

The Architectural Creativity as a Local Genius Dialogue in the Javanese Traditional Building

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ABSTRACT

Classical Indonesian Architecture has variant of type architecture development. The phenomena shows the open of idea in contact with the other culture from the outside and the creativity process to produce a new form or a new identity. Local Genius in the context of local culture in Indonesia showed a creative community that allows generate new products. This paper will discuss the results of the architectural creativity on dynamic development of Indonesia classical architecture in Islamic Era, particularly in Java and they dialogue with the past. Moreover this phenomenon is also found in traditional Javanese architecture which is also associated with a form of sacred buildings. The emergence of Tiered roof Mosque can be ascertained is the result of a new creativity to building the mosque, as well as the emergence of forms *Joglo* in traditional Javanese architecture. In Indonesia, a form of classical architectural heritage is very dynamic so it is more difficult to be recognized as a persistent identity, every age and region has its own character. This uniqueness is indicated by the dialogical creativity of the ability to blend on elements from the outside with a preexisting (role of local genius) or between the new and the past.

KEYWORD: Local Genius, Creativity, Past, Dialogue, Javanese

INTRODUCTION

Indonesian Architecture reflects the wealth of building variation in ancient times (Classical) until the present moment. Indonesia architecture in the classical period showed a dynamic architecture and moved in a creative and open to the intersection of culture. The result is a novelty but still did not leave the 'identity' before. Dialogue with the past is a foundation in thinking to generate something new, even though the product may indicate a novelty or innovation and sometimes seen not related to the past. This paper intends to describe how the shape of the local classical architecture was able to hold a dialogue with various points of contact, especially local historical ones. These points of contact are not to be interpreted as mere imitations of foreign architectural designs or ones derived from the past, but rather as ones that undergo a certain formal transformation yielding a new form of architectural art. Therefore, examples will be taken of how many particular forms can be considered as representative of this transformational process. The latter cannot be detached from the creative effort to be made. The local spirit or atmosphere (local genius) provides a blueprint to indicate what this creative capacity amounts to.

Local Genius is what makes architectural transformation tick. Basically, form transformation cannot be detached from the problematic issue of typification. As related to typology, the stages of this design process contain among others the moment of typology and the moment of form invention, according to [1]. These stages are linked with an elaboration on various types and forms to be used. Both stages are closely interrelated. This moment of typology can also be estimated to have been used in the creation of Indonesian Classical architecture related to inspiration from the Indian or China Architecture that were rearranged into new forms. In the design process of architecture, the moment of typology is a stage in the formal quest by taking into account what already exists, even though the final outcome may well differ. Javanese architecture related to the form of its sacred edifices. These innovative characteristics can also be identified in the temple or non-temple buildings of the ancient Early *Mataram* Era, the *Majapahit* Era, and the Islamic *Demak-Mataram* Era (15-18 century), indicating the same spirit of dynamism.

RESEARCH METHODS

This research was conducted using the descriptive-argumentative method to shed light (in architectural terms) on the architectural creativity as reflected by the building shapes encountered in the Classical Era in Indonesia. There are various important milestones to be found in its architectural shape, namely in enshrinements, the aforementioned *Joglo* style, and the tiered roof - *Tumpang* Mosque, to provide three examples. By making use of the typo-morphological

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approach including the inherent transformation, it is hoped that the elements of this architectural creativity can be detected in holistic ways. The comprehension of typology-morphology (or the study of the typo-morphology of architecture) consists of the close examination of architectural types by paying attention to the shaping elements (structure-element-component), and the composition itself, without disregarding the functional elements found in these objects [2]

This study can be applied to the analysis of form in historical research, both in synchronic and diachronic ways. Not all locations could be reached by way of field surveys due to certain limitations, so they have been selected by purposive sampling. The study and the comparisons are made of the following elements, namely ground plan, appearance and location, followed by the components found inside, such as façade and ornaments, the building materials including the tectonics inside. The research steps to be taken include the following:

1. Comparing the architecture of the Hindu-Buddhist temples with the architecture of the following Islamic Era like Javanese House and Mosque
2. Making an interpretation and analysis based on this study to determine the potential for interrelatedness in the framework of finding the defining characteristics of the architectural forms. The variables used comprise the architectural elements, design and arrangement of space, location and arrangement of mass, frame-shape-façade and the kind of ornamentation used to embellish, technology (i.e. engineering)-construction-materials.

It is hoped that the outcome of this study will enrich the comprehension of architectural theory related to transformation in representation. The usefulness of representing the architecture of the past and the various arrangements in the new designs form part of the process of rethinking, reforming, rebuilding, reinventing, redefining, and re-evaluating. The process of form invention can be linked to the spirit of the age, globalization or trends manifesting themselves in each particular era, even though the factor of local genius plays a more prominent role in filtering these factors.

RESULTS AND DISCUSSION

Quaritch Wales defines local genius as the sum of the cultural characteristics which the vast majority of the people have in common as a result of the experiences in early life, what I meant by local is simply pre-Indian, and the adjective “creative” means involving the use of skill and the imagination to produce something new or a work of art, or having the skill and ability to produce something new, especially a work of art; showing this ability [3]. Creative thinking means thinking about problems in a new way or thinking of new ideas [4]. Creative thinking is inextricably linked with the architectural design process. The process of creating works of architecture basically consists of a designing process aimed at producing something new. To do so, a certain kind of creativity is required that is supported by a sufficient amount of skill and imagination.

To use one’s imagination to the full, a variety of sources is needed to tickle one’s fancy, so to speak. Regarding these sources, Galenter observed that form is shaped by intended function; form is generated within the creative imagination; form is shaped by the prevailing spirit of the age; form is determined by the prevailing social and economic conditions; form is derived from timeless principles of form that transcend particular designers, culture, and climate [5]. In the field of architectural design, several approaches and strategies are known to have been adopted. These strategies can generally be divided into three categories, according to Antoniades, namely the traditional strategy (conventional), the borrowing strategy, and ‘deconstruction’ strategy [6]. According to Jomarka, there happen to be several approaches in the field of design, among others the rational approach, the precedent approach (taking into typological forms/previous elements), and the regionalism approach (incorporating regional aspects) leading up to the generative process[7]. By observing the forms of Indonesia’s classical architecture the concepts of borrowing, regionalism and precedent inspiration are implied in its architecture. However, according to Prajudi, formal invention in the field of design generally refers to or modifies the existing types and forms that have existed so far, various types derived from outside, or even formal inventions that were not. In other words, the lack of reference to certain forms may yield a genuinely new style or design [8].

According to Prajudi the image that emerges from representations may take the shape of duplication (same-identical), iconic forms (containing only the essential elements) or abstract ones (incorporating values but assuming different shapes) [8]. The strategy of borrowing in the transformational process facilitates the efforts to re-introduce representations rooted in the past. This phenomenon stimulates the emergence of blending in the architectural design involved. This mixing process can take place at several poles of the spectrum that may differ, for instance involving the aspect of historical, cultural or stylistic backgrounds, and the like. Architectural blending can be motivated by the presence of cultural acculturation by way of background.

Dialog with Indian temple Architecture

The dialogue is not only associated with cultures from outside but also with local cultures from a bygone era. Thoughts about archetype, collective memory and primordial images amount to a strong reason to sketch or elaborate on the presence of the dialogue with the past. This can be seen in several examples of classical architecture, as found in ancient temple architecture. Buildings where religious duties were observed before the Early Classical Era are believed to have featured wooden buildings, such as the ones depicted in the ancient classical temples that had artificial pillars. In his analysis Dumarcaay states that the possibility exists that temple buildings were initially made of wood. Subsequently, stone was used thanks to the development of building materials and technology (engineering skills), even though after this transformation the use of wooden buildings was not left behind altogether. This can be gleaned from the use of artificial pillars made of plaster that were engraved in the corner of temple walls and the vestibule roof (entrance) that illustrated the wooden roof [9].

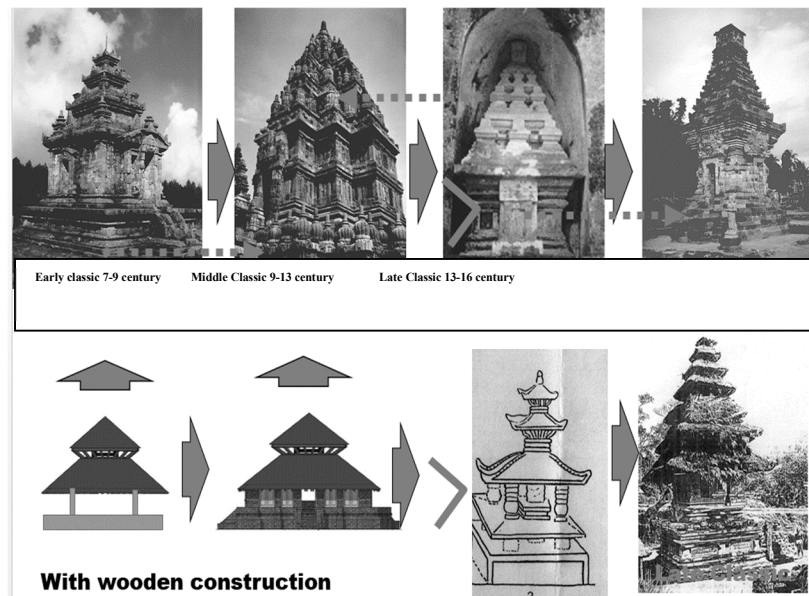


Figure 1. The development of sacred Hindu-Buddhist Architecture in Java, especially minaret type from 7 -16 century that show the tiered roof with umbrella construction[10]

Tumpang Mosque (shrine) and *Joglo* (house) Architecture as a dialog with Pre-Islamic Architecture

The sacred buildings are identical with centered roofs, as seen in the temple and *Meru* style. Since the Banjar *Wantilan* ranked as important, it is quite possible that when the ideology of the *Majapahit* Kingdom (13-15 century) became Islamic era, the function was transmogrified into a mosque. In the era of Christianization of Europe, the same transformation took place, namely the use of Basilica (originally intended for meetings and court cases) for the benefit of the Church.

In the *Majapahit* Era, one glance at one of the relief pictures of the remains would reveal the shape of the building which is identical to the Banjar *Wantilan* with a so-called hip-roof, open walls, and situated in a square. On the island of Bali, the Banjar *Wantilan* is also placed in a square, and some have the same pyramid-like hip roof (ridged) or a centered main roof called *Tajug* (in the shape of a pyramidal crown).

With the creativity of that era at hand, the profane *Wantilan* was reconceptualized and rearranged as sacred, namely by using the *Wantilan* with the centered or main hip-roof and its walls rearranged as closed, similar to the temples of the age (*Meru* buildings). The inner space could be used to accommodate a large number of people. In several of the main mosques, the buildings were completed with a large terrace or open veranda in front. The architecture of the early mosques form the creative output of the community existing in Islamic society (the jemaah of that era) in response to Islam as the new ideology that had entered the *Majapahit* kingdom, including the role played by the *Walisongo* (holy Islamic Missionary) in this context, that is to say the pious leaders who spread Islam in Java. These religious leaders are assumed to have mastered the art of building, just like the priests had in the Early *Majapahit* Era [11]. *Majapahit* culture made a strong impact on life in the Nusantara archipelago, so that the shape of the early

mosques with their typical *Tumpang* (tiered pyramidal) roofs can be encountered in all of the regions that belonged to this kingdom's territory, including Malacca (present-day Malaysia). The Book of *Nagarakertagama* describes how the Nusantara territory extended to Malaysia and its surrounding areas.

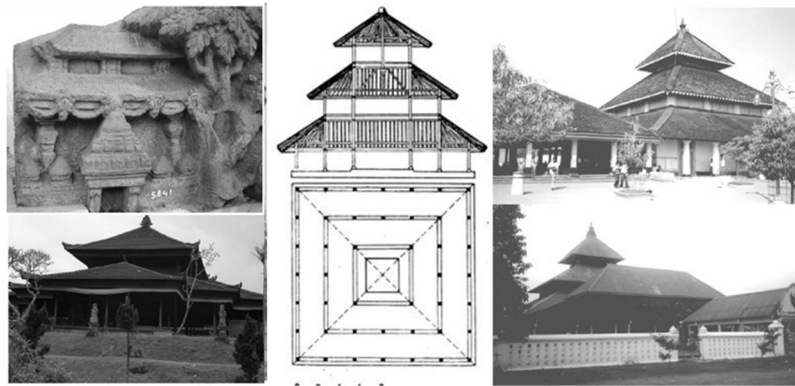


Figure 2. Depiction of *Wantilan* at temple relief in Java 9 Century and *Wantilan Banjar* in Bali 20 century (left), Detail of *Wantilan*-umbrella ceiling (centre), Tiered Roof Mosque- Masjid *Tumpang* at Jawa -Demak and Yogyakarta (right) [12]

In the era of Islamic expansion on the island of Java, the so-called *Joglo* architecture arrived on the scene. *Joglo* consists of roof types that have never been found or depicted in the bas-reliefs of temples in the *Majapahit* Era, whereas other types such as pyramid-like shapes, *Panggang Pe* (used for drying tea leaves) and *Tajug* can be encountered. *Joglo* is the result the innovative architectural creativity of that era. In those days there was a cultural transition, namely from the Hindu-Buddhist traditions to Islamic ones. However, the use of the *Majapahit* style of architecture was still continued, even though the general ideology had changed drastically. This particular use was naturally transformed in keeping with the Islamic paradigms, even though the elements derived from Hinduism and Buddhism could still be detected in the architecture of mosques and grave sites, such as the mausoleums of religious leaders and kings. *Joglo* is estimated to have been the outcome of the transformation of thought or philosophy by way of creativity, yielding a new entity altogether

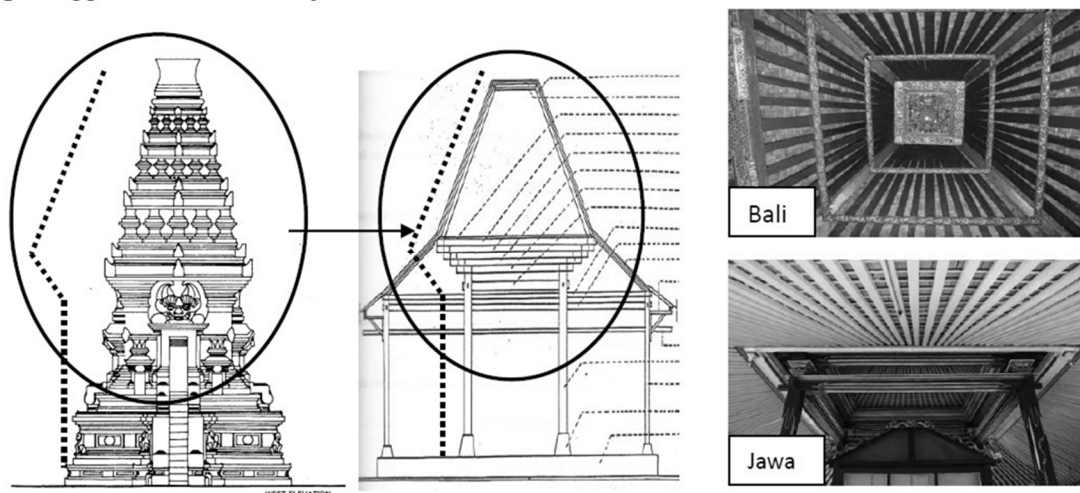


Figure 3. Depiction of the relation between Late Classical *Candi* and *Joglo* (tectonic transformation from stone to wooden) and the relation of roof ceiling arrangement like umbrella[12]

The form closest in shape to the *Joglo* type is the roof shape of temples built in the Early Classical Style, in addition to the ones known as tiered patterns as in the ceilings of temples [13]. The architects of that era used their creativity to arrange sketches of stone-based architecture (early classical temples) with the existing technology or engineering

skills and wooden materials. Walls were replaced by wooden columns, in accordance with their function but visually still following the plan of those temples. The construction of its layered center was to become known as *tumpangsari*, which literary means joining or intercropping. The building process of *Joglo* was started from the middle of the central pillar (*sokoguru*) and joints (*tumpangsari*), to be followed by an additional structure including the various columns of the surrounding buildings. This construction was built in response to the functional challenges and the climate so that additional columns that propped up the wooden rafters (*kaso*) around it and formed the roof structure. The pattern of installing these rafters is identical to the one used in the pyramid-like buildings found on Bali that resemble the *Payung* (umbrella) construction and also as the remains of constructions of the Hindu era.

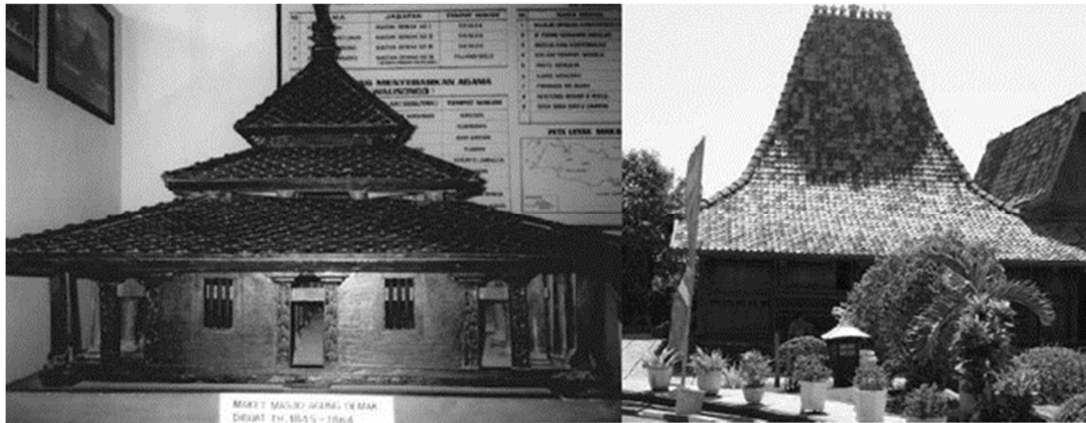


Figure 4. *Tumpang* Mosque and *Joglo* still strong influence up to now[14]

CONCLUSIONS

The *Joglo* and tiered roof (*Tumpang*) Mosque is the sacred architectural representation or dialogue of the past that was re-introduced (re-formation), albeit within the context of its era. However *Joglo* is used to profane place to live and *Tumpang* Mosque is a holy or sacral place. This re-introduction looks more like a preservation or perpetuation of values esteemed in the past. Javanese society has always held the values of the past in high esteem and does not always adopt the same physical elements. The physical elements can be adapted or transformed both in terms of materials and shapes, while the aspect to preserve is the spirit. The *Joglo* style that was used by way of occupancy or residence (guardian spirit) being of a more private nature forms the representation of the image that depicts Javanese people holding a dialogue with their ancestors (spirit and tradition).

Thus it can be concluded that the creativity of the Indonesian people in the classical era shows the uniqueness and excellence of their architectural tradition, and that apart from the dynamism of the outward appearance, Indonesian architecture also managed to inspire other places. The concepts based on archetype, collective memory and primordial image were launched through myths and legends and finally by way of physical shapes that are tangible, such as architecture. The creativity behind designs reared its head to produce a kind of realization of new architecture that was considered capable of acting as a bridge between external and local ideas and concepts, and between the old and the new.

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