Javanese Mythology of Orientation in the 'Interior' Architecture of North Sitihinggil at the Keraton Yogyakarta, Indonesia

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Abstract

The orientation concept of 'Interior' Architecture of the North Sitihinggil Ward at the Keraton Yogyakarta has mystical and philosophical values related to mythology in Javanese culture. This is related to the concept of the creation of nature and human beings and the purpose of human life. Other similar mythologies exist. One of them is the *kaja-kelod* axis in Bali which is also used in the design to be the axis of Mount Merapi and the South Sea in Javanese cosmology.

This research focuses on interpreting the orientation of the 'interior' architecture of the North Sitihinggil Ward at the Keraton Yogyakarta, a Javanese cultural artefact. This research employs the subjectivity of 'interior' architectural orientation, including imaginative orientation and mystical reflection, with an analytical study. It uses a qualitative approach based on historical science, observation, and semiotics method.

The research aims to explore the science of 'interior' architectural design from the perspective of mysticism in Javanese culture at the Keraton Yogyakarta. The findings show that the orientation of the 'interior' architectural of the North Sitihinggil Ward at the Keraton Yogyakarta is a philosophical concept strongly assumed to legitimize the power of the King at the Keraton Yogyakarta.

Keywords: 'Interior' architecture, Orientation, *Kaja-kelod*, Keraton, Mystical, North Sitihinggil Ward.

Introduction

The 'Interior' Architecture of North Sitihinggil Ward in Javanese palaces which is sometimes imaginary, mystical and mysterious, is rarely studied from a philosophical point of view. This is because scientific data is not easy to obtain. The myth of the relationship between the Kings of the Keraton Yogyakarta and the Queen of the South Kanjeng Ratu Kidul said to have an inner connection, is a complex matter, significantly when it is associated with mystical and spiritual aspects. This inner relationship is legendary and is believed even by the Javanese. Since its founding, the Keraton Yogyakarta, where the King lived, was seen as a sacred cosmic centre. In this study, the power of the King is characterised by complex spatial arrangements with various symbols, including creating imaginary concepts for the 'interior' architecture of the Keraton Yogyakarta (Kusumo, 2021; Sholikhin, 2009; Suhardjo, 2004).

There is a substantial assumption that this relationship is included in the imaginary axis in the concept of 'interior' architectural orientation at the Keraton Yogyakarta. Moreover, the architectural concept of the Keraton Yogyakarta's orientation to Mount Merapi and the South Sea, established in 1755, in an imaginary line, has been built by Sultan Hamengku Buwana I with a Javanese philosophical approach.

The facts show that the North Sitihinggil Ward at the Keraton Yogyakarta is the central axis in the architectural site plan of the Keraton. Thus, it is positioned as a work of art *adiluhung* full of mystery and different from the 'interior'. The function of the 'interior' is not only as a place to carry out activities but inside it contains elements of mythology.

The object of the message does not determine the myth but the way the myth expresses the message itself. A myth cannot be explained by its objects or materials; material can be supported by its meaning. In this context, the object is the concept of 'interior' architectural orientation. The concept of 'interior' architectural orientation in the Keraton Yogyakarta cannot be separated from mythological, mystical, symbolic and sacred influences. This is illogical, subjective and beyond reason (Barthes, 2004).

The Javanese believe in myths about the presence of mystical-religious figures who associate them with natural forces or movements or sacred objects. Armstrong (2023) explicitly says that myths concern meaning, not practical matters. Human beings are meaning-seeking creatures; life becomes empty and hopeless without meaning. It is a myth that leads people to the most profound truths, gives meaning to their transitory and vulnerable lives, but directs attention to the eternal. In addition, the supernatural powers of these figures are often seen as supernatural (mystical) powers that are very influential in human life.

According to Scattolin (2022), the term 'mystical' with its derivatives has been widely used in contemporary mass culture imposed by global consumerism. This is often reduced to the most extravagant, illogical and banal meanings, especially regarding 'interior' design. This view is a challenge in studying 'interior' architectural design, which always means studying interiors logically and mystically (Hendro, 2018).

Therefore, the study of the 'interior' architecture orientation of the North Sitihinggil Ward at the Keraton Yogyakarta cannot be seen only outwardly explicitly with logic but can be studied from the inner paradigm implied by a sense of invisible content. There is a substantial assumption that the orientation concept of North Sitihinggil Ward was designed with a mystical dimension using sacred symbols. One of the facts on the ground proves that the North Sithinggil Ward is closed for visits by the general public at close range.

The North Sitihinggil Ward can only be observed up close when the ward is used for ceremonies, performances or the coronation of the King. In this context, the North Sitihinggil Ward has sacred and mystical values compared to the other wards in Keraton Yogyakarta.

This research was conducted to introduce how significant the challenges of historical theory and 'interior' design concepts are in the context of Java's semiotic philosophical ideas: sacred and mystical. The research aims to explore the science of 'interior' architectural design from the perspective of mysticism in Javanese culture at the Keraton Yogyakarta. An expected and useful finding for 'interior' design studies is understanding the contents of the 'interior' architecture orientation concept of the North Sitihinggil Ward at the Keraton Yogyakarta as a local genius that deserves preservation.

Previous research on the Mythology of Orientation is shown in the table below (Table 1):

| Title | Conclusions | Author/s & Source |
|--|---|--|
| Locality of Building Orientation in Traditional Indonesian Architecture: A Systematic Literature Review | Research on locality-based building orientation has not been widely explained holistically; the research results show that nature, direct access, and beliefs determine the orientation of traditional Indonesian houses. The role of nature determines the orientation in which residents respect nature, cultivate and prevent wind. Ancestral beliefs, sacred spaces, and Qibla also shape the house's orientation in traditional Indonesian houses. | Muhammad Ismail Hasan, Asrul Mahjuddin Ressang Aminuddin, Hazrina Haja Bava Mohidin; Journal of Design & Built Environment 22(3) (Hasan, et al., 2022) |
| Building Orientation on Traditional Balinese Culture | Traditional Balinese architecture not only means harmonization between humans and their environment but also protects | Gusti Bagus Wijaya Kusuma; Humaniora 15(1) (Kusuma, 2003) |

Table 1: Previous Research on Mythology of Orientation

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| Title | Conclusions | Author/s & Source |
|---|---|--|
| | humans from environmental disasters. Therefore, the design of buildings in Bali must refer to the <i>Tri Hita Karana</i> concept. | |
| Building, Architecture and Myth | Myth is a way of making sense in an unreasonable world and finding meaning in apparent meaninglessness—appreciating buildings and architecture as the embodiment of myth. The vital role and importance of understanding and appreciating the values – sacred values – that define and enable the functioning of a society and embodying those sacred values, values, even God, in fostered form continues to be the capacity and task of architecture that huge, including interior design in it. | Edward Samuel; Architecture, Culture, and Spirituality Symposium (ACSF 11) (Samuel, 2019) |
| The Mythos of Nyai Roro Kidul and Sea Life as an Inspiration Alternative to Development the Motifs of Java Coast of Batik Story Telling | Exotic mystical stories and mysterious beauty are found in the land of Java. The geographical paradox of land and sea forms the character of the nation with its unique diversity of tribes and cultural patterns, a philosophy of life that unites the two worlds. Imaginative narratives of power dominate the lands, mountains and seas, mystical figures and mythically intriguing legends. The concept of two realms, a land of dangerous volcanoes and mysterious seas, is reflected in cultural products. | Nuning Yanti Damayanti, Ariesa Pandanwangi, Belinda Sukapura Dewi, Arleti Mochtar Apin, and Ayoeningsih Dyah Woelandhary; 1st International Conference on Interdisciplinary Arts and Humanities (Damayanti, et al., 2019) |
| Architectural Research: Incorporating Myth and Science | The modern period was based on the intellectual, instrumental, and organic understanding of humans, where the most emphasis was on physical and spatial planning, which did not accommodate representative actions. Even though some factors must be accepted with awareness, namely accepting the symbolic and emotional aspects of reality as (if not more) necessary as physical tools. The building is a representation of culture, but making the building is not just a scientific explanation; it is natural from behind that does not seem real. The combination of myth and science is a strength in architecture. | Julia Williams Robinson; Journal of Architectural Education 44(1) (Robinson, 1990) |
| Makna Bangunan Keraton Yogyakarta | The meaning of the Keraton Yogyakarta Building Architecture and interior as part of the applied arts combine aspects of beauty and usability with the consideration that humans try to give meaning to the period of their lives by making interpretations that are by their beliefs. Preserving traditional artefacts is expected to be in harmony with the demands and needs of the aesthetics of modern society, but not to fade the typical Javanese traditional characteristics to maintain harmony. | Laksmi Kusuma Wardani; Seminar Nasional Seni Kriya. Kriya: Kesinambungan dan Perubahan (Wardani, 2009) |
| Study of Javanese Traditional Architecture: Bangsal Building at Pagelaran and Sitihinggil <i>Ler</i> Area of Keraton Yogyakarta | The Studies related to functional elements as a feature of the Keraton building. The Sitihinggil <i>Ler area</i> has the same characteristics as other wards, which are open. Differences in form and typology are also influenced by past usage. Sitihinggil is a building with aristocratic functions; the splendor has shown architecturally. In addition to the size and complexity of the building structure, also with ornaments, the more sacred the function of the building is complete and finished with magnificent ornaments and displays symbols of power. | Tri Yuniastuti, Sukirman, Satrio H.B. Wibowo; Exploring Noble Values of Local Wisdom and Prime Javanese Culture to Strengthen the Nation Identity (Yuniastuti, et al., 2021) |
| Perwujudan Simbolisme Sitihinggil Utara Keraton | North Sitihinggil is manifested in the orientation of its buildings towards the center (Sewayana Ward). The building, which is the center of the orientation, has a higher sacred value than | Rully; Jurnal Teknik Sipil dan Arsitektur (Rully, 2012) |

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| Title | Conclusions | Author/s & Source |
|---|---|--|
| Kasunanan Surakarta | other buildings around it. The spatial or regional relations in | |
| Hadiningrat - Analisis | North Sitihinggil are interrelated; the Keraton describes the | |
| Pada Aspek Arsitektur | process of human life's journey towards the perfection of life | |
| Secara Makro | and the afterlife. This differs from the Sitihinggil Ward at the | |
| Gaya Seni Hindu | Keraton Yogyakarta, which has an imaginary north-south axis. The expression of artistic style in the layout of the Keraton | Laksmi Kusuma |
| Jawa pada Tata | Yogyakarta follows the Vastusatra theological concept and | Wardani R.M. |
| Ruang Keraton | belief myths of pre-Hindu society that continue today. The | Soedarsono, Timbul |
| Yogyakarta | research results found that the expression of the form and | Haryono, Djoko |
| . ogyananta | content of spatial planning are inspired by religious | Suryo; Dimensi |
| | considerations, not as mere aesthetic expressions—Harmony | Interior 9(2) |
| | of the micro-universe with the macro universe, a reflection of | (Wardani, et al., 2011) |
| | the pre-Hindu and Hindu periods. Change occurs as a form of | |
| | cultural acculturation, especially in building orientation and the | |
| | layout of the Keraton Yogyakarta halls. | |
| The Change of | Sitihinggil at the Surakarta Hadiningrat Palace, initially | Suryo Triono, |
| Function and | considered very exclusive, can be recognized by the general | Cahyani Tunggal Sari; |
| Management of Siti | public, the arts community, the intellectual community, and tourists. The Keraton introduces itself to the whole community | The 2nd International and Interdisciplinary |
| Hinggil Kasunanan Palace Surakarta as | as a source of Javanese culture through cultural products | Conference on Arts |
| A Tourism Commodity | which until now are enjoyed, imitated and used by the people | Creation and Studies |
| in commonly | of Central Java in particular. This study does not discuss the | (IICACS) (Triono & |
| | interior orientation of Sitihinggil. | Sari, 2017) |
| Akulturasi Budaya | Visually, the variations in the architecture of the Kraton | Ibrahim Tohar, Suko |
| dalam Rancangan | Yogyakarta are identified in the elements of fixed and semi- | Istijanto; Jurnal Ilmiah |
| Arsitektur Studi | fixed features. From the results of visual observations, broadly | Arsitektur 11(2) |
| Kasus: Keraton | speaking, there are two categories of buildings at the Keraton | (Tohar & Istijanto, |
| Yogyakarta | Yogyakarta, which accommodate the Javanese Traditional | 2021) |
| | style and the Dutch Colonial style. In Tratag Pagelaran, Tratag | |
| | Sitihinggil, and Bangsal Ponconiti, European-style elements appear to beautify buildings with a Javanese architectural style, | |
| | which have a concept of shade without walls and have a 'light' | |
| | expression. This study does not explain the spatial orientation | |
| | of Sitihinggil. | |
| Building Orientation; | A north-south orientation is recommended for the tropics to | John James Anumah, |
| Enhancing Nature | ensure the building takes advantage of the winds that aid | Lesado Anumah; |
| with Nature | cooling and block out excess sunlight that causes overheating. | Journal of Applied |
| | If site constraints make it difficult to achieve a north-south | Sciences & |
| | orientation, extra steps must be taken to ensure that the | Environmental |
| | building does not overheat. In the context of this study, the | Sustainability |
| | orientation is functional, profane, natural, and modern. It differs from Bangsal Sitihinggil's orientation, which emphasizes | (Anumah & Anumah, 2017) |
| | mystical, symbolic, and mythological factors. | 2017) |
| Kajian Nilai Budaya | This research examines the cultural values of traditional | Aryani Widyakusuma, |
| Tradisi pada | architecture in one of the wards, which are part of the Keraton | Rismawan Arief; |
| Arsitektur Bangunan | Yogyakarta. His study's results show that a cultural | Jurnal Trave 27(1) |
| Adat Jawa Bangsal | transformation has influenced the science of architecture, | (Widyakusuma & |
| Kencono Keraton | especially spatial planning that upholds Javanese traditions, | Àrief, 2023) |
| Yogyakarta | especially in the Keraton Yogyakarta. | |
| Pelestarian Aspek | The universal aspect of Bangsal Sitihinggil is based on the | Alwin Suryono |
| Kesemestaan dan | philosophy of Javanese culture, "unity of social-spiritual-nature | Jurnal RUAS 14(2) |
| Kesetempatan dalam | relations" through spatial planning (symmetry of the | (Suryono, 2016) |
| Arsitektur Panasal Sitihinggil di | philosophical axis, environmental adaptability) and inner | |
| Bangsal Sitihinggil di Kraton Yogyakarta | envelope (open, accessible view of Alun-alun and Tugu Pal Putih) The local aspect is based on the philosophy of | |
| Malon Tuyyakalla | Putih). The local aspect is based on the philosophy of "tolerance" of Javanese Culture (on European Culture) through | |
| | architectural styles (a blend of Javanese-European Traditional | |
| | architecture), building structures (independent) and ornaments. | |
| | lournal of the International Society for the Study of Verna | cular Settlements 269 |

Previous research examining the 'interior' architectural orientation of the Sitihinggil Ward at the Keraton Yogyakarta is scarce; no one has discussed it comprehensively. Research studies refer more to the architectural building orientation in a natural, profane way and can be seen in the form of the orientation. There are a few research mythologies with 'interior' architectural orientation, except for the *Sanga Mandala*, which discusses traditional Balinese house layouts known as *kaja-kelod* orientation.

Reviewing the previous research identified that traditional architectural interior designs, such as the Sitihinggil Ward at the Keraton Yogyakarta, were made from a functional perspective and a symbolic and meaningful perspective. Mystical symbols in the context of Javanese cultural mythology, including using imaginary lines that cannot be identified visually.

In the context of 'interior' architectural orientation, it is divided into two, namely, the first orientation is profane, natural, realistic, and has functional value. Both orientations are mystical, magical, sacred, virtual, unreal, abstract, or imaginary. Sitihinggil Ward uses these two axes as the concept of his interior design philosophy. The orientation of Sitihinggil Ward is to North-South, Mount Merapi-South Sea, mystical and mythological *kaja-kelod*. Sitihinggil Ward is also geographically oriented and profane and follows the sun's circulation from East to West, but mystically, this circulation is associated with birth, life and death, which are supernatural and sacred. Therefore, the 'interior' orientation of Sitihinggil as a place or means for the coronation of Kings is considered sacred and full of mythology. There is a substantial assumption that this was done to legitimize his power, supernatural powers, and the King's authority when he was in power. This finding sets a precedent that every King crowned at Sitihinggil would be elevated to the rank of *Wong Agung*.

Research Method

This reseach uses a historical approach associated with semiotics in the context of Javanese philosophical mythology. The semiotic approach in the historical context of the Keraton Yogyakarta is the focus of this research. It uses a qualitative approach and observations that combines historical and semiotic literature related to the philosophical ideas of Java. Observations were made directly to the research location at the Keraton Yogyakarta and the North-South axis that stretches across the City of Yogyakarta by observing the research object, using a camera and mapping the axis by sketching at November 27, 2022 and February 21, 2023. This method aims to understand the semiotic signs built in the 'interior' architecture of North Sitihinggil at the Keraton Yogyakarta. Therefore, 'interior' architectural orientation can be studied from an explicit pragmatic paradigm and interpreted from a mystical perspective by studying the interior as an implicit visual sign. The study of history and semiotics is a relatively new analytical approach to obtaining contextual meanings, including in the study of the architecture of the Keraton Yogyakarta (Noth, 1990; Supriyatna-Mz, 2004; Tamm, 2017; Hidayat, 2021).

Semiotics is the science of signs or sign systems (signifier and signified). Indeed, it is the study of meaning. Semiotics does not seek to prove or disprove their theories objectively and scientifically. It is the application of linguistic methods to objects other than language (including visual architectural languages). It is an approach to logically understanding contextual texts (Noth, 1990). Semiotic logic can be accepted if it is supported by contextually analyzed data or text. In a design context, in the process of semiosis design, the formation of spatial symbols would inevitably bring about 'integral' and 'characteristic' spatial effects. Here, the 'semiosis' brings about a design method, concept, and evaluation angle (Xie, et al., 2021).

The Steps of semiotic method are (1) Placing the concept of orientation and 'interior' architectural view of North Sitihinggil Ward as an imaginative 'signified'; (2) Then the 'signified' is interpreted according to the context (the 'signifier'); (3) Keraton Yogyakarta History as a visual 'signified' containing mystical and sacred values in the context of Javanese culture; (4) Then the interpretation of the meaning of the Keraton Yogyakarta in the context of cultural history. Based on the study above, it will produce findings of symbolic meaning which if interpreted, is in accordance with the context of mythology.

Findings and Discussion

The architecture of the North Sitihinggil Ward at the Keraton Yogyakarta has an imaginary concept that people believe to be mystical. The Keraton building faces the North, is oriented towards Mount Merapi, and backwards, is oriented towards the South Sea (Fig. 1).



Fig. 1: The concept of the mystical architectural orientation of the Keraton Yogyakarta. Source: The Philosophical Axis of Yogyakarta, a City Rich in Traditions and Culture (2022).

Imaginal lines are drawn from three buildings: The Krapyak Stage, the Keraton Yogyakarta, and the Pal Putih Monument (*Tugu Golong Gilig*). In the context of recording media mapping, this agrees with Samaratunga (2018), who said that even though imaginary lines have become an old discourse, they are still interesting to discuss. The city is divided by an imaginary axis that connects Mount Merapi – Tugu Pal Putih – Keraton – Krapyak Stage – Parangkusumo Seaside. Based on the map, it can be seen that Merapi, the Palace and the South Coast are indeed in an imaginary straight line. The philosophy of an imaginary straight line from Merapi to the South Sea is full of symbolic meanings.

In the context of the spatial layout of the Keraton Yogyakarta, Wardani shows an essence of balance and harmony between the microcosm and the macrocosm (Trisno, et al., 2020). Thus, it can be concluded that the spatial concept of the Keraton Yogyakarta is based on three orientations: natural orientation, which means reality orientation; human orientation, which means creative-sense-initiative orientation; and a meta-empirical orientation, namely an orientation toward God, the ruler of the universe. All three contain elements of good, trustworthiness, and beauty. With this understanding, the layout of the Keraton Yogyakarta has used the concept of 'interior' architectural orientation, both logically and mystically. Therefore, the 'interior' orientation concept of the architecture of the North Sitihinggil Ward at the Keraton Yogyakarta is unique and mysterious to be studied in depth.

According to Edward De Bono (2022), a concept is an essential aspect of the thought process, which is very interesting. Concepts are the creation of ideas and ways to move forward. Bono emphasises that sometimes the concept is not clear and complex (Bono, 2022). The 'interior' orientation concept of the architecture of the North Sitihinggil Ward at the Keraton Yogyakarta is also interesting, unclear, and complex, especially regarding mythology.

Concepts are the elements that make up a myth. Myth is the meaning and form of a sign in semiotics. A sign combines concepts and images; a unique concept is not necessarily historical. History is wholly embedded in myths and then gives meaning. Meaning is the myth itself related to the myth's concept and form. The function of myth is to distort its hidden meaning (Barthes, 2004). Experts have divided the two types of environment in mythical human life, namely the sacred (haunted) and the other is profane, which can affect the concept of God.

Often, human beings want to understand the existence of God and eventually give birth to various experiences about God, human beings and nature, philosophical thoughts, and cultural traditions, like *manunggaling kawula gusti* (Zoetmulder, 2000) in the Javanese cultural tradition. The religious experience becomes a unique concept, unlike the concept of teaching, which was born from philosophical thoughts but combines the results of thought and inner contemplation (Kolis & Ajhuri, 2019). Thus, the so-called mystical approach was born.

Fear marks the approach to the sacred mystical world in a man of ancient forces in life and nature. Human beings are looking for strategies to find the proper relationship between human beings—that strength is like God, including divine powers. The gods are nothing but the forces of nature, such as fertility, power and annihilation. Even now, these gods are starting to emerge as influential figures (Peursen, 1976) in human beings. This thought forms the basis of Keraton Yogyakarta's orientation mythology.

The mythology of the 'interior' architectural orientation at the Keraton Yogyakarta is an analytical approach related to time in the orientation of the solar cycle. Understanding 'interior' orientation is necessary to examine the signs constructed by interpreting their meanings. Cosmological orientation is the study of (profane) architecture, and mythological orientation is the study of the mystical (sacred and haunted).

This is reinforced by Van Peursen (1976), who explains that myths guide man's behaviour and guide human wisdom. The primary function of myths is to make people aware of supernatural powers. Myths do not provide material information about these forces, but they help people experience these forces as supernatural forces that influence and control nature and the lives of their people.

In the case of the Keraton Yogyakarta, the imaginary line that crosses the North Sitihinggil Ward is considered the most sacred because this ward is the place of the coronation of the King at the Keraton Yogyakarta. Therefore, mythologically, the imaginary line is a religious view.

The view is the direction that can be seen from the inside to the outside of the architectural space. Viewing buildings is more indicated to place the position of the building following the positive potential and avoid negative things inside and outside the environment. View relates to the 'interior' orientation of the room or something directly reached by the senses of sight (Trisno & Lianto, 2021).

The 'interior' orientation concept of the North Sitihinggil Ward at the Keraton Yogyakarta is also closely related to the view concept in architecture. According to Saputro (2022), notions of the meanings of view exist. They were first interpreted as a view or something that the senses of the eye can see. Second, the meaning of view is defined as a view that can be achieved based on thought and logic. View relates to a person's understanding or the way of looking at an object.



Fig. 2: The concept of urban planning orientation in the Yogyakarta Region Source: Imaginary Axis as a Basic Morphology in the City of Yogyakarta – Indonesia (2008).

View of the Keraton Yogyakarta uses the monument's orientation towards Mount Merapiashis views and the Krapyak Stage as an orientation backwards towards the South Sea so that the concept of this orientation becomes mystical, not pragmatic (Fig. 2).

In architectural engineering, Banu (2022) writes that orientation is made to determine the direction of the building and depends on factors such as sunlight, wind and precipitation (Fig. 3).





Source: Left - Importance of Building Orientation in Architecture (2022); Right - Building Orientation for Passive Design (n.d.).

The analytical process determines the mass and structure of a building. The main objectives of building orientations are as follows;

- (1) Provide an optimal position related to the environment.
- (2) Increase natural light and ventilation for the occupants.
- (3) Protection against dust and external noise

(4) Protection against climate change, such as rainfall and hurricanes.

- (5) Provide privacy for users
- (6) Increase the aesthetic value.

The point is that natural factors in the surrounding environment are essential orientational concepts (Fig. 3).

In the context of domestic architecture, Hindarto (2015) says that orientation is needed so that the room of the house has added value. This added value, for example, is the view and recreational impression. It is not easy to design by paying attention to the orientation in the form of a view. Many architects pay little attention to this and design in only two dimensions and assume that once the plans are completed, they do not have to pay attention to orientation that can increase the value of the house itself, which can be increased through the potential of that orientation. The 'interior' orientation of pragmatic (profane) architecture is related to the solar circulation time (Fig. 3), which is oriented to the East-West and correlates with the time of human spiritual life. The Palace's orientation to the North-South towards the mountains and the sea is related to Hindu mythology in Javanese culture.

The cultural significance in Java is inextricably linked with mystical experiences brought to the level of precise rational-logical formulations. The mystical experience seeks to be, and must be, a concrete experience of absolute reality, not abstract discourse. Thus, it is clear that mysticism, the essence of religious experience, must become a special place of interreligious dialogue and the basis for a more weighty inter-cultural dialogue. In this context, the cosmic and mystical centre (Zuhriyah, 2013) is a unique and qualitative study (Scattolin, 2022).

1. History of the Keraton Yogyakarta

Sultan Hamengku Buwana created the philosophical axis of Yogyakarta when he built the Keraton Yogyakarta in 1755 after the events of the Giyanti Agreement or Palihan Nagari. It is a historical fact that the North Sitihinggil Ward is on the high ground and serves as the place for the coronation of the Sultan as King in the Keraton Yogyakarta from Hamengku Buwana I to Hamengku Buwana X, carried out in the North Sitihinggil Ward (Setyaningrum, 2022). In leading the royal ceremony, the Sultan was also in Sitihinggil. Sitihinggil comes from the Javanese word 'Siti', which means ground, and 'Hinggil', which means high (Fig. 2). Sitihinggil is an elevated land because it has a noble and sacred philosophical function as the official seat of the Sultan (Setyaningrum, 2022; Admin, 2017).

North Sitihinggil Ward at the Keraton Yogyakarta is magnificent and holy because Sitihinggil Ward is the place of the coronation of the King who sits on the Dhampar Kencana or Sultan's throne. Sometimes, the North Sitihinggil Ward is also used as the place for the Great Pisowanan (Supriyatna-Mz, 2010), namely Sultan's meeting with his people. Facts on the ground show that the architecture of the North Sitihinggil Ward has no walls, and thus the room is very open, following the traditional Javanese architectural style. It gives a symbolic meaning of openness. If the King sat or meditated in the middle of North Sitihinggil Ward, he could be seen from all directions. The four cardinal directions seem wide open to blend with nature as a conceptual basis for 'interior' architectural orientation and focus on imaginary lines.

The imaginary line is the imaginary axis of Yogyakarta philosophy in the form of a straight line that extends from the North to South; on the West side, there is the Winongo River, and on the East side is the Code River (Fig. 4) which stretches to follow the circulation of the sun. The 'interior' architectural orientation axis is an imaginary line of sight or views in a faint, even virtual, straight line.

Various studies on the 'interior' architectural orientation concept of the Keraton Yogyakarta often discuss imaginary lines. This is a historical fact whose existence is very clearly recognised. This fact shows that the imaginary line does exist but is a mystical orientation as the basic concept of architectural orientation (Kumara, 2022; Lianto & Trisno, 2022).





Fig. 4: The Keraton Yogyakarta building's orientation. Source: Javanese Chair of Power (2013, p. 140).

This imaginary line also passes through the North Sitihinggil Ward in the Keraton Yogyakarta area, which is considered sacred. Based on the observations, the layout artefacts at the Keraton Yogyakarta provide historical evidence that can be derived from their plans. The concept of 'interior' architectural orientation at the Keraton Yogyakarta facing North, oriented towards Mount Merapi and backwards towards the South Sea, is noteworthy here. Sitihinggil Ward is in front of block A, also facing the North. Within the 'Interior' Architecture of the Sitihinggil Ward are the Manguntur Tangkil Ward and the Wihono Ward (Fig. 6). It is thus clear that the basic concept of this history-based orientation has become the main thought in the architectural design of Keraton Yogyakarta.

2. Orientation and 'Interior' Architectural View of North Sitihinggil Ward

There are two unique sign paradigms when the concept of 'interior' orientation at the Keraton Yogyakarta is studied from a semiotic analysis. First, the 'interior' orientation of the architecture of North Sitihinggil Ward at the Keraton Yogyakarta as artefacts or physical markers can be seen with the 'naked eye' means literal form, visible, visual, and authentic. Second, the 'interior' orientation function of the Sitihinggil North Ward at the Keraton Yogyakarta is not just a place to perform visual routines and ritual activities, however, has a symbolic meaning that is sometimes mysterious and mystical. This can be observed only by using the 'inner eye', meaning having supernatural, sacred, full of myths, religious and mysterious things positioned as markers (Gustami, 2004).

The crossing of cultural signs between Islamic culture and Hindu culture leads to the level of Javanese mythology, which forms the basis of the 'interior' architectural concept of North Sitihinggil Ward. Hindu culture in Bali is an integral part of its architectural concept. Most likely, the orientation of the *kaja-kelod* axis in Bali was used in the design to be the orientation of the axis of Mount Merapi and the South Sea in the Javanese belief in the North Sitihinggil Ward. Creative courage that utilises imagination, the mystical creation of Sri Sultan Hamengku Buwana I, is strongly assumed to have surpassed his time's big dreams (Altidor, 2020).

The intersection can be seen from the 'interior' orientation axis of the North Sitihinggil Ward architecture, which resembles the *Sanga Mandala* concept in Balinese Hindu culture. *Sanga Mandala* is a word that comes from Sanskrit. *Sanga* means number nine, and Mandala means zone. The *Sanga Mandala* conception divides an area into nine zones based on their respective sacred values. They combine the concepts of *kangin-kauh* and *kaja-kelod* (Fig. 5), resulting in the *Sanga Mandala* (Fig. 6). These two conceptions are added to the position of the open area in the middle, or it can be called *natah*. This zone is *kaja-kelod* Which is only divided into sacred and profane zones, which are finally divided into three zones, namely; (a) Main or Main (sacred); (b) Madya (*natah*); (c) Nista (profane). Like *kangin-kauh* zone is divided into three zones, as same as *kaja-kelod*, *applying these two conceptions* (*kaja-kelod, kangin-kauh*), nine 'interior' zones arise due to intersection. These nine zones have their respective values based on their sacred and profane values (Sabrina, et al., 2019).



Fig. 5: The basic concept of the Balinese Traditional House relates to 'interior' orientation. Source: Reinterpretation of Spatial Orientation and the Transformation of the Architectural Pattern (2019).

The cardinal direction is understanding the concepts of *kaja, kangin, kelod* and *kauh. Kaja* means North, *Kangin* means East, *Kelod* means South and Kauh means West. *Kaja is* not always identical or mean the North. Also, *kangin* doesn't necessarily mean the East; neither *kaja-kangin* No always means the Northeast. In the spatial Balinese language, *kaja* means or represents the mountain, and *kangin* means the sun. The mountain and sun are believed to be upstream; The mountain is a symbol of water upstream, and the sun is upstream of energy in life (Nurbawa, 2018). *Kelod* is the opposite of the North. Referring to the literal meaning, *Kelod* is the direction of the South. However, if we return to the spatial concept of Bali, *kelod* shows the opposite position to the mountain, so if you are in the Bali area North, then *kelod* would refer to the North, namely the ocean (Suarcani, 2020).

This philosophy is transformed into the concept of cosmic balance, as translated from this philosophy, about Bali's natural geography with its two axes, namely the cosmic axis and the ritual/processional axis. The cosmic axis is a mountain located in the middle of the island of Bali, as the centre of orientation so that it forms an axis with two directions: towards = ka, mountain = ja, and headed = ke, sea = lod, therefore direction kaja-kelod would form.



Fig. 6: Sanga Mandala is the basic concept of the Balinese Traditional House. Source: Author (2023).

Studying *kaja-kelod* in the concept of *Sanga Mandala* in Balinese Hindu culture (Susanta, 2017) has similarities with the orientation concept initiated by Sultan Hamengku Buwana I, who adheres to Islam. Only in Bali it does not use imaginary lines.

3. Interpretation of the Meaning of North Sitihinggil 'Interior' Architectural Orientation in the Context of Javanese Culture

In the context of semiotics in Java, a mountain is one of the signs (markers) representing a towering height towards God or Gods, who are considered holy. An educated figure named Syekh Jumadil Kubra is said to be the ancestor of the saints in Java. His grave is believed to be among the Majapahit-era Islamic tombs in Troloyo. Sheikh Jumadil Kubra leaves Merapi's impressive mountains an Islam spreader in Java, producing *Wali songo* (Putri, 2020). The sign's 'interior' architectural orientation is created and selected as a symbol of respect and worship that deserves to be sacred at the cultural level of the Keraton in Java.

The majority of the Javanese people in Yogyakarta believe in mystical signs that there is a guardian of Mount Merapi who has a special relationship with the goddess of the ruler of the South Sea (*Kanjeng Rara Kidul*). It is said that the two of them often visited each other through the Winongo River (in the western part of the city of Yogyakarta), and residents around the river called it a group of mystical creatures known as *Lampor*. Thus, the legend is considered very logical, primarily because until now, the Javanese people still hold the mountain sacred and regard it as a religious symbol. Based on this, it is revealed that the shape of the imaginary line as a mystical axis in the architectural concept of the Keraton Yogyakarta is oriented towards the view: the view of Mount Merapi as a representation of respect for the ancestors, Gods and religious figures (Hendro, 2018).

In addition, there is a mystical sign in the Kanjeng Ratu Kidul mythology, a legendary concept passed down from generation to generation. Every coronation of a King at the Keraton Yogyakarta is performed by the Bedhaya Ketawang dance, performed by nine dancers, and it is said that one of the dancers is Kanjeng Ratu Kidul. According to Suwardi, Kanjeng Ratu Kidul is the ruler of the South Coast of the island of Java, which is classified as a mysterious place. In this area, it can be said that there are many ghosts scattered in the land of Java. Because of this, this area has many forests, quiet places, and rocks and is widely known as the Kanjeng Ratu Kidul area. Kanjeng Ratu Kidul herself is an influential Ghost king (stealth) (Suwardi, 2007).

In the Babad Tanah Jawa, the owner's story is in the South Sea. There was a Queen there who was a beautiful princess without equality. The entire universe is incomparable; her name is

Kanjeng Ratu Kidul. She controls all spirits in Java. At that time, Kanjeng Ratu Kidul was only in the Palace, resting on a gold bed (*kantil*) decorated with diamonds and other precious stones, presented by jinns, demons, and fairies (Olthof, 2008).

There is a surrender sentence from the Queen of the South: "Have mercy on me because I would protect the sea. About the request to Allah has now been granted. Your Majesty and your children and grandchildren would become kings in Mataram, ruling all of Java without equality. Java's djinn, demons and fairies are also in your power" (Olthof, 2008:96). For example, when they meet enemies, they would help and obey all orders because Your Majesty is the forerunner of Kings in Java.

This mystical husband of the Queen cannot be described in how the story goes. The place of the agreement was in Parangkusumo. By the sea, a location is considered the meeting place between Senopati and Kanjeng Ratu Selatan. They agree with Pranoto that Kanjeng Ratu Kencana Sari is another name for Kanjeng Ratu Kidul. Although this story is a kind of fable or legend, it is assumed that it is reliable that about seventy percent of its historical accuracy can also be found in the Chronicle of the Land of Java (Olthof, 2008; Pranoto, 2007).

In this chronicle, a story indicates that Kanjeng Ratu Kidul from the country of jinns (demons) had worshipped the King of Mataram, who also gave birth to Javanese kings at the Keraton Yogyakarta. Thus it can be assumed that Kanjeng Ratu Kidul is one of the orientation centres in the interior concept of the Keraton Yogyakarta. The 'interior' orientation on the back is Laut Selatan which means the adoration of love for the Queen of the South becomes an imaginary line at the opposite intersection with Mount Merapi.

This proves that both orientations have mystical powers that can be used to legitimise the King's power. This is because the King is connoted as having supernatural powers to have an inner dialogue with the two mystical axes. This mystical orientation is the 'interior' architectural design concept of North Sitihinggil Ward, the place for the coronation of Kings in the Keraton Yogyakarta, which is as mystical and sacred as the imaginary lines.

a. The Mythology of Imaginary Lines in the Keraton Yogyakarta

The mythology of Mount Merapi's axis (*kaja*) and the South Sea (*kelod*) are 'interior' architectural orientation concepts of the North Sitihinggil Ward at the Keraton Yogyakarta. The symbolic meaning of the earth's axis (*kaja-kelod*) is revealed: the sea is an evil spirit, the land is a man, and the mountains are gods (Barlow, et al., 2003). This mythology is built based on legends that have been sacred for generations. Logically and pragmatically, this concept is a tool to legitimise the power, authority, and supernatural power of the King who rules in the Keraton Yogyakarta. People believed in this legitimacy that the King was God's representative on earth.

Based on the perspective of Javanese mythology in the Keraton Yogyakarta, this imaginary line symbolises the harmony and balance of the universe. If interpreted vertically, it is *hablun minallah*, a spiritual-religious relationship between human beings and their God. As for horizontally, *hablun minannas* is a social relationship between human beings and other human beings and their environment which refers to a mystical-spiritual approach. This mystical orientation aligns with the concept of *manunggaling kawula gusti* in a spiritual context. This is also embodied in Dhampar Kencana as a royal throne designed symbolically and mystically and placed in the 'interior' architecture of North Sitihinggil Ward. This means that the King has reached the pinnacle of his spiritual journey, i.e., perfection (Supriyatna-Mz, 2010). This concept aligns with the concept of *kejawen* (Fig. 7).



Fig. 7 The floor plan of the Keraton Yogyakarta. Source: Zuliadi (2009).

This would be different if studied from the concept of 'interior' architectural orientation with a mythological approach. Then the existence of the North Sitihinggil Ward at the Keraton Yogyakarta tends to have an 'interior' architectural concept based on: (1) Imaginary lines in the architectural concept of the Keraton Yogyakarta; (2) Kejawen Islamic mysticism, which is influenced by Islamic and Hindu culture; (3) The concept of *manunggaling kawula gusti*; (4) Based on the architectural engineering approach, natural orientation, especially the cardinal directions. The *Kaja-Kelod* concept is visible (Fig. 7).

In the concept of *kejawen* is a human who has become one with his God. Human beings can roll the macrocosm into the microcosm. Therefore, the King, who is *manunggaling kawula gusti* is a human being with creativity, taste, and intention characteristics. Mulyanto (2004) says *manunggaling kawula gusti* is related to the relationship between humans and their God. This is because what is sought is not theory but the knowledge that has to mean for the practice of life, whether to gain wealth or power in this world, including to legitimise power (Zoetmulder, 2000; Supriyatna-Mz, 2013).

According to Suryono (2016), the universal aspect of North Sitihinggil Ward is based on the philosophy of Javanese culture, 'unity of social-spiritual-nature relations' through spatial planning (symmetry of the philosophical axis, adaptability to the environment) and inner envelope (open, accessible view of Alun-alun and Pal Tugu Putih). White is the orientation axis in the form of an imaginary line. This is done to maintain harmony between the micro and macro cosmos. It is essential to make some arrangements in the space order. Therefore, orientation in space becomes necessary. Spatial orientation determines the pattern of interrelationships between all cosmic forces in an imaginary line (Karsono & Wahid, 2008).

Evidence of this can be observed from the architectural orientation concept of the Keraton Yogyakarta, which influences the 'interior' architectural orientation concept of the North Sitihinggil Ward at the Keraton Yogyakarta. North Sitihinggil Ward was used for the coronation of the Kings from Sultan Hamengku Buwana I to Hamengku Buwana X. This Ward is positioned as a sacred and mystical place, especially when viewed from the 'interior' orientation in imaginary lines or orientation axes.

During the Hindu period, orientation became a significant factor in shaping buildings or other built environments. The orientation axis is the visible physical form of the religion of the community. The concept of the North-South axis and the East-West axis became the archetype in their cities. This imaginary axis has two phenomena; (1) As an imaginary axis based on religion and cosmology, and also the basis for the sacred things they believe in; (2) As an aesthetic value through an orientation towards something (Karsono & Wahid, 2008).

Thus, the application of imaginary lines to the 'interior' orientation concept of the architecture of the North Sitihinggil Ward at the Keraton Yogyakarta is not only the place of the King's coronation but a building that is mythical and sacred because it is considered very good and noble for religious activities (Fig. 7). This was done to build the image and strengthen the legitimacy of the King's power. The myth about the 'interior' orientation of the Keraton Yogyakarta architecture with the concept of imaginary lines is an attempt to make people aware that there is a sacred supernatural power passed down from their ancestors.

b. Interpretation of the Sacredness of North Sitihinggil Ward

Observations identified that North Sitihinggil Ward could not be touched up close and was even forbidden (Fig. 8) for the tourists to enter who wish to observe the mystical power of North Sitihinggil Wardas the place for the coronation of kings at the Keraton Yogyakarta. This is because the imaginary line, the mystical axis that passes through the North Sitihinggil Ward, has been considered a sacred place full of supernatural powers for generations. Logically, sacred values related to *manunggaling kawula gusti*, and mystical orientation in an imaginary axis become historical records that make sense to preserve the Javanese culture (Fig. 9).



Fig. 8 Front view of the North Sitihinggil Ward at the Keraton Yogyakarta. Source: Authors (2022).

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Fig. 9: Left: Plan of North Sitihinggil ward. Right: The inner ward at the Keraton Yogyakarta. Source: Left: Alwin Suryono (2016) and Right: Geonusantara (2018).

Therefore, the 'interior' architecture of the North Sitihinggil Ward at the Keraton Yogyakarta cannot be touched directly by the general public because it is considered sacred and believed to have mystical powers. The public can see it when there are ceremonies, performances, and exhibitions. There is a substantial assumption that the 'interior' architectural orientation concept of North Sitihinggil Ward aims to legitimise power, create an image of supernatural powers, display the authority status of the King, and preserve Javanese culture.

Conclusions

Based on historical studies, it can be concluded that the North Sitihinggil Ward as the place for the coronation of kings, starting from Sultan Hamengku Buwana I to Sultan Hamengku Buwana X, has been cultivated as a tradition of appointing kings or sultans in the Keraton Yogyakarta for generations. Therefore, North Sitihinggil Ward is a sacred place of myths and philosophically mystical 'interior' orientation. In this case, the 'interior' orientation concept of the architecture of the North Sitihinggil Ward at the Keraton Yogyakarta becomes a device for building imaginative ideas that are considered irrational. However, mythologically, imaginary lines become rational and logical following the historical context of Keraton Yogyakarta.

In the context of semiotics, there are three findings of the 'interior' architectural orientation of North Sitihinggil Ward as a Javanese philosophical concept that represents a sacred and mystical orientation, namely:

- (1) An imaginary straight-line orientation between Mount Merapi (North) and the South Sea (South), which has mystical powers influenced by Hindu Culture;
- (2) The orientation of the cardinal points and the circulation of the sun, namely sunrise (East) and sunset (West), is interpreted as a cycle of life-based on Hindu culture;
- (3) Kejawen, which is influenced by Islamic culture, namely *manunggaling kawula gusti*, which can be interpreted as the unification of humans (*subjects*) with God (*Gusti*).

Thus, the Keraton Yogyakarta, through Sri Sultan Hamengku Buwana I, has created an imaginary line that refers to the three natural orientations (cosmology) complete with their mythology. The concept was carried out as a tool to legitimise the King's power, represent supernatural powers, the authority of the King, and efforts to preserve Javanese culture. Preserving mystical Javanese culture can only be understood as the duality between the sacred and the profane by the first creators and users of 'interior' architectural orientation, namely the Kings at the Keraton Yogyakarta.

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References

- Admin. (2017) *Tata Ruang dan Bangunan Kawasan Inti Keraton Yogyakarta*. [Online] Available at: https://www.kratonjogja.id/tata-rakiting/4-tata-ruang-dan-bangunan-kawasaninti-keraton-yogyakarta/
- Altidor, W. (2020) Keberanian Kreatif. Jakarta: Elex Media Komputindo.
- Anumah, J. J. & Anumah, L. (2017) Building Orientation; Enhancing Nature with Nature. *Journal* of Applied Sciences & Environmental Sustainability, 3(7), pp. 29-35.
- Archi-Monarch.com. n.d. *Building Orientation for Passive Design*. [Online] Available at: https://archi-monarch.com/building-orientation-for-passive-design/ [Accessed 8 January 2023].
- Armstrong, K. (2023) *Sacred Nature: How to Recover Familiarity with Nature*. Bandung: PT. Mizan Library.
- Banu, H. (2022) *Importance of Building Orientation in Architecture*. [Online] Available at: https://thearchspace.com/importance-of-building-orientation/ [Accessed 11 January 2023].
- Barlow, C., Jay, S. & Rigg, J. (2003) The Human Environment. Singapore: Archipelago press..
- Barthes, R. (2004) Mitologi. Yogyakarta: Kreasi Wacana.
- Bono, E. d. (2022) How to Have a Beautiful Mind. Jakarta: PT. Elex Media Komputindo.
- Damayanti, N. Y. et al. (2019) *The Mythos of Nyai Roro Kidul and Sea Life as an Inspiration Alternative to Development the Motifs of Java coast of Batik Story Telling*. Yogyakarta, Institut Seni Indonesia Yogyakarta, pp. 547-554.
- Geonusantara. (2018) Bangsal Siti Hinggil Ler Keraton Ngayogyakarta Hadiningrat: Tempat Pelantikan Para Sultan dan Presiden Sukarno. [Online] Available at: https://www.geonusantara.org/2018/01/01/bangsal-siti-hinggil-ler-keratonngayogyakarta-hadiningrat-tempat-pelantikan-para-sultan-dan-presiden-sukarno/ [Accessed 10 January 2023].
- Gustami, S. P. (2004) *Proses Penciptaan Seni Kriya: Untaian Metodologis*. Yogyakarta: Program Pascasarjana Institut Seni Indonesia Yogyakarta.
- Hasan, M. I., Aminuddin, A. M. R. & Mohidin, H. H. B. (2022) Locality of Building Orientation in Traditional Indonesian Architecture: A Systematic Literature Review. *Journal of Design & Built Environment*, 22(3), pp. 40-48.
- Hendro, E. P. (2018) Religiusitas Gunung Merapi. *Endogami: Jurnal Ilmiah Kajian Antropologi*, 2(1), pp. 21-29.
- Hidayat, A. P. (2021) Pendekatan Semiotika untuk Penulisan Sejarah: Beberapa Kemungkinan. *Tsaqôfah: Jurnal Agama dan Budaya*, 19(1), pp. 17-30.
- Hindarto, P. (2015) *Mengenal Orientasi Rumah dan Bangunan*. [Online] Available at: https://probohindarto.wordpress.com/2015/01/19/mengenal-orientasi-rumahdan-bangunan/
 - [Accessed 12 February 2023].
- Ionescu, V. (2018) The Interior as Interiority. *Palgrave Communications. (Humanities, Social Sciences, Business)*, 4(33), pp. 1-5.
- Karsono, B. & Wahid, J. (2008) Imaginary Axix as a Basic Morphology in the Cty of Yogyakarta Indonesia. Penang, Malaysia, School of Housing Building and Planning, Universiti Sains Malaysia, pp. 187-195.
- Kolis, N. & Ajhuri, K. F. (2019) Sangkan Paraning Dumadi: Eksplorasi Sufistik Konsep Mengenal Diri dalam Pustaka Islam Jawa Prespektik Kunci Swarga Miftahul Djanati. *Dialogia Jurnal Studi Islam dan Sosial*, 17(1), pp. 1-20.
- Kumara, R. (2022) Sumbu Filosofis Yogyakarta, Kota yang Kaya Akan Tradisi dan Budaya. [Online]

Available at: https://kumparan.com/raka-kumara/sumbu-19filosofis-yogyakarta-kota-yang-kaya-akan-tradisi-dan-budaya-1xog8mYtlNF

[Accessed 14 January 2023].

- Kusuma, G. B. W. (2003) Building Orientation on Traditional Balinese Culture. *Humaniora*, Volume 15, pp. 62-73.
- Kusumo, R. (2021) Legenda Kanjeng Ratu Kidul, Simbolisasi Indonesia Sebagai Bangsa Bahari. [Online]

Available at: https://www.goodnewsfromindonesia.id/2021/06/14/legenda-kanjeng-ratu-kidul-simbolisasi-indonesia-sebagai-bangsa-bahari [Accessed 15 January 2023].

Lianto, F. & Trisno, R. (2022) Discovering the Factor of the Bird's Nest Stadium as the Icon of Beijing City. *International Journal on Advanced Science, Engineering and Information Technology*, 12(1), pp. 313-319.

Muryanto, S. (2004) Ajaran Manunggaling Kawula Gusti. Yogyakarta: Kreasi Wacana.

Noth, W. (1990) Handbook of Semiotics. Indianapolis: Indiana University Press.

Nurbawa, M. (2018) "Kaja-Kangin" bukan Timur-Laut. [Online]

Available at: https://tatkala.co/2018/02/15/kaja-kangin-bukan-timur-laut/ [Accessed 15 January 2023].

Olthof, W. L. (2008) Babad Tanah Jawi. Yogyakarta: Narasi.

Peursen, C. A. v. (1976) Strategi Kebudayaan. Yogyakarta: Yayasan Kanisius.

- Pranoto, T. H. T. (2007) *Membuka Tirai Ghaib Kraton Ratu Kidul dan Gunung Srindil.* Yogyakarta: Kuntul Press.
- Putra, I. D. G. A. D. (2019) *Reinterpretation of Spatial Orientation and the Transformation of the Architectural Pattern.* Phnom Penh, Cambodia, World Research Library: Home, pp. 39-43.
- Putri, R. H. (2020) Syekh Jumadil Kubra dan Orang Islam di Majapahit: Syekh Jumadil Kubra disebut Moyang Para Wali Jawa. Makamnya diyakini Berada di antara Makam Islam Masa Majapahit di Troloyo. [Online]

Available at: https://historia.id/kuno/articles/syekh-jumadil-kubra-dan-orang-islam-di-majapahit-PdlpZ/page/1

[Accessed 7 January 2023].

- Robinson, J. W. (1990) Architectural Research: Incorporating Myth and Science. *Journal of Architectural Education*, 44(1), pp. 20-32.
- Rully. (2012) Perwujudan Simbolisme Siti Hinggil Utara Keraton Kasunanan Surakarta Hadiningrat - Analisis Pada Aspek Arsitektur Secara Makro. Jurnal Teknik Sipil dan Arsitektur, 11(15), pp. 1-12.
- Sabrina, M., Pribadi, O. S. & Rosnarti, D. (2019) Pengaruh Penerapan Konsep Sanga Mandala pada Bangunan Arsitektur Bali Terhadap Lingkungan. Jakarta, FTSP, Universitas Trisakti, pp. 234-238.
- Samaratungga, O. (2018) Eksplorasi Teknis Fotografi Udara Poros Imajiner Daerah Istimewa Yogyakarta. *Rekam*, 14(2), pp. 115-124.

Samuel, E. (2019) Building, Architecture and Myth. s.l., s.n., pp. 1-15.

Saputro, P. (2022) Arti Views Menurut Kamus dan Berdasarkan Konteks, Ketahui juga Contoh Penggunaannya dalam Kalimat. [Online]

Available at: https://plus.kapanlagi.com/penjelasan-arti-views-menurut-kamus-danberdasarkan-konteks-ketahui-juga-contoh-penggunaannya-dalam-kalimat-e9179f.html [Accessed 18 January 2023].

- Scattolin, G. (2022) *Religion and Society: Exploring Human Interiority*. [Online] Available at: https://www.oasiscenter.eu/en/exploring-human-interiority [Accessed 23 January 2023].
- Setyaningrum, P. (2022) Mengenal Sumbu Filosofi Yogyakarta, Konsep Tata Ruang Peninggalan Sri Sultan Hamengku Buwono I. [Online]

Available at: https://yogyakarta.kompas.com/read/2022/09/15/070800078/mengenalsumbu-filosofi-yogyakarta-konsep-tata-ruang-peninggalan-sri?page=all [Accessed 30 January 2023].

Sholikhin, M. (2009) Kanjeng Ratu Kidul dalam persepektif Islam Jawa. Yogyakarta: Narasi.
Suarcani. (2020) Yuk, Pelajari! Inilah 5 Sebutan Arah Mata Angin dalam Bahasa Bali. [Online]
Available at: https://www.idntimes.com/life/education/alhzeta/mata-angin-bahasa-bali-

c1c2?page=all

[Accessed 20 January 2023].

Suhardjo, D. (2004) Mengaji Ilmu Lingkungan: Kraton. Yogyakarta: Safiria Insania Press.

Supriyatna-Mz, E. (2004) Logika semiotika dalam penelitian kualitatif. Akademika, 6(2), pp. 47-57.

Supriyatna-Mz, E. (2010) Tafsir Desain Kursi di Keraton Yogyakarta dan Gedung Agung Yogyakarta. *Jurnal Humaniora*, 22(3), pp. 299-312.

Supriyatna-Mz, E. (2013) Kursi Kekuasaan Jawa. Yogyakarta: Narasi.

Suryono, A. (2016) Pelestarian Aspek Kesemestaan dan Kesetempatan dalam Arsitektur Bangsal Sitihinggil di Kraton Yogyakarta. *Jurnal Ruas*, 14(2), pp. 1-10.

Susanta, I. N. (2017) Makna dan Konsep Arsitektur Tradisional Bali dan Aplikasinya dalam Arsitektur Masa Kini. *Space*, 4(2), pp. 199-212.

Suwardi. (2007) Dunia Hantu, Mistik, dan Wisata Spiritual di Pesisir Selatan. Jurnal Penelitian Humaniora, 12(1), pp. 86-103.

Tamm, M. (2017) Introduction: Semiotics and History Revisited. *Sign System Studies*, 45(3/4), pp. 211-229.

Tohar, I. & Istijanto, S. (2021) Akulturasi Budaya dalam Rancang Arsitektur Studi Kasus: Keraton Yogyakarta. *Jurnal Ilmiah Arsitektur*, 11(2), pp. 40-47.

Triono, S. & Sari, C. T. (2017) The Change of Function and Management of Siti Hinggil Kasunanan Palace Surakarta as A Tourism Commodity. Surakarta, Indonesia Institut of The Arts in collaboration with Students Affairs Association of the Indonesia Institute of the Arts, pp. 160-171.

Trisno, R., Claudia, K. & Lianto, F. (2020) Spiritual Architecture in the Context of Java. *ISVS e-journal*, 7(3), pp. 40-48.

Trisno, R. & Lianto, F. (2021) Lao Tze and Confucius' philosophies influenced the designs of Kisho Kurokawa and Tadao Ando. *City, Territory, and Architecture,* 8(8), pp. 1-11.

Wardani, L. K. (2009) *Makna Bangunan Keraton Yogyakarta*. Yogyakarta, Institut Seni Indonesia Yogyakarta, pp. 245-256.

Wardani, L. K., Soedarsono, R., Haryono, T. & Suryo, D. (2011) Gaya Seni Hindu-Jawa pada Tata Ruang Keraton Yogyakarta. *Dimensi Interior*, 9(2), pp. 108-118.

Widyakusuma, A. & Arief, R. (2023) Kajian Nilai Budaya Tradisi pada Arsitektur Bangunan Adat Jawa Bangsal Kencono Keraton Yogyakarta. *Jurnal Trave*, 27(1), pp. 1-11.

Xie, Y., Bin Husin, R. & Binti Mohd Noor, A. L. (2021) The Design Method of "Semiosis" in Interior Furnishing Design. *Art and Design Review*, Volume 9, pp. 254-262.

Yuniastuti, T., Sukirman & Wibowo, S. H. B. (2021) *Study of Javanese Traditional Architecture: Bangsal Building At Pagelaran and Sitihinggil Ler Area of Yogyakarta Palace.* Surakarta, Universitas Sebelas Maret Surakarta, pp. 735-754.

Zoetmulder, P. J. (2000) *Manunggaling Kawula Gusti: Pantheisme dan Monisme dalam Sastra Suluk Jawa.* Jakarta: PT Gramedia Pustaka Umum.

Zuhriyah, L. (2013) Kosmologi Islam Kasultanan Ngayogyakarta Hadiningrat. *Teosofi: Jurnal Tasawuf dan Pemikiran Islam*, 3(1), pp. 90-116.

Zuliadi. (2009) Denah Kraton Yogyakarta. [Online] Available at: https://zuliadi.wordpress.com/2009/03/06/denah-kraton-yogyakarta/ [Accessed 13 January 2023].