

Traditions of Creating Architectural Ornaments: Semiotics of the 20th Century Ornament Changes at the Pagelaran of the Yogyakarta Javanese Palace in Indonesia

Sri Sunarti¹, Sudaryono² & Eugenius Pradipto³

¹Doctoral Program, Department of Architecture and Planning, Faculty of Engineering, Gadjah Mada University, Indonesia.

²Départment of Architecture and Planning, Faculty of Engineering, Gadjah Mada University, Indonesia

[*sunartis722@mail.ugm.ac.id](mailto:sunartis722@mail.ugm.ac.id)¹; sudaryono@ugm.ac.id; e.pradipto@ugm.ac.id

Abstract

Most palaces in Yogyakarta have undergone changes or restorations. Similarly, in Pagelaran of the Yogyakarta Palace, there have been 'unchanged changes' or 'malih neng ora owah and owah neng ora malih' in the 20th century. At the Sri Sultan Hamengkubuwana VIII Pagelaran, the noble values of architectural elements have been rotated to become noble again. Meanwhile, Pagelaran as a traditional environment is believed to have not changed.

These changes (owah ora malih- malih ora owah) are an interesting phenomenon to study. Many researches have examined the Yogyakarta Palace through the center for Javanese studies. However, there is little or no research on the place and the phenomenon itself. This research aims to find out the Changes in Ornamental-Architecture of Trtatag Pagelaran in the 20th Century employing an analysis of semiotic meaning relations.

This study employed a qualitative descriptive method with a triadic semiotic approach. The first step is the collection and identification of textual data (manuscripts, maps, pictures) and observation. Then, information is analyzed on the three-mode tada approach (triangle of meaning) by means of an object comparison analogy with other fields as chronological relevance to the research object. Comparison can borrow knowledge from sengkalan, teacher of songs, wayang, Javanese traditions and pekem (provisions), and history.

Triadic semiotics is very relevant and common in interpreting established sign objects. Thus, to interpret the object of the sign in the process of change which usually has multiple interpretations, it is necessary to formulate the concept of change that involves the event of interpreting the sign of the meaning of a sign.

The paper concludes that ordinary triadic semiotics for interpreting established sign objects is very relevant. Meanwhile, to interpret the sign object in the process of change, which usually has multiple interpretations, it is necessary to formulate the concept of change which involves events interpreting meaning

Keywords: Semiotics, Change, Ornamental Architecture, 20th century.

Introduction

Previously, semiotics was considered the theory of 'signs' (Todorov, 1982. in Chandler, 2007) that had existed throughout the ancient Greek philosophy. The development of sign understanding can be read through words, images, sounds, gestures, and objects (Eco, 1967 in Chandler, 2007). The variations of sign objects in this study are ornaments and architecture. In earlier times, it was the ornaments that inspired the architectural forms, where this condition can be found in the frescoes of old caves thousands of years ago. In fact, Vitruvius was the first writer to position ornaments as an important element of architecture, adding psychological value, as a transformation of the function or purpose or meaning of a sign or symbol. Semiotics as a science of signs is an isolated 'codification' of a perceptual experience (Eco, 2016). References to the position of ornaments and codification can be used as a basis for tracing meanings in this study.

Pagelaran in the layout of the Javanese palace occupies the front yard which is 'marked' with the presence of a non-permanent category building called *Tratag* or *Tarub*. Over time, the *Tratag* of Pagelaran of the Yogyakarta Palace underwent a major change after major changes took place within the palace. The 'big' phenomena were related to: dimension, function, mass, and quantity. In the meantime, 'important' connections related to the traditional environment believed to be permanent had in fact experienced a striking change related to the position of the leading place of 'point view' for many masses of all times; as well as in the revolutionary situation of the 20th century.

The 20th century, the century of revolutionary change, was a world phenomenon in various fields to the point where it became a memorial marker of world history, which has also affected the Pagelaran of Yogyakarta Palace. The question is 'what is the meaning behind this phenomenon? Because as Rossi (1984) says: 'on the other hand every change in the traditional environment usually had persistence.

The phenomenon of global change perceptually or interpretatively related to Pagelaran is likely to persist due to several important factors, including the environment, socio-culture, and the interactions of Sri Sultan Hamengkubuwana VIII. Rapoport (1969) says that '... change is as a continuation of identity'. In other words, resilience is the continuity and change of culture in every era, as the implied meaning of the signs resulting from changes in Pagelaran. This background has encouraged this research in order to discover the concept of change related to the transformation relations of meaning and form in signs.

Based on this background, the 'purpose' of this research is to examine the meaning of changes in the architectural variety of *Tratag* Pagelaran in the 20th century

The Theoretical Basis

The research begins with an understanding of the significant theoretical ideas pertinent to the issue being investigated. Hence, the explorations of the relevant theories related to semiotics and ornaments are presented as follows.

Semiotics of Ornamental Architecture

Semiotics is a science that deals with signs. The application of semiotics involves a sign structure consisting of a sign, signified, and signifier. As Eco (1976, as cited in dalam Chandler, 2007: 2) says, 'semiotics is concerned with everything that can be taken as a sign'.

Ornaments in the traditional Javanese buildings have both aesthetic values and often 'contain spiritual symbolic values in each of its motifs'. Slamet (1985) says that it is physically a sign. The understanding is that 'sign' is a transformation of meaning, which reveals that meaning requires the application of the science of signs (semiotics).

Ornaments, apart from being aesthetic, can serve as an indication of identity, origin, period, social status, and civilization. As Kristeva defines the sign as "resemblance" (Eco, 1984). Signs in this research include architectural ornaments.

As playing instrumental roles in architecture, ornaments can be studied with many approaches, such as their history, aesthetic, technics and symbolism. To properly understand the symbolic dimension of ornaments, it is necessary to explore some theories on semiotics focusing on how ornaments may convey messages.

Ferdinand de Saussure, argues that a sign is made up of two parts: the signifier (the form the sign takes) and the signified (the concept or meaning that the sign conveys). In the context of architectural ornament, the signifier would be the physical form of the ornament itself, being parts of the totality of a building; while the signified would be the meaning or message that the ornament is intended to convey.

Explaining in more pragmatic ways, Charles Peirce categorizes signs into three types: icons (signs that resemble what they represent), indexes (signs that have a causal or physical relationship with what they represent), and symbols (signs that have an arbitrary relationship with what they represent). In the context of architectural ornament, an icon might be an ornament that resembles a natural form, such as a bird or flower. An index might be an ornament that is located on a particular part of a building, to enhance the existence of the component, such as a pedestal or roof finial. A symbol might be an ornament that is used to represent a specific idea or a concept, such as a Javanese solar emblem or tree of life.

Ornamental Architecture

The word ornament comes from the word 'ornere' which means to decorate. In ancient times it was ornaments that inspired the formation of architecture, which can be found in the various ancient cave wall paintings such as the Liang Bulu Caves 40,000 thousand years ago. Today, ornaments have become an integral part of architecture. They can be viewed in the psychological character of the head-dress of the Ioni style column or the Boromini architectural column. It can be used as a decorative element to increase the aesthetic value that is applied and then becomes an inherent part of the architectural form. The ornaments are related to the role of the 20th century technology: Architectural ornaments in the form of uniforms were mass-produced and ornaments were produced through craft printing technology. The relation of technology to the architectural decorations can be used as a study to explore the role of decorations.

Facing the advancement of industrial era, German architect Gottfried Semper (1989) in the 19th century argued that ornamentation should be derived from the constructional and technical features of a building. According to this theory of structural rationalism, ornaments should be a part of the structural design and should serve a purpose beyond mere decoration. Previously, Marc Antoine Laugier in the mid-19th [1755] had argued that structural elements were essentially architectural elements. Therefore, ornaments were applied to enhance the expression and identity of the structural elements in the architectural composition.

Even stronger theory on structural rationalism was promoted by Viollet-le-Duc by arguing that there two truths in architecture: according to the program and according to the method of construction (1875, pp. 474-475). Ornaments were not something added to the construction but they were the constructions themselves which were beautifully designed

Changes in Ornamental Architecture

Numerous variations of changing patterns of ornaments have been identified as follows:

- Metaphor: figuring out as a symbolic approach in semiotics (Barthe's, 1968, in Ardiansyah, 2017)
- Transformation: change through dimensional transformations, subtractive transformations, and additive transformations (Ching, 2007).

'Change' is the result in the form of a sign that functions as a medium of information, and the change itself is also a sign.

The 20th Century in Pagelaran

Century or era is the reference to the pause in time that is motivated by the significance of events, trends, to global levels which then become stories or memories. The purpose of using the word 'century' is to make it easier to remember certain events, phenomena, and trends. As for the term period in Java, it is in the form of: dal, windu, lapan, or pasar. Meanwhile, the 20th century has an important relationship with various phenomena in various parts of the world concerning revolutions in various fields, especially industry. It was the beginning of a large-scale interaction between Europe and Java as a milestone in the rise of the archipelago

(Lombard, 2018). The mention of the 20th century in this study also signifies the time when Sri Sultan Hamengkubuwana VIII brought the phenomenon of persistence behind significant changes that had global impacts.

Some of the understandings above make us aware of the importance of the object of research, because as a traditional environment, *Tratag* (terrace non-permanent) or the Pagelaran that is believed to have not changed and remain 'static' so far. In fact, it has experienced major and important changes. The big term is related to external dimensions and connections, in various statuses, in related strategic positions throughout the history of Performances. On the other hand, the position of strategic places and the mass and meaning that occurs in the Performance are important. The phenomenon of change as a memorable historical sign occurred simultaneously during the globalization era of the 20th century during Sri Sultan Hamengkubuwana VIII (HB VIII).

Literature Review

Ornaments play significant roles in architectural practices as well as in theoretical discourse for centuries. While ornaments serve to enhance the visual appeal of a building, they also can be used to convey meaning, represent cultural values, and express individual creativity. There are a number of theories concerning ornaments in architecture, which have evolved over time.

Emphasizing on the aesthetic values, Vitruvius during the early years of the Roman Empire (1960) believed that the purpose of ornaments in architecture was to enhance the building's aesthetic value while also enhancing the particular characteristics of the architecture especially those referring to the Classical orders. Writing in the early Renaissance era, in his book "De Re Aedificatoria" (On the Art of Building), Alberti [1991] believed that ornaments in architecture should be designed in such a way as to enhance the building's overall aesthetic value applied in a well-proportioned building forms. He believed that ornaments should not be used excessively, but rather should be applied in a way that enhances the building's form and proportion. Alberti wrote that ornaments in architecture should serve two purposes - they should provide delight to the eye, and they should communicate the building's purpose and function.

Austrian architect Otto Wagner writing in the early 20th century argued that ornaments in architecture were part of artistic expressionism. According to this theory, ornaments should be a form of artistic expression and should reflect the cultural values of a society. Wagner believed that ornamentation should be inspired by nature and should be simple, functional, and beautiful.

While Viollet-le-Duc embraced new materials and technology, John Ruskin positioned himself against the proliferations of iron and other industrial materials. For him, ornaments should convey a message or represent a concept beyond their decorative value. He emphasized on the moral values of architecture including the ornaments made by dedicated mind and hands on natural materials with forms inspired by nature. Only in this way ornaments may reflect the moral and spiritual values of a society.

Some key theories of ornaments in postmodern architecture included historical references, symbolic message, ironic representation (Jencks, 1977). Historical References incorporates ornamental elements, such as arches, columns, and pediments, to reference historical styles such as classical, gothic, and art deco. Postmodern architecture also often used ornamental elements to convey symbolic meaning, to communicate a message or to represent an idea or concept. Meanwhile, Postmodern architecture often uses ornamental elements in an ironic way, subverting traditional expectations of what a building should look like. Ornamental elements may be used in unexpected ways, or may be deliberately exaggerated or distorted.

The appeal of ornaments continued in contemporary context, such as in parametric ornaments or digital ornaments by using parametric design tools to create intricate and complex ornamental designs that are digitally fabricated. This approach allows for the creation of complex, detailed, and customized ornamental designs that are difficult or impossible to create by traditional means. Digital ornament can be used to create intricate patterns, textures, and

shapes, and can be applied to both the interior and exterior of buildings (Kolarevic, 2010 and Leach, 2007).

Research Methods

Methodology is an approach used to carry out an activity in a coherent manner step by step as an integrated unit (Muhadjir, 1998). It should be comprehensive, coherently arranged in a flowing and logical manner starting from the significance of the problem, followed by the completion process starting from extracting information until completion, conclusions (Ashadi, 2018).

Creswell (2007) describes the narrative of information data and interpretative analysis on the object of research (Pagelaran) with consideration of memory, experience, knowledge, and cultural norms. Considering that the research location is in an environment that is closely related to sign and symbols, the sign mode is very relevant. The method should guide the course of research, to what extent is the relevance of the concept of meaning and to what extent gaps may occur so that suggestions for improvement are needed. Research implementation is carried out in the following.

Data Collection and Information Compilation

Data objects of Pagelaran before and during the Sri Sultan Hamengkubuwana VIII period are classified according to the level: landscape/space, architectural construction, decoration or ornamentation that accompanies architecture as objects attached as a single unit.

Information is gathered first from manuscripts and observation to trace suitability. Given that some information is still wrapped in the form of a sign, it needs to be interpreted first. The implementation strategy can be through three sign modes that can be applied either one, or at the same time to reveal the meaning which is hidden information. Excavation of meaning information is done using the following strategies:

- Citing the similarity of the final sound (suffix) or *guru lagu*;
- Through reading *sengkalan* (Padmosoekotjo, 1960).

This strategy of interpreting the meanings is undeniably multivalent, because 'dyadic meanings are influenced by the presence of agents and interpreters (Wibowo, 2013). The real data can be directly compiled together with data resulting from meaning into information presented in the form of a narrative description, which can be accompanied by images. Description of the data is the basis for analyzing the changes in the relation to the form sign or symbol to the meaning of space, architectural construction, decoration or ornament.

To achieve the goal of this research, given that the object of research is an event and a location related to a sign, a qualitative research method with a triadic semiotic approach can be applied, in the following triangle of meaning triangles (triadic):

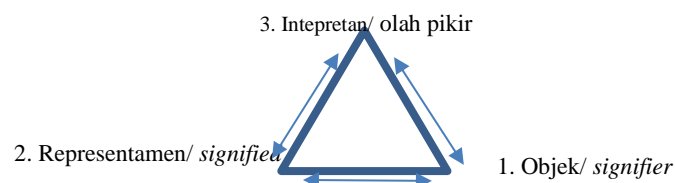


Fig. 1: The triangle of meaning

Source: Eco, 1976

Data Presentation

Outcomes of data observation is presented in the form of descriptive narratives from the form of signs or results of meaning. Some descriptions of informational narratives are accompanied by images from the 20th Century as much as possible. Meanwhile, images of the existing condition are a means of tracing the chronological traces of change until conditions were formed during the time of Sri Sultan Hamengkubuwana VIII (HB VIII).



Besides the period, there is also a mention of data in the context of the Javanese culture, both physical and non-physical. For example, traditional Javanese buildings with limasan architecture are recognized as the old (local) category. Meanwhile, the new architecture in this study refers to everything that has come from Europe (imported).

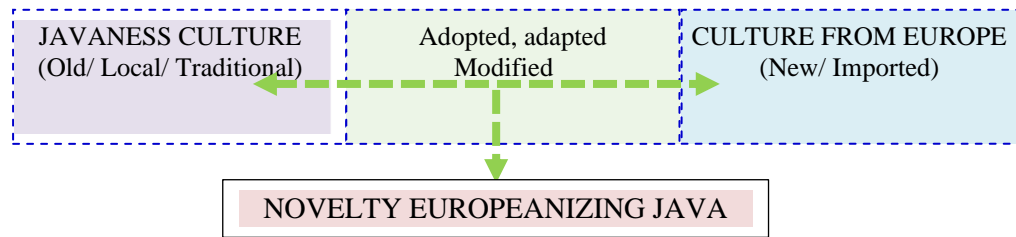


Fig.2: Time-sharing framework

Source: Author, 2022

The figure shows that semiotics is a chronological process of meaning by involving the interrelationships between sign structures (1,2,3) together to find meaning. Interpretation can also be done by referring to the tradition of values and activities in the supporting community. Triadic semiotics has been widely used to interpret established signs. Meanwhile, triadic semiotics focusing on interpreting situations that are still in the process of changing is not felt yet. The alleged discrepancy in the application of the Triadic Theory to be applied in this study is the extent to which the suitability of the meaning of the triadic theory (sign mode) can be applied to interpret the 'changing sign' in this study.

The early stages of macro-observation has found that there were alleged patterns of change in the phenomenon such as: a). owah ora malih/replace (the old pattern there is reused); b). malih ora owah (an old pattern from another place is installed in the old place; c). novelty patterns in old places or never existed at all (present here). Then, this pattern of change is used as a means of tracing meaning by referring or comparative analogy to other places in the palace or other fundamental fields.

Furthermore, the final findings of this study are not solely the results of sign meanings like previous research as follows:

- 1). 'Meaning Motive Mirong Bangsal Witono'. Sukirman (2012) discusses the uniqueness and high meaning of the architectural ornament that accompanies the beauty of the architecture of Bangsal Witono;
- 2). Semiotics and Realism. Vaupoti (2010) discusses that in semiotics, there is a change in the text during the process resulting in character dysfunction, while for this research the focus is on examining the meaning of the change itself in relation to the meaning in places and in important centuries. The findings of this gap will encourage the proposal for the formulation of a 'new' concept of change related to semiotics in the further research.

Data Analysis

Analysis of morphological changes on a landscape scale, architectural construction and ornament is as a relation to a sign of a meaning. The analysis strategy includes:

- 1). Cross-sectional comparisons by borrowing relevant psychological contexts that are not there;
- 2). Pairing position of a resemblance of form to another or closest place;
- 3). References to traditions transformed in physical form;
- 4). Important history in the 20th century related to the interaction of Sri Sultan Hamengkubuwana VIII (HB. VIII's) figure at the world level. Interaction is as a chronology of physical or non-physical transformations, including the presence of decorative and architectural trends which are part of the sign. Regarding signs, Peirce's Triadic semiotic approach known as the triangle of meaning is a choice of meaning which is illustrated in the Fig. 1.

The Fig. 1 shows the analysis of the meaning of a sign or signifier which can be applied to one or all three of the modes of triadic signs:

- Iconic mode: interpreting a sign object by emphasizing an old resemblance because it is based on similarity.

- Symbolic Mode: interpreting the object of the sign by emphasizing the arbitrary nature of liking, but being understood or accepted by the audience.
- Indexical Mode: interpreting a new sign objects by emphasizing new but dissimilar items.

To analyze a change pattern phenomenon such as:

- The old condition is reused. In this case, it occupies the old position with the open dimensions and shape as before the pattern changed but not move positions.
- Old from another place installed in the old location pattern (*boyongan*) or *owah ora malih* (move positions but not changed).
- At the old location, a new one is installed that has never existed at that location pattern change.

To the results of the meanings generated by the application of the triadic theory, that is not suitable, the meanings can be proposed as additional knowledge.

Findings And the Discussion

Changes can take various forms, including restoration that still includes character or identity in the results of the changes. This is an effort for continuity and change identity (Rahman, 2020). This concept can be used as a consideration in the object of this research. The discussion of Pagelaran begins with the Javanese karaton tradition providing a transitional space that connects the alun-alun and Sitihinggil. The naming of the Pagelaran refers to the main character as a form of semi-permanent open building in the front environment called 'Tratag Rambat' or 'Tratag Pagelaran'.

In the Javanese tradition, Tratag is present as a temporary facility during a celebration held by the owner of the house. Likewise, the Tratag Pagelaran in the front yard of the Yogyakarta Palace is a place to hold royal ceremonies. As the name implies, 'title' is to hold an activity to receive guests of foreign regent officials before the sowan at Siti Hinggil (Wibatsu, 1995). Tratag Pagelaran acts also as

- 1). Guest facilities for officials of foreign regents, tumenggung at Watangan-Seton or pisowanan agung;
- 2). In the military system, 'Pagelaran' is a place for the preparation of the title for the departure of soldiers, which is indicated by an open building with a pair of rear wings ready to propel flight.

Referring to the map 1, 1833 A.D Tratag space, Yogyakarta Palace, Pagelaran was still a blank yard flanked by Bangsal Pengapit Kulon and Pengapit Wetan until the validity of the map needed to be investigated. In addition to the manuscript source by Wibatsu, the map referenced as 2nd century 18 AD showed that the Tratag Pagelaran space was marked with a grid pattern of dots. In the architectural drawing techniques, the point of column notation is from an open building; in this case, the column or saka from the Tratag Pagelaran. Therefore, it is possible that the presence of the tratag in the image is categorized as non-existent or ignored by the designer.

The Javanese tradition of tratag is as a temporary building to support the celebration activities (temporary) in the classification of Javanese house as a non-permanent house. Likewise, Tratag as in the Pagelaran before the reign of Sri Sultan Hamengkubuwana VIII was an open building with a non-permanent roof in the form of woven coconut leaves (*gêté pé*) supported by saka teak wood in a grid pattern. In later times the octagonal teak saka was replaced by octagonal masonry pillars, then during the reign of Sri Sultan Hamengkubuwana VI it was replaced with ornate octagonal cast iron columns, with iron roof trusses arranged flat, *gêté pé* roof coverings (Wibatsu, 1995). At the time of Sri Sultan Hamengkubuwana VIII, the roof of the Tratag Pagelaran was replaced by a flat roof with a top raised like a pyramid. This change also allowed the inclusion of decorative accessories attached to architectural elements that previously had not existed, because there was no architectural space to attach them.

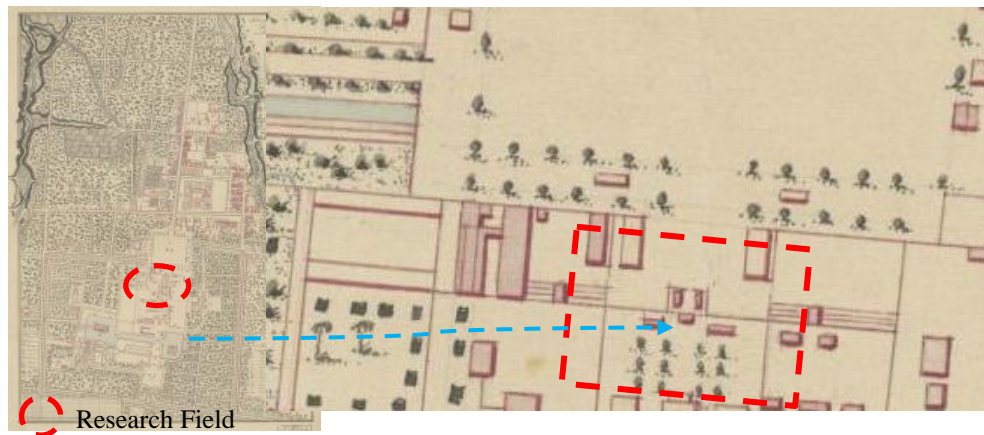
As a traditional environment, it was believed that Pagelaran was static. In fact, it has dynamically undergone significant changes. In the Javanese tradition, the dynamics of changes that occur like that usually produce signs, which can be interpreted with Peirce's Triadic

Semiotics with a sign mode application strategy. Observation of the pattern of changes that occur in Pagelaran is through the following pattern

Old Reused

Landscape: The layout tradition of using the front yard of the palace, among others, is for the implementation of Watangan (Wibatsu, 1995), in the Alun-alun. Positioning is as the front yard of the palace, because the main access for guests is through the front building of the palace which is represented by the Witana Ward; a unit of Sitihihgil. The spatial pattern has similarities to the map of the Majapahit Palace (Maclaine Pont, 1925), which shows the pattern of the palace space from the back to the front. This pattern can manifest as a body sculpture, where Sitihihgil's environment is the head, which is indicated by the presence of supit urang (shrimp chopsticks) a symbol of the war title formation or soca (eyes) located on either side of the Sitihihgil door.

Considering the series of environmental positions, the facial characters is relevant to the page or yard. The changes related to the layout of Trtatag Pagelaran indicates that the supit pattern did not survive in various changing physical manifestations. Supit urang is a mark of the elements of the face of the palace, replete with markings (trees, fences, roads etc.) as the characteristics of each environmental unit, as shown in the following map image:



Map. 1: Old Map of Yogyakarta 'Situatie der Ommestreeken van Djocjokarta 1833 M' (Source: KITLV Collection, Leiden, The Netherlands. Access 2019)

According to the map 1, it still retains the pattern criteria: dimensions, U letter layout, the position flanked by Bangsal Pengapit is as same as before. This pattern of landscape arrangement can be found in the previous palace too (Karaton Mataram Surakarta). The facility development shapes the character of the environmental units in the square yard with barriers (trees, fences, roads, etc) having philosophical meanings. The follow-up environmental units in the Yogyakarta palace courtyard are in the form of squares notation. Performances occur as shown in the maps 1 or 2.

Architectural concept of the Trtatag building form: Non-permanent open/ disassembled, grid pattern columns, flat roof. The image system is visualized in the form of dots.



Fig. 2: Trtatag Pagelaran

Source: Palace collection in Gd. UGM, referenced 2015

There are no Ward Pengrawit and Trtatag Performances on the map 1, because the essence of trtatag is a temporary building in the yard; the essence of Ward Pengrawit I similar to being 'temporary', whereas in the map 2 of the 18th century AD, the plot space of Trtatag

Pagelaran is in the form of grid pattern dots confirming the pattern of iron columns of non-permanent tratag buildings as shown in the Fig. 2 below. The dotted notation of the Tratatag Pagelaran column on the 1830 AD map shows that the 1833 AD map is different because of the references to the depiction guidelines. Then the existence of Tratatag was clarified in the map of 1925 AD. It was already in the form of a box, as was the notation of the plot of the building like its surroundings.



Map. 3: Old Map of Yogyakarta

Source: Djogjakarta En Omstreken 1:10000 Uit 1925 Van De Topografische Dienst In Nederland Indie Djogja Solo Beeld Van De Vorsteneden. Accessed in 2019

The map shows that the essence of the Tratatag Pagelaran in each era has a letter U layout with *saka* (column) points *ora malih* that (do not change) and *ora owah* (sift positions/ move positions). Its position on the philosophical axis, *seturus* (in line) to Sitinggil, is found in the previous palace too. Therefore, the sustainable tradition proposed by Rapoport (Year) as continuity and change has relevance to the Tratatag Pagelaran phenomenon, which is findings '*malih neng ora owah*' (changed but not changed). This can be recognized as sustainable architecture inherent in vernacular architecture (Wahid,2012).

Traditionally, the pattern of activity paths is straight from Siti Hinggil to Alun-alun or *vice versa*, crossing the Tratatag axis. Because the Pengrawit Ward is a movable building (Darsiti, 2000) if it is placed in the middle of the Performance, interpreted as a building that is fundamental, diverting the royal ceremonial route. Meanwhile, referring to the old map, it describes the philosophical axis as a free path without buildings, as the notification of movable buildings was not drawn.

Therefore, according to the old manuscript, similar spaces, metaphors, the chronology of the spatial map, and the functional correlation of the spatial pattern are relevant to comprehend Pagelaran. Thus, the philosophical transformation towards the physical space can be interpreted having the status of a pagelaran which serves as a yard even though there is a building as a facility for the traditional activities.

Old in Another Place

Architectural Construction

The phenomenon of old buildings can be related to old buildings that are not there (architecture similar to limasan/pyramid). There is 'novelty (previously not limasan) and there is displacement' (borrowing architectural forms around Pagelaran Hall in).

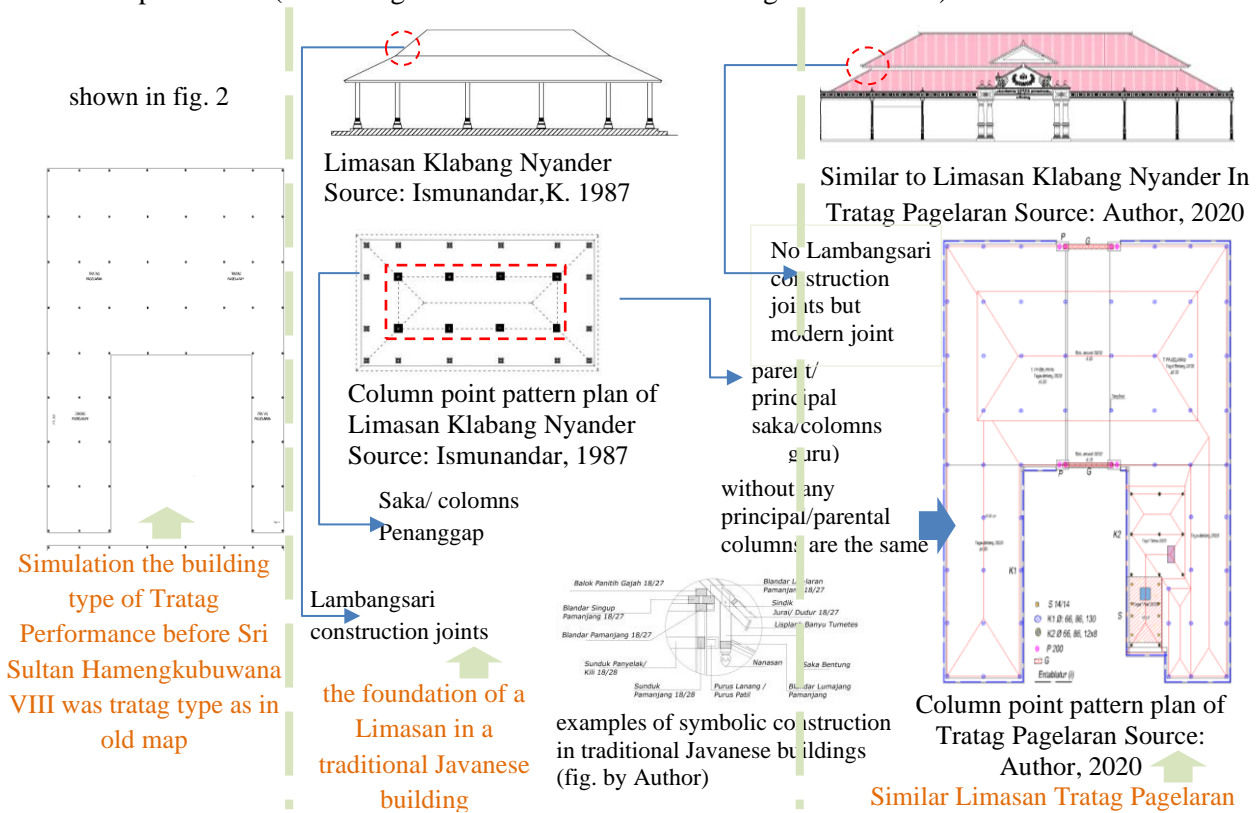


Fig. 4: Comparison Architecture between the Limasan and Tratatag Pagelaran and before period Sri Sultan Hamengkubuwana VIII

There was a transplant of old borrowings that were not used there (at Pagelaran). Typological Tratatag Pagelaran as a traditional Javanese building displays the similarity of the architectural form of the pyramid roof in the palace. In terms of comparison, the size of the width x length is similar to the pyramid of klabang nyander, but the structure of it is very different (grid pattern). If we look at it from below, it doesn't change much that the roof is flat because there is no arrangement of levels of saka guru-pengarak. All the levels of saka are the same, nothing grounded.

Since the composition of the saka is still the same as that of the old one, the characteristics of Pagelaran as the old tradition are still there. The phenomenon of transplanted occurs where the pattern of the pyramid structure of the Pagelaran has a pattern of laying saka and the dimensions do not represent the level status. However, there is a relation

between the structure of the saka tradition of Pagelaran and the old space philosophy. Those who understand the similarity of form (tratag) apply the meaning of 'iconic fashion' because it is based on similarity. Its findings are '*malih neng ora owah*' - changed but not changed.

Total Novelty

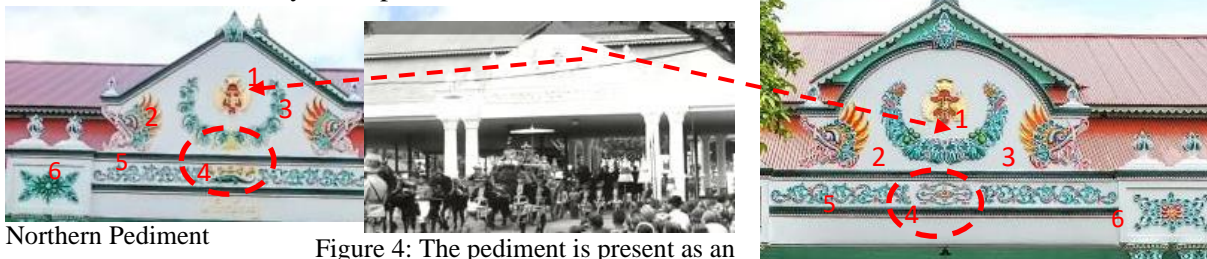
The phenomenon of imported or local novelty related to design or material generally occurred in Javanese Palaces, which became a trend including in Pagelaran in the 20th century. Imported architecture (i.e. Pediments and entablatures, European Corinthian columns) interacted and adapted to the Pagelaran and the traditional Javanese environment.

The pediment is identical to the conch or tepong cover on the roof of the village. However, the direction of the tepong (local pediment) is usually to the side, while the European pediment faces forward. Moreover, the front is more commonly installed as the regol (gate). In classical times, pediments in Europe were applied only to sacred buildings, such as temples. Then in the neo-classical era, pediments began to be installed in authoritative public buildings considered important, such as the parliament, museums, or royal buildings.

The next development of the European pediment was brought by the Dutch to Indonesia among others, at Vredeburg Fort (reference). The earliest pediment was installed only in important buildings. Since it was later installed also in a building in the Yogyakarta Palace, it could also be considered important. Furthermore, the pediment underwent a transformation into the architecture in the karaton variously, scale-direction and the shape of an acute triangle or a circle/curved. A variety of the use of pediments such as in *Tratag* Pagelaran, *regol*, *kelir* (*regol* barrier wall), and even toilets is something that has never happened in Europe. It is not clear if the installation of pediments in these various buildings can be seen as de-sacralization of the pediment, because even though it is repeatedly installed in various places or not, it has to be noble, as an inherent characteristic.

The pediment in *Tratag* Pagelaran can be seen as something separate from the others. However, to make it look more majestic and important, it needs *diJawakke* (be Javanese) to be modified by adding some local decorations and modified forms.

Pediment is an imported element of architecture but the application of the ornament is taken from many other places such as:



Northern Pediment

Legend: 1. Projocihno; 2. Bledhegan; 3. rice-cotton; 4. Candrasengkalan; 5. Sulur; 6. Papaya vegetable

Figure 4: The pediment is present as an indication of regulation for the track
Source: Video Archive of Perpustakaan DIY) accessed 14/04/2022

Southern Pediment Ornament

Legend: 1. Projocihno; 2. Bledhegan; 3. fruit and vegetable; 4. Candrasengkalan; 5. Sulur; 6. gambir, betel nut



Candra Sengkala: Panca Gana Sliro Tunggal (1865J)



Surya Sengkala: *catur tri sulo kembang lata* (1934 AD)

Fig. 5: Pediment Ornament
Source: Authors, 2021

The Figure 5 never existed before the period of Sri Sultan Hamengkubuwana VIII, as referred to in the photo 'KITLV A94 - Ingang van de kraton met waringin-koeroen te Jogjakarta-1880' because there was no space for attaching ornaments.

In the modern era, cement printing technology was present, giving rise to the production of universal tendrils representing tendrils in *Bangsai Pengrawit* with larger dimensions, although in non-wood materials (printed concrete). It is interesting that the entablature from Europe served as a beam, while the one in *Tratag* was a novelty that served

like a *lisplang or takir* (Entablature filling) from the local ornaments has never existed in a palace. The pattern of placement of the ornaments on the pediment followed the curved design (imported) as modelled on the European Laurel Wreath (Farmer,2014).

the northern part:

- (1). Praja Cihna or regalia ornament and
 - (2). Rambut api or bledhegan sign ornament
 - (3). Cotton paddy bouquet ornament
- } on the southern pediment

(4). The entablature of the northern part of the pediment was filled with ornaments as *candra sengkala memet* (a Javanese tradition of marking the year in the form of ornaments). *Sengkalan* with the symbol of 5 bees and 1 monitor lizard can be read *Panca Gana Sliro Tunggal* as a symbol for the year 1865 Java. In the southern part it is in the form of *suryo sengkala* (symbol of the Masahai year in the form of decoration).

5. *Lung-lungan* as installed in the palace was a symbol of the life of the *tulung-tinulung* (help each other), the brotherhood tradition (sibling ethics),

6. the ornaments of people's crops were fruits or papaya vegetables.

The southern part:

- (1). Praja Cihna or regalia ornament and
 - (2). Rambut api or bledhegan sign ornament
 - (3). Bouquet of vegetables and fruits ornament
- } on the southern pediment

pediment was marked (4) by *suryo sengkala* (a symbol of the AD year in the form of ornaments). The ornaments in the form of 4 tridents radiating from the center of the lotus flower can be read *catur tri sulo kembang lata* as a symbol for the year 1934 AD according to the procedure for reading *sengkalan*, Padmosoekotjo 1960).

The tradition of applying *suryo sengkalan* as a marker of the year of events during the time of Sri Sultan Hamengkubuwana VIII began to be widely applied and supplemented by *suryo sengkolo*. It can be interpreted that during the time of Sri Sultan Hamengkubuwana VIII, he began to open up to the world, including in the international assimilation.

(5) the application of ornaments of *sulur or lunglungan* was with the same pattern and type as those in the palace, but the new cement printing technology was present, marking universal *sulur* representing the one in *Bangsai Pengrawit* with larger dimensions, and in non-wood material. What is even more interesting is that the European entablature (the function of the side beams) is that the *Tratag Pagelaran* doubles as the baseboards, which can motivate creativity to fill it ornaments.

(6) The design for filling the Corinthian pediment and column ornaments should be usually as shown in the Fig. 2 (Borromini. 2022) while in *Pagelaran* it was filled with old ornaments that had never been used in the palace (*gambir, betel nut*). It has been introduced to strengthen local identity through European design (Europeanizing Java). In fact, this ornament can also be an indication of the period and cultural civilization based on character, competence skills, techniques, rules, and the status of its owner (Gustami,1980).

Change with the process of presenting new pediments in variations of place and scale and shape have also occurred so that they deviate from their original form. The ways to create them are:

1. The peculiarities of *karaton* by referring to the ones existing before or other fields;
2. Showing the importance of *Pagelaran*
 - more monumental
 - indicating novelty

There was an effort to modify the *Pagelaran Tratag* by giving local ornamentation and placing it in a central position in the middle of the building with a certain distance. This indicates a function for the track and becomes interesting because of the presence of certain ornaments that have never been used in the architectural construction in Java.

The concept of change here varies and can mean adopting, borrowing, and then adapting according to the characters that are there and then displaying it again with important values.

Since the Javanese put the cover on the conch plain, the ornamental applications were taken from many other places, such as bledegan; mosque dome vegetation and mountain element as well as making fields with ancient models like those in Tamansari.

The phenomena of a complete novelty that had never been introduced in a palace before (pediment, entablature and Laurel Wreath design) could be interpreted as an attempt to reach a global architectural modernity. Nevertheless, the influence of globalization was adapted to the local decoration that had never been present in palaces or in architectural construction with the aim of Europeanizing Javanese but maintaining local identity

Conclusions

This study concludes the following.

1. There has been persistence of tratag signs in the standards (ordinances) of Javanese building concepts related to layout, typology, and similarities in mention.
2. The existence of a relationship between *Tratag Pagelaran* and the old (traditional Javanese) was not *limasan* (a pyramid) like other pyramid buildings in the Yogyakarta Palace.
3. The concept of change that used to have a sacred meaning (European pediment) underwent a de-sacralization into a trivial item (installed everywhere) and then became an important item again in *Tratag Pagelaran*. It became important by Europeanizing Java (filling in Javanese decoration on the imported design/pediment so that it looked magnificent). The ornament produces a new Javanese identity that has never been present to any architectural construction.
4. Peirce triadic semiotics with a sign mode theory approach is very relevant for interpreting established signs in general. Moreover, interpreting objects that are still in the process of changing allows multiple interpretations.

This study proposes that the concept of interpreting a sign that is still in the process of change can be done by interpreting the change and then interpreting the cultural change, the physical change and the change in meaning related to the physical change. Therefore, the new concept interprets the sign of the sign behind the change (meaning of interpreting). This new concept can be used as a reference for further similar research and in other similar places.

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