

Architectural Interaction between Space and Behavior (Case Study: Santika Dyandra Hotel Medan's Lobby)

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Abstract

Medan is the most tourism town that is in much demand in Indonesia, both from domestic and foreign. The hotel has become an important means to support the activities of tourism or business. Hotel Santika Dyandra Medan is one of the four-star hotels and is quite prestigious, located in the city of Medan. One room that can not be separated from a hotel is the lobby area of the hotel which is the main facility. The interior design of the lobby space is generally focused on aspects of the function. But in its development of interior design has a wider outreach, one of which is an aspect of human behavior as userspace. The interior design of Hotel Santika Dyandra Lobby is closely related to the problem of human activity, which is like conducting the check-in, check-out, or just sit in the lobby lounge. There are three elements of a major factor in the design of the interior, namely human, space, and environment. This study aimed to determine whether human behavior shaping the function of Hotel Santika Lobby space or otherwise, by using the theory of behavior settings. This can be analyzed through a pattern of activity that formed on each mapping, where each pattern follows the application form from the lobby area itself, as well as the arrangement of the various furniture.

Keywords

hotel; lobby; interior; behavior setting



I. Introduction

Behavior setting can be interpreted as the interaction between an activity and a specific place. The behavior setting contains elements of a group of people who carry out an activity, a group of people's activity or behavior, the place where the activity is carried out, and the specific time when the activity is carried out. According Suharto in Saleh and Mujahiddin (2020) the main objective is not only to overcome problems related to economic income, but also to make people have the ability to meet their physical, economic and social needs, such as; increase self-confidence, participate in social activities, and be able to independently carry out the tasks of life. Eskandari (2020) stated that Such idea sometimes gives its practitioners a sense of social mission.

The case in this study is the lobby room at the Santika Premiere Dyandra hotel in Medan. The smoking area is used by young and old alike. Users can move the chairs located in prime places to where they want to make an informal space. These informal spaces can occur when a group of users interacts to chat or just relax.

The sitting area is located adjacent to the reception. In this section, the materials used tend to be formal. The layout of the room is arranged more neatly and regularly following the pattern of space, adapted to users who are often used by adults to meet clients or families. This study intends to determine whether human behavior shapes the function of the space in the Santika hotel lobby or vice versa.

II. Review of Literature

2.1 Relationship of Architecture, Environment, and Behavior in Relation to Spatial Planning

Space is an architectural component that becomes important in discussing the study of the relationship between environmental architecture and behavior because of its function as a forum for human activities (Haryadi, 2010). In this study, behavior is operationalized as a setting needed in human activities in the form of space. Humans have various interrelated activities in a system of activities. Thus, the place for these various activities is also linked in a system. These interrelated places then form a spatial arrangement which is one part of the architectural form.

2.2 Behaviorism in Architecture

Humans are social beings who are never separated from the environment in the formation of themselves. In the relationship between architecture and society, buildings are designed by humans who consciously or unconsciously can influence the behavior patterns of humans who live in architecture and their environment. Architecture is built to meet human needs. However, through architecture also emerges a new human need that has returned (Tandal dan Egam, 2011).

2.3 Architecture Shapes Human Behavior

Buildings are built by humans to meet needs and then shape the behavior of building users. Buildings will affect how users live social life and values in life. This is related to the stability between architecture and society where both live side by side in environmental harmony. The formation of human behavior can be influenced by several physical designs of space such as the shape of the room with size, arrangement of furniture, sound, color, temperature, and lighting.

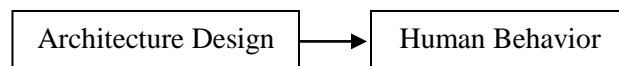


Diagram 1. Architecture shapes human behavior

Source: Tandal dan Egam, 2011

2.4 Human Behavior Shapes Architecture

Humans build a building and then shape the user's behavior. After a behavior is formed, humans reshape buildings that have previously been built on the basis of behaviors that have been formed, and so on.

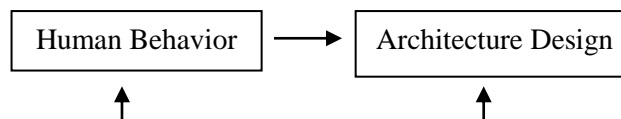


Diagram 2. Human behavior shapes architecture

Source: Tandal dan Egam, 2011

2.5 Behavior Setting

Behavior setting is defined as an interaction between activities and specific places. Humans are the primary component of behavioral settings because without their existence as users, behavioral settings will not exist. However, the relationship between humans and physical objects will manifest the existence of a behavioral setting (Haryadi, 2010).

Behavior setting can also be referred to as "behavior" because the pattern of human behavior is related to the order of the physical environment (Barker, 1968; Laurens, 2004).

2.6 Behavior Setting Boundary

The behavioral boundary is the boundary at a behavior stops (does not continue). There are two types of behavioral boundaries (Laurens, 2004), namely:

a. Physical boundary

Behavioral boundaries can be marked and influenced by the presence of physical elements of the environment (physical boundaries of space) including the basic elements of space (vertical, up, and down). The ideal boundary is a clearly visible boundary such as a wall. If the boundaries of behavior setting are not clear, the problem is the unclear separation of activities, especially if some aspects of the behavior pattern must be separated from one another. Another problem is if the existing boundaries or dividers are only symbolic boundaries, not a physical boundary, for example through differences in floor patterns or colors because not everyone involved in activities in that area knows it. Some objects can function as a form of spatial boundaries and another object function has to support the pattern of the activities that occur in them. The boundary object function is to surround behavior, while the second type of object serves as a supporter of the activity patterns, and the behavior function is to surround the second object.

b. Symbolic boundary

A symbolic boundary is a behavioral boundary marked by a non-space element or a symbol. In addition to a wall as a clear boundary, it can also be done through administrative arrangements or using symbolic signs to define boundaries for each behavior setting. For example, the warning "no smoking" symbol is posted on the wall.

2.7 Factors which Affecting Behavioral Boundary

Factors that affecting behavioral boundary (Ardana, 2009), namely:

1. Boundary recognition level: the level that determines whether or not an element of behavioral boundaries can be recognized by humans. The point is how clear the boundaries of an element can be seen by everyone, both physical and symbolic boundaries. Generally, the clearer visibility of the boundaries, the clearer people will be recognizing and interpreting these boundaries.
2. Boundary separation level: the degree of a boundary element restricts a behavior (accessibility, visuals, materials, senses, elements). Boundary elements of behavior, both physical and symbolic, serve to separate each behavior in a place, for example, inaccessibility, the entrance to a room will indicate that the room separates the activities outside from the activities inside. The boundaries level of the visual elements where something is visible to the human eye becomes the boundary of activity in a certain space, for example, such as a wall. The material is something used to form a behavioral boundary. The more solid the material used, visually, the boundary will be more solid and visible to humans, for example, a barrier in the form of a brick wall, glass, triplex bulkhead, etc.

III. Research Methods

The method of the discussion carried out is by using literature studies and observation methods (place-centered mapping and person-centered mapping).

a. Literature Studies

Literature study data collection was carried out by reading and recording the information related to theories about the object to be studied via the internet and writings from the previous researchers, in order to obtain sources of information that support the discussion and problem-solving in this study. The descriptive method is used to explain the background, results, and discussion containing the theme of Architectural Interaction between Space and Behavior.

b. Observation Method

1. Place Centered Mapping Method: according to Haryadi and Setiawan (1995), this method is a mapping based on the place where the activity takes place which has the aim of knowing how humans use or accommodate their behavior in a certain time and place. The concern of this method is a specific place either small or large in a fixed setting.
2. Person-Centered Mapping Method: this method emphasizes the movement of people in a certain period of time-related to not only one place, but also several places. This method requires the researcher to deal with a person or group of people who are specifically observed

IV. Results and Discussion

4.1 Existing Review of Santika Dyandra Hotel Medan

a. Santika Hotel Review

Built in 2011, the Santika Dyandra Hotel Medan is a four-star hotel located at Jalan Kapten Maulana Lubis No. 7, Medan Petisah, Medan. The building consists of 12 floors with 324 rooms. This hotel has one tower, a conference room, and the largest convention center in Medan city. Apart from functioning as a hotel and convention center, Santika Dyandra Hotel also has a function as a business center that provides 12 meeting rooms for rent. Some of the public facilities owned are coffee shops, fitness centers, restaurants, and a swimming pool.



Figure 1. Santika Dyandra Hotel Medan site location
(Source: Google maps)

b. Lobby Hotel Review

One of the rooms that cannot be separated from a hotel is the lobby area which is the main hotel facility. The lobby at the Santika Diandra Hotel Medan is quite large, located

on the ground floor and the floor plan forms like the letter “L”. There is a reception, sitting area, The Vintage, and smoking area in the hotel lobby. For public facilities, there are stairs going up and down, 2 basement lifts, 1 lift in the middle of the stairs, and 3 public lifts in the lounge area. For the lobby, there are different space zones between the reception area and the lift area for access from the basement.



Figure 2. Ground floor plan

c. Hotel Lobby Santika Dyandra Behaviorism

The physical design of the space in the lobby of the Hotel Santika Dyandra is deliberately designed to influence the behavior patterns of visitors. It can be seen in the application of the shape of the lobby area, as well as the arrangement of the various furniture. The whole physical design of the lobby causes every visitor who comes should follow the pattern of the design that has been made.

Each design pattern simultaneously affects the activities of visitors. The design of the Santika hotel lobby, which was designed by the architect, was originally built to meet the needs of visitors but in fact, it affects the path and pattern of visitor behavior.

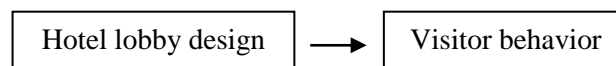


Diagram 3. Behaviorism at the lobby

4.2 Behavior Setting at Hotel Santika Dyandra Lobby

a. Lobby Circulation

The lobby area which has a floor plan shaped like the letter “L” will affect most of the circulation patterns of visitors who come. From the entrance area in front of the elevator, visitors must walk straight to enter the reception and lounge area, they should turn left to go to the elevator, café, lounge, The Vintage, and sitting area at the smoking area.



Figure 3. Lobby circulation

Circulation in the Santika hotel lobby is not difficult to reach for first-time visitors. The shape and circulation can be followed through the pattern of the hotel lobby space.

b. Lobby Reception

The reception area is located in front of the entrance and a function is a place for visitors to ask for information, check-in, and check-out. Visitors in this area are mostly older people and teenagers. This area is usually crowded in the morning until noon, which is around 10 am to 12 noon because at these hours visitors will be able to check-in and check-out.



Figure 4. Hotel lobby reception



Figure 5. Visitors checking in

c. Lobby Sitting Area

The sitting area for visitors is divided into several corners. For visitors who will check-in or check-out generally take advantage of the sitting area located in front of the receptionist (no smoking area). While the smoking area is located in one corner of the lobby area which is adjacent to The Vintage and the public elevator.

In the sitting area located in front of the reception (no smoking area), there is a capacity for 32 people with a more formal concept. This can be seen in the furniture design concept, which prioritizes the use of wide sofas and tables.



Figure 6. Sitting Area

Visitors who are in this sitting area generally come from the elderly, which is usually used as a place to gather or hold business meetings. In addition to the elderly, families also often use this area as a waiting room and relax.



Figure 7. The elderly who is reading in the sitting area



Figure 8. A family and a couple who is relaxing in the sitting area

In the no-smoking sitting area, which is located adjacent to the smoking area, visitors are more often used as a place to relax and chat while enjoying the available food and drinks. This area has a capacity of 24 seats. However, this section is rarely used by visitors

because of its slightly closed location behind the lobby. For some business people, this place is often used to conduct business relations because the atmosphere is comfortable and quiet compared to other sitting areas.



Figure 9. No smoking sitting area



Figure 10. Smoking sitting area

d. Behavior Setting Boundary at Lobby Hotel Santika Dyandra Hotel Lobby

1. Physical boundary

The physical boundary of the behavior setting in the hotel lobby can be seen from the application of massive walls as well as partitions and flower pots that are used as barriers between spaces. This can be seen by the presence of a wooden wall as a barrier between The Vintage and the sitting area, and also the presence of a wooden partition as a space divider in the smoking sitting area.



Figure 11. Flower pots as a boundary between the circulation path and the sitting area

The glass wall is also one of the physical boundaries that border the different functions of space. The glass wall is located in the smoking area and entrance lobby.



Figure 12. Glass wall used in the smoking area

Another physical boundary is seen by the difference in floor patterns that separate the smoking sitting area and the no-smoking sitting area, where the smoking sitting area uses carpet, while the no-smoking sitting area uses marble floor material.

2. Symbolic boundary

The symbolic boundary of the behavior setting in the hotel lobby can be seen from the application of "exit" signage which is a sign to the exit in the lobby.



Figure 13. Exit signage

Another symbolic boundary is the application of the signage of emergency stairs, no smoking area, and under parental supervision.



Figure 14. The signage of emergency stairs, no smoking area, and under parental supervision

e. Analysis of Architectural Interaction between Space and Behavior

The lobby at the Santika Dyandra Hotel Medan is an area that functions for guests to carry out activities related to this area such as waiting for further services from the hotel or the visitors who just want to sit and relax. This area is not only for hotel guests who stay but also frequented by people who are just visiting.



Figure 15. Hotel lobby receptionist

There are three sitting area zones in the lobby. The first zone is the sitting area which is right in front of the receptionist. This zone is visited by most visitors because it is located close to the reception and exit doors and has a fairly large size. The presence of large windows and chandeliers is also an attraction for visitors.



Figure 16. The main sitting area

The second zone is the sitting area which is also a no-smoking area located on the side of the lobby. This section is opposite The Vintage so that the visitors who want to relax can enjoy snacks and drinks provided by the hotel. The sitting area and circulation path are borders by large flower pots following the circulation path. This section is also quite convenient for doing activities that require quiet such as doing work, meeting colleagues, and so on.



Figure 17. Sitting area on the side of the lobby

The third zone of the sitting area is the smoking area. This area is located at the end of the lobby. This area is restricted by a glass door as a zone separator. The arrangement of the room is informal with the selection of more colorful materials. In the room, there is also a special room for visitors who want to hold small meetings that require more privacy.



Figure 18. Smoking Area

f. Visitors' Activity

Every visitor who comes to the lobby has their activities and interests, where each activity can be carried out in the reception area, lounge, café, or waiting area for the elevator. All activities occur depending on each time that has been determined by the visitor. This is what underlies the occurrence of a behavior setting for a visitor.

The movement of hotel guests from morning to noon is more active due to the many morning activities that are often carried out such as breakfast, check-out, preparation for leaving the hotel, and so on. The place that is often used by visitors is the reception and sitting area in front of it.

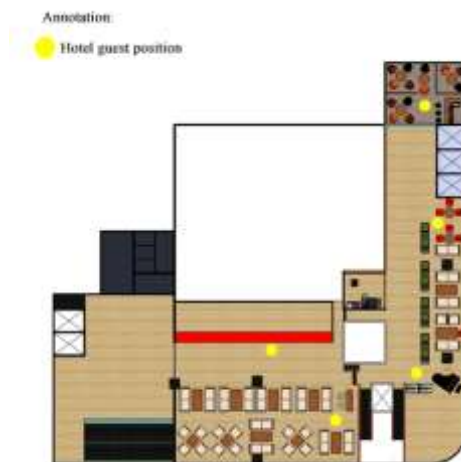


Figure 19. Morning visitor movement plan

From the afternoon to evening, there are not too many visitor activities in the hotel lobby. Some of the activities are the hotel guests checking in, visitors coming to just enjoy the lobby atmosphere, and business people meeting colleagues or clients. At these times, a smoking area is a place that is visited by many men.

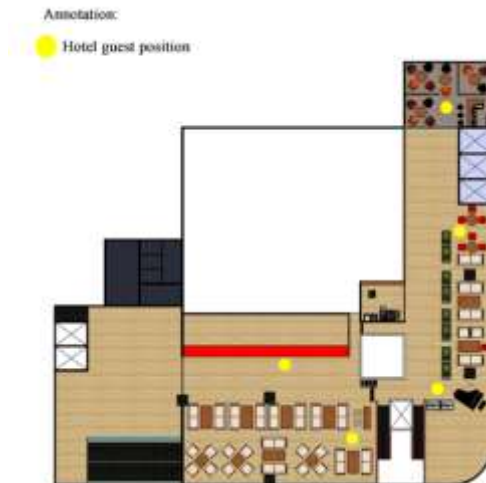


Figure 20. *The floor plan of the movement of visitors during the day*

At the night, the hotel lobby area is often visited by the elderly and some young people. So does The Vintage. Some hotel guests often enjoy the lobby area to relax and chat at night. The smoking area is also frequently visited by the elderly.



Figure 21. *Night visitor movement plan*

4.3 Behavior Setting Boundary Santika Dyandra Hotel Lobby

a. Physical Boundary

The walls and glass doors serve as a barrier between the smoking area and the no-smoking area. The use of this glass wall has been effective and understood by the visitors which functions as a space separator.



Figure 22. *The difference application of wall and floor materials as a separator for smoking areas and no smoking areas*

The flower pot is placed in the sitting area adjacent to the smoking area, which functions as an aesthetic as well as a barrier between seating and circulation path. There are four large flower pots placed in the middle of the room. Between the pots are given a distance of about 1.5 meters as a circulation path to the seat.



Figure 23. *Circulation between the flower pots to the sitting area*

b. Place Centered Mapping at Santika Dyandra Hotel Lobby

Several behaviors follow the spatial pattern. For example, visitors come to the reception to check in or check out. Besides, some visitors come and sit directly in the sitting area or smoking area. This mapping gives a formal and comfortable impression to the sitting area. In Figure 5.10 you can see the visitor points in the lobby.



Figure 24. Behavior that follows the pattern of space

c. Person-Centered Mapping at Santika Dyandra Hotel Lobby

There is a pattern of visitor movement that forms the space in the lobby area. The observations were made to surveillance the activities of visitors who come to the hotel lobby.



Figure 25. Patterns of visitor movement that shape behavior

Explanation:

Behavior 1: Shows visitors who come to the reception and after that sit in the sitting area.

Behavior 2: Shows visitors who come directly to the sitting area.

Behavior 3: Shows visitors who come to buy cakes in the cake corner and then sit in the sitting area which is nearby. This behavior is generally carried out by teenagers.

Behavior 4: Shows visitors who come directly to the elevator. Generally, this activity is carried out by overnight visitors, meetings, seminars, overnight guests, and so on.

V. Conclusion

From the analysis that has been done, the lobby of Santika Dyandra Hotel uses the place-centered mapping method which applies spatial patterns to shape behavior. This can be seen from the shape of the hotel lobby, the application of massive walls, and the materials used.

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