

The concept of Javanese cultural locality that influences the design of the Aerotropolis Hotel Yogyakarta International Airport

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ABSTRACT

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The government has plans to build an Aerotropolis area, a city with an airport-centered infrastructure and economic topology to support local economic progress at Yogyakarta International Airport, Kulon Progo. The potential for rapid airport traffic means that the planned hotel development can be a facility for postponing plane departure schedules due to certain circumstances such as bad weather (incidental). Hotel development is implemented using a Javanese cultural locality approach which revives the atmosphere of traditional elements by creating local building shapes and patterns. So the issues raised are the concept of locality and the concept of hotel design. This research uses qualitative descriptive methods and analysis is carried out using theories from the architectural anatomy approach and the Javanese cultural locality approach. The result is that there are five aspects of architectural anatomy and three cultural forms that influence the locality of Javanese culture. The anatomical aspects of architecture are the environmental scope, site scope, building scope, form scope, and material scope, while the aspects of cultural form are the form of ideas, activities, and artefacts. Five architectural concept criteria were produced, namely the concept of an imaginary mountain-sea axis, Kiblat Papat Kalima Pancer, Javanese architectural buildings, Kawung batik ornaments, and local materials aimed at giving the impression of a building that is integrated with the area and still preserves Javanese culture.



Introduction

The easing of COVID-19 pandemic cases has significantly increased the movement visits to Yogyakarta. The number of visits increased by 24.88 per cent. The total number of foreign tourist visits from January to February 2023 was 8,732 people (Cindy Dwi, 2023). This certainly affects the development of air transportation which is busy again, especially at Yogyakarta International Airport, Kulon Progo.



Figure 1. Kulon Progo Aerotropolis City Masterplan

Sumber: jogjainvest.jogjaprovo.go.id, 2024

The government has plans to build the Aerotropolis area here, which is a city with a layout, infrastructure, and economy centred on the airport. Based on the Kulon Progo Aerotropolis City master plan, there is an idea to make it easier for passengers and encourage the development of regional infrastructure by developing lodging facilities close to the airport, namely hotels (Persada & Octadynata, 2021). This hotel can be used as a temporary resting place while waiting for departure hours or it can be called transit in incidental conditions. Under normal conditions, people who visit hotels are not for transit purposes but can also attend seminars or conventions.

Cultural Locality

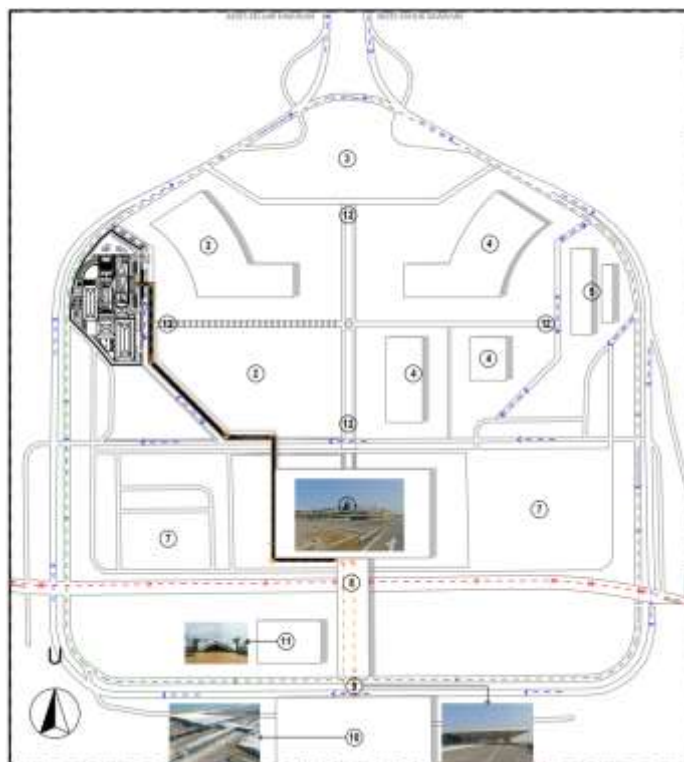
Yogyakarta is one of the regions that is quite known for its culture that is still maintained (DPMPTSP Kota Yogyakarta, 2023). The culture that is closely attached to Yogyakarta is Javanese culture and has become a characteristic that marks the area. The culture that is maintained can be seen from the social activities of the community, beliefs, language, and historical relics, to the architectural style of the building (exterior, interior, spatial layout). Many parts of the city are decorated with a touch of Javanese culture that makes people remember the characteristics that exist. This is an attraction for tourists to take a tourist trip to Yogyakarta (Mukminatun, 2010).

Seeing the development of increasingly advanced times makes an architectural style continue to change (Ardiwidjaja, 2018). Many new buildings have grown with current concepts that want to accommodate the development of activities and mindsets in society. These concepts can influence the local architectural style in new buildings. This situation can cause the loss of a characteristic that is an attraction to an area because local values that are the attraction of a region cannot be maintained (Ardhian, Zakiyah, & Fauzi, 2023). Seeing these problems, the development of hotels at this airport is applied with a Javanese Cultural locality approach. Architecture with a locality approach to Javanese culture revives the atmosphere of traditional elements by creating the shapes and patterns of local buildings into new building designs (Nandang, 2010).

Research Methods

This study uses a qualitative descriptive research approach. The qualitative descriptive method emphasizes the description and analysis of the situation in the field specifically and in-depth. The first thing that is done is to collect and conduct literature studies that discuss hotels, architecture related to Javanese culture, and rules in architecture. After understanding the theories and requirements, the next step is to observe and document the research object.

The focus of the research is on the design of hotels in the metropolis area of the international airport. The architectural concept of Yogyakarta International Airport and the locality of Javanese Culture are revealed through the theory of architectural anatomy. Architectural anatomy helps to read architecture as well as can be used to design architecture (Salura, 2018). The place is in the Yogyakarta International Airport Area in Temon District, Kulon Progo Regency, D. I. Yogyakarta. The region is still starting infrastructure development to support international airport operations. There is an area of 11,000 m² that has been planned in the city master plan. The place is in the Yogyakarta International Airport Area in Temon District, Kulon Progo Regency, D. I. Yogyakarta. The region is still starting infrastructure development to support international airport operations. There is an area of 11,000 m² that has been planned in the City master plan. **Aerotropolis Kulon Progo is to be designed as a hotel with 4 stars.**



Information:

1	4-star hotels
2	MICE
3	Garden
4	Retail
5	3-star hotels
6	Airport Parking Building
7	Airport Outdoor Parking
8	Airport Train Station
9	Airport Dropoff
10	Airport Terminal
11	Masjid Al- Akbar
12	Pedestrian Area

Figure 2. Kulon Progo Aerotropolis Area Plan Block

Results and Discussion

The Yogyakarta International Airport Aerotropolis Hotel as one of the infrastructure and operational supporting facilities of Yogyakarta International Airport is designed in line with the general concept of the airport. The design of the hotel is planned by combining the technical and philosophical aspects of strong local cultural wisdom, namely Javanese Culture. The application of design with Javanese cultural locality does not leave the modern aspect as a step in the development of hotels that still adapt to the development of the times. So the design obtained will still adjust to the development of the times but the nuances of locality can still be felt.

Elements of Javanese Cultural Locality in Yogyakarta

Culture in each region has its conception that produces its characteristics. Cultural values continue to be inherited from generation to generation in a social order. There is a stigma in society that classifies regional cultural values with its distinctive characteristics that distinguish it from other regions. Javanese culture grew and developed in the Java area. This Javanese culture grew and developed, especially in the Central Java, East Java, and D. I. Yogyakarta areas. The elements of Javanese cultural locality can be understood through their forms, namely the form of ideas, the form of activities, and the form of artefacts (Koentjaraningrat, 2009).

Wujud Ide

The form of an idea is abstract, and cannot be touched or photographed. Its location is in the head or other words, in the minds of the citizens of the community where the culture lives. In Javanese culture, ideas are manifested, for example, the Papat Qibla Kalima Pancer, Hamemayu Hayuning Bawana, and Manunggaling Kawula and Gusti.

In human life, there is a philosophy of direction (qibla) that guides people so that they do not go in the wrong direction, which is called the four qiblas of the five pancer which means there are four corners and one in the middle. In this philosophy, the qibla of the universe begins from the east (wetan) which means kawitan or beginning. In the order of the universe, hamemayu swinging bawana can be interpreted as beautifying the state of the world. This concept in Javanese culture is held by the Javanese people to create harmonious conditions that are manifested in three things, namely harmony with the entire universe and its contents with mutually respectful behaviour, maintaining harmonious relationships between fellow living beings, whether humans, animals, or plants, and uniting oneself to Almighty God to get clues to the truth (Aziz et al., n.d.).

Activity Form

The form of activity in Javanese culture is called the social system, regarding the actions of humans themselves who have a certain pattern. This social system consists of human activities that interact, relate, and associate with each other from second to second, from day to day, and from year to year, always according to certain patterns based on the customs of the code of conduct that indirectly have an understanding of each other in society (Widyakusuma & Arief, 2023).

Wujud Artefak

The form of artefacts is a cultural form in the form of all physical results and activities, deeds, and works of all humans in society. In Javanese culture, for example, such as the Joglo House. In the concept of the Joglo house, there is a structure in the form of four teachers or main pillars, in the Javanese concept the centralized arrangement that surrounds four elements that are related in a single structure is a concrete form of Javanese views on the four qiblas of the five dancers (Krisnawati, 2014). In this philosophy of Joglo's house, everything is always associated with the forces of nature, something metaphysical that forms a balance.

The Yogyakarta region itself produces a culture in the form of artefacts in the form of the Yogyakarta Palace. The Palace building is the beginning of the source of Yogyakarta's regional planology which is full of symbols of life and human life. Yogyakarta is based on the meaning of the philosophical axis between the Krapyak Stage - Kraton - Tugu which forms a straight line (Priyono et al., 2015). Between these axes stand buildings with the meaning of the human life process from birth to facing the creator. The location of the Palace is regulated by the law of harmony between the macro cosmos and the micro cosmos. Mount Merapi- Kraton- South Sea depicts an imaginary axis that symbolizes the harmony and balance of the relationship between man and God, man and man, and man and nature. This concept does not consider only its functional aspects but the philosophy of the universe.

There is one of the buildings in the Yogyakarta Palace that can explain the Javanese cultural values contained in traditional Javanese buildings and their meaning, namely the Ponconiti Ward building. The position of the building is on the Philosophical axis which is a representation of the microcosm, part of the macrocosm (imaginary axis). This position has a meaning, namely maintaining the preservation of the human world in harmony with the universe to achieve prosperity and peace (Suryono, 2020). This Javanese cultural value is contained in the philosophy of Hamemayu Hayuning Bawana. Overall, the architecture of the Yogyakarta Palace has almost the same building mass shape as each other but has different dimensions and the number of elements that make up the building. The explanation of one of the wards in the Yogyakarta Palace complex provides a general understanding of the typology of the buildings in the Yogyakarta Palace.

Aerotropolis Hotel with Javanese Cultural Locality Elements

Understanding architectural works begins with the anatomy of architecture which serves as a guideline for reading and understanding a complete building starting from the scope: the surrounding environment, site, building, shape, and material sources (Salura, 2018).

Environmental Scope



Figure 3. Satellite image of the Kulonprogo Aerotropolis Area

Information:

1. 4-Star Hotel Site
2. Airport Terminal
3. Airport Parking Building
4. Access in and out of the area



Figure 4. Mass Arrangement of the Yogyakarta Palace Building

Sumber: <https://www.kratonjogja.id/tata-rakiting/4-tata-ruang-dan-bangunan-kawasan-inti-keraton-yogyakarta/> , 2024

In the scope of the environment, to produce the desired expression, attention must be paid to the selection of the right location. The selection of this location should place the position of the building that gives rise to the dominant expression of both the composition, the building, and the orientation of the site. The mass and space arrangement wants to reveal the essence of Javanese culture hamemayu swinging bawana where the harmony of the universe is created. The spatial layout and building mass are arranged linearly with an imaginary mountain-sea axis. The organization of the space uses a radial-linear arrangement. The circulation room is central and surrounded by guest rooms arranged linearly in groups.

Site Scope

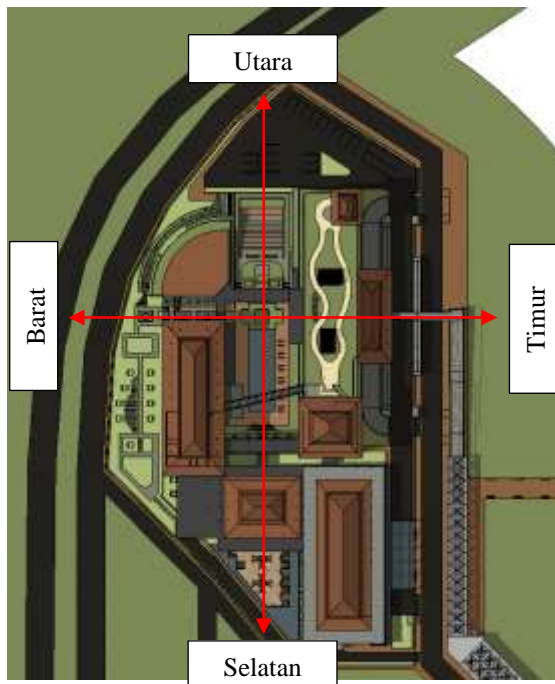


Figure 5. Simulation of Qibla Orientation Design in Hotel Buildings



Figure 6. Illustration of the Qibla Direction

Source: Cultural Office D. I. Yogyakarta, 2015

In the scope of the site, the architectural anatomy that must be considered is the mass order of the building to create the exterior space inside the site. The desired expression is generated from the size of the space and the quality of the space. The main building in the hotel, namely the guest room, has a philosophy as a spirit that communicates with his God while the supporting building can be analogized as an accomplice. The building pattern is arranged based on the four cardinal corners where there are east-west and north-south axes. This direction is called the four qiblas of the five pancer which means there are four corners and one in the middle.

The receiving building at the hotel in the form of Drop Off and Lobby is the main entrance gate for visitors into the hotel building. The atmosphere of hospitality is displayed through the embodiment of a spatial layout that has a friendly and open expression for anyone. This philosophy exists in traditional Javanese buildings, namely the Joglo House. In the Joglo house, there is a room called pendapa which is usually used for meeting and receiving guests. The position of this panda is in the front area of the building and is public. Adaptation of this expression and form can be applied to the hotel drop-off and lobby as a reception room for hotel visitors so that the value of local wisdom of Javanese culture can be felt directly when visitors step into the hotel building for the first time.

Building Scope

The concept of locality in Javanese culture can be found in the expression of Javanese vernacular buildings such as joglo houses. Creating a Javanese vernacular expression can be done by adapting the shape of the traditional building into a new

building with different materials or constructions. The application of shape of the joglo roof in hotel buildings can be applied by adapting the shape and material. This form also has the value of the philosophy of keblat four kalima pancer where the pancer is the middle part which if in making offerings, the Javanese people place the largest tumpeng on the pancer. The body of the building in the form of a scope wall in traditional Javanese buildings has the property of being open in public spaces while closed in more private spaces. The application to hotel buildings can be done by giving an open nature to spaces that are public and more closed to private spaces. Public spaces such as the lobby, restaurant, dropoff, and meeting area. A private space is the guest room. Public space also prioritizes the direct relationship between the outer space and the inner space so that the open expression of the building body is more shown.



Figure 7. Perspective Design Simulation from the East



Figure 8. Yogyakarta Palace

Sumber: <https://kebudayaan.jogjakota.go.id/page/index/kawasan-kraton>, 2024

The foot of the building in traditional Javanese architecture has a raised floor level. The height of this floor does not make the floor of the building like a stilt house. The height is only 2-4 steps. The application of hotel building design can adapt the floor level applied to this traditional Javanese architecture by providing a level of height starting from the receiving building to the main building.

There is a dominant ornament at Yogyakarta International Airport, namely batik applied to the roof of the terminal lobby area. The type of batik used is batik with a kawung motif. The shape of the kawung batik is adapted into a roof structure in the form of four oval circles that surround the circle. The design of the kawung batik motif used has the Javanese cultural philosophy of manunggaling kawula Gusti / unity with God.

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Figure 9. The Shape of Kawung Batik Ornaments at NYIA
Source: Personal Documentation, 2024

The embodiment of ornaments from batik kawung motifs can be used in hotel designs that are applied to interior or exterior elements. On the exterior of the building, the application of this ornament can be used on the façade of the building, while on the interior of the building, it can be used on ceiling pattern ornaments and floor patterns. With the use of these ornaments, the atmosphere created can be by the design of the airport as the centre of the development of the city master plan of the metropolis.



Figure 10. Design simulation seen from the east (entrance)

Scope of Form

In the scope of shape, the architectural anatomy that is emphasized is the level of openness and orderliness as well as the surface quality of the building covering elements. This must be considered to support activities in the room. The expression produced inside and outside the building is obtained from the openness and closeness of the enveloping elements and the relationship between the interior space and the exterior space of the building must be considered.

The scope wall in traditional Javanese buildings has the property of being open in public spaces while closed in more private spaces. The application in hotel buildings is carried out by providing a greater level of openness in public spaces and more closed in

private spaces. The application of this scope element can create an expression of the value of ideas from Javanese Culture that are friendly and *also*.

Material Scope

The concept of material scope, the emphasis of architectural anatomy is on the availability of all material sources used. The sustainability of the building will be maintained if the materials and materials used come from the surrounding environment. The use of local materials also gives a familiar impression to the community because they already know and understand it.



Figure 11. Perspective Design Simulation from the North

Local materials in the environment around the hotel design area must be adapted to the needs and capabilities to be used in hotel design. Local materials available in the surrounding environment include bamboo, wood, and processed clay products such as bricks and tiles. This material can be used for the design of walls, floors, ceilings, and building facades. With this combination of local and modern materials, the resulting building design will adjust to the contemporary style but still provide the atmosphere and expression of the Javanese Culture locality.

Conclusion

The concept of Javanese cultural locality and the architecture of Yogyakarta International Airport that influences the design of the Yogyakarta International Airport Aerotropolis hotel exists in the architectural anatomy in the form of aspects of environmental scope, site scope, building scope, shape scope, and material scope. From this aspect, five criteria for architectural concepts were produced, namely the concept of an imaginary axis of the mountain-sea, the qibla of the four dancers, Javanese architectural buildings, knowing batik ornaments, and local materials aimed at giving the

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impression of a building that blends with the area and still preserves Javanese culture. These aspects and concepts are influential as a basis for producing guidelines for the design of aerotropolis hotels with the Javanese Cultural locality approach.

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