

# **STUDY OF JAVANESE TRADITIONAL ARCHITECTURE: BANGSAL BUILDING AT PAGELARAN AND SITIHINGGIL LER AREA OF YOGYAKARTA PALACE**

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## **Abstract**

Complex of Yogyakarta Palace is home to the King, as the center of the royal government and as a cultural center, which consists of building is a traditional Javanese-style, which is so very important. As a protected heritage building laws and as the nation's cultural heritage, Yogyakarta Palace buildings and distinctive characteristics, namely among others his age who had long, especially in the Complexity construction and beauty of the ornaments.

Development of the Era, civilization and culture, has influenced the diversity of buildings in Complex of Yogyakarta Palace with various functions and forms. While still steeped in Javanese traditional style of architecture, but there are some European-style buildings, this is not apart of history, that the Kingdom also experienced the Dutch colonial period. The study of Traditional Architecture in the Java of Yogyakarta Palace complex, needs to be done to assess the existence of Javanese traditional buildings, identify the form of buildings, history, function and meaning of buildings and equipment components. The studies were carried out direct observation of the results to the object, literature studies, interviews and a review of previous research earlier.

The expected result is a document written about aspects of the history, function and meaning of the building along with building form drawings and detail drawings that show the uniqueness of the building. This study is expected to become knowledge and guidelines for building preservation and the inspiration of Traditional Javanese cultural development in the future are sourced from local culture, and became the driving young people to still love their own culture.

*Key words: Javanese Traditional, Buildings, Yogyakarta Palace*

## I. Preliminary

Yogyakarta Sultanate Palace is located in downtown of Yogyakarta, Special Province of Yogyakarta, established in 1755 as a result of Giyanti agreement on February 13, 1755 between Prince Mangkubumi (brother of Sunan Pakubuwono II, king of Surakarta Palace) with the Dutch VOC (Noto Suroto, 1985/1986).

Another important development is that the sultan's palace no longer has the power like in the beginning, is now his domain is oriented in the social field of Javanese culture as stated by Sri Sultan Hamengkubuwono X at the inauguration of a king of Yogyakarta Palace, which to X. Therefore Palace has now developed into a center of Javanese culture (Eko Putro Hendro G, 2001 in Tri Yuniastuti and Satrio HB Wibowo, 2007) while maintaining the life of Javanese culture in every step of everyday life in the Kingdom both in the architectural, traditional Javanese customs, dances, shadow puppets, singing, music and other things that relate to Javanese culture.

From the architectural side, according to the Center of Yogyakarta Archaeological Heritage Preservation, 2003 and from various sources is known that the peak of the visual manifestation of Yogyakarta palace architecture in the reign of Sri Sultan Hamengkubuwono VIII (1921-1939) as we see today. Previously, the palace buildings gradually awakened by the powerful kings of his time starting from the wards and Siti Hinggil Prabayaksa Lor in 1769; Exhibition hall with bamboo tratag in 1896; the use of marble from Italy to ward Kencana in the Sri Sultan Hamengkubuwono VI and Sweet and complex Siliran wards in the Sri Sultan Hamengkubuwono VII.

In the sultan's palace, traditional Javanese architecture is an architectural style of the principal/main. This can be seen by the number of buildings Traditional of Javanese style. It is also proposed in Javanese palace (1991) that the most important buildings in the Kingdom to use the roof joglo (typology of traditional Javanese architecture) that form from the pyramids and trapezoidal. Similarly, put forward by Eko Punto Hendro G., in Tri Yuniastuti and Satrio HB Wibowo (2007) that evaluated from the roof, the buildings at the Palace use gable, *Limasan*, *tajug* and *joglo* (typology of traditional Javanese architecture.)

One form of buildings in the Palace area is characterize the traditional Javanese architecture building is the hall. The building is open (*pendhapa*). From the observations so far recorded at least there are 20

buildings in the form named *bangsal* (open building / *pendhapa*) in the palace is a form of native Javanese traditional house building, such as *Bangsai Kencana*, *Bangsai Sri Manganti*, *Bangsai Ponconiti*, *Bangsai Manguntur Tangkil*, *Bangsai Witono* and other buildings with their different functions.

In the particular *bangsal* buildings of Traditional style Java is used as a place with the main functions/importance in the Kingdom. Buildings such as sheds *Manguntur Tangkil* used as his throne the King when his inauguration; *Bangsai Kencana* that serves as a place to receive state guests and internal events of the royal family; *Bangsai Witono* as a place of royal heritage *jamasan* ceremony performed by King special, as well as building-other buildings that carry out important functions.

On the whole, and especially the *bangsal* building with traditional Javanese architecture style using the typology roof *Joglo*, *Limasan*, and *Tajug*. The average frame *bangsal* were decorated ornament (decoration) complex, unique, meaningful, philosophical, aesthetic and so typical of Java of the interior into a beautiful, graceful, stately and artistic.

Characteristics of the *bangsal buildings* at the Palace with Java Traditional style with various accessories into something unique, rare and valuable historical high. The uniqueness and scarcity occur given that it is only in the sultan's palace buildings were located and sustainable. Even the development of *Joglo* typologies with the highest classification *joglo lambang gantung* developed by Sri Sultan Hamengkubuwono I also only exist in the Sultan's Palace. Worth of history, given that traditional-style buildings in the palace built by Javanese kings of Java since hundreds years ago that represents the greatness and beauty of his day. Now these buildings into heritage of priceless value, as well as the cultural roots of Java and the Indonesian people in general and Indonesia in particular the root architecture.

## **II. Javanese Traditional Architecture**

### **A. Typology of Javanese Traditional Architecture**

According to HJ Wibowo (1986) and Arya Ronald (1997) architectural form of traditional buildings in particular Java Yogyakarta Special Region is divided into 5 (five) typology, namely: 1) *Panggung Pe*, 2) *Kampung (Pelana)*; 3) *Limasan*; 4) *Joglo*; and 5) *Tajug*. The forms of the tiered architecture of the perfection of its architecture. The first tier

(lowest) to highest is roasted *panggung pe* typology, *Kampung*, *Limasan*, *Tajug* and *Joglo*. Still according to HJ Wibowo (1986) typology of the whole each have variant forms that differ.

*Panggung Pe* typology is a variant of seven species of principal *Panggung pe*, *Gedhang Selirang*, *Empyak Setangkep*, *Gedhang Setangkep*, *Ceregancet*, *Trajumas* and *panggung pe* combination.

Typology of *Kampung* have 10 (ten) variants, namely *Kampung Principal*, *Pacul Gowang*, *Srotong*, *Dara Gepak*, *Klabang Nyander*, *lambang teplok*, *Tinandu Semar*, *gajah Njerum*, *cere gancet* and *Semar Pinondong*.

Tipologi *Limasan* has a number of 17 (seventeen) variants, namely *Limasan Principal*, *lawakan*, *gajah ngombe*, *gajah njerum*, *apitan*, *Klabang Nyander*, *Pacul Gowang*, *gajah Mungkur*, *Cere gancet*, *pengapit*, *lambang teplok*, *Semar Tinandu*, *Trajumas*, *Trajumas lambang Gantung*, *Trajumas lawakan*, *lambang Sari*, and *sinom lambang Gantung* frame *Kutuk Ngambang*.

Typology *Joglo* has 8 (eight) variants, namely *Joglo Principal*, *Lawakan*, *Sinom*, *Jompongan*, *Paangrawit*, *Mangkurat*, *Hageng* and *Semar Tinandu*.

While the typology *Tajug* have 7 (seven) variants, namely *Tajug Lawakan*, *Lambang Teplok*, *Semar Tinandu*, *Lambang Gantung*, *Semar Sinongsong Lambang Gantung*, *Mangkurat* and *Ceblokan*. In the Java community, *Tajug* typology commonly used for worship buildings is a mosque and Islamic religion or violating (HJ. Wibowo et al, 1986/1987).

Some of the traditional typology of Java can be seen in the following figure:

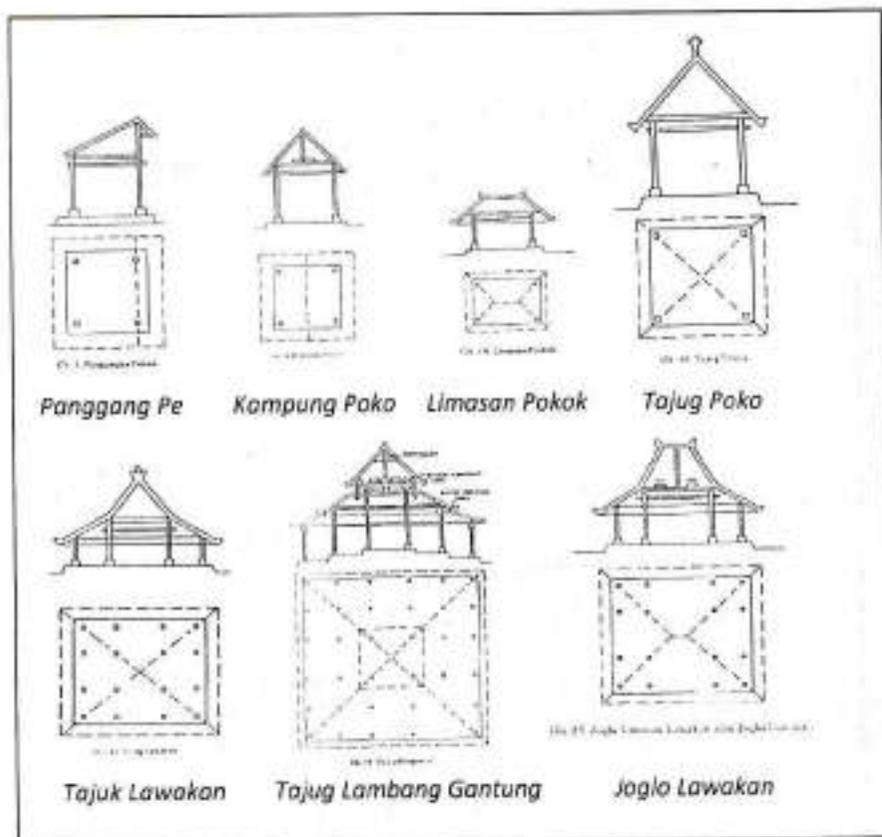


Figure . 1.  
 Building Typology of Traditional Javanese (DIY)  
 Source: HJ Wibowo, et al., 1986/1987

## B. Java Structures and Construction Building Systems

Building construction is a relationship between building components (foundation floor, walls, pillars, beams, ceiling, roof), with a relationship of mutual dependence, with a specific purpose that is supporting the usefulness (functioning) (F), strength (S), durability (D) and security (S). (Aryo Ronald, Ir, 449).

System in building structures such *joglo* is very closely related to the construction between components, because the overall harmony, inter-related. Construction work starts from the bottom of the building components (foundation), then further upwards until the top component. The development also resulted in the development of *joglo* form the structural system and construction. (Aryo Ronald, Ir, 281)

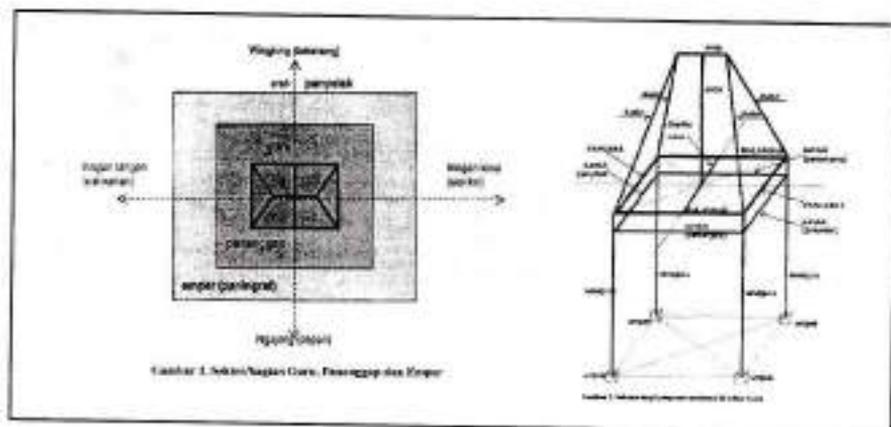


Figure 2.  
Distribution of roofing sector and components of center sector  
Source: Prijotomo J., 2005

### C. Ornaments on Traditional Architecture of Java

Ornament is a component of the art product that is added or deliberately made for the purpose as a garnish. Besides his job to decorate, for example, to add to the beauty of a product so that more good and interesting, consequently affecting also in terms of appreciation in terms of both spiritual and material aspects / financial. In addition, in the ornament often found are the symbolic values or specific purposes related to the view of life (philosophy) the human or the creator of society, so that the object by an ornament will have a further meaning, accompanied by certain expectations as well (Drs. Gustami, SP, 1980.4). Meanwhile, according to Slamet DS (1985, h.180), general decoration used on traditional Javanese building tangible relief (relief).

In his book Theme's Architecture Traditional of Yogyakarta, HJ. Wibowo et al (1986/1987) revealed that for Traditional Javanese architecture, ornament is useful to give the beauty of the building. It is expected that the beauty that is created will create peace and coolness for the occupants. There are 2 forms of ornamentation are the ornaments that are not constructional and constructional. What is meant by constructional ornaments are ornaments made together with the building. While no constructional ornaments are ornaments that can be separated from the building (ornaments patches).

Still according to the HJ. Wibowo et al. (1986/1987), ornaments in Javanese traditional architecture consists of 5 groups: 1) the flora, 2) groups of fauna, 3) natural group; 4) religion and belief, and 5) others.

Flora group consisted of 8 types of ornaments which are: 1) *lung-lungan*, placement in the beam frame house, *pamidangan*, doors, windows and *patang aring*; 2) *saton*, placement at top and bottom of *saka*, *blandar*, *sunduk*, *tumpang* beam, *ander* and field filler of door; 3) *wajikan*, placement on the middle pillar of the building, crossing point / angle oblique to the fence building; 4) *nanasan*, placements under angle of *tumpang* beam, the middle of *dada peksi*, tip of *saka bentung*; 5) *tlacapan*, placements across the framework of the building; 6) *kebenan*, placement on *blandar tumpang* buttons, and the lower end *saka bentung*; 7) *Patran*, placement of the blocks on the right and left *dhadha peksi*, inside *blandar tumpang* (*singup*), *blandar penanggap* and *penitih*; and 8) *padma*, with placement at the base of the column (*umpak*/pedestals).

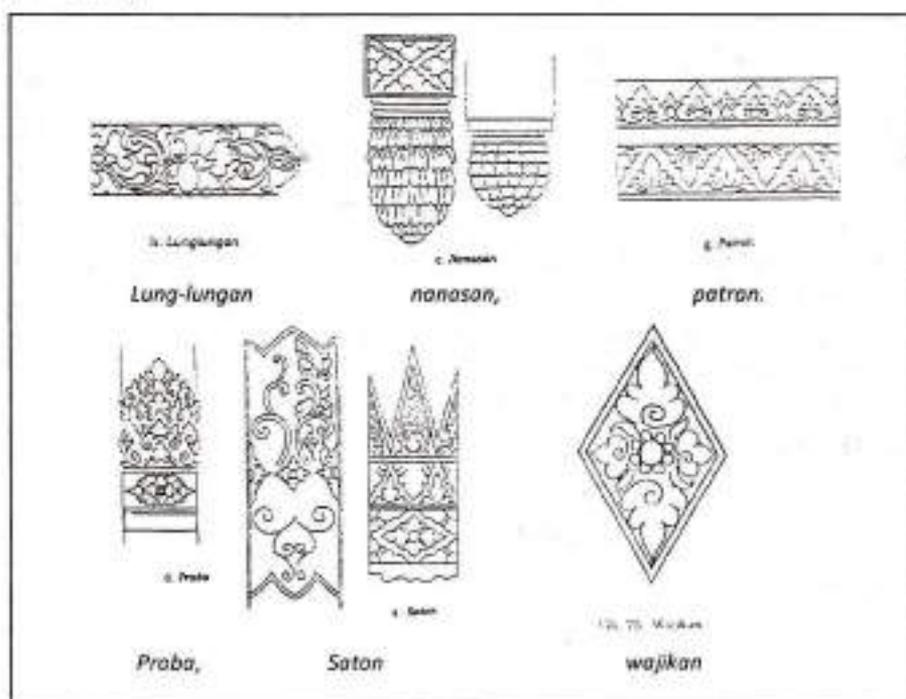


Figure 3.  
Example Variety Ornamental Flora  
Source: HJ Wibowo, et al., 1986/1987

Fauna group consisted of 5 types namely: 1) *kemamang*, placement on the mask of the gate building, the castle and the entrance, 2) *peksi garuda*, placement on the ridge of the building, *tebeng* (board above the door and windows, central *senhang*, *patang aring*; 3) dragon, placement on the gate, house ridge; 4) *jago*, placement on the ridge of the building and 5) *mirong*, placement on the pole (*saka*) building and *saka Santen*.

Meanwhile, religious groups and the trust consists of 2 types of *mustaka* and calligraphy. According to Agus Suwanto (2009), *mustaka* in Javanese traditional architecture using the pattern in the form of ornamental plants *kluwih* leaves and *gada*. *Kluwih* Leaves implies *linuwih* means perfect or has a surplus. While *gada* has a single definition that is to admit the oneness of God the Almighty. Placement *mustaka* ornaments placed on top of buildings with a rod tip is the highest. And the second type of calligraphy, placement on the building frame.

### III. Spatial of Kraton

Formerly the main part of the palace, from north to south, starting from *Gladhag* Gate in the north to the south *Plengkung Nirbaya*. Main parts of Yogyakarta palace from north to south are: *Gladag-Pangurakan* Gate; *Alun-alun Ler* Complex (North Field) and the *Masjid Gedhe* (*Masjid Raya* Kingdom); *Pagelaran* Complex, *Siti Hinggil Ler* Complex, *Kamandhungan Ler* Complex; *Sri Manganti* Complex; *Kedhaton* Complex; *Kamagangan* Complex; *Kamandhungan Kidul* Complex; *Siti Hinggil Kidul* Complex (now called *Sasana Hinggil*); and *Alun-alun Kidul* (South Field) and *Plengkung Nirbaya* commonly called *Plengkung Gadhing* ([http://id.wikipedia.org/wiki/Keraton\\_Ngayogyakarta\\_Hadiningrat](http://id.wikipedia.org/wiki/Keraton_Ngayogyakarta_Hadiningrat), 2009).

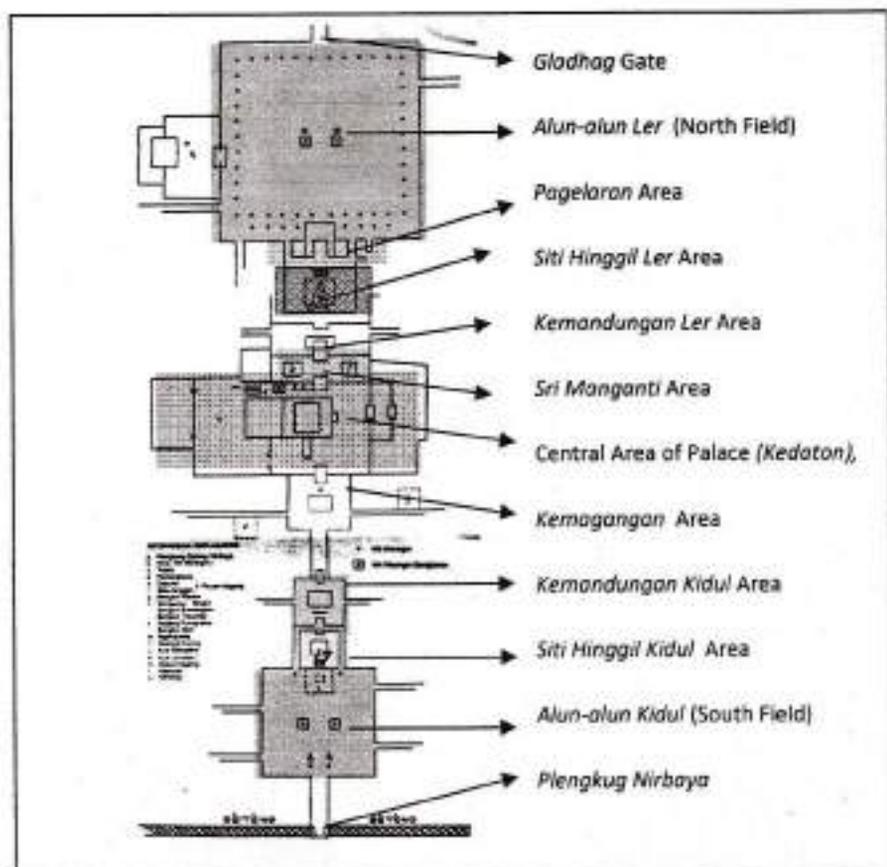


Figure 4.  
Space Layout of Yogyakarta Palace  
Source: data applied to the map

#### IV. Variety Building in Yogyakarta Palace

Physically architectural (a building). buildings in the district court using the traditional style of Java to the specific form *pendapa* building form, roof *joglo*, *tajug*, *Limasan* and *Kampung* (Eko Putro Hendro, 2001 and Djauhari Sumintardjo, 1978).

In terms of its nature, the buildings at the Palace consists of *open building* that is without the wall covering room and closed the building (there are wall coverings). The building opened in the Palace called a *bangsai* and is completely covered (with lid wall) is called a *gedhong*. (KPH. Brongtodiningrat, 1978). What has been proposed KPH

Brongtodiningrat, reinforced by Tontje Trunay (1991) who was also promoted to the Palace consists of *gedhong* (building walls) and *bangsral* (not-walled building).



Figure 5.  
Several *bangsral* buildings in Yogyakarta Palace  
Source: Observations, 2009

Other buildings in the Palace is a building that has been exposed to the influence of European Classical architecture. The influence of the sultan's palace buildings resulted in the emergence of elements of Classical architecture of Europe into the palace buildings which raises new buildings European Classical style, particularly in *Gedhong* and *Regol* buildings. (Tri Yuniastuti and Satrio HBW, 2007).

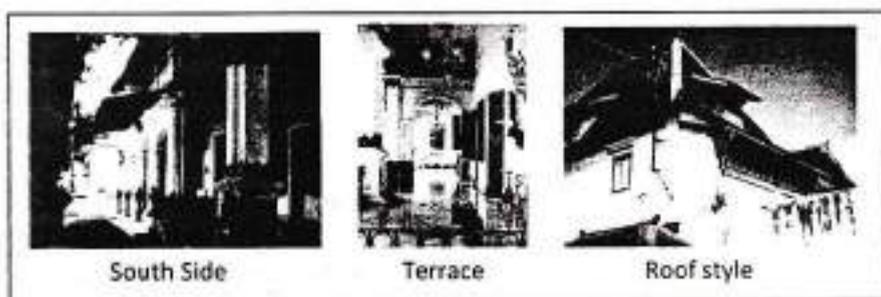


Figure 6.  
*Gedhong Purworetno* European-style architecture  
Source: Tri Yuniastuti and Satrio HBW, 2007

## V. Bangsal Building at *Pagelaran* and *Sithinggil Ler* Area of Yogyakarta Palace

### A. Name and Function Buildings

Have been changes to the Palace building functions from time to time. Changes in these functions due to the policy of the Emperor,

among others, the policy of Sultan HB IX. After becoming a tourist attraction, some buildings have changed their function. Functions formerly *bangsal* (under study) as in the following table.

Table 1  
Late Functions of *Bangsal* at Yogyakarta Palace

NO.	BUILDING NAME	LATE FUNCTION
1.	<i>Bangsal Pengapit/ Bangsal Pasewakan</i>	used by the commanders of the Sultan of the Sultanate received orders or waiting to report to him later also used as a place to keep the Anom Jaba Regent
2.	<i>Bangsal Pengrawit</i>	used by the Sultan to inaugurate <i>Pepatih Dalem</i>
3.	<i>Bangsal Pacikeran</i>	used by the <i>Abdi Dalem Mertolulut</i> and <i>Singonegoro</i> until around the year 1926.
4.	<i>Bangsal Kori</i>	Place of servants : <i>Abdi Dalem Kori</i> and <i>Jaksa</i> prosecutor whose function is to deliver the petition or complaint of the people to the Sultan.
5.	<i>Bangsal Manguntur Tangkil</i>	is where the Sultan sat on his throne at formal occasions such as royal Sultan inauguration and <i>Pisowanan Agung</i> . In this <i>bangsal</i> also on December 17, 1949 Ir. Sukarno was inaugurated as President of the Republic of Indonesia States.
6.	<i>Bangsal Witono</i>	used to put symbols of royal or royal heritage as the Kingdom official event and when the Sultan was enthroned in <i>Bangsal Manguntur Tangkil</i>

Source : [http://id.wikipedia.org/wiki/Keraton\\_Ngayogyakarta\\_Hadiningrat](http://id.wikipedia.org/wiki/Keraton_Ngayogyakarta_Hadiningrat), 2009

Since the Palace of Yogyakarta became to cultural attractions in Yogyakarta, the function of in particular is also changing. Functions are now *bangsal* buildings studied at Yogyakarta Palace can be seen in the following table.

Table 2.  
Function of Ward Yogyakarta Palace

NO.	BUILDING NAME	FUNCTION NOW
1.	<i>Bangsai Pengapit / Bangsal Pasewakan</i>	used for tourism purposes (a kind of diorama depicting traditional processions, the palace and the other soldiers).
2.	<i>Bangsai Pengrawit</i>	Tourism Object
3.	<i>Bangsai Pacikera</i>	Tourism Object
4.	<i>Bangsai Kori</i>	Place courtiers watching Tourists in Tratak Siti Hinggil
5.	<i>Bangsai Manguntur Tangkil</i>	Place the Sultan coronation Tourism Object (Visual)
6.	<i>Bangsai Witono</i>	Tourism Object (Visual)

Source: [http://id.wikipedia.org/wiki/Keraton\\_Ngayogyakarta\\_Hadiningrat](http://id.wikipedia.org/wiki/Keraton_Ngayogyakarta_Hadiningrat), 2009 and observation 2009.

## B. Location and Buildings Being

Location of the *bangsal* which is on *Pagelaran* area and *Sitihinggil* Ler Sultan's Palace and the shape of the building can be seen in the picture below.

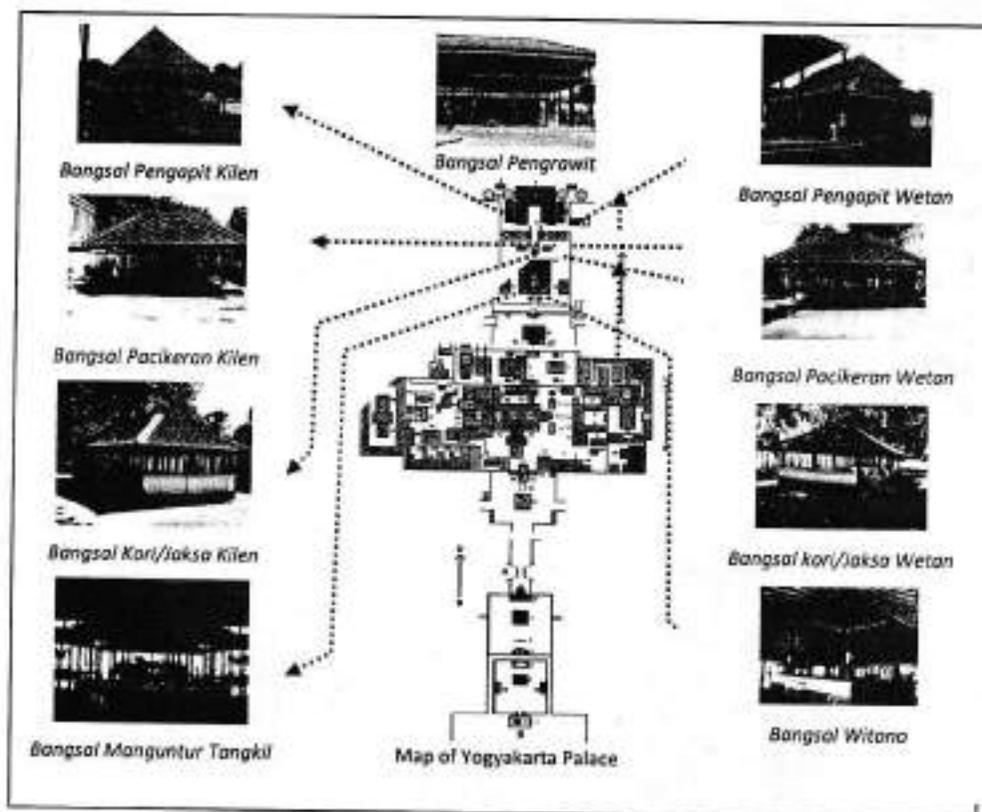
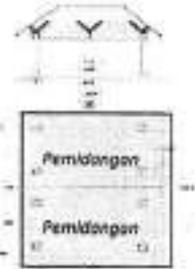


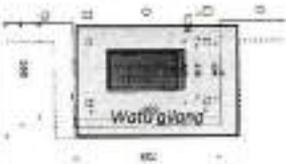
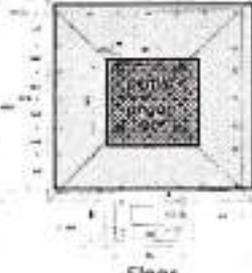
Figure 7. Location and Buildings Being In Yogyakarta Palace Complex  
Source: 2009 observations

### C. Frame Building Forms

Framework of the *bangsal* buildings standing on the floor, above it there as a pedestal base (*umpak*) with pole / column / *saka* as vertical frame buildings. Beam fastened above the column named *sunduk / kili*, and on these there are beams *blandar / pengeret*, above there is a *tumpang* (overlap) beam as the pedestal roof truss. Roof truss consists of *dudur, Molo, Ander, usuk*. More pictures can be seen in the table below.

Table 3.  
Form and Components of Building

NO.	BUILDING NAME	BUILDING FORMS	BUILDING COMPONENTS
1.	<p><i>Bangsai Pengapit Kilen</i></p> 	 <p>Floor Plan and Section</p>	<p>Roof : <i>Brunjung</i> and <i>Penanggap</i> Roof Structure : <i>Molo, Blandar, Usuk</i></p> <p>Structure : <i>Saka Guru, Saka Penanggap, Umpak Blandar/Pengeret, Sunduk/Kili</i></p> <p>Floor : <i>Pemidangan (Center) Penanggap</i></p>
2.	<p><i>Bangsai Pengrawit</i></p> 	 <p>Floor Plan and Section</p>	<p>Roof : <i>Limasan</i> Structure : <i>Molo, Ander, uleng, Blandar/Pengeret, tumpang sari, balok Listplank, usuk</i></p> <p>Structure : <i>Balok Sunduk/Kili, Saka Umpak,</i></p> <p>2 lantai <i>pemidangan</i></p>
3.	<p><i>Bangsai Pacikera</i></p>  <p>Outside view</p>	 <p>Appear in</p>	<p>Roof : <i>Limasan</i> Structure : <i>Molo, Dudur, Ander, Blandar/Pengeret, usuk, lisplang.</i></p> <p>Frame : <i>Sunduk/Kili, 4 Saka dan umpak</i></p> <p>Floor : 1 <i>pemidangan, quadrangle</i></p>
4.	<p><i>Bangsai Kari</i></p>  <p>Outside view</p>	 <p>Appear in</p>	<p>Roof : <i>Limasan</i> Structure : <i>Molo, Dudur, Ander, Blandar/Pengeret, usuk, lisplang.</i></p> <p>Frame : <i>Sunduk/Kili, 10 Saka dan umpak</i></p> <p>Floor : 3 <i>pemidangan, quadrangle</i></p>

<p>5. <i>Bangsaf Manguntur Tangkil</i></p> 	 <p>Appear in room</p>  <p>Floor Plan</p>	<p>Roof: <i>Limasan</i>            Ceiling cover 4 fields            Roof Frame: <i>Mola, Dudur, Ulang 4 rooms, Dada Peksi, Blandar /pengeret, Tumpang Sari, usuk, lisplang.</i></p> <p>Frame :<i>Sunduk/Kili, 4 Saka dan umpak</i></p> <p>Floor: 1 <i>pemidangan, square. Watu Gilang</i> there in the middle where the Sultan's throne.</p>
<p>6. <i>Bangsaf Witono</i></p> 	 <p>Appear in</p>  <p>Section</p>  <p>Floor</p>	<p>Roof: <i>Tajug</i>            Sector: <i>Brunjung</i> and separate <i>penanggap (hang)</i>            Ceiling cover 4 fields            Roof Frame:  <i>Brunjung: Dudur, Ulang, Dhadha Peksi, Blandar / pengeret, Tumpang Sari, usuk, lisplang.</i>  <i>Penanggap : blandar gantung, dudur, blandar, usuk, takir.</i></p> <p>Frame:  <i>Brunjung : blandar sunduk, saka (pillars), umpak (pedestals)</i>  <i>Penanggap : Blandar, Sunduk, Saka penanggap, umpak</i></p> <p>Floor:            Consisting of <i>pemidangan, penanggap</i> sector            Floor square.</p>

Source : observation, 2009.

#### D. Building Ornaments

Not all buildings which have been studied ornament (decoration). The building also contained ornaments of different motives and location. The following building components ward Kraton studied contained ornament.

Table Figure 2  
Ornaments on Bangsal Building

NO	BUILDING NAME	BUILDING COMPONENT ORNAMENTS					
		<i>Umpak/ pedestal</i>	<i>Saka/Column/ Pillars</i>	<i>Blandar/ beam</i>	<i>ceiling</i>	<i>usuk</i>	<i>listplank</i>
1.	 Bangsal Pengapit Gilen There are only a few ornaments.	 Ornament : <i>padma</i> (lotus flower relief)	 Patterned ornament in the middle : <i>Wajikon</i>	 No ornaments on <i>blandar</i> (beams) Plafond is iron plate			
3.	 Bangsal Pengrawit Yellow and red ornaments	 Ornament : <i>padma</i> (lotus flower relief)	 (1) (2) (3) Ornaments on bottom (1) and above (3) column patterned <i>saron</i> , and the middle (2) patterned <i>Praba</i> .	 Beams ornament patterned <i>Patras</i> . Ceiling ornaments patterned Circle fingered (star) <i>B</i> .	No ornament on <i>Usuk</i>	 Listplank beams ornate floral shaped in the middle and <i>saron</i> on tip	
4	Bangsal Pacikeran	No ornaments on plain wooden building framework components.					
5	Bangsal Kori	No ornaments on plain wooden building framework components.					

<p>6</p>	<p><i>Bangsai Manguntur Tangkil</i></p>  <p>Ornaments yellow and red packaging. The column is black</p>	 <p>Ornament : <i>padma</i> (lotus flower relief)</p>	 <p>Lower and upper colom ornament shaped <i>Praba</i> and the middle shaped <i>mirong</i> and <i>sorot</i>.</p>	 <p>Ceiling cover ornaments : flora motif Beam ornaments : <i>potron</i> and <i>sorot</i> or <i>trisula</i>.</p>	 <p>Florals ornaments at <i>usuk:lung-lungan</i></p>  <p><i>Lapank</i> beam Ornaments patterned <i>Patron</i></p>
<p>7</p>	<p><i>Bangsai Witono</i></p>  <p>Ornaments yellow and red packaging. The column is black.</p>	 <p>Ornament : <i>padma</i> (lotus flower relief)</p>	 <p>Lower and upper pole ornament shaped <i>Praba</i>, the middle shaped <i>mirong</i> and <i>sorot</i>.</p>	 <p><i>Dhadha peksi</i> beam ornaments patterned <i>Patron</i> with <i>sarot</i>-shaped ends. <i>Uling</i> Beam ornaments shaped <i>Patron</i>. Ceiling cover pictures <i>Kraton</i> symbol.</p>	 <p><i>Usuk</i> was not ornamented, ornament on <i>lapank</i> beam patterned <i>Patron</i></p>

Source : Observation, 2009

## **VI. Studies of Javanese Traditional Architecture on *Bangsai* Building at *Pagelaran* and *Sitihinggil Ler* Area of Yogyakarta Palace**

### **A. Building Function**

The creation of a structure of the studied wards (*bangsal*) because of the role previously function as a place to hold events tradition palace, although now its function has been turned into a cultural tourist attraction. Incidentally all the studied building works to the public instead of private (residential). What distinguishes the function of buildings to one another is an activity and the perpetrator. Of activities can be grouped into: common activities / every day (waiting in *Bangsai Pengapit*, manning in *Bangsai Pacikera*n and *Kori*), special ceremonies (governor's inauguration in *Bangsai Pengrawit* , and Sultan inauguration in *Bangsai Manguntur Tangkil*) and spiritual activities in *Bangsai Witono*. Based actors, can be grouped into : performed by courtiers (guard duty in *Bangsai Pacikera*n and *Kori*), officials under the Sultan (*Head wait* in *bangsai Pengapit*) and by the Sultan (inaugurated in *Bangsai Pengrawit* and inauguration of Sultan on *Bangsai Manguntur Tangkil*).

### **B. Building Forms**

All building plans wards studied quadrilateral, are the hallmark of traditional buildings on the grounds of Java easier to work and the conception *keblat papat limo pancer* or *mancapat*.

The ward consists of building is the framework of buildings (columns and beams) and the roof, open without walls. This is related to the nature of the activities formerly reserved for public activities, except closely *Bangsai Pengapit* glass walls because of its function has changed to saved and displayed mannequins with traditional clothing and ceremonial palace.

### **C. Typology building**

Building typology study *bangsai* at *Pagelaran* and *Sitihinggil Ler* area when viewed from the side of the type of roof is composed of two typologies:

1. *Limasan* : *bangsai Pengapit Kilen/Wetan* (build type *Limasan lambang teplok* and *lambang gantung* ), *bangsai Pengrawit*, *Bangsai Pacikera*n (*Limasan Principal*) and *bangsai Kori*.
2. *Tajug*: *Bangsai Witono* (*Tajug lambang Gantung*)

#### D. Ornament

Have a location, type of ornament used in the *bangsals* that the object of study consists of ornaments with constructional type (*Bangsai Pengrawit, Manguntur Tangkil, and Witono*), which integrates with components of the building. While the non structural is *Bangsai Pengapit*, attached to the pole.

The use of ornament is suspected as the aesthetic value and greatness of king symbol (a building for the king), it is evident in buildings with advance functions for the activities of the Sultan, the ornament is located almost in all parts building (*bangsai Pengrawit, Manguntur Tangkil and Witono*) with color red and golden yellow as a symbol of power and greatness. Instead of building works to the public or courtiers only, then only a few ornaments and even almost non-existent (*bangsai Pengapit, Pacikoran and Kori*).

Ornaments found on the *bangsai* buildings in Yogyakarta Palace, which was observed generally patterned flora, and especially in the sacral buildings there *mirong* ornament on the pole (*saka*) and symbols of the greatness of the king who was ruling at the time of construction. In this case Most of symbol numbers 8 (star 8 in every plafond, Kingdom symbols and HB VIII writing on the cover of *bangsai Witono* ceiling). Because the development most done during the reign of Sri Sultan HB VIII (1921-1939).

#### VII. Conclusion

The presence of Sultan's Palace is very important. As a royal palace contains the history of one large kingdom in Java that is Ngayogyakarta Sultanate. As the building is the work of a very high cultural value, is the development Traditional architecture of Javanese is very high with the typology of building a magnificent and complex with a bandage wormwoods is typical range.

This study aims to identify the buildings in the Yogyakarta Palace, especially the so-called *bangsai* wich pristine. From this study it was concluded that :

1. Building ward in the Sultan's Palace, especially on *Pagelaran and Sitihiinggil Ler* area has the same characteristic, which is open and is building Java tradirional, although varying depending on the shape tipology roof and its skeletal structure.

2. The difference in shape and typology is also influenced by the function / use of the past: the kinds of events and perpetrators.
3. As a building with the functions of royalty, grandeur is shown in addition to the size and complexity of building structures, also with ornaments, the sacred function of the building, the more complete and finishing with a magnificent ornament and displaying the emblems of power.

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**LEMBAR**

**HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW**

**KARYA ILMIAH : PROSIDING**

Judul Karya Ilmiah (Artikel) : Study of Javanese Traditional Architecture : *Bangsas* Building At *Pagelaran* and *Sitihinggil* *Ler* Area of Yogyakarta Palace

Nama Penulis : Tri Yuniastuti; Sukirman; Satrio Hasto Broto Wibowo

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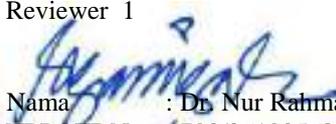
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