Bandar Kajum Terminal Design With Hybrid Architectural Approach In the City of Tebing Tinggi

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ABSTRACT

Terminal is a public service, a place for up and down passengers, a place for transfers between public and a place for the arrival and departure of public transport. The terminal can drive the transportation system because it is an infrastructure that can increase the mobility of vehicles and users. At the Bandar Kajum terminal in the City of Tebing Tinggi, it is necessary to maximize the function of the terminal both in terms of facilities and building mass that is able to combine strength, usability and beauty so as to produce balance. To produce such a large building mass, hybrid architecture was chosen as an approach in designing the Bandar Kajum terminal because hybrid architecture is a combination of different planning and design elements in an environment. The research method used in this study is an approach with a descriptive method that aims to identify the application of a hybrid to the design which is carried out through eclectic stages, modifications and merging as a way to combine building programs, this allows the functions of one another to be interrelated. support and interact with each other in the same building mass and elevate the locality of the Bandar Kajum terminal.

Keywords: Terminal, Bandar Kajum, Hybrid

INTRODUCTION

The bus terminal is one of the public service infrastructures that affect the development of land transportation, because the terminal is a vital place for the mobility or movement of the flow of people, including goods and services [1].

The terminal can be used as a solution in solving the problem of traffic congestion, the low accessibility of public transportation, to the level of service in public transportation [2].
Therefore, the bus terminal is the main component in the transportation network that has an important role because the smooth operation of the existing terminal can affect the efficiency and effectiveness of the public transport system as a whole [3].
To increase the effectiveness of the terminal, the construction of the terminal needs to be well planned so that the performance of the terminal can be more optimal. The problem that often occurs at the terminal is the number of prospective passengers and terminal passengers carrying out activities up and down from public transportation outside the terminal, causing congestion [4]. In addition, at the terminal facilities often occur that cause intersections between vehicles and interfere with circulation activities at the terminal [5].

Problems that often occur at the terminal described above are also found at the Bandar Kajum Terminal in Tebing Tinggi City. Currently Bandar Kajum Terminal is no longer in accordance with the function of the terminal because many passengers get off and get on outside the terminal, the circulation inside the terminal is also not organized even the ticket booths are no longer functioning because the facilities available at the terminal are not up to standard. so the terminal is no longer functional.
To maximize the function of the terminal in accommodating movement access in the City of Tebing Tinggi, it is necessary to have a terminal that has a design that can support terminal operations, both from facilities adapted to terminal users, terminal layout and the mass of the terminal building in order to form a harmonious building.
In maximizing terminal function requires terminal planning both in terms of facilities and building mass that is able to combine usability

and beauty so as to produce a balance in buildings that are adapted to the environmental context. To produce such mass of buildings, hybrid architecture was chosen as the approach in designing this terminal.

Hybrid has several meanings, first, hybrid is a combination or mixing of the best elements from different cultures, both between present and past cultures (diachronic), or between contemporary cultures (synchronic), which accepts the use of multiple references through cross-cultural and historical. [6]. Second, hybrid is a method to create something with old (historical) patterns, but with new materials and techniques [7]. Third, hybrid has a meaning as a form of "both and" which is mixing binary oppositions into a single entity into a new entity [8]. Fourth, hybrid is a theory that combines and combines (adaptive blending) 2 or more theories, different functions and forms into a new function and form [9] So it can be concluded that hybrid is an acceptance of plural references, respecting memory and history and accepting improvisation so that produce a new function and form.

To maintain the shape of a hybrid building, it is based on the statement that in designing it is necessary to raise the locality of a place such as materials, shapes, textures and colors in order to form the surrounding character [10] to strengthen the hybrid without losing the locality of the design to accept today's cultural references, namely analyzing local characters and reinterpreting it in contemporary terms, rather than directly adapting tradition and architectural values must be placed in the geographical context of the building [11]. In addition, the function referred to in the hybrid is to combine various potential program activities in one building where the spatial program settings can be placed vertically or horizontally [12]. In a hybrid building, it can derive various programs in a single building form. However, there are two basic categories in combining various kinds of programs in buildings, namely thematic programs and disparate programs. Both are based on the combination and interaction between parts in the building program [13]. In this design, the author uses the thematic program method as a way to combine building programs, this allows the functions of each other to be interdependent and interact with each other in the same building mass. In addition, there are eight qualities that can be seen in hybrid buildings, namely project scale, urban area density, function diversity, function scale, function integration, flexibility, vertical connections (that promote integration) and integrated public gathering space [14]. In doing a hybrid there are methods or stages that are passed, namely quotation, manipulation of elements and unification or merging. This method has similarities in thinking with the "both and" method which includes order, fragmentation and inflection as well as juxtaposition or superimposition [15]. The following is an explanation of the stages in carrying out the hybrid method:

Eclectic or quotation

Eclectic or quotation is the selection of the treasury of architectural forms and elements, both colors, building forms or materials from the past that are considered potential to be re-elected, in which the shape or meaning of the building has been accepted or understood in the community.

Manipulation and modification

The elements or results of the quotation will then be manipulated and shaped in a way that is able to change, shift and distort the meaning that already exists. Manipulation has several techniques, namely, reduction or simplification, repetition, distortion, disorientation, disportion, and dislocalization.

Merger

Merging and unification of several elements that have been manipulated or modified into a design that has a predetermined order.

Linked Hybrid

Linked Hybrid is one of the buildings that uses a hybrid approach, the linked hybrid is built on 220,000 square meters of land in China, aiming to counter the urban development in China today by creating porous spaces as the theme of the XXI century, this building highlights interactive relationships and encourages gatherings in space different public sectors from commercial, residential, and educational and recreational sectors. The entire complex in this

building is a combination of functions that are on the ground, underground and above ground. The following is an explanation of the stages in carrying out the hybrid method on a linked hybrid building.

The eclectic application of Linked Hybrid is the use of Chinese polychromatic colors on the building windows. The Application of Manipulation and modification can be seen in windows that are given polychromatic colors are used as building facades which are manipulated by repeating shapes and colors on the entire facade of the building while the combination applied is a different functions in buildings are united by combining buildings with different functions through skybridges that are connected to each other.

Sliced Porosity Block

Sliced Porosity Block is located in the center of Chengdu, China, there is a block that forms a large public square with various functions, namely Office, Hotel, Retail, Apartments, Restaurant. This block is called the Sliced Porosity Block with ownership namely Capita Land Limited. Holl, the architect of Sliced Porosity Block, said that this is a hybrid building that has the functions of an office, retail, apartment, hotel and restaurant. This building is designed to follow the distribution of natural lighting that enters this block.

The large public space is framed in the center of the block formed into three valleys inspired by the poetry of the city's greatest poet, DuFu. The three levels in the square feature a water garden based on the concept of time, namely the Chinese Calendar Year Fountain, Twelve Moon Fountain, and Thirty Days Fountain. The three mini colas function as skylights to the shopping area. The repetition that occurs in the building can be seen from the expression of the building as a glass wall, the repetition of the shape of the window into the facade of this building. The following is an explanation of the stages in carrying out the hybrid method on a linked hybrid building.

The eclectic application of sliced porosity block can be seen from the three-tiered garden inspired by the great Chinese poet and at the terraced garden you will find a water garden inspired by the calendar Chinese annual fountain. The Application of Manipulation and modification can be seen in the whole building leads to the garden and on the facade of the windows is done by doing repetition so that the entire facade of the building has the same pattern and the combination applied is a different functions of the building are combined by combining the different functions of the building through a skybridge and the garden is the center.

METHODS

The research method used by reseaerchers in this study is a qualitative approach with descriptive method. Research aims to maintain human from behavior and analyze its qualities following cultural assumptions as well as following data [16].
This study aims to identify the important elements in terminal design with a hybrid architectural approach. The analysis begins by collecting data from buildings that have similar functions and themes. Then, conduct a comparative study as a reference for the condition of the area to be built. After the data is collected, the next step is to choose an existing location that fits the function. After doing the design with the stages of the elclectic or quotation, manipulation and modification and unification or merging [15]

RESULTS AND DISCUSSION

This building has a concept on the facade that combines Melayu architecture with modern architecture. The application of hybrid stages to the facade in this design can be seen through the following stages:

Eclectic or quotation

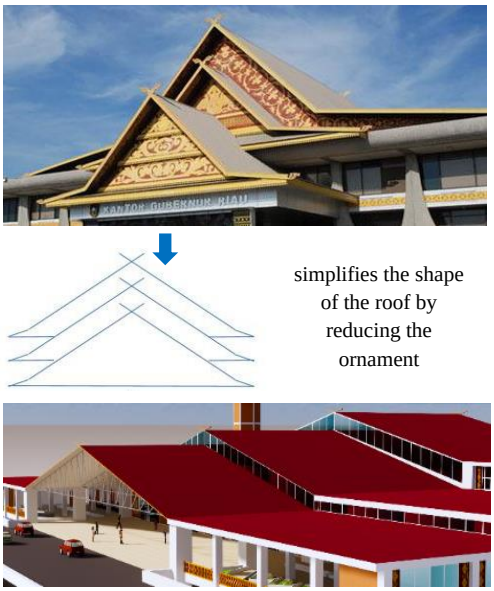
The facade of the building elevates the use of ornaments that are considered potential and characterizes the surrounding environment, in addition the use of awning roof is also applied to the building and the use of yellow and red colors on the facade of the building to strengthen the Melayu architectural character.

Figure 1. Pucuk Rebung
(Source : Ummu Khalsum
www.flickr.com/photos,2017)

Figure 2. The Kajang Roof
(Source : Wisatamelayu.com from
/news.okezone.com,2010)

Manipulation and Merging

Manipulation is carried out by simplification applied to the roof of the kajang and the use of ornaments and then merging with the application of glass on the facade which is one of the characteristics of modern architecture.



After simplification is carried out, there is an incorporation of the use of glass on the front of the roof which functions as a skylight

Figure 3. Manipulation and Merging Kajang Roof
(personal source, 2021)

Simplify the pucuk rebung ornament which is usually used as a roof list plank to become an ornament on the building facade wall whose size is enlarged and combined with the use of glass.

Figure 4. Merging Aplication of Ornament
(personal source, 2021)

hybrid process is also carried out on the arrangement or zoning of different spatial functions in the building. The hybrid function arrangement uses a thematic program that is applied vertically and horizontally, namely the existence of a terminal management function, a food court and a transit hotel function in one building and then combined and manipulated with the hall as the center. building point and terminal user activity center. (Figure 5 and figure 6).

Program Concept

Hybrid Area : Retail, Waiting Room, Information, Locket for Ticketing, Circulation Vertikal

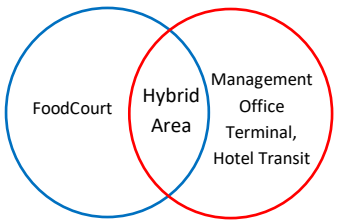


Figure 5. Thematic Program Concept
(personal source, 2021)

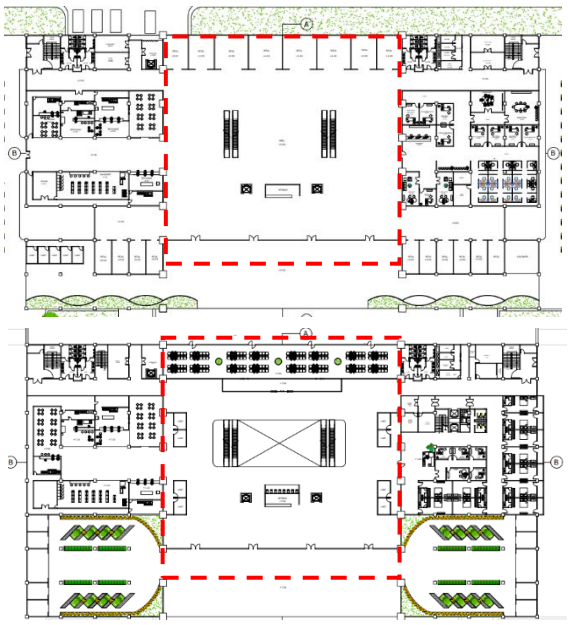


Figure 6. Hybrid Area in first floor and Second Floor
(personal source, 2021)

CONCLUSION

Terminal is a public transportation infrastructure that is able to encourage the movement or movement of people in terms of products or services. In maximizing the function of the terminal, terminal planning is carried out that combines different functions but is needed in a terminal building. This combination is carried out using a hybrid architectural approach that combines different functions with a more modern theme but still maintains the locality of the building that has strength, usefulness and beauty so as to produce a balance in the terminal building of Bandar Kajum.

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