architecture is found in Tjong A Fie's residence, this can be seen from the entire building such as the gate, entrance and interior space. Where in the inside of the room is very thick with trinkets and colors that symbolize Chinese architecture and also carvings on the walls (Fig. 9).

5. Conclusions

Chinese architecture is architecture brought by plantation workers and traders during the Dutch colonial period and collaborating with local architecture. This collaboration has colored the development of modern / postmodern architecture that developed until now. Nowadays, Chinese architecture is very influential on the architecture of the city of Medan; this can be seen in the Kesawan area and the surrounding shops, where almost all of them are forms of Chinese architecture with the majority of the population is Chinese ethnic.

The building that predominates and gives a big impact on the architecture of the city of Medan is the Tjong A Fie House building which is very large and big to be compared with the surrounding dwellings. Tjong A Fie is a wealthy merchant in which he is happy to help others so he is also known as a philanthropist and his house has greatly influenced the development of architecture in Medan. Thus Chinese architecture in the city of Medan still survives because Chinese architecture is able to maintain its philosophy and meaning to this day. The shapes and colors of each Chinese architectures in the city of Medan have strong meanings and symbols for their respective beliefs.

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