Dualism in the Javanese House and Transformation
With focus on the houses of Kotagede, Yogyakarta

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Abstract

The Javanese in Indonesia believe that the cosmos (the natural world) is composed of various opposing concepts – day and night, brightness and darkness, heaven and earth, left and right, male and female, etc. Given that Javanese people perceive a house as a microcosm of the natural universe, they seek to find balance in their housing as well. Such dualism, which is represented in the form and use of Javanese housing, causes the house to consist of various separated units assigned with contrasting concepts. Through case studies of the traditional houses existing in Kotagede, Yogyakarta, this paper aims to clarify how this type of dualism is realized in Javanese houses and how dualism has been transformed as the society changed.

A field survey conducted in August 2014 includes measurement of five houses and interviews with the residents using a semi-structured questionnaire in order to understand the history of the houses and families as well as the meaning and use of the housing spaces. Among the diverse concepts of dualism, the study focused on the three major dualistic concepts of public/private, male/female, and god/when analyzing each of the Javanese buildings and its spaces.

Keywords: dualism; Javanese houses; public; private; gender

1. Introduction

1.1 Background and Aims of Study

The form of a house can be seen as a product of culture. This view, widely adopted amongst researchers, considers the culture of a given society to be the key factor that determines house form, which in turn influences the lives of people who live within the house.

Of the different types of architecture, it is the house that changes form at the slowest rate; housing culture, amongst the different types of cultures, tends to be highly durable and constant. In an ever-changing and interactive global society, it is often difficult to identify the underlying principle of a given phenomenon. However, even in this 'age of fusion', each country has maintained its distinctive culture and housing philosophy, which the authors of this paper strongly believe continue to be seen in contemporary houses.

Indonesia is an archipelago country, which consists of diverse ethnic groups. Among its islands, Java is the largest and most populous. Of the cities of Java, Yogyakarta has been the center of Javanese heritage and culture.

The Javanese believe that the cosmos (the natural world) is composed of various opposing concepts – day and night, brightness and darkness, heaven and earth, left and right, male and female, etc. When the opposing binary concepts are balanced, the cosmos gains equilibrium. Given that Javanese people perceive a house as a microcosm of the natural universe, they seek to find balance in their housing as well (Frick, 1997; Tjahjono, 1989; Prijotomo, 1992; Himasari, 2011).

This dualism, a philosophical and physical order that controls the forms and uses of Javanese houses, is a very unique characteristic, which can provide important insights into understanding the identity of Indonesian contemporary houses.

As a basic stage in the search for the distinctive identity of the Indonesian contemporary house, this study examines the fundamental order present in the traditional houses of the region and traces how that order has become been maintained or changed within modern society.
There is a previous study that carried out documental reviews of the beliefs and architecture of Javanese housing (Kim and Oh and Ju, 2013). The present study represents a step forward from the previous research. Through case studies of traditional houses existing in Kotagede in Yogyakarta, this study aims to clarify how this type of dualism is realized in Javanese houses and how that dualism has been maintained and transformed as the society changed.

In addition to the dualism present in spatial organization, this study also focuses on the analysis of housing behavior; this is done by investigating how this dualism is realized and perceived by those actually living in traditional Javanese houses in the modern day. Such an understanding of the living behavior of contemporary residents will make it possible to identify the new housing needs of modern residents. It is hoped that the results of this study will ultimately allow a better understanding of the continuation and transformation of Javanese traditional housing culture in modern times.

### 1.2 Scope and Methodology of the Study

A field survey was conducted in August of 2014. The field survey includes the measurement of houses and interviews with the residents using a semi-structured questionnaire in an effort to understand the history of the houses and families, as well as the meaning and use of the housing spaces. After the survey, the authors chose five Javanese houses and analyzed them for the purposes of this study (Table 1.).

### 2. Dualism in Javanese Houses

Dualism denotes the condition or state of two parts, of being dual; it refers to twofold divisions or a system of thought that recognizes two independent principles. The binary opposition between two elements is an important concept of Dutch structuralism.

Rassers (1959) identified a universal dualism that was present in ancient Javanese culture and analyzed the cultural significance of the spaces of the Javanese house. De Jong (1977) argued that it was possible to reconstruct ancient social forms by revealing the principles that structured the classification of current diverse social, cultural and natural forms in existing societies. A cosmological dualism was identified as an essential nature of "Indochinese" culture by Przyluski (1931), and Kroef (1954) adopted symbolism and dualism to explain the structures of opposition present within Indonesian societies.

Central to Javanese philosophy is the concept of dualism, in which balance is maintained through the dialectical interaction of opposites. Hierarchy is another concept important to Javanese philosophy. These concepts of dualism and hierarchy are strongly reflected in the layout of the Javanese house.

### Table 1. Profile of Selected Houses

| House | Owner          | Address            | Year of construction | Owner's occupation     | History of ownership     | Family tree |
|-------|----------------|--------------------|----------------------|-------------------------|--------------------------|-------------|
| A     | Mr. Erwito Wibowo | Dolahan KG III No. 580 RT31/RW07 | About 1825           | Entrepreneur            | Purchase (father)        | ![Family Tree](image) |
| B     | Mrs. Sunartiniah | Dolahan No. 607 RT30/ RW07 | 19th century Purchase | House wife (Uncle: Silversmith) | Inheritance (1968) | ![Family Tree](image) |
| C     | Mr. Joko Nugroho | Alun-alun RT37/RW09 | About 1930           | Tourism                 | Inheritance (19C)        | ![Family Tree](image) |
| D     | Mrs. Asnaafiah  | Selokraman KG III/C 1034 | About 1854           | House wife (Batik sales) | Inheritance (1926)       | ![Family Tree](image) |
| E     | Mr. Achmad Charis Zubair | Boharen KG III/653 | About 1854           | Professor UGM (retired) | Inheritance (1854)       | ![Family Tree](image) |
Prijotomos (1984) identified that the Javanese house was primarily arranged according to linear and centripetal organizations, and that this entailed the principles of duality and center. In discussing the duality of the Javanese house, it was also noted that the apparent opposites are readily united by the concept of the center. Tjahjono (1989) also explored how these principles of duality and the center were revealed in the layout of the Javanese house, focusing on the houses of Kotagede.

The Javanese house features spaces of opposite meanings, such as inner/outer, female/male, west/east but these opposites are neutralized and unified by a center. Santosa (2000) also divided the Javanese house into the front and rear, which at weddings respectively represent male and female domains, and at shadow plays respectively represent the self and the other.

The boundary line divides the inner and outer space, and the pringgitan acts as the central point of the division of space. Hence, the space created through division is the space of transition, from outside to inside, from the universe to human space. It acts to clarify the meaning of duality and direction (Cairns, 1997; Mangunwijaya, 1992; Supriyadi, 2010).

This dualism can be summarized into the following conceptual diagram (Fig.2.).

These elements of dualism are integrated with one another. The female space is the most secret and private of spaces, an enclosed space where outsiders are forbidden to enter. The male space, on the other hand, is where public practices take place, a bright and open area that outsiders are allowed to enter. Of the dualisms present in the Javanese house, previous studies have tended to focus on male/female and public/private.

As discussed above, a balance between the opposing elements can be achieved by the existence of a center. All Javanese houses feature a senthong tengah (in an ordinary house) or a krobongan (in a higher status house). This centrality can be understood from the perspective of god/human.

Finally, amongst the diverse concepts of dualism, the present study focuses on the three major dualistic concepts of public/private, male/female, and god/human in analyzing each of the Javanese buildings and its spaces.

4. Analysis of the Dualism in Javanese Houses
4.1 General Status of Cases

The general statuses of cases are shown in Table 1. All cases face south to represent respect to the Goddess of the south sea.

4.2 Public and Private

The Javanese village community, the Desa, forms the basic social unit of the community and stresses the importance of Gotong Royong. Villagers cooperate with regard to farming and communal work. Therefore public meetings and events take place frequently in order to maintain a family-like relationship between village members. Within such a culture, the social role of the house, such as a place to receive guests or to hold the ritual ceremonies of the family, is important. However, this social role has decreased in the modern period.

In House A, where the owner periodically carries out traditional performances, the front yard and stage are
used as a public space for the village. The pendhapa located in the center of the front yard was destroyed in an earthquake, replaced by a newly built stage in 2013 but moved to the left side to provide seats for the audience. Kercong practice takes place on every Wednesday evening. The family enters the house through the kuncung, which is like a modern entrance and visitors are welcomed at this place, located towards the front of the gandhok. Kuncung in this house replaced the role of an emper, which normally is a boundary between the public and private spaces. Due to the social function of a house, the clear division between public and private space exists.

House B is accessed through an auxiliary building because it is located along a narrow alley and the auxiliary building confronts the alley. The pendhapa and auxiliary buildings were used as a workshop for silver working until 2002 and as a public space for ritual events (such as the funeral of an uncle in 2002 and a couple's wedding in 2007). Both the pendhapa and the dalem are rarely used currently and are left as vacant spaces, while only the gandhok is actively used. The floor and roof of the gandhok were renovated, and the floor was raised to maintain the same level. The back of the gandhok was extended to incorporate two rooms, one for the wife's mother and one for a brother. Expansion and modernization of the gandhok are strongly found in House B.

The location of House C is quite special in the Kotagede region, for it is located in the Alun-alun, where a total of nine houses are aligned along a common alley. This alley, which was originally a longkangan, acts as a boundary between the public and private spaces. The pendhapa and auxiliary buildings are used as the meeting place of the local community. The emper that opens towards the alley forms a semi-public space, where day-to-day contact and communication with neighbors takes place. The family's private space consists of the dalem, gandhok, and mburi omah; the gandhok is entered directly from the alley. The inner space of the gandhok is divided using partitions and the rooms are used as bedrooms (one for wife & husband, one for grandmother). The dalem is used as a multi-functional space, such as a living room, family room etc. It is unique that they allow formal guests into the dalem. It can be understood that this house is actually divided into two parts by the alley. Therefore, when a guest accesses the house from the alley, he or she can easily enter the house from the emper to the dalem, except in the case of formal events. In this house, a clear juxtaposition of public and private space also exists.

House D is an independent house surrounded by a wall and located in deep alleys, but ironically its longkangan is used as a shortcut for neighbors. The pendhapa is used for community services (a kindergarten and religious meetings). The longkangan therefore acts as the boundary line between public and private spaces, as in the case of House C. The emper is a semi-public space where neighbors or guests are received. The dalem and gandhok form the family's private and semi-private space. The front part of the east gandhok is where the mother's garment shop is located; the mother's bedroom and resting place are located at the back. The west gandhok is used by the daughter to receive guests. The bedrooms used by the daughter or reserved for guests are located in the dalem. Only invited guests may enter the back of the gandhok and the dalem. In this house, integration of a gandhok is evident and the private use of senthongs is also found.

House E is an independent house surrounded by a high wall and features a typical layout of the noble houses of this region. Visitors may only enter the house upon a formal invitation. Guests are received at the pendhapa. The pendhapa is not open to local society and is used to hold formal family meetings (e.g., the father's funeral), congregational prayers, and religious meetings (e.g., for reciting the Koran). The longkangan has been renovated into an indoor comfortable semi-private space where close guests are received. The emper was renovated into bedrooms for the grandparents. In the past, family members resided together in the east and west gandhok. At present, however, the west gandhok is no longer in use and the east gandhok is divided into several spaces, such as

Table 2. Analysis of Public and Private

| House A | House B | House C | House D | House E |
|---------|---------|---------|---------|---------|
| ![Diagram A](image) | ![Diagram B](image) | ![Diagram C](image) | ![Diagram D](image) | ![Diagram E](image) |

Legend:
- Private
- Semi-private
- Semi-public
- Public
- Inactive
- Boundary between public & private
- Rukunan Street
the parent's bedroom, the family room, and the dining room, while maintaining the level difference. The dalem is now used as the old grandmother's bedroom, who requires care.

4.3 Male and Female

"Gender" is a social and cultural category, influenced by stereotypes about "female" and "male" behavior that exist in our attitudes and beliefs (Goodman, 1996). Indonesia is a patriarchal society that adheres to a traditional norm consciousness which condones polygamy, due to the influence of Islam, and which believes that women should demonstrate complicity and forbearance. Javanese society is also a patriarchal society, in which it is believed that women should always follow and obey male power. A complementary dualism between males and females is clearly symbolized in religious ceremonies, folk tales, and the traditional farming activities of Java. Such a dualism between males and females can also be observed in the spatial layouts of buildings and houses.

Male and female spaces are clearly divided in traditional Javanese houses. The pendhapa, an open space located at the front of the house, symbolizes male authority; it is used during events when the individual is displayed to society and social relationships are established, such as the receiving of guests, performances, and public meetings. The dalem, enclosed on all four sides with walls, is the space of the female, where the family is nurtured, and where strict abstinence, marriages, and ancestor worship take place (Santosa, 2007).

In Houses A and C, the space for the husband's social activities and the space for the wife's domestic activities are clearly divided. The husband's activities are focused on the pendhapa, emper and courtyard, which are outdoor spaces, whereas the wife's activities mainly take place indoors, such as in the east gandhok and mburi omah. In particular, the mburi omah is where the wife cooks and does the laundry for the family, according the gender division of roles, and is therefore rarely entered by the husband. In the interview, the husband answered that "the dapur located at the back is perceived as female space, and the emper can be regarded as male space." This demonstrates that females continue to be regarded as having to undertake and manage household chores and that the dapur is regarded, accordingly, as a female space. The dapur located in the back of House C is also perceived as a female space and is not entered by the husband.

In the case of House D, a clear distinction between male and female space cannot be observed as only females currently reside in the house. In the past, the west gandhok, which housed a library, was used as the father's space, and the east gandhok was used as the family's space. At present, the west gandhok is used by the daughter but the library and the prayer room have been maintained. In the past, the west gandhok of House E was also used as a male space and the east gandhok as a space for women and children. Females freely entered the east gandhok through the side door of the mburi omah, preparing food for ritual ceremonies in the east gandhok. At present, the west gandhok and the side gate to the rear are no longer in use; male guests are received in the pendhapa and female guests in the east gandhok. In most houses, the east gandhok
is considerably spacious and the west gandhok is small in size and vacant. A well (sumur) is often located to the rear of the east gandhok, marking this area as the center of the daily housekeeping activities of women.

4.4 God and Human

Islam, which was introduced into Indonesia from the 14th century, came to be amalgamated with the pre-existing religions of Java (spirit worship, Buddhism, and Hinduism); as such, it is possible to make a distinction between Abangan and Santri\(^2\). Javanese Muslims observe the rules of Islam, attending formal prayers and participating in the religious practice of fasting, but they also carry out traditional selamatan rituals.

The krobongan, the central senthong room, is where Dewi Sri rests and where she is worshiped. It is where seed rice is stored and family heirlooms, such as the keris are kept. The krobongan is an empty room that is not lived in; it is used as a place for the bride and groom on their wedding night. However, it is always decorated with pillows, which symbolize harmony, as well as other items such as a dipan, guling, and kasur (Subiyantoro, 2009). This is a romantic place where the god of love and the goddess of love come together and wed, and it symbolizes the happiness and fecundity of the family.

As such, it can be said that the krobongan, located at the center of the north-south axis of the Javanese traditional house, at its innermost location, represents the domain of the gods – the rest of the house represents the human domain. Following the Islamic reformist movement of 1925, the tradition of ancestor worship and the keeping of loro blonyo statues came to an end, but the senthong continued to be maintained and did not change in form.

In Houses A and D, this senthong is used as a bedroom; in Houses B, C, and E, this space is left empty, as it would have been in the traditional Javanese house, although the worship of Dewi Sri no longer takes place. In House C it is used as a prayer room.

However although Javanese people follow Islam, the incorporation of Islamic beliefs in the house cannot be found except in the langgar dhuwur\(^3\), a family mosque which is built in a compound for family or community prayers.

Within the Javanese house, the langgar dhuwur and prayer room are Islamic religious spaces. Formal prayers, however, now take place at the mosque; therefore, the langgar dhuwur is no longer needed. Only two langgar dhuwur still exist in the Kotagede region, one of which can be found in House E, but it is not used at present. Each house has a prayer room. The prayer room is located at the rear of the east gandhok in House E and toward the rear or the west gandhok in House D. The middle senthong is used as the prayer room in House C. In Houses A and B, there are no separate rooms for praying, but mats are laid down in the dalem or gandhok and prayers are carried out towards Mecca (toward the west). It therefore appears that there is no particular rule to be followed in terms of the place of the prayer room.

5. Summary and Findings

Based on the results of this analysis of how dualism is represented in the original plans of the Javanese houses of Kotagede and how dualism has transformed in present housing conditions, several findings can be reported, as follows:

Many ritual activities (such as weddings and funerals) and social events that in the past took place within the house have now come to be hosted in outside facilities, and as guests are now mainly received in the emper, the use of pendhapa has decreased. In this context, the pendhapa has come to be regarded as an inefficient space, the maintenance expense of which is relatively high considering its infrequent use. This, in turn, has resulted in the weakening of the symbolism of the pendhapa, which in the past reflected the family’s socio-economic status. In houses A, C, and D, which actively host local community services (e.g. theatre, kindergarten, religious meetings), however, the pendhapa continues to be actively used. In the family’s private space, especially the gandhok, it was found that the floors in between were raised and renovated to be an even floor (House B and D) and expanded (House B), and subdivided into several rooms (House B, C, E). Whereas the family’s private space consisted of a single area without walls in the traditional houses in the past, partitions have come to be actively used in
the present day to form bedrooms (House B, C, D), thereby reflecting the greater importance of the privacy of the individual.

The division of space according to gender roles is not as clear as it was in the past. However, the front space of the house where public, social activities take place continues to be dominated by males, whereas the rear space where domestic activities take place is dominated by females. It should be noted that the disappearance of the public roles of the front section of the house has resulted in a reduction or the disappearance of this male space. The private space where domestic activities take place, on the other hand, continues to be maintained, and the greater, functional subdivision of this space can also be observed.

In the present use of Javanese houses, most of the sacred spaces for gods (middle senthongs) are kept empty or have been converted into private bedrooms. With the decrease in the number of family members residing in the house, eventually resulting in the house being used only by a nuclear family, it appears that less space is needed. In addition, the religious functions and meanings of these spaces have decreased compared to earlier times. Instead, langgar dhuwur and prayer spaces appeared in some of the houses. In the case of House E, a two-story langgar dhuwur was built in the south-west section of the compound, functioning as a community mosque. In Houses A and B, there are no separate rooms for prayers, but a rug was laid down in order to designate a space for praying. However, Muslim culture did not bring about a change of the order or form of the Javanese house.

6. Conclusion
To conclude, it is clearly shown that dualism is still present in the traditional Javanese houses of Kotagede. However, transformations in the use of the houses and the meaning of this dualism can be stated as follows.

Except for the houses that actively provide community services, the public role of the house is no longer in existence. Nevertheless, a clear division remains apparent between the public and private in a space, which also refers to the concepts of outside/inside and male/female. Given this juxtaposition of dualisms, the emper acts as a boundary between public and private areas (i.e., outside/inside and male/female) and also functions as a transitional space for movement from one part to the other. As such, it can be said that the meaning and function of the emper has become relatively more important in present-day Javanese houses.

Dualism between male and female is not more apparent than before. Instead, the gradual transition of female space into a space for the family can also be identified.

Physical transformation in the houses was strongly found in the gandhok. The floor levels were adjusted in order to maintain an even floor and partition walls were used to divide the space. Whereas there was no clear separation of sleeping spaces for family members in traditional houses, the personalization of private space became common by dividing rooms in the gandhok buildings.

Although Islam has taken root in the lives of the Javanese, it has not brought about a change to the form or spatial order of the Javanese house. The symbolism of the indigenous religions imbued within the Javanese house has weakened due to Islam, but the hierarchical ordering of space and the form of the house remain unchanged. The fact that the middle senthong was left as an empty space can be seen to reflect the fundamental elements of Javanese culture that still exist subconsciously in the minds of the Javanese people. It can thus be said that the Islamic influence has brought about a change only to the outer appearance of religious life; the traditional interpretation of abangan and the belief system remain the same.

As only five examples of Traditional Javanese houses located in Kotagede were examined here, the results of the current study cannot be generalized. However, it provides a starting point for further discussions of the transformation of Javanese houses and of the housing culture of the Javanese people.

It is anticipated that the phenomenon of transformation in the Javanese housing culture and in the traditional houses of the Javanese can be firmly discovered and characterized through additional analyses, perhaps involving a wider sample of Javanese houses.

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Notes
1 The previous study by the authors analyzes the space organization of Javanese houses. In this article, due to lack of space, basic spaces of Javanese houses mentioned are introduced as follows: The pendhapa, which is an open building without walls, represents the most public space, where the residents of the house receive visitors. The pringgitan (or emper), located between the dalem and the pendhapa, is a semi-open building where wayang kulit performances take place during weddings, circumcisions, and ravatan events. The dalem represents the backside of the house, consisting of a building that is closed on all four sides with walls. It is a private space where no visitors except close relatives can enter and where family members congregate, often for formal ceremonies such as weddings and funerals. Within the dalem, three senthongs are located. The senthongs situated to the left and right are typically used as bedrooms for family members. The central senthong – referred to as the “kroonggong” – is the most private of spaces, a sacred and holy place where Dewi Sri is worshipped. Mburi omah refers to a service space such as the dapur (kitchen), kamar mandi (toilet) pekisan (bathroom), which are considered to be unclean spaces. These are usually located behind the dalem, as far away as possible from the holy place of the house.
Kotagede (also Kota Gede, Javanese for "big city") is a historic neighborhood in Yogyakarta, Indonesia. The name was also used for the administrative district (kecamatan) of the same name in the city of Yogyakarta. Kotagede contains the remains of the first capital of Mataram Sultanate, established in the 16th century.

The semi-structured questionnaire was developed and applied to collect the residents' open answers as well as the exact information that was required. It consisted of questions on the following topics: the general characteristics of the owner (age, sex, family, occupation, etc.), general information regarding the house (structure, built year, size of land and buildings, space use, the hosting of ceremonies, and the cognition of space.

The ten traditional Javanese houses in Kotagede that had kept the original forms of Javanese houses and consisted of all basic buildings were surveyed. Of these, five houses were chosen which had been inhabited by the resident for at least 40 years (for at least two generations) and in-depth interviews with the inhabitants of the house were possible.

The precedent studies approach dualism generally understood in terms of the sacred and profane from a slightly different perspective, interpreting it, rather, as a dualistic relationship between God and humans.

Gotong royong refers to the conception of sociality familiar to large parts of Indonesia, which is a type of mutual aid among community members. The spirit of "relying upon and helping one another" is passed down traditionally.

An Indonesian string instrument smaller than a guitar that is connected to all nine houses and therefore functions as a path of communication.

Kampong kotagede is the name of the prayer room for Muslims, i.e., dalem, which is built specifically with a higher position than the kampong. It is located in front of a royal palace. The residential area in kampong Kotagede, aligned along an east-west axis share a common alleyway. The west gate is connected to the main road and the east gate forms the boundary with another house. The longkangan located between the pendhapa and dalem acts to form the rukunan, which is connected to all nine houses and therefore functions as a path of communication.

The longkangan is an area which connects pendhapa and pringgitan. The longkangan in Kotagede is usually open. In the kampong Aman, longkangan are connected side by side to become a unique pathway. As such, rukunan is a street that connects the longkangan of multiple houses.

The Javanese say that the three 'ur' in which women should be are the dapur (kitchen), sumur (well or laundry place), and the kasur (bed). This illustrates the continuing perception that household chores are women's work and that the kitchen is a place for women, resulting in the mbari omah and east ganthoh being regarded as female spaces.

Abungan literally means "red." This refers to Javanese Muslims with syncretic beliefs who do not perform obligatory rituals; i.e., they do not observe the rules of Islam. Santri are orthodox Muslims who strictly observe the practices of Islam, such as prayers and fasting.

Langgar dhuwur is the name of the prayer room for Muslims, i.e., musala, which is built specifically with a higher position than the main traditional house. The langgar dhuwur is usually located in the attic of a Javanese traditional house in Kotagede. Its function is to enable Islamic daily prayer for family members or people in the surrounding neighborhood. The langgar dhuwur is located in the front yard and on the west corner.

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