

Javanese Neo-Vernacular Themes in Architectural Praxis

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ABSTRACT: This research aims to identify themes of Javanese neo vernacular architecture practice in Indonesia which can results a design guidelines for a Javanese neo vernacular building. This research uses a descriptive analysis method with a quantitative approach and systematic precedent review with 30 precedents. The results of this study shows that the most dominant theme used in the president are the values of local or natural materials, unity interior and exterior space, something new, and following vernacular elements. While the most dominant architectural components applied to Javanese neo vernacular values in precedents are roof and ornaments.

Keywords:- Architecture themes, Javanese architecture, Neo-vernacular

I. INTRODUCTION

According to Yulianto Sumalyo, vernacular in architecture is to refer to forms that apply elements of culture, the environment including the local climate, then expressed in physical architectural forms such as floor plans, structures, details of ornaments, and so on. While the notion of vernacular architecture according to Paul Oliver in the book *Encyclopedia of Vernacular Architecture of the World* is about people's houses and other buildings, which are related to their environmental context and available resources that are owned or built using traditional technology. [1]. In the late 19th century, as the whole world was witnessing the effects of the Industrial Revolution, 'modernity' in architecture quietly crept in and began to carve out its place, displacing sustainable practices. It also arose from the desire to break with historical architectural styles and create something new, which caused concern all over the world, these were building materials with a high energy content (steel, glass, concrete, etc.) and ignorance of only the micro and macro conditions of the site . Vernacular architecture is seen as an approach to achieve the desired goals. As the requirements and goals of buildings and their users change, vernacular architecture cannot be practiced in its pure essence. In a general reaction to modernism in the 1960s and 1970s, 'NEO-VERNACULAR ARCHITECTURE' emerged and used bricks and tiles, sharing a common understanding of the natural environment and user needs [2]. However, in the modern era, Vernacular Architecture is rarely applied [3].

The emergence of the modern era raises a problem where there are many modern buildings that do not apply the characteristics of the local architectural culture including the phenomenon that exists in Indonesia. As an example of the phenomenon in Indonesia, come the impact of modernization and globalization that has affected changes in every aspect of urban life. The pressure of globalization on traditional cities could lead to cultural dualism, where local behavior and activity patterns begin to slowly shift [4]. Traditional values in Indonesia are increasingly dissolving due to the rapid development of the times and technology. Traditional values should become an identity for the area, one of which is in the architectural aspect. Many buildings have started to develop along the time, often traditional buildings are considered ancient by some people. So one thing that can be pursued in maintaining this and also responding to the times, is the need to combine traditional architecture with modern architecture [5].

The development of time bring forth the modern buildings which sometimes forget the aspects of local identity in the Java area, which in this case is devoted to the physical element aspect, because the physical element is the easiest to absorb and supports the legibility and imageability of Javanese neo vernacular architecture.

From the problems above, a question arises about how to apply neo vernacular themes of Javanese architecture to modern buildings? This question can be answered by conducting a study on the application of

Javanese architecture to modern building design practices to formulate themes, concepts, or approaches to neo vernacular architecture in Java.

The results of this formulation are expected to provide input in the preparation of guidelines for Javanese neo vernacular architecture in modern buildings.

Neo-vernacular architecture is actually a contemporary interpretation of vernacular architectural buildings [6]. It includes not only physical elements applied in a contemporary way, but also non-physical elements such as culture, beliefs, layout, religion, and others. Neo-vernacular consists of the word *Neo* which means new or something new, and *Vernacular* which means an original architecture built by the local community with a new concept in terms of workmanship or materials [7].

From the statement by Charles Jenks in his book "The Language of Post Modern Architecture (1990)," the characteristics of neo-vernacular architecture can be explained as follows: a) Always use a roof. Since the roof covers the height of the walls almost to the ground, more roofs are compared to protective elements, called defensive elements, symbolizes hostility; b) bricks; c) restoration of traditional shapes with greener and vertical proportions; d) unity between interior spaces is opened through modern elements with external open spaces; and e) strongly contrasting.[8]

According to Zikri, there are several criteria for neo vernacular architecture, namely: a) The mass of the building applies elements of culture and the surrounding environment as well as the local climate, which is set forth in architectural physical form (floor plans, ornaments or details or structures in buildings); b.) not always purely following vernacular elements, usually something new; c.) process non-physical elements, such as mindsets, culture, beliefs and layouts that refer to the macrocosm and others [9].

Based on the combination of the two theories above, it can be concluded that there are 7 criteria for neo vernacular architecture, namely: a) Neo vernacular can be applied to roofs, plans, ornaments, building details, or structures in accordance with the culture and surrounding environment as well as local climate conditions; b) the use of local materials; c) restoration of traditional shapes with greener and more vertical proportions; d) not always purely following vernacular elements, usually something new; e) unity between interior spaces is opened through modern elements with external open spaces; f) process non-physical elements, such as mindsets, culture, beliefs and layouts that refer to the macrocosm and others; and g) strongly contrasting.

Indonesia is one of a country that has high potential to develop and build a neo vernacular architecture based on its rich local identity, one of the areas with local identity characteristics that can be developed in terms of neo vernacular architecture is Javanese.

Javanese Vernacular Architecture

Javanese traditional architecture can be seen from the Javanese traditional house aspect, which one has multiple functions. The Javanese house is rich in symbolic meanings, socio-cultural values as well as architectural values, along with unique structures adapted to environmental, cultural and climatic conditions. According to Ismunandar, there are several Javanese houses in Indonesia, as following : 1) Joglo House; 2.) Limasan House; 3.) "Kampung"/Village House; 4.)Tajug and; 5.) "Panggung Pe" House [10]. The hallmark of windows in Javanese buildings is their large size and large amount of windows with the majority of the frames are using wood materials, this is an adaptation of colonial house designs with the function of providing fresh air inside [11]. In general, traditional Javanese houses are built with wood materials and the arrangement is proportional so that it looks symmetrical.

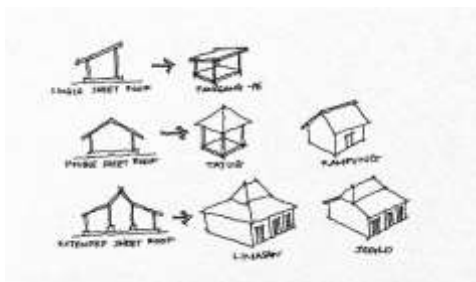


Figure 1 Traditional forms of Javanese buildings.

(Source : redrawn from https://www.researchgate.net/figure/The-many-shapes-of-Javanese-Traditional-Houses-2_fig1_334062599)

The typology of Javanese architectural buildings can be classified based on the roof characteristics and spatial patterns. The use of the roof shape has its own hierarchical meaning, starting from the tajug roof for the mosque, the joglo for the aristocratic group, the pyramid for the middle class, the kampung and the Panggang-pe for the common people [12]. In traditional Javanese houses, the concept of a pyramid roof and the form of a village will be more flexible in the selection of building materials, construction and implementation in the field.

Traditional Javanese house buildings can be categorized as buildings that are easy to disassemble and move because they use a raft system of wooden construction [13]. In its development, Javanese house building is increasingly adaptive and dynamic. The materials used are dominated by renewable materials such as wood and bamboo, so the building looks more friendly to the environment [14].

Javanese architecture is rooted in spirituality, a world that is integrated with Javanese daily life [15]. The beauty of Javanese architecture may reflect the high technological competence of the builders. Javanese architecture is understood through a spiritual rather than a material approach (which might, for example, consider factors such as efficiency). In addition, it would be very misleading to justify the architectural quality of Java without considering the context of its physical and non-physical environment.

However, until now the design guidelines for how to apply Javanese neo vernacular in modern buildings, are still incomplete, therefore studies are needed to provide input on the formulation of Javanese neo vernacular design guidelines in modern buildings. This study can be carried out by studying best practices regarding the application of Javanese neo vernacular architecture to buildings that have been built.

In order to study this matter, it can be based on the research questions such as : a) what is the design concept or design approach in applying Javanese neo vernacular architecture to modern buildings?; b) what design concept themes or application themes can be formulated from question item (a)? and; c) how operational is the design guideline for each theme with reference to the answers to points (a) and (b)? The problem is there is still a lack of studies regarding the identification of Javanese neo vernacular architectural themes in practice which then can be referred as a design guidelines. The purpose of this study is to find out the various variations of Javanese neo vernacular architectural themes and how they are applied in architectural design practice.

The benefits expected to be received by readers are that they can increase knowledge about various themes of implementing neo-vernacular architecture, which can then become a design guideline for implementing Javanese neo-vernacular architecture in modern architectural practice.

II. METHODS OF RESEARCH

To achieve the objectives of this study, the method used in this study is a descriptive analysis method with a quantitative approach and precedents review. Where then these precedents will be analyzed for the characteristics of the Javanese neo vernacular architectural design. The analysis of this research is more focused on the exterior aspects of the building facade. There are a total of 30 precedents divided into 3 groups representing hotel, residential and public building typologies. Characteristics will then be classified based on the similarity of the concept, from this classification can be formulated based on the theme and can produce a result that can be used as a design guide.



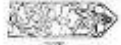

Through literature studies and precedent review approach, the author could analyze the implement existing theories into the design of Javanese neo-vernacular in architectural buildings praxis. The analysis between the theoretical review and the discussion of this research will then be represented through a matrix table which then produce a percentage conclusion where 0-50% is the values that least applied, 51-70% is values that applied moderately, and 71-100% is the most dominant applied.





III. RESULTS AND DISCUSSION

In order to be able to analyze the application of Javanese Neo Vernacular in architecture, the first step is to describe and arrange the variables from the Javanese Neo Vernacular values and architectural components where the values are applied, as shown in the following Table 1 :

Table 1. Variables from the Javanese Vernacular values and architectural components

Javanese Value	Architecture Variable				
	Roof	Wall	Window	Ornament	Color
Openness and Closeness	<p>Joglo : represent a belief that the mountain is the abode of the gods.</p> <p>Tajug : The tip of the roof of Tajug shape is triangular which symbolizes the eternity and oneness of God.</p>	<p>Placing the house door on the middle wall as an openness and closeness between the occupants of the house and the guests. House walls are are</p>	<p>Joglo : large amount of huge windows is intended so that air can enter more freely.</p> <p>Limasan : has big</p>	-	-

Javanese Value	Architecture Variable				
	Roof	Wall	Window	Ornament	Color
		grouped into closed buildings, open buildings, mixed buildings (open and closed), and half-open buildings;t	windows and feels cool because the air circulation is very good.		
Social Class	 <p>Joglo : Considered to be sacred in Java and associated with the high social status of the nobility Image Source : https://www.arsigriya.com/mengenal-struktur-bangunan-joglo Accessed date May 10,2023</p>	 <p>Kampung : Recognized as belonging to the lowest social class in Java. Image Source : https://encrypted-tbn0.gstatic.com/images Accessed date May 10,2023</p>	-	-	-
Tranquility	-	-	-	 <p>Lung-Lung : carving's motif means tranquility Gunungan: shape like a mountain and forest represent the meaning of peace, tranquility, and prosperity Image Source : https://unisnupress.unisnu.ac.id/assets/media/ornamen-tradisional-bentuk-sejarah-dan-karakternya.pdf Accessed date May 10,2023</p>	-
Fertility	-	-	-	 <p>In front of Senthong is usually decorated with symbols of fertility such as loro blonyo. Image Source : https://indonesia.go.id/kategori/keanekaragaman-hayati/1202/loro-blonyo-simbol-kemakmuran-dan-keturunan?lang=1 Accessed date May 10,2023</p>	-

Javanese Value	Architecture Variable				
	Roof	Wall	Window	Ornament	Color
Nature	<p>Joglo : the shape of a tajug which resembles a mountain.</p> <p>Limasan : This type of traditional house has the advantages of absorbing earthquakes.</p>	-	<p>The majority of traditional Javanese buildings have windows that open in response to the tropical climate</p>	 <p>Banyu Netes : shape a raindrops from the edge of the roof of the house.</p>  <p>Lung Lung : shape like a plant or flowers that are vines and creeping.</p>  <p>Patran : shape like an arrangement of leaves that are neatly lined up and arranged in layers.</p>  <p>Wajikan : shape like a diamond with a flower carvings on the middle.</p> <p>Image source : https://unisnupress.unisnu.ac.id/assets/media/ornamen-tradisional-bentuk-sejarah-dan-karakternya.pdf Accessed date May 10, 2023</p>	<p>The color is dominated by brown which is caused by natural materials such as teak wood, coconut trees, woven bamboo and the upper part of some houses uses clay tiles.</p>
Sacral and Static	<p>Joglo : Shape of the roof represent a mountain shape that is taken from the philosophy of ancient javanese society. at that time, the mountain was a sacred place for the community.</p>	<p>The development of the Javanese joglo house is closely related to an ancient building called punden terraces, which is a sacred building that has a structure or arrangement that is getting smaller and smaller represent a ladder.</p>		<p>Javanese traditional houses are decorated with ornaments that are profane, sacred and placed on parts of the building structure such as pillars, blandar, dudur, ander, dhadhapeksi, sunduk, siding, door slats, window slats, doors.</p>	-
Multi Functional	<p>Limasan : Preferable for those who prefer an extra spacious place</p> <p>Joglo : a protector for the users inside, the shape of the roof has the intention that air circulation inside can</p>	<p>Pendopo: for formal and public events</p> <p>Pringgitan: for wayang performances</p> <p>Senthong</p> <p>Kiwo: family</p>	-	-	-

Javanese Value	Architecture Variable				
	Roof	Wall	Window	Ornament	Color
	rotate properly and smoothly.	bedroom or as a storage area for rice and farming tools. Senthong Tengah (Krobongan) and Senthong Tengen: places to store seeds and grain or worship. Gandhok : family room.			
Local / Natural materials	y a clay tiles or a shingle roof as a roof covering materials that have the advantages such as light, strong, reflect heat, last long up to 25 years.	Generally made of solid brick materials that are not painted or covered with other layers. House walls are made of woven bamboo or wood	Traditional Javanese buildings use wooden frame frames with Javanese carvings	The use of carvings using woo, rattan, stone, cloth, bronze, and brass material and usually located on the ceiling of the roof, doors, walls, or window frames	The main material is teak wood that represent the color brown
Color meaning	-	-	-	-	Use the color brown, white, beige, or any various shades of brown, it gives the impression of natural color of wood, breeziness, and modesty which similar to the color of soil and

Javanese Value	Architecture Variable				
	Roof	Wall	Window	Ornament	Color
					warmth
Acculturation	Kampung : Used for contemporary-style houses without or less local values.	-	Joglo : lots of large windows due to the acculturation of colonial and Javanese architecture.	-	-

The second step is to analyze the criteria for the application of neo vernacular architecture in general based on the theoretical conclusions of Charles Jenks and Zikri, as shown in the following Table 2 :

Table 2. Conclusion of Neo-Vernacular Criteria according to Charles Jenks and Zikri

Neo-Vernacular architecture criteria according to Charles Jenks, 1990	Neo-Vernacular architecture criteria according to Zikri, 2012	Conclusion
Always use the roof. Since the roof covers the level of the walls almost to the ground, more roofs are compared to protective elements, called defensive elements.	The mass of the building applies elements of culture and the surrounding environment as well as the local climate, which is set forth in architectural physical form (floor plans, ornaments or details or structures in buildings)	Neo vernacular can be applied to roofs, plans, ornaments, building details, or structures in accordance with the culture and surrounding environment as well as local climate conditions .
Bricks (in this case local building elements).	-	The use of local materials
Restoration of traditional shapes with greener and more vertical proportions	-	Restoration of traditional shapes with greener and more vertical proportions
-	Not always purely following vernacular elements, usually something new	Not always purely following vernacular elements , usually something new
Unity between interior spaces is opened through modern elements with external open spaces	-	Unity between interior spaces is opened through modern elements with external open spaces (unity interior space and exterior space)
-	Process non-physical elements, such as mindsets, culture, beliefs and layouts that refer to the macrocosm and others.	Process non-physical elements, such as mindsets, culture, beliefs and layouts that refer to the macrocosm and others.
Strongly contrasting	-	Strongly contrasting

The next step is to do an analysis of the literature review above to generate values from neo vernacular and architectural components where those values are applied, as shown in the Table 3 :

Table 3. Variables from the Neo Vernacular values and architectural components

Neo Vernacular Value	Architecture Variable				
	Roof	Plans	Ornament	Building Details	Structure
Surrounding environment [local climate conditions.]	A sloping gable roof, pyramid with a system of beams, rafters and ties or a space frame system.	Building plans consider an exposure to sunlight and air circulation (location and size of the windows, the direction of the house, the roof design, materials, to the exterior arrangement.)	The ornaments used are in accordance with the traditional ornaments of the site	The front wall of the house is painted or covered with natural stone.	Modern architecture usually uses steel infrastructure for its construction, where the interior columns bear most of the load.
The use of local materials	Roof tiles shingles, clay tiles, concrete tiles, metal or metal tiles, bituminous tiles	-	The use of wood, bamboo and natural stone materials.	The use of aluminum, wood and uPVC as local materials.	Bricks is dominated by the use of 19th century brick Victorian style.
Following vernacular elements	Adhering to the principles and forms of traditional roofs in the traditional location or theme of the building	Building plans can follow the concept of plans applied to traditional buildings in that location	The ornaments used are in accordance with the traditional ornaments of the site	The materials for building walls ranging from red brick, light brick, wood, bamboo, and any other traditional material	Traditional structural elements are the upper structure (mala-anders) and lower structure (pairs of pedestals and rocks). Between the lower and upper structures, there are structures that flank each other, one middle structure flanking the other two structures, namely intercropping-sunduk, kili-sakaguru
Something new	Modern roof materials such as concrete, metal or bitumen	Room is usually not equipped with a dividing wall (only used for private spaces (bedrooms and bathrooms)). Other spaces are usually only separated by using partitions such as shelves or tables.	Ornaments can be used with modern materials	Modern material such as adobe, metal walls, wood, glass to fiber cement panels.	The use of exposed concrete, steel, plastic and wood. Neo- vernacular is usually applied to vertical tall buildings so that it uses a concrete pile foundation or bored pile structure

Unity interior and exterior space	-	Walls that are open as a response to the integration between the interior of the building and the open space outside Large window openings as a unified response.	-	-	-
Culture	The shape of the roof is inspired by cultural, environmental and physical architectural elements.	The application of modern floor plans can be combined with the provisions of traditional house plans in that location	The ornaments used in the building are in accordance with the existing traditional ornaments	Sculptures and paintings are an important part of modern design.	-
Beliefs	Combined with modern styles with the beliefs that are applied to that location	the application of modern floor plans still follows the rules of trust that exist in that location if there are any	-	-	-
Strongly contrasting	The use of traditional roofs can create a contrasting characteristic in buildings	-	-	The use of dominant and contrasting colors	-

After analyzing the values of Javanese architecture and neo vernacular architectural values, the next step is to combine the results of the two values to create Javanese neo vernacular architectural values and architectural components, as shown in the table below:

Table 4. Combination of Pure Javanese value and Neo Vernacular value with architectural components


VALUES		ARCHITECTURAL COMPONENT							
CATEGORIES	VALUES	PURE JAVANESE			NEO VERNACULAR			JAVANESE NEO VERNACULAR	
		WALL	WINDOW	COLOR	PLANS	BUILDING DETAILS	STRUCTURE	ROOF	ORNAMENT
Pure Javanese	Openness and Closeness	Placing the house door on the middle wall Walls are grouped into closed buildings, open buildings, mixed buildings, and half-open buildings	Joglo Limasan	-	-	-	-	-	-
	Social Class	-	-	-	-	-	-	Joglo Limasan Tajug Panggung pe Kampung	-

VALUES		ARCHITECTURAL COMPONENT							
CATEGORIES	VALUES	PURE JAVANESE			NEO VERNACULAR			JAVANESE NEO VERNACULAR	
		WALL	WINDOW	COLOR	PLANS	BUILDING DETAILS	STRUCTURE	ROOF	ORNAMENT
	Tranquility	-	-	-	-	-	-	-	Lung lung Gunungan
	Fertility	-	-	-	-	-	-	-	Loro blonyo.
	Nature	-	The majority have windows that open in response to the tropical climate	Dominated by natural brown color	-	-	-	Joglo Limasan	Banyu Netes Lung lung Patran Wajidan
	Sacral and static	Joglo house is closely related to an ancient building called punden terraces	-	-	-	-	-	Joglo	Placed on parts of the building structure such as pillars, blandar, dudur, ander, dhadhapeksi, sunduk, siding, door slats, window slats, doors, and so on.
	Multi Functional	Pendopo Pringgitan Senthong Kiwo Senthong Tengah (Krobongan) Senthong Tengen Gandhok	-	-	-	-	-	Joglo Limasan	-
	Local / Natural materials	Generally made of solid brick materials that are not painted or covered with other layers or made of woven bamboo or wood	Traditional Javanese buildings use wooden frame with Javanese carvings	Teak wood that represent the color brown	-	-	-	clay tiles or a shingle roof	Carvings using woo, rattan, stone, cloth, bronze, and brass material.
	Color meaning	-	-	Brown symbolizes warmth	-	-	-	-	-
	Acculturation	-	lots of large windows acculturation of colonial and Javanese architecture	-	-	-	-	Kampung	-
Neo Vernacular	Surrounding environment [local climate conditions.]	-	-	-	Building plans consider an exposure to sunlight and air circulation.	The front wall of the house is covered with natural stone.	Uses steel infrastructure for its construction,	use a sloping gable roof, pyramid with a system of beams, rafters and ties or a space frame system.	The ornaments used are in accordance with the traditional ornaments of the site
	The use of local materials	-	-	-	-	The use of aluminum, wood and uPVC	Bricks is dominated	Roof tiles shingles, clay tiles, concrete tiles, metal or	The use of wood, bamboo and natural stone




VALUES		ARCHITECTURAL COMPONENT							
CATEGORIES	VALUES	PURE JAVANESE			NEO VERNACULAR			JAVANESE NEO VERNACULAR	
		WALL	WINDOW	COLOR	PLANS	BUILDING DETAILS	STRUCTURE	ROOF	ORNAMENT
								metal tiles, bituminous tiles	materials.
	Following vernacular elements	-	-	-	Building plans can follow the concept of plans applied to traditional buildings in that location	red brick, light brick, wood, bamboo, and any other traditional material	Traditional structural elements are divided the upper, middle and lower structures.	Adhering to the principles and forms of traditional roofs in the traditional location	The ornaments used are in accordance with the traditional ornaments of the site
	Something new	-	-	-	Not equipped with a dividing wall. Room dividers only used for private spaces	The materials for walls can used an adobe, metal walls, wood, glass to fiber cement panels.	Emphasize the use of exposed concrete, steel, plastic and wood. Vertical tall buildings that uses a concrete pile or bored pile foundation	Traditional forms can be used with modern materials such as concrete, metal or bitumen	Ornaments can be used with modern materials
	Unity interior and exterior space	-	-	-	Walls that are open and large window openings as a response to the integration between the interior of the building and the open space outside	-	-	-	-
	Culture	-	-	-	the application of modern floor plans can be combined with traditional house plans	Sculptures and paintings are an important part of modern design.	-	The shape of the roof is inspired elements.	The ornaments accordance with the existing traditional ornaments
	Beliefs	-	-	-	the application of modern floor plans still follows the rules of trust that exist in that location if there are any	-	-	The shape of the roof can be combined the beliefs that are applied	-
	Strongly contrasting	-	-	-	-	The use of dominant and contrasting colors	-	The use of traditional roofs compared to modern roofs can create a contrasting characteristic in buildings	-

The last step is to analyze the findings of neo vernacular values and their application to the precedent study, in this case the precedent study is divided into 3 parts, the typology of hotels, residences, and public buildings, as shown in table 5 below :

Table 5. Precedent Review

Hotel	Residence	Public Building
 <p>Fig 1. Djogja Luxury Bungalow (Image source : https://www.trip.com)</p>	 <p>Fig 11. Elemen kayu Ak-House, Studio Air Putih (Image source : https://www.arsitag.com/project/akhouse)</p>	 <p>Fig 21. Masjid Joglo Baitul Ma'Mur (Image source : https://img.okezone.com)</p>
 <p>Fig 2. Aveta Hotel Malioboro (Image source : https://www.booking.com/hotel)</p>	 <p>Fig 12. Roemah Kampoeng / Paulus Setyabudi Architects (Image source : https://www.archdaily.com)</p>	 <p>Fig 22. Masjid gedhe kauman (Image source : https://raskita.com/masjid-kauman-yogyakarta/)</p>
 <p>Fig 3. Grand Inna Malioboro (Image source : https://www.krjogja.com)</p>	 <p>Fig 13. Batu Jimbaran Residence, Imago Design Studio (Image source : https://www.arsitag.com/project/batu-jimbaran-residence/photo/94671)</p>	 <p>Fig 23. Dinas Kebudayaan Yogyakarta (Image source : https://budava.jogjaprov.go.id)</p>
 <p>Fig 4. Omah Kayu (Image source : https://planetofhotels.com/)</p>	 <p>Fig 14. Residential house in Kampung Laweyan (Image source : https://www.arsitag.com/project/the-laweyan)</p>	 <p>Fig 24. Taseroh Kopi (Image source : https://pingpoint.co.id/)</p>
 <p>Fig 5. D'Senopati Malioboro</p>	 <p>Fig 15. House of @ulyarosyta (Image source :</p>	 <p>Fig 25. Joglo Abah</p>

Hotel	Residence	Public Building
<p>(Image source : https://www.pegipegi.com/)</p>	<p>https://www.instagram.com/ulya_rosyta)</p>	<p>(Image source : https://es.restaurantguru.com/Joglo-Abah-Resto-Kedai-Kopi-dan-Pusat-Oleh-oleh-Tarogong-Kaler)</p>
 <p>Fig 6. Joglo Plawang International Boutique (Image source : https://www.pegipegi.com/)</p>	 <p>Fig 16. Kubu Pica (Image source : https://www.agoda.com)</p>	 <p>Fig 26. Kejawa Resto (Image source : https://www.naikmotor.com/180147/kejawa-resto-sentuhan-arsitektur-jawa-minimalis-dan-menu-istimewa/)</p>
 <p>Fig 7. Kusuma Sahid Prince (Image source : https://surakarta.go.id/?p=8621)</p>	 <p>Fig 17. Joglo Ngebo House / Umran Studio (Image source : https://www.archdaily.com/934172/joglo-ngebo-house-umran-studio)</p>	 <p>Fig 27. Omah Dhuwur (Image source : https://bantulpedia.bantulkab.go.id/layanan/pariwisata/jelajahbantul/detail/1/24/730/omah-dhuwur-restaurant.html)</p>
 <p>Fig 8. Manohara Borobudur (Image source : https://www.tripadvisor.co.id/)</p>	 <p>Fig 18. Omah Djawa House / Budi Pradono Architects (Image source : https://www.archdaily.com/973820/omah-djawa-house-budi-pradono-architects-1)</p>	 <p>Fig 28. Masjid pathok negara (Image source : https://id.wikipedia.org/wiki/Masjid_Pathok_Negara_Taqwa_Wonokromo)</p>
 <p>Fig 9. Prime Plaza Hotel (Image source : https://jogja.pphotels.com/)</p>	 <p>Fig 19. Joglo Legacy (Image source : https://planetofhotels.com/)</p>	 <p>Fig 29. Masjid Rotowijayan (Image source : https:// warta.jogjakota.go.id/detail/index/20560)</p>

Hotel	Residence	Public Building
 <p>Fig 10. Sheraton Mustika Yogyakarta Resort & Spa (Image source : https://id.sheratonvogva.karta.com/)</p>	 <p>Fig 20. Berawa (Image source : https://villaberawabali.com/three-bedroom-pool-villa/)</p>	 <p>Fig 30. Masjid Gedhe Mataram Kotagede (Image source : https://travel.kompas.com/)</p>

After collecting 30 precedents from 3 different typologies, the next step is to analyze these precedents for their application to findings of neo javanese vernacular values, as shown in the table 6 below :

Table 6. Variables from the Javanese Vernacular, Neo Vernacular, Javanese Neo Vernacular values and architectural components

VALUES		ARCHITECTURAL COMPONENTS								CONCLUSION	
CATEGORIES	VALUES	R	WL	WD	O	BD	C	P	S	Percentage of Buildings with Javanese, Neo Vernacular, and Javanese Neo Vernacular Values	Percentage of Architectural Components with Javanese, Neo Vernacular, and Javanese Neo Vernacular Values
Pure Javanese	Openness and Closeness	-	30%	19,3%	-	-	-	-	-	49.3% of building precedents applied traditional Javanese values on openness and closeness to walls and windows	25% architectural components applied to modern buildings to reflect the value of openness and closeness
	Social Class	13%	-	-	-	-	-	-	-	13% of building precedents applied traditional Javanese values on social class to roof	12,5% architectural components applied to modern buildings to reflect the value of social class
	Fertility	-	-	-	1,3%	-	-	-	-	1,3% of building precedents applied traditional Javanese values on fertility to ornaments	12,5% architectural components applied to modern buildings to reflect the value of fertility
	Nature	13%	-	19,4%	7%	-	34,5%	-	-	73,9% of building precedents applied traditional Javanese values on nature to roof, windows, and colors.	50% architectural components applied to modern buildings to reflect the value of nature
	Sacral and Static	5,2%	11,7%	-	7%	-	-	-	-	23,9% of building precedents applied traditional Javanese values on Sacral and Static to roof and walls	37,5% architectural components applied to modern buildings to reflect the value of sacral and static
	Multi Functional	0,8%	11,7%	-	-	-	-	-	-	12,5% of building precedents applied traditional Javanese values on Multi	25% architectural components applied to modern buildings to reflect the value

VALUES		ARCHITECTURAL COMPONENTS								CONCLUSION	
CATEGORIES	VALUES	R	WL	WD	O	BD	C	P	S	Percentage of Buildings with Javanese, Neo Vernacular, and Javanese Neo Vernacular Values	Percentage of Architectural Components with Javanese, Neo Vernacular, and Javanese Neo Vernacular Values
	Color meaning	-	-	-	-		38,1 %	-	-	38,1% of building precedents applied traditional Javanese values on Color meaning to colors	12,5% architectural components applied to modern buildings to reflect the value of color meaning
	Acculturation	-	-	18,3 %	-	-	-	-	-	18,3% of building precedents applied traditional Javanese values on Acculturation to roof and walls	12,5% architectural components applied to modern buildings to reflect the value of acculturation
Neo Vernacular	Surrounding environment [local climate conditions.]	13%	-	-	14,8 %	-	-	33,3 %	-	61,1% of building precedents applied neo vernacular values on Surrounding environment to roof, ornament, and plan	37,5% architectural components applied to modern buildings to reflect the value of surrounding environment
	Following vernacular elements	13%	-	-	14,9 %	26,1 %	-	13,9 %	21,9 %	89,8% % of building precedents applied neo vernacular values on Following vernacular elements to roof, ornaments, building details, and structure	62,5% architectural components applied to modern buildings to reflect the value of following vernacular elements
	Something new	3,9%	-	-	13,5 %	24,6 %	-	22,2 %	31,2 %	95,4% % of building precedents applied neo vernacular values on something new to roof, ornaments, building details and structure	62,5% architectural components applied to modern buildings to reflect the value of something new
	Unity interior and exterior space	-	27,9 %	19,3 %	-	-		52,7 %	-	99,9% % of building precedents applied neo vernacular values on Unity interior and exterior space to walls, windows, and plan	12,5% architectural components applied to modern buildings to reflect the value of unity interior and exterior space
	Culture	13%	-	-	14,8 %	-	-	-	-	-	27,8% % of building precedents applied neo vernacular values on culture to roof

VALUES		ARCHITECTURAL COMPONENTS								CONCLUSION	
CATEGORIES	VALUES	R	WL	WD	O	BD	C	P	S	Percentage of Buildings with Javanese, Neo Vernacular, and Javanese Neo Vernacular Values	Percentage of Architectural Components with Javanese, Neo Vernacular, and Javanese Neo Vernacular Values
	Beliefs	2,2%	-	-	-	-	-	13,9%	-	15,1% % of building precedents applied neo vernacular values on beliefs to roof and plan	25% architectural components applied to modern buildings to reflect the value of beliefs
	Strongly contrasting	6%	-	-	-	32,3%	-	-	-	38,3% % of building precedents applied neo vernacular values on Strongly contrasting to roof and building details	25% architectural components applied to modern buildings to reflect the value of strongly contrasting
Javanese Neo Vernacular	Local or Natural materials	8,3%	20,5%	23,4%	20,3%	-	27,3%	-	-	99,8% % of building precedents applied Javanese neo vernacular values on Natural materials on roof, walls, windows, ornament, and color.	62,5% architectural components applied to modern buildings to reflect the value of local or natural materials
Conclusion		68,75% % of roof component apply Javanese neo vernacular values	31,25% % of walls component apply Javanese neo vernacular values	31,25% % of windows component apply Javanese neo vernacular values	50% of ornaments component apply Javanese neo vernacular values	18,75% % of building details component apply Javanese neo vernacular values	18,75% % of colors component apply Javanese neo vernacular values	31,25% % of plan component apply Javanese neo vernacular values	12,5% % of structure component apply Javanese neo vernacular values	The most dominant values used in the president are local or natural materials, unity interior and exterior space, something new, following vernacular elements. The values that are the least used in precedents are social class, fertility, sacral and static, multi functional, color, acculturation, culture, beliefs, and strongly contrasting	The most dominant architectural components applied to Javanese neo vernacular values in precedents are roof and ornament Architectural components that are least applied to Javanese neo vernacular values in precedents are building detail, colors, structure



Figure 2 Elemen kayu Ak-House, Studio Air Putih, representation of the Values of Following Vernacular Elements.

(Source : <https://www.btnproperti.co.id/blog/7-paduan-apik-desain-tradisional-jawa-dan-modern-1973.html>)



Figure 3 Grand Inna Malioboro, representation of the Values of Something New.

(Source : <https://visitingjogja.jogjaprovo.go.id/34883/grand-inna-malioboro/>)



Figure 4 Dinas Kebudayaan Yogyakarta, representation of the Value of Local or Natural Materials, and the Unity Interior and Exterior Space.

(Source : <https://budaya.jogjaprovo.go.id/profil/tentang-kami>)

IV. CONCLUSION

From the results of research that has been carried out using 5 analysis tables regarding the characteristics of Javanese neo vernacular architecture and its application in practice in Indonesia in 30 case studies which are then divided into 3 building typologies it can be concluded The most dominant values used in the president are local or natural materials, unity interior and exterior space, something new, following vernacular elements. The values that are the least used in precedents are social class, fertility, sacral and static, multi-functional, color, acculturation, culture, beliefs, and strongly contrasting.

While the most dominant architectural components applied to Javanese neo vernacular values in precedents are roof and ornament and the architectural components that are least applied to Javanese neo vernacular values in precedents are building detail, colors, and structure.

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