

Architectural Detail in a Javanese House

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Abstract—Details have a role to create a continuity in architecture design. It is easy to apply in the design process while also can explore other minor things in the architecture design. There are two identification categories of the architectural details, whether the details become the main part of the building or as the additional. Details are the integral part of architecture which the items show the physical information of the building including the materials, composition and dimension; special effects; and some specific information regarding the whole concept of the building's structure and overall construction. In addition, details can also explain the non-physical part from the builder's mindset and attitude towards their building.

The architecture of Javanese house has three important things, namely the relation of the *Wastu* or the soul, *Kalang* or the resource and *Wewangunan* or the form, all of which are the constituent parts of totality in architecture. Detailed elements on the architecture of the Javanese house have many elements of culture that are revealed before the interacting process occurs. Details of architectural element in Javanese house can be seen from several dimensions including dimension of material which in the form of artifact, socially agreed of basic concept dimension and applied science and the philosophical dimension which contains values of shaping mentality much deeper. Architectural details become an important part for the establishment of a Javanese house. Both of the constructive and not constructive details appear together in creation the creation. Thus, details have more roles such as being able to trace a building culture, architectural and skill knowledge, psychological dimension, the story of the building process, so that architectural details need to be viewed contextually.

The method used in this paper is the qualitative method with based on the study of empirical phenomena in the field. Qualitative research is the study of several methods that focus on interpretation, naturalistic paradigm with phenomenological approach. The research findings from architectural detail in Javanese house is a detail function on Javanese architecture with wide spectrum which refers to the connectivity of thought between form, construction, material and carpentry. That connectivity is influenced by four aspects of human, nature, culture and beliefs embodied in architectural detail to realize the Java home.

Keywords : *Details, architectural, Javanese house*

I. INTRODUCTION

The word "detail" derives from 17th century French words *detail* and *détailler*, which consists of an infix *de-*, meaning to separate, and *tailler*, meaning to cut (this word in turn derives

from the Latin word *talea* meaning to cut or branch). Together, they denote small things which capture an entirety. In architecture, detail refers to module, component, unit, joint, transition, connection, conjunction, or even to the most controversial decoration, style, accessory, and ornament pattern. Detail is relational (Garcia, 2014); no independent activities occur in the details. In a sense, it is not different from a whole building, since detail is designed and articulated, also solves problem in the same way. Therefore, detail remains to be a crucial part to be developed in architecture within the larger scale (Hardiyati, 2015)

Detail plays parts in building the continuity in an architectural design, helps to realise a seamless design process, and explores smaller units in the design. There are two categories of architectural detail: one that is an essential part of a building and one which simply is an addition (Verghese, 2009). Architectural detail showcases the utilised materials, provides certain informations on the construction system, composition, and dimension of a building as a whole, gives certain flairs to a building, and reflects the attitude and the way of thinking of the builders (Bundgaard, 2010; Frascari, 1984). Frascari (1984) expressed that detail is a method to approach an architectural subject. It supplies factual notions to analyse architecture while considering the scale, theory, and material altogether. Paul Berlage and Greg Lynn (2014) stated the details in architecture for the last century has been ignored in the architectural researches. This opens an opportunity for the researchers to conduct studies in the near future.

Javanese architecture is the architecture of shelter (Prijetomo, 2006); its occupiers have a sense of being one with the surrounding nature. The space is created from one main component of the building, the *payon* (Javanese for roof). It forms a sheltered volume, distinct from its surrounding without being separated, and is considered to be very important in Javanese architecture. There are four types of forms in this architecture, namely *joglo*, *limasan*, *kampung*, and *tajuk*, which are all constructed from timber (Prijetomo, 2006). Javanese architecture is the product of long process of observations and trials in order to response the nature and natural disasters, resulting a system of structure constructions and construction details.

There are three principal aspects in a Javanese architecture: *wastu* (fostering soul), *kalang* (resource), and *wewangunan* (building), which forms the architectural totality (Ronald, 2005; Santosa, 2010). Architectural details, whether constructive or non-constructive in nature, are fundamental to Javanese houses and appear together to bring the buildings into existence. Subsequently, the details have a larger role than being functional; they inform the observers about the building

culture and crafts, the architectural knowledge, the psychological dimension, and the process of construction (Frasconi, 1984), hence architectural details need to be seen contextually.

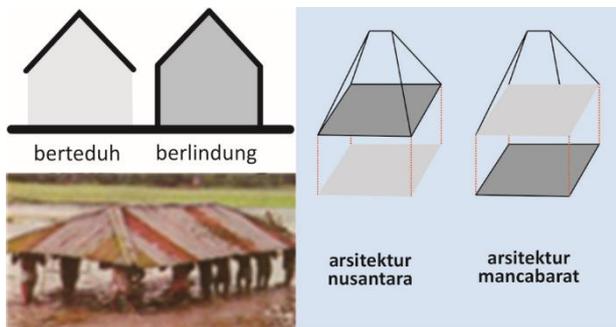


Figure 1: The concept of shelter (*berteduh*) and protection (*berlindung*) (Source: Prijotomo, 2006)

II. LITERATURE REVIEW AND METHOD

A. Detail in Architecture

Ludwig Mies van der Rohe elaborated his famous dictum “God is in the details” that architectural details play major part in the technical execution of construction to achieve the ideal building. Architecture as whole depends on the success of the small components i.e. the details (Schmid, 2004). Detail is beyond the accessory components in architecture, it gives meanings and characters to a building (Bundgaard, 2009). Hence, detail lays the foundation to understanding a building – individual comprehension of a building cannot be separated from the comprehension of its details. Detail creates more than entertainments, it is a manifestation of architectural art and knowledge (Ford, 2011).

The philosophy of architectural detail is to combine, connect, incorporate, and integrate the various elements, parts, and materials to construct a harmonically, balanced, and a well-rounded building. Detail in architecture becomes the point where two different materials meet, the method to creatively solve problems, the convention to make decisions, the bridge to close any gaps, and the expression of joints from a fine architectural work. Detail also expresses the process of being, shows a holistic structure construction system, and conveys messages from the architect. Other than that, detail is the embryo of buildings or architecture (Charleson, 2005; Schmid, 2004). It plays an integral role in architectural design to generate solutions for buildings and development in architectural practice. For example, the roof in many buildings in Indonesian folk architecture is built with the purpose of protecting the timber structure of the buildings, but the details contribute in forming distinct characterisation of the façade for each type. Detail in architecture will always develop in tune with the complexity of the building and is inevitably linked with the integrity of the structure in order to sustain the building for the long term.

In the end, detail is a systematic combination of various components to carry out structural role with the complexity of the building in mind while the configuration elements stay in

different tectonic position. The knots of the architectural details appear in many places in a Javanese architecture, from the flooring to the tip of the roof. These details are highly diverse. Visual elements such as columns, walls, ceilings, and roofs may vanish geometrically and rematerialise in the detail (Pangarsa, 2008). For example, a timber column essentially comprises the fibers, the knots, and the texture; these can be

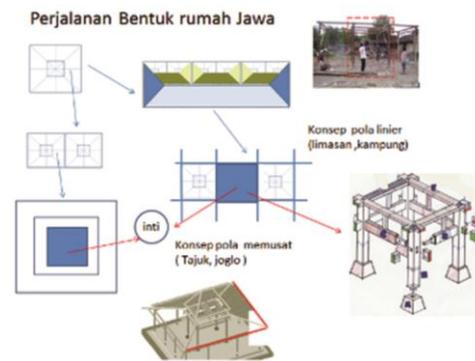


Figure 2: Form progression of Javanese house (Source: Hardiyati, 2015)

observed in close distance and are able to appear in other places in the building.

B. Research Theory and Methods

The study is conducted as a qualitative research. It aims to comprehend and find the characteristics of architectural details as the formative elements of Javanese houses. There are four key components in qualitative research (Groat and Wang, 2002). First, it emphasizes on the natural setting of the objects of the study. Second, the study focuses on the interpretations and the meanings which cause the researcher not only collect empirical realities/facts from the field observation, but also interpret the data to be meaningful to the study. Next, it also relies on the interpretation of the respondents (according to their very own knowledge) in order to gain a larger, thorough picture of the the phenomenon or the setting. The last component is where the researcher utilizes many strategy in the context of the study to allow open-minded and flexible observation of the reality.

III. DISCUSSION

The physical components of Javanese houses comprise the main structure, the partitions, the roof, and the functional rooms within. An ideal house will nurture its inhabitants and provide a space for an individual to find tranquility and joy. In a further observation, the house and the configuration of its elements will reflect the characters and the psychological state of the occupiers and the surrounding environment.

The Javanese house, as stated in the Kawruh Kalang text, originated from one form called tajuk, which then diverged into several models namely joglo, limasan, and kampung. The form progression started from a simple, naturalistic shape into the more sophisticated ones. It signifies that the Javanese is

able to develop their architecture creatively (still respect the inherited customs and codes) based on their experience, the potential of their surroundings, and what nature dictates to them, resulting in the various forms of a Javanese house.

Gathered from the field observation, architectural details in a Javanese house contribute to ensure the construction of the building. These structural-constructive details can be observed easily to decide its significance in the Javanese house. The structural-constructive details also present itself as the aesthetic elements, as well as communicate the design ideas and the quality of the architecture. Furthermore, these details provide the sign of functionality and the physical characters, which in turn are able to respond and resonate the meaning in every aspect of the building.

Exploring and understanding the details in a Javanese house will prompt a further comprehension of the art that is in a Javanese house itself. The house is a framework which communicates its design through its details that possess a very specific parameters and connect diverse network of forms, materials, and craftsmanship. Each details can be solved through various methods, but it is necessary to know and pick the suitable criteria and solution. The detail also expresses the concept of flexible conservation in a Javanese house which is shown by the ability of fully substituting or replacing defunct details in the building.

The integration of architectural details in a Javanese house is fundamental since the building comprises the varied details with their own purposes. Each element will abandon its character to form a new, larger unit and create an original identity, in other words, architectural details possess the uniting spirit to fulfil the purpose of the building. The architectural details in a Javanese house are able to create images, generate spatial territory, become the rhythmic elements for the façade, devise the wayfinding elements in the interior. It also shows the harmony between the work of craftsmanship and the potential from the dynamic nature.

IV. CONCLUSION

The architectural details in a Javanese house is a practical knowledge that turns out to be cultural values and traditions for many generations. Those details metaphorically represent the human body (proven by the name analogue of *molo*, *pamidangan*, and *saka* to describe either parts of human anatomy and a Javanese house), a tectonic structure created by God Almighty which inspires the shapes of a Javanese house according to its functions and mechanism, as well as the principle in building a Javanese house. Human sees nature as their immediate surrounding within the larger universe hence they draw many inspirations from nature to build their abode.

The architectural details in a Javanese house take themselves as the vehicles of many artistic ideas that express subjective and objective values. The beauty is influenced and developed from the subjective notions. The woodworkers rarely have chance to go outside of their villages to observe things, but the idea of pulchritude can come from within. All the functional shapes of the structural-constructive details

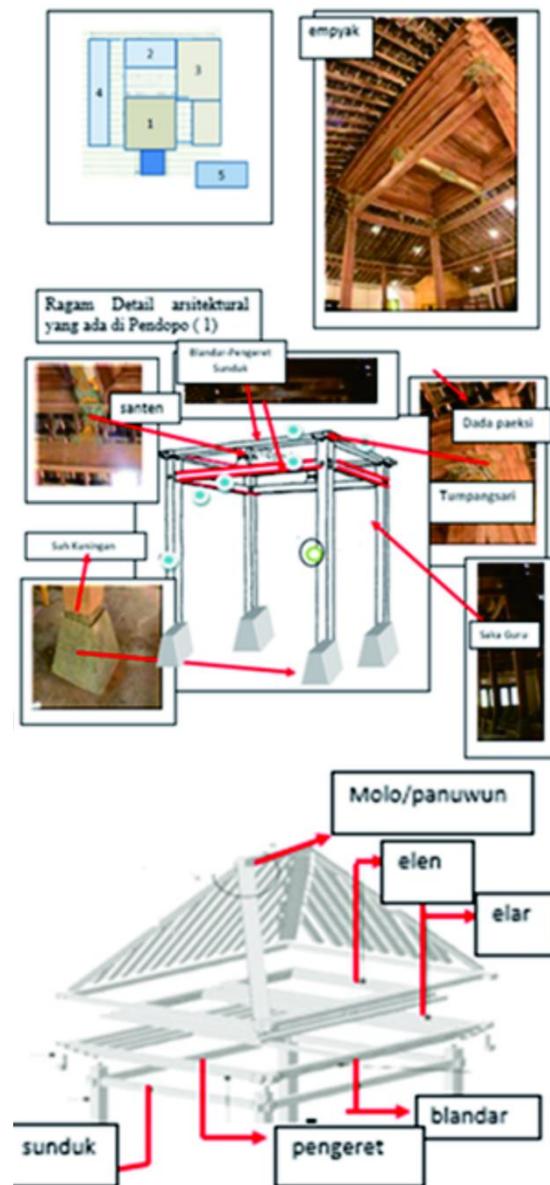


Figure 3: Details of Javanese house (Source: Hardiyati, 2015)

generates unpretentious beauty, one that come from the integrity of the construction.

Detail is a small part in a Javanese house which gives the richer understanding, that architectural concept is derived not from the styles but from the larger life. There are elements emanating from a certain subject, then transferred to other elements/subjects; these elements cannot be counted mathematically, comprising the creation of concepts and ideas, human condition, or certain qualities such as the individual predicament, the nature of environment, as well as the traditions, cultures, beliefs, and senses of community. In architectural details, there exist three important matters i.e. making, experiencing, and understanding.

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