

JAVANESE HOUSE INTERIOR STUDY: A PHILOSOPHICAL AND COSMOLOGICAL EXTRACTION OF JAVA'S HERITAGE, AS DESIGN PRINCIPLES APPLICATION IN LOCAL CONTENT CONTEXT

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ABSTRACT

Omah has interior arrangement system and regulation according to the life of Javanese people hereditarily. In its process of building and interior arranging, Javanese people hold on to the philosophical and cosmological concept, which was illogic for modern design study to be applied in the aesthetic study. This study aimed to examine the extent of the correlation between consideration of philosophical and cosmological Java community with modern design principles in making Omah. It was through observation on concept application to the realization in Omah form and also through literature analysis of both these principles. This research used the qualitative method in the form of observation and literature study. This research would observe and analyze the relationship between philosophical and cosmological extraction of Javanese interior with design principle through the study from another journal. It finds that a design that facilitates activities and way of life of Javanese people applies design principles and a modern study that becomes visual beauty guidance.

Keywords: *Javanese house, Omah, interior study, philosophical extractions, cosmological extraction, Java heritage, design principles, local content*

INTRODUCTION

In the modern scientific world of interior design, design considerations for making Javanese building or interior, such as choosing materials, determining measurement, or room layout, does not refer to modern science that uses the basic principles of interior design that consist of balance, rhythm, emphasize, proportion, unity, and movement. Instead, it uses philosophical and cosmological judgment that sometimes is seen as a priori because it is considered as absurd, mystical, and irrational. In fact, the use of philosophical and a cosmological design principle is also the potential solution that in tune with principles of modern design.

Javanese traditional house called *Omah* is a place to live that is built based on its inhabitant's character of Javanese. The bond of Javanese people with the environment states in all aspects of life, including the place to live. Javanese people seek to harmonize the atmosphere of life with the surrounding environment, both human and the environment or human with each other. Previously, Javanese people embraced animism and dynamism which means they have faith in supernatural and believes that the power of nature rules. When they were building a house, they were very concerned with nature harmony from the environmental conditions, inhabit human condition, materials selection, and avoid any abusive action.

As a formed of the artificial environment, *Omah* can be broken down into the physical realm, social, and spatial environment. Javanese people realize that their life is under the authority of greater power than themselves. From the needs of shelter, then man requires a place to stay that accommodates their everyday habits and way of life. Then comes *Omah* form as a basis for the Javanese architecture development that not only has the purpose as shelter and place to stay but also elements that make the building *Omah* has the meaning more than just functions (Mangunwijaya, 2013).

This study aims to examine the extent of correlation between consideration of philosophical and cosmological Java community with modern design principles in making *Omah*, it can be done through observation on concept application to the realization in *Omah* form and also through literature analysis of both these principles. The author hopes that the principles used in making *Omah* can be used as an additional reference in the application of modern design principles.

METHODS

This research uses the qualitative method in the form of observation and literature study. The author conducts literature observations from writings that related to Javanese house and principles of design. It is required in analysis and comparison of modern design principles with the principles that apply in Javanese house. Moreover, the direct observation is also conducted through site survey from some Javanese houses in Central Java cities, such as Surakarta and Sragen in order to obtain comprehensive data.

RESULTS AND DISCUSSIONS

From the wood selection to cutting, selecting land and day of luck to create a house, to luck calculation to set up the pillars and structural frames all begins with observation, problem identification, evaluation, and choosing each alternative that carefully conducted and peace of mind. It is in order to obtain prosperity and peace for its residents. The *Omah* interior concept formation as a residence has the meaning of *Longkangan* (place of residence). The room is needed and used to perform the variety of activities in fulfilling the needs to grow, to move, to walks, and to form the living atmosphere that matches with what they want.

Ronald (2005) has said that *Panggenan* (place to live) is the living environment that allows its occupants to survive biologically and ecologically to establish a life together that is harmonious and balanced. *Palenggahan* (place to perform activities of interaction) is required as the place to interact with each other in establishing the social system within which will form social and cultural values. *Pepepen* (place for contemplation) is expected to communicate with inner self in a narrow boundary and with infinite creators in the wide boundary. This kind of place is necessary for building a life in order to become tranquil, prosperous, and peaceful.

The expression of Java community living system in-house spatial layout is manifested by the adhesion of functional attributes (use) with the value attribute (meaning) of the house. Javanese residence expresses the contained concept and rules for the sake of community agreements through socio-cultural background and religious beliefs. There is a clear orientation in the spatial expression, namely the North-South axis and duality central. Orientation states position, behavior, and events (Sari & Mutiari, 2014). The spatial concept in the interior of Javanese house consists of multiple spatial arrangements. The center of *Omah* called *griya ageng/dalem* is used as a family residence (family bedroom). There is a semi-open space at the front called *pendhapa* which serves as a space for

receiving guests. Between *pendhapa* and *griya ageng/dalem*, there is connecting space called *paringgitan*. The word *paringgitan* comes from word *ringgit* which means *wayang* (shadow puppet show art performance). *Paringgitan* is a place to conduct *wayang* performance. The audience can see this show from *pendhapa* or *griya ageng*.

There are rooms on the left and the right wing parts of the house that are called *gandhok*. In the back of the house, there is a service area that is called *pawon* (kitchen). Overall, what is called as *Omah* is the environment inside the gates that contains building units with different functions. The wall's purpose is a just as temporary divider, rather than a permanent one.

In designing *Omah* interior, Javanese people are more concern to cosmology than the principal basis of modern architecture. Interior configuration is not only based on ergonomic consideration as conceived by the modern human. They are not only considerate about physical comfortness but also the psychological one. Spatial arrangement is done neatly and thoroughly in a balanced composition plot, as Javanese people live.

Concept design of traditional Javanese house in planning does not pursue an ending of physical construction that has functional and aesthetics reasoning, but the hinge within its building that is about nature, cosmology, ritual, and religion. Budiwiyanto (2013) has said that for the Javanese, houses are considered to have souls that give power to the owner so that it will give a positive power. The house will provide comfort, tranquility, and harmony inhabitants. An *Omah* layout construction is addressed as a vessel and its content that integrated each other. It can be seen in Serat Dewaruci (Mangunwijaya, 2013).

Kang ingaran Urip mono mung jumbuhing badan wadaq lan batine, pepindahe wadhah lan isine. Jeneng wadhah yen tanpo isi, alah dene arane wadhah, tanpa tanja tan ana pigunane. Semono uga isi tanpa wadhah, yekti barang mokal. Tumrap urip kang utama tertamtu ambutuhake wadhah lan isi, kang utama karo-karone (Serat Dewaruci).

Life is an integration of body and soul as a vessel and its content. A vessel without its content is a pointless, meaningless, and useless vessel. Likewise, content without a vessel is also impossible. For a perfect life, we need a vessel and its content; both are primary (Serat Dewaruci).

Philosophy and cosmology belief in creating a residence interior as an eastern custom are emerging pros and counter of it. It collides with a basic rational principle of modern configuration that has anthropometry and ergonomy calculation. When an *Omah* arrangement of interior and layout is based on belief calculation (*petung*), then the usage of the interior component to construct a building will be too long or too short, uncomfortable, and mismatched. Besides that, the effect is about an uninteresting final configuration.

Prijotomo (2006) has said that many works are done without concerning the good or bad of the building but with a fixed calculation of *petungan* (belief calculation), that is usually done in the rural area. For example is the amount of *pecak* and *blandar pangeret* size will give a *selamet* calculation and bring good fortune. The amount of *usuk* is also adapted to get a *becik* (good) calculation thus makes the house form will be mismatched because of the *petungan* calculation. In fact, *petungan* is definitely a lie. If it is true and according to the *rahayu* calculation (prosperous) of course, every villager will be prosperous. But the fact is the opposite of *petungan*; the house is useless and bad-shaped already.

The incompatibility of physiology and cosmology concept with the calculation of modern interior design is later argued by Abidin Kusno. Kusno (2012) has said that the assessment is different

according to the valid era. People cannot judge the standard of *Omah* creation according to changing era. The nature environment that phases the human behavior within is something to be considerate of. As Kartono (2005) has said that the Javanese home always pays attention to the harmony with the cosmos in terms of always paying attention and respecting the potential footprint that is around. The concept of space is not like those in western concepts of space, but more character place (place) which is strongly influenced by the dimension of time and ritual.

It shall not predict as if the supernatural, mystical, or magical reasons of ancient people in architecture. They are also smart in analyzing reality and handling practical issues of settlement and buildings. One of the examples is the palace construction or residence in Central Java. It has harmonious and logical integration between religious dimensions and reality perspective, practical technic, spiritual, and material sides. A place for the living has an important spot in Javanese people lives and also is a representation of a person. An established residence that makes someone has a territorial control is very important in stating his or her existence.

In Javanese perspective, spatial order is more over than phenomenon organization, and it is more important than temporal order. *Omah* is the most intensive domestic domain to interact with its inhabitant. There is an activity that emerges a facility of the interior formation. In a wider domestic frame, *Omah* is a nucleus that will form a wider domestic domain that attached to spatial closeness, activity network, and an understanding of collective purpose. Dwelling for certain groups is a culture shaped through space. *Omah* is a self-reflection of Javanese people that still attached with a dwelling concept including routine and non-routine activities.

Through *Omah*, Javanese people have a vessel as a media to actualize themselves personally and environmentally. Javanese people's belief in cosmology influences their daily behavior. A base known as cosmology concept seems to be a fixed measuring rod. That concept influences behavior in all aspect (Sunarmi, *et al.*, 2007). Javanese house interior refers to three things; they are beautiful, safe, and peaceful. Beautiful means aesthetic, symbolic, rich, and showing its identity. The aesthetic is something about beauty. In a traditional Javanese house, though it is built on cosmology and philosophy in its planning, it applies the process of the composition following the beautiful pattern.

In fine art studies, the local content study or Nirmana elaborates a theory about content elements and content principals (creation/design). Nirmana teaches about something that is designed, arranged, ordered or composed well from a thought into creation. A good composition is when an artist can order, arrange, and organize fine art elements as a media that can form a creation ordered and arranged with consideration and inspiration to perform an aesthetic value. Design elements consist of line, shape, form, texture, color, space, and value. Each element has various appearance and character to compose its appearance effect. While the design principle of arrangement guidance law includes the visual effect as a result of a design process. Basic principles of interior design are balance, rhythm, emphasize, proportion, unity, and movement (Irawan & Tamara, 2013).

Balance, it describes the distribution of objects and visual weight within a space. This principle describes the selection and placement of elements in ways that provide even or uneven objects. There are three kinds of balance; they are the formal balance, informal balance, and radial balance. When a balance is formed from two antipode matters, from one or more identical or typical substance, then it is named a formal balance. When a balance comes from two or more different substance, asymmetric, then it is called an informal balance. The impression emerged from an informal balance composition is a dynamic result. While radial balance is when all shape or substance design compositions centralize in one main point.

Rhythm is the use of recurring elements to direct the movement of the viewer's eye through the product or artwork and give a sense of unity to the composition. In rhythm, design elements have a proportional and measurable interval. There are four kinds of rhythm; they are repetition (the same

component being repeated), alternation (when different component being repeated to form composition), progression (an increasing/widening repetition component), and regression (a decreasing component). Each rhythm has the different effect in visual that depends on what the designer purpose.

Emphasis is the special attention or importance that is given to one part or element in a work of art and design. Emphasis can be achieved through placement, contrast, color, size, and repetition among other means. The purpose of the emphasis is to bring attention or to eliminate monotone impression. Proportion is the relationship between objects with respect to the size, number, and other including the relation between parts of a whole. Proportion is important in making composition. A good visual composition has a right proportion whatever the style will be shown. Unity is the arrangement of elements to give the viewer the feeling that all the parts of the piece form a coherent whole. In planning or visual design, the unity of design elements is needed. The final goal of the design is a unity of cohesion and consistency that is a core of composition. Movement is the path along which the viewer's eyes usually move to an area of emphasis or focus. The movement could make directions, monotone, and dynamics. In design, the movement is an organized arrangement of design elements in a composition and has a certain direction and purpose.

This basic principles design is truly a concept for Javanese people to form a residence interior. Whereas, in building *Omah*, the Javanese people orientate on philosophy and cosmology, which is unlogic as a science. The application of principles design in *Omah* interior can be seen in some visual form of the *Omah* building concept. Figure 1 shows the layout of Javanese house.

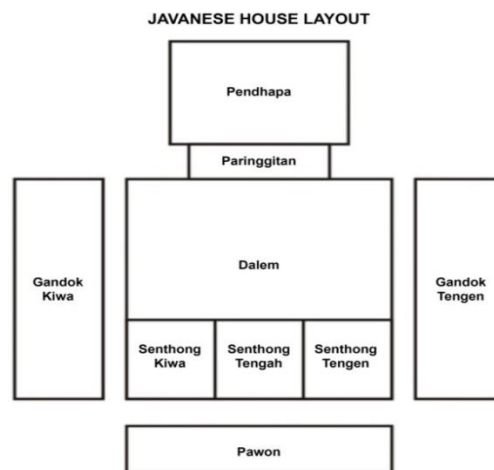


Figure 1 Javanese House Layout
(Source: Ade Fajarwati, 2016)

The balanced form of *Omah* can be seen from the space shape and interior element that always hollow and symmetrical. Almost every part of *Omah* is symmetrical; an application of the formal balance. Cosmologically, *Omah* is a replica of human's body that is balanced between right and left side. If it is asymmetric, *Omah* design interior still uses the principle of balance that is applied in ceiling, floor design, even the wall that shapes *Omah* interior. *Omah*, where Javanese people live in, has the same basic layout; they are *pendhapa*, *paringgitan*, *dalem* (there are left room, center room, and right room inside), *gandhok*, and *pawon* that are built quite the same. The size of left and right side is equally balanced. Another example of an architectural design principle is symmetry. Long associated with beauty, symmetry is visual equivalence among elements of a structure or organism. Nature provides the best examples of symmetry. Javanese cosmology believes in macrocosm (big universe) and microcosm (little universe) balance that realized in symmetry form in residences.

Symmetrical axis in facade and interior is an expression of hope of perfection for better life future (Cahyani, Wulandari & Antarika, 2014). Figure 2 shows the balance example in *Omah*.

Omah also uses principle design such as rhythm, where there is some repetition in interior design form, as in wooden wall that comes from some panels with the same size and shape; it can be a knockdown system. For some lower social structure community, the wall that they use to form room interior is made from bamboo, a certain plaited pattern that finally forms a strong and beautiful structure. Javanese building element has rhythm, where the dimension and material are always the same. So does the decoration in some interior, it uses the repeated design. Each of the supporting poles also has the same size and shape. Figure 3 shows the rhythm example in *Omah*.



Figure 2 Balance Example in *Omah*
(Source: Ade Fajarwati, 2016)



Figure 3 Rhythm Example in *Omah*
(Source: Ade Fajarwati, 2016)

Javanese house layout recognizes emphasis. The value of holiness, sacredness, and privacy starts from the front side toward backside but does not end in pawon. In fact, they are arranged in such way so that the highest sacred value is in *senhong tengah* because the central axis is coming from front side and backside that commonly stop at that *senhong tengah*. Also for the floor height, it has the highest level among others. Cosmologically, Javanese people believe that center point of *Omah* is the biggest energy that they use it as a shrine for nature ruler power. This emphasis can be seen in Figure 4.



Figure 4 Emphasis in *Omah*
(Source: Ade Fajarwati, 2016)

Javanese people have their own norm to determine proportion. They use the calculation of *Sri*, *Kitri*, *Gana*, *Liyu*, and *Pokah* as a standard in determining the length of a block that will be used to build a house. The basic calculation is *Neptu*, a calculation based on someone's day of birth which is believed that it will influence the destiny of *Omah's* owner and family. *Dalem ageng* part uses *Sri* calculation. It means the length of the block and its pengeret is divided by five equals one, or it can be formulated as:

$$n/5 = X + N = \text{result} \quad (1)$$

n = *blandar/pengeret* length
 X = odd number
 N = *neptu* number

So, Javanese house should have block length 21 feet or 26 feet or 31 feet, and its *pengeret* is 16 feet or 21 feet. House for *pendhapa* must use *kitri* calculation, while *gandhok* must use *gana* calculation. *Regol* and *ward* use *liyu* calculation, while *lambung*, *gedhongan* and else must use *pokah*. So, although both *pendhapa* and *griya ageng* use roof construction *joglo* model, each proportion must be different. One uses *Kitri* while the other must use *Sri*. As a result, the appearance of both rooms shows different proportion. The final shape from cosmological calculation delivers a typical Javanese house. Although it is unlogic according to modern human that calculate with the logic base. This proportion can be seen in Figure 5.

The wealthy of decoration in Javanese house interior is poured in wooden sculptured which has functioned as a decoration or filler in the household utensil. The setting of this decoration considers the proportion that is applied in every room. Organic shape in sculpture motive integrated with the geometric shape in room element is a composition concern in balance, proportion, rhythm, unity, and harmony. From this, it can be seen the unity in *Omah* interior.



Figure 5 Proportion in *Omah*
 (Source: Ade Fajarwati, 2016)

In Javanese ethnic across from Central Java until East Java, there are several types of decoration, such as Majapahit decoration, Mataram decoration, Surakarta decoration, Yogyakarta decoration, Jepara decoration, Cirebon decoration (transitional), and Madura decoration (transitional). Every decoration has certain features one among others, but still, has similarity in the pattern that can detect as a traditional Javanese decoration. *Omah* is *ayom*, meant as a shelter and protected. An *Omah* must be able to give security to its inhabitant. Construction in knock down arrangement in *Omah* is firmly and strongly calculated with the best-picked material. *Omah* interior design is built for harmony with the neighborhood. The harmonious with nature may create a strong and safe final design that fitted with the nature of Java Island.

Omah wall as a room element is intentionally made, the knockdown system that will be easy to part if needed. The character of Javanese people that love to gather that are combined with a need to perform lots of rituals brings the idea to create a system that facilitates the owner to create a larger room by parting the room divider. That is why *Omah* uses to knock down system that makes it easier to set-apart. A firm and interrelated construction between elements then become a unity. This is one of the systems that becomes a character in building a Javanese house. The unity of *Omah* can be seen in Figure 6.

Movement applied in the design of Javanese ceiling is construction called *tumpang sari*. This construction forms a bonding arrangement with the bottom-up order from short to longer part. *Tumpang sari* consists of arranged blocks as a bond of four main poles in the center of the building. This shape is a strong character that makes *Omah* different from other traditional house. At this order, it can see the principle of movement, getting bigger toward high level to make a beautiful composition. It can be seen in Figure 7.



Figure 6 Unity in *Omah*
(Source: Ade Fajarwati, 2016)



Figure 7 *Tumpang Sari* as Movement in *Omah*
(Source: Ade Fajarwati, 2016)

The embodiment of Javanese house interior is to be prosperous on earth and in heaven. House refers to the environment, religious surrounding, family circle, and social-cultural sphere. Javanese people realize that they are one of the elements of their environment, so humans unite with their God. A human cannot be separated from nature. That is why, to reach God, the human need to live according to nature, accomplish nature, and keep nature for the prosperousness on earth and in heaven in the corridor of Javanese cultural belief.

CONCLUSIONS

In the practice of *Omah*, applications of design principles are applied through unlogical traditional calculation, research, and relation with cosmology. But at the end, the result is a logical composition as a creation with design principles application. At least *Omah* interior can be used as inspiration in a modern creation process.

Javanese people have guidance in life philosophy and nature balance. With cosmological things as a human who lives in Javanese land, cosmological and important than modern architecture and interior rules. Modern human thinks that the principles of these Javanese people are irrational, bad-shaped, and unproportional because they are based on something beyond their logic. But, the fact about the design created by Javanese people is not like that.

The benefit of philosophy and cosmology rules in building *Omah*, as a matter a fact forms an interior design that concerns design principles become a modern aesthetic guidance. *Omah* interior design is applied by considering nature. In the end, it brings a design that facilitates activities and way of life of Javanese people and also applies design principles, a modern study that becomes visual beauty guidance.

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