Genius loci of shop houses in urban area: A case study in urban secondary cities in Sumatera Utara

J T Aditya¹, M N Loebis²*, B O Y Marpaung³, D Lindarto³ and W Abdillah²

¹Student of Master Degree Program of Architecture Department, Faculty of Engineering, Universitas Sumatera Utara, Jl. dr. Mansyur Kampus USU Medan 20155.
²Lecturer of Master Degree Program of Architecture Department, Faculty of Engineering, Universitas Sumatera Utara, Jl. dr. Mansyur Kampus USU Medan 20155

*Email: m.nawawi@usu.ac.id

Abstract. Generally, Shop houses in urban area appear dominantly, because it is very rational in term of economic and financial such as “cost and benefit analysis”, is that absolutely right? These believed is a kind of simplification of the main issues in term of modernist and materialistic philosophy, since the local culture and the local architecture has been totally denied. A number of method has been applied to found and to identified local urban vernacular architecture. One among them is research on shop houses which socially adaptable with individual life of modern society but also accommodate the social aspect of local traditional life. This research basically is using qualitative method and focused on genius loci in shop houses in urban secondary cities in Sumatera Utara, where local culture and local architecture is still dominant. In this research Brastagi city in Karo regency will be posed as a study case. There is the main hypothesis on the spread of shop houses into the urban secondary urban cities because the shop houses have the great potential to make an adaptation with local culture and local architecture. In fact, the problems in this study is very wide, consequently, although research focused on architecture, other discipline has to be discussed namely philosophy and anthropology. With these method, the research revealing why the local peoples can adapt themselves socially and culturally with the shop houses. A number of research has focused on genius loci by using qualitative methods in order to find genius loci in architecture of Urban Shop Houses in Karo.

1. Introduction

If widely believed that modern architecture has failed, marked by the emergence of design alternatives based on socio-cultural societies and local norms where the building was created. Modern architecture itself is a product of science which ignores the socio-cultural elements, religion and locality and human entities as subjects (psychology). Modern architecture views the world as a machine that serves human needs but paradoxically ignores humanity itself and also the natural elements that influence it. According to Ching, F. D., et al. [1], the collapse of modern architecture was marked by the demolition of Pruitt Igo in 1972 which was considered to have failed as a human habitation, which is: security, comfortable dan place for expression.

Charles Jenks [2] in his book "The Rise of Post Modern Architecture" provides new thinking for alternative designs based on a broader theory by emphasizing new approaches such as semiotics, symbolism, traditionalism and other things beyond the abstraction of modern architecture. Furthermore, by Christian Noberg Schulz [3] in his book "Genius Loci, Toward a Phenomenology of
Architecture" raises human experience, human relations with the environment and human subconscious as aspects of forming architecture. Meanwhile according to Hale [4], phenomenology architecture was born from a philosophy of phenomena that considers human experience that produces strong knowledge and gives special influence in architecture with emphasis on perception and cognition. Phenomenology is a philosophical thought put forward by Edmund Husserl (1859-1938) which refers to the presence of an object, that is, all objects are seen as manifestations of the creative power of the soul. Husserl's thinking was later developed by Heidegger in the words "Building, dwelling, thinking" which explained that humans settled in their environment with 4 prerequisites, namely: earth, divine, sky and mortal.

The term genius loci was first introduced in ancient Rome, namely a protective spirit somewhere [5]. But in its development in the world of western contemporary architecture, the genius loci no longer refer to the spirit but the location of the atmosphere (spirit of place) [3]. Spirit of place is related to how local people can express their identity or experience meaningful experiences in their own environment. Human effort occupies between heaven and earth or manifests it in a general situation, an existential concept is needed which is related to the ability to catalyze meaning [3]. The pure expression reflected in the symbolization explains their position in a community group or family.

According to Harisdani [6], the development of shop houses in Indonesia began in the 1800s in the commercial areas of each city by large merchants who traded on their wide-shaped land which affected the system of building structures used. With the use of front land for the store and the back side of the land for residential functions. In its historical development, the existence of shop houses is closely related to existence on the main road so that the aesthetic process for the structure is so simple as to bring out the identity of the owner. Because of its rigid shape and facing the main road, the shop's identity is reflected in the front row visual lines.

The research location is the shop houses located on Jalan Veteran, Brastagi city, Kab. Karo, North Sumatra. Related to its location, a few shop houses come into contact with the locality and social culture of Karo which are predicted to produce new forms that exist today. Acceptance of shop houses in Karo socio-culture can be in the form of acceptance of overall physical form, some or even some forms and can also be acceptance that is culturally adaptive where Karo people can use physical shophouses as a place for their contemporary social cultural activities.

The research is descriptive qualitative in nature, the first of which is the study of theories related to shophouses, genius loci and social contemporary Karo culture. The vice-versa adaptation between shophouses and socio-culture was the topic of this paper to find the genius loci, especially space and character values contained in the existing shop houses and neighborhoods in Jalan Veteran / Jamin Ginting, Karo Regency. Karo contemporary social culture was obtained by field surveys with interview techniques on randomly selected shop houses of 20 shop houses from ± 127 shop houses targeted by Karo ethnic shop owners.

2. Literatures Review

2.1. Genius Loci

Human physical satisfaction and the environment of certain situations require architecture as a solution. This exceeds the understanding of architecture adherents of functionalism architecture which only addresses functional needs but also considers aspects of human feelings and emotions. The approach taken by Norberg-Schulz is a phenomenology approach or event and experience that is felt in the field. Existential space is not only defined as a mathematical term but also the relationship between humans and their environment, namely the physical and social environment of society. The existential concept consists of space and character that is in accordance with physical functions, namely is orientation and identification, such as mountains, grasslands, coastlines, deserts, main roads, north-south (compass point) and so on. This existential space also functions as a form of human consciousness of the importance of the orientation so that they do not get lost in their own environment.
Human relations with the natural surroundings are concrete in architecture in terms of "gathering" and "thing" which together form a unit (can be a region) which ultimately visualizes a genius locus. Character is an indication of the existence of an atmosphere, where it is a formal agreement from a place that results from a process of orientation and human identification. In addition, the meaning also plays a role in the formation of a stronger and stronger position in certain social societies. Therefore, Norberg-Schulz analyzes places with space and character categories so that genius loci can be concluded as a human effort to concretize life, intangible knowledge, gathering and nature [3].

2.2. Sense of Place
According to Norman Crowe, the sense of place is human activities to understand themselves and their surroundings to get a sense of security. Sense of place can also be interpreted as a sense of responsibility on how architecture and urbanism exist in general assumptions. This feeling is present in humans to recognize the environment in which they are located. Sense of place refers to something that can be recognized by humans because humans need to find something familiar in the landscape as a reference for its existence in an environment that was initially unknown that will bring fear, dimensionless, timeless and chaos. The feeling arises when humans try to dwelling in an unknown environment so that they will choose the right environment or a sense of place.

When humans recognize a place without realizing it, they will record everything in memory as a whole, such as place characteristics such as the quality of light, the smell of air, rock elements, trees, water, the color and smell of soil and land surface. Finding a place will cause a familiar sensation as a response that arises from a basic understanding of a place or can be said to be intuitive understanding. Norman Crowe also explained that an object in the landscape must give meaning to be able to be remembered and give direction to someone so that it was found to have a relationship with the object or someone felt the essential quality of the landscape before he intellectualized it. In ancient times, people built features in natural landscapes. Hills, mountains, trees reflect the buildings, monuments and walls of ancient civilizations. Reflection of nature into the building was created to give meaning and orientation. Place made by civilization is viewed as the context of human culture to explain nature and character that emerge from the expression of human experience. A person's experience of place in a socio-cultural environment involves dialectics for a long time or evolve to form a harmonious and natural unity [7].

2.3. Berastagi
Berastagi is one of the sub-districts in Karo Regency from 17 sub-districts with an area of 3,050 Ha, at an average height of 1,375 amsl with temperatures between 19° to 26°C, with an average humidity of 79%. The topography of Berastagi sub-district is 65% flat, gentle slope, 22% hilly, 13% mountainous. Average rainfall is 2,100 mm per year. The majority of the population has Karo ethnicity of 75%. Most of the people's livelihoods are farming. Berastagi sub-district has a city that is Berastagi city as a national and foreign tourist destination city. Berastagi City is a secondary city if compared with Kabanjahe. The distance from Medan City is around 66 km and from Kabanjahe City is around 11 km [8].

Berastagi in the pronunciation of the Dutch language is "Brastagi" which means rice storage. Very little literature about the history of the city of Berastagi, but the Netherlands Colonial first built schools and dormitories in the city of Berastagi in the 1920s. It is estimated that Jalan Veteran / Jamin Ginting already existed before the Dutch entered Berastagi city.
The city of Berastagi is currently known as the city of tourism, a market for fruits and vegetables. Tourist activities are centered in Gundaling which is the highest hill in Berastagi. To reach Berastagi city from Medan it takes 1 to 3 hours depending on traffic density. When entering the city of Berastagi, tourists will find 6 geriten rows in the median of the road and afterwards Tugu Joeang will be found. From the Joeang monument, peoples will be faced with a corridor Jl. Veteran / Jamin Ginting along 615 meters to the monument Kol. If tourists continue the journey from the Kol monument, then about 11 km will find the city of Kabanjahe.

Back to the Joeang monument, if tourists turn right towards Gundaling, then they will find a fruit and vegetable market, along this corridor, left and right, dominated by three floors shop houses and less some government buildings, religious buildings and one public transport terminals. This corridor is not straight but curved and with sloping and bumpy ground conditions, down from the monument to Kol monument. This corridor also has a relationship that is very closely related to urban cities that are right on the road or transportation routes within the city [11]. Activities that exist along this corridor are commercial trade and services such as banks, restaurants, private and government offices, cafes and so on.
Figure 4. Land Use.

Figure 5. Joeang Monument.

Figure 6. Kol Monument.

Mount Sibayak is visible if someone stands in the Joeang monument and looks towards Medan, while in the southwest, Mount Sinabung is not visible because it is blocked by the height of the shophouse.

Figure 7. Row of shop houses on Jalan Veteran / Jamin Ginting, Brastagi - Kab. Karo. Dominated by 3 storey shop houses (source: survey results).

2.4. Traditional Architecture of Karo Ethnic

Traditional Karo communities do not have the modern knowledge system as it is today. Knowledge was passed down from generation to generation, like weaving carried out in *jambur*, building traditional houses with a system of mutual cooperation, levers, connecting wooden structures with joints and stakes. The livelihood of the majority of the traditional Karo community is farmers and everyone has a field whose results are stored in the *sapo page* (rice barn). This barn is a separate building from a traditional house [9].

2.4.1. The Building of Traditional Karo. In traditional Karo architecture there are many customary buildings known as apart from traditional houses (siwaluh jabu), namely: *gerit, jambur, sapo page* and *lesung* [9]. Typologically the secondary functions and shapes of these buildings are almost the same but are dimensionally quite different as shown in figure 08.
2.4.2. Tradisional Karo Kampoong Pattern. The form of the traditional village pattern of Karo marches along the river channel so that the main door faces upstream (kenjulu) and the back door faces downstream (kenjahe), then this pattern transforms into West and East according to the sun's journey. This transformation is expected to change back and forth from time to time [9]. The buildings in the traditional Karo village always face a wide field or on a siwaluh jabu house, ture julu always facing the wide field called kesain, so they can see social activities and can stare the sacred mountain if any.

2.4.3. Siwaluh Jabu. Generally, Karo traditional houses are reserved for eight families (Jabu) who have family ties with each other. The arrangement of space for each family is arranged according to the position and function of each family. Jabu is also interpreted as one part of the room found in the Karo house. In traditional homes, shared life is governed by beliefs and customs. The rule may be a little different from other traditional houses but the principle remains the same. For example, the underworld (of abyss) is symbolized by the underworld, the middle world (human) is represented by the space of the traditional house and the world above is symbolized by the roof of the building. The bena kayu or elder in the house (homeowner) is on the left side of the lobah / labah (hallway) and so on (see picture 12) but there is no separation wall [9].
2.5. Rumah Toko (Ruko)

Shop houses (ruko) are buildings with business functions on the ground floor and function as occupancy on other floors, is a characteristic of urban areas in Asia from the 18th - 20th century. Setting the function of the floor plan is intended for convenience and security of the store. Basically shop houses lined up on a block bordered by the main road (front), side lane and back road. Each shop house is connected with a pedestrian which protected peoples from tropical weather [11].

Ruko with a business place on the ground floor and a residence on the upper floor is built with an upper floor that is more protruding from the ground floor so that the ground floor of the front (terrace) becomes a typical arcade [13]. Distribution of shophouses in Asia is in Southeast Asia, Sri Lanka and South China. All buildings including shophouses express cross-cultural correlations from a variety of architectures reflected in the arcade, cross ventilation, cantilever floor (2nd floor), roof system and ethnic details resulting in a new hybrid architectural style [14]. The Japanese state also received this form of shop because it corresponds to the social culture of Japanese society which is rooted in its traditional architecture, namely Engawa. Engawa is also closely related to Buddhist philosophy [15]. Based on research conducted by Wan Nordiana, shop style can be explained by typology, namely: neo classical, eclectic, art deco, modern and modern beginnings [12]. The classification of styles can be seen in figure 13.

| Neo-Classical (1880s-1920s) | Transition (1880s-1900s) | Eclectic (1890s-1930s) | Art Deco (1920s-1950s) | Early Modern (1940s-1970s) | Modern (1970s) |
|-----------------------------|---------------------------|------------------------|------------------------|---------------------------|---------------|
| Shophouse Typology          |                           |                        |                        |                           |               |
| Description                 |                           |                        |                        |                           |               |
| Widely used of Greek and Roman order and decorative motifs, maquetry on geometric forms and shallow relief as ornamental detail. | It is a combination of elements from diverse styles for multi-ethnic decorative design; two major periods and styles that are used to produce the blend of Chinese, Malay, Indian and European architectural styles. | Inspired by Art Nouveau, Native American art, Gothic and the Art Deco. The style is characterized by linear, hard edge, or angular composition with stylized decoration. | Focus on the aspect of efficiency, function and economy that reflects the utilitarian style. Reinforced concrete has fully adapted and influenced by contemporary practices without ornamentation but large back of overhang and slanting design. | Unconstrained by the conventional concept; or asymmetrical composition, flat roof and smooth wall finishes devoid of surface ornamentation. Primarily driven by technological and engineering developments. |

Figure 13. Shophouse Typology at Ipoh, Malaysia [12].
3. Methodology
This research is descriptive qualitative or quasi qualitative, namely research that adheres to the philosophy of phenomenology and postpositivism. This view was the forerunner of Edmund Husserl, Martin Heidegger, Marleaun Ponty. Phenomenology is a school of philosophy that examines apparitions (phenomena) which between phenomena in the consciousness of a society are not isolated from each other but have a dialectic relationship.

Whereas postpositivism is a philosophy of science that must be criticized by looking at phenomena as reality in accordance with natural law [10]. Therefore, related to genius loci and sense of place as the basis for architectural research this is in line with the method chosen because the basis of the architectural theory is derived from phenomenology.

The qualitative descriptive format does not have the characteristics of widening like water surface but focuses on specific cases or phenomena that are observed and reviews them in more depth [10]. Based on the study of the theory of genius loci, sense of place, the city of Brastagi (contemporary) and traditional Karo architectures, we can compile the research framework steps as shown in figure 14.

![Research framework flowchart](image)

Figure 14. Research framework flowchart.

The adaptation between shop houses and social culture Karo is the topic of this paper to find the genius loci values contained in and the environment outside the existing shop houses in Jalan Veteran / Jamin Ginting, Karo Regency. Karo contemporary social culture is obtained by the acquisition of the field and interview techniques with traditional institutions, in this case the Indonesian Karo Society Association. This comparison is expected to find some genius loci that still exists today and is feasible to be improved in quality and preserved architecturally.

4. Result and Discussion

4.1. Survey Results
The location survey was carried out along Jalan Veteran / Jamin Ginting in the city of Brastagi - Karo Regency with a road length of ± 700 meters by recording images of the corridor and visual shop situation both on the right and left of the road. The recordings per photo are then put together and will make easy to analyze shophouse buildings related genius loci. Because of the limitations of the paper width, the visual front of the shophouse is divided and on the map marked by blocks of capture of visual images and their merging.
Figure 15. Map of block distribution of shop houses Jl. Veteran, Berastagi – Karo Regency
A: Row of shop right next to the road from Medan; B: The row of shophouses on the left side.

4.2. Space
When talking about space in the context of genius loci, it is related to existential space and architectural space based on local social culture. The Dutch were present at Berastagi in the 1920s, building a row of shophouses equipped with wide pedestrians. This is an architectural space, but if it is examined based on the traditional social culture of the Karo community, in the traditional village there is a wide area or area as a place for social and cultural activities to take place. It is analogous to the architectural space made by the Dutch that can accommodate the current socio-cultural activities (contemporary) adopting *kesain* (open space) traditional Karo, but the present situation is not too good and seems degraded (see figure 16 & 17). Space architecture that is supposed to be for social cultural activities (existential space) is sometimes often used for motorcycle parking.

Existential space actually looks firm in contemporary Geriten near the Joeang monument. Where contemporary geriten is used by the general public as shelter and lounging for tourists and middle / high school students. In traditional Geriten, the space beneath the storage of ancestral bones also serves as a traditional social cultural space for the Karo community [9].

Figure 16. Berastagi City, 1967. Two storey ruko with arcade and wide pedestrian (source: tropenmuseum).
Figure 17. Berastagi City 2019. Ruko 3-storey and wide pedestrian, arcade was lost.
Figure 18. Geriten become existential space (source: survey).

This can be said that traditional socio-culture that took place under geriten is still ongoing even though the Geriten upper space function is not used as a storage of the bones of ancestors. Contemporary middle / high school students who sit under geriten show their contemporary
existence compared to their own school. The school environment is intended for students, but their existence in the school environment is as students whose teacher's existence is more recognized than students (figure 18).

4.3. Character
Typologically, the style of shop houses on Jalan Veteran can be classified as early modern style as has been studied by Wan Nordiana in a shop in Ipoh - Malaysia. The difference is generally shop houses on Jalan Veteran Berastagi are dominated by 3-storey shophouses. In addition, arcades are not as strict as those in Ipoh shophouses, so they do not function as "sidewalks".

Figure 19. Ruko line, block A5 (source: survey)  
Figure 20. Ruko near Joeang monument (source: tropenmuseum)

Based on an interview with Alexander Sembiring, one of the members of the Himpunan Masyarakat Karo Indonesia (HMKI), Veteran road existed when the Dutch entered Berastagi around 1920 (figure 20). In that year shop houses along Veteran road existed and generally had 2 floors like the typology of the height of shop floors in Ipoh [14]. One important sub-variable character genius loci is building material, in 1967 the character of the building was generally from a mixture of brick, concrete and wood structures while today it is dominated by a 3-storey concrete structure building on Jalan Veteran / Jamin Ginting, Brastagi - Karo District (figure 17 & 19) but in some points is that there are still original shop houses.

In addition, also based on an interview with Alexander Sembiring (HMKI member) as well as the interview results of shop owners, founded that the designation of shop houses on the 3rd floor was for shop owners who existentially explained the position of parents more than their children. In traditional Karo customs the position of the owner of a traditional house (bena kayu) is in front of the ture [9]. The change that occurs is that once existential horizontal becomes existential vertical even though it takes more effort for parents to go up to the 3rd floor. Shop is a rigid building with a width of 4 to 5 meters which cannot accommodate the arrangement of traditional spaces. Therefore, contemporary movements become upward or become the 3rd floor. They generally do not understand anymore with the traditional house arrangement, but in an existential position the parents or owner are higher in the family system.

5. Conclusion
Genius loci that affect the current form of shop houses. For example, the Karo traditional house is not known for arcades. Arcade on shop houses comes from the influence of European culture brought by the Dutch colonial to Indonesia. Because it is not in accordance with the social culture of Karo associated with the existential ownership of traditional private houses, the arcade is lost in contemporary shop houses. In southern China, arcades are acceptable because they are compatible with Chinese social culture.

The shophouse building that was brought by the Dutch is 2 storey but what is developing now in the Veteran road corridor is a 3-storey shophouse that is the effect of transformation from the existential or traditional existential horizontal to vertical homeowners. This is also still in accordance
with Karo customs because the house owner (bena kayu) is a representative of the god [9]. Although the understanding of that Karo ethnic group is not understood at this time, it is unconsciously transformed as an affirmation of the ownership of shop houses.

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