ABSTRACT
The definition of sacred place is subjective and complex but architectural elements seem to have the ability to define it. Architectural elements ‘mold’ space into a locus sacri in many ways—from being symbols of the sacredness itself to using lights on creating certain nuance. However, they will only be meaningful for people who use the place for the purpose of searching for sacredness or doing sacred rituals or activities. This paper is an attempt to know how architectural elements construct sacred place from its user's perspective. Bahrul Ulum Mosque became our case study because of its solitary nuance even though it is surrounded by housings and national scale research center. We explored the mosque's architectural elements by following Islam ritual orders. Based on our observation and exploration we argue that Masjid Bahrul Ulum’s spatial sequence defines its sacredness with subtle repetitions and ambiguous atmosphere.

Keywords: mosque, place of worship, religious architecture, sacred place, spatial sequence

INTRODUCTION
In his endeavor to define beauty in architecture and ideals of home, Alain de Botton once wrote “in danger of being corrupted by our passions and led astray by the commerce and chatter of our societies, we require places where the values outside of us encourage and enforce the aspirations within us” (Alain de Botton, 2006, p. 108), as if we need a place that is detached from our everydayness. What De Botton wrote is not specifically about loci sacri—sacred places—but the discourse about our need to create a place where greater power exists that has lingered since a long time ago.

Looking through its literal meaning, loci, the plural form of locus, means “the place where something is situated or occurs” (Merriam-Webster, 2017). Meanwhile, sacri means holy or “entitled to reverence and respect” (Merriam-Webster, 2017). Thus, in general, loci sacri means a situated place that enhances great respect.

Although the literal definition of a sacred place is easily known, the absolute answer to what constructs it is nonexistent. What we consider as a sacred place can be an ordinary one in someone else's perspective. The Istiqal Mosque is sacred for Indonesian Muslims, but tourists who do not believe in Islam may consider it as a ‘mere’ historical building or one of the tourism destinations at Jakarta. Despite its grandeur size and nationalism value, the Muslims usually use Istiqal Mosque for religious rituals, especially for Friday prayer and Eid al-Fitr prayer. The rituals define the sacredness of the building and mark it as a site, which is discrete from profane realm. This distinction encourages certain behaviour, such as using clothes that cover our bodies and hairs (for women), to show respect towards the mosque.

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Yet, the example does not prove that every ritual marks the holiness of a place. A Muslim praying in a vehicle does not make it a sacred place. Neither does incensing at the corner of a market at Bangkok transform it into a holy place. A sacred place seems to contain particular nuance that is different from its surrounding and has definitive physical boundary to differentiate it. Its tranquillity, symbols or grandeur size can separate it from the hustle of non-sacred place. In some point, architectural elements have role to emphasize its sacredness. Stained glass windows in cathedrals that usually illustrate Christ or other holy figures clearly mark a sacred place for Catholics. Meanwhile, the complex geometry on a mosque's façade creates a distinguishable appearance of a holy place for Muslims. Both examples show how architectural elements can be symbols of a sacred place. Nevertheless, their capacity is beyond symbolic. A sacred place has certain distinct proportion and nuance to create awe of the users. A tall ceiling of a gothic church with light refraction, a gigantic *stupa* in the middle of a wide field, or a mosque's arches and pillars repetition are effectual for enhancing reverence.

It is crucial to examine the relationship between rituals and physical elements of a sacred place if we want to know how it is constructed. In his book titled *Seeking the Sacred in Contemporary Religious Architecture*, Hoffman (2010, p. 7-8) wrote, “emplacement, or ritual in place, transforms and elevates the ordinary to sacred”. His statement is based on argument of Jonathan Z. Smith, a historian of religion, about how fundamental a place is for religious rituals: “place directs attention”. In this position, we have to regard architectural elements as not only tools of the sacred space emplacement but also entities that create orientation for ritual movement. In other words, spatial sequence represents how architectural elements give direction and orientation for sacred rituals. Our premise is examining spatial sequence will lead us to know how physical elements emplace rituals.

Now, how does spatial sequence of a sacred place define sacredness within it? We would answer this question by exploring Bahrul Ulum Mosque. The mosque is located at Pusat Penelitian Ilmu Pengetahuan dan Teknologi—Center of Science and Technological Research—(PUSPIPTEK) area, South Tangerang. It is surrounded by a serene landscape that intensifies its solemnity. With its geometrical aperture and distinct spatial composition, Bahrul Ulum Mosque seems to contain deeper quality in enhancing sacredness of a place for worship. We thoroughly observed the architectural elements by focusing on its gate/portal, path, and place. We followed the Islam ritual order—walking through the entrance, removing footwear, going through its terrace that surrounds its yard, cleaning ourselves at *wudu* room, and entering the main pray room—to know how the mosque's architectural elements shape its spatial sequence. We, then, analyze how the sequence symbolizes sacredness by examining its ‘archetypal elements’—universal archetype, religious symbols, and geometric symbols—and interpreting the nuance.
SPATIAL SEQUENCE IN LOCI SACRI: TURNING ORDINARY INTO SACRED

Before explaining about our exploration on Bahrul Ulum Mosque, we need to elaborate the relation between spatial sequence and loci sacri. Further explanation will show that the issue is as primitive as understanding space and place, yet it is excessively abstract.

As Hoffman mentioned about emplacement of a sacred place, we realize that it is always related to how we describe space into place. We know that in general ‘space’ is more abstract than ‘place’. By endowing it with value, space becomes place (Tuan, 1977, p. 6). Nonetheless, if we consider more specific quality, such as ‘sacred’, ‘space’ itself is already noticed with sacral experience ‘within’ it. Meanwhile, ‘sacred place’ only appears if there is an intended physical element that is used for supporting the experience and marks the sacredness. For example, Muslims can pray everywhere as long as the place is free from najis—unclean things or creatures according to Islamic law. In other words, an ordinary clean place is able to be a ‘sacred space’, but it does not necessarily become a ‘sacred place’. A ‘sacred place’ demands more than just functional matters. Loci sacri contains symbols and specific orders to clarify its holiness. In this perspective, place is not only about value in space, but also about defining it as a more ‘sensed’ matter.

If space is where experience happens, then movements and events must be ‘within’ and ‘through’ it. Both happen in certain order that turns them into something called ‘sequence’. Sequence generally means “a continuous or connected series” (Merriam-Webster, 2017). The term is commonly being used in architecture realm to define frames of movements in space. Tschumi in The Manhattan Transcript mentioned that sequence is “a composite succession of frames that confronts space, movements, and events, each with its own combinatory structure and inherent set of rules” (1994, p. 10). Tschumi’s notion about architecture as something that is never disassociated to events (1996, p. 139-150) has put sequence as a ‘product’ of desire—it strings up events that may appear spontaneously. Relating this notion to previous general differentiation between space and place, we understand that sequence has a capacity to unintentionally endow space with events and movements; hence, making it a ‘new’ place. This nature of sequence is also applied on rituals at loci sacri. However, we have to consider that ritual is more complex than movement. It is a “meaningful action” (Hoffman, 2010, p. 4).

Regardless of the various ways to interpret it, architecture in loci sacri can ‘dictate’ spatial experience. Because it requires reverence, sequence in loci sacri is less likely invariable. Loci sacri is always related to ritual, which is repeatedly done with order and rules. Following them will direct devotees from its preparation phase to its pinnacle. In the preparation phase, the devotees must clean themselves to show their worthiness to enter the loci sacri, whether by washing their body parts or being abstinence for particular time. They enter the sacred place afterwards and walk with the purpose to be enlightened, getting a higher degree, or for clarity. From the entrance to the highest spot of the hierarchy, they amble. When they reach the main room of loci sacri, the devotees proceed into the pinnacle of the ritual—gathering to pray. The rituals order is crucial because its process and phases have sacral meanings. Therefore, in this sense, we need to see sequence as symbols carriers. We use “spatial” before “sequence” to emphasize its relation with spatial experience, which is conducted by architectural elements. In other words, spatial sequence is the product of architectural elements arrangements.

It is obvious that spatial sequence is an important matter in emplacing spatial quality, including sacredness. In his attempt to understand how (physical) architectural elements mark certain space with sacral symbols and transform it into a sacred place, Hoffman mentioned about architectural elements, archetypal elements, and atmospheric ambiguities. These three components are arguably linked to define a sacred space.
Architectural elements are materials that conduct the devotees to amble and achieve the peak of their rituals. Hoffman argued that an ordinary space needs these elements to emplace sacredness. Furthermore, to create a sense of awe and mesmerizing spatial quality “architectural setting for worship...must provide meaning in both the physical and metaphysical realm“ (2010, p.12). Regarding the significant role of walking through a path toward the ‘highest’ part of loci sacri, we think the architectural elements are meaningless without considering the impact of its spatial sequence. Hoffman focuses his notion on the architectural elements of a sacred space into ‘gate’/’portal’, ‘path’ and ‘place’. It is conformable with our notion about spatial sequence of loci sacri.

Concurrently, loci sacri bares symbols, which are recognized and admitted by the community of devotee. At the same time, it is intriguing to know that there are symbols, which generally have the same meaning in every religion—water to cleanse and renewal, fire for enlightening, et cetera. In other words, symbols in loci sacri can also be public. Hoffman realized this fact so that he examined several works of Jung to elaborate it further. He used Jung’s term in defining “forms or images of a collective nature which occur practically all over the earth as constituents of myths”: archetype (2010, p. 3-4). Hoffman categorizes archetypal elements in loci sacri into ‘universal’ symbols, ‘religious/mythic’ symbols and ‘geometric’ symbols.

Furthermore, loci sacri can never be separated from the duality of holy and profane, dark and lights, or insider and outsider. The separation is important, as we need to represent divine power into matter. Nevertheless, the relation between profane and sacred is not aloof (Coomans, et al., 2012, p. 7). Therefore we need to consider this relation and examine how atmospheric ambiguity “convey(s) the sense of mysterium tremendum” to move the devotee's minds or consciousness to other places (Hoffman, 2010, p.3).

It may be said that a sacred place is where ordinary place is reconstructed by certain orders of architectural elements to accommodate sacred rituals. Thus, in order to know how a sacred place is constructed, we need to take a look at symbols and nuances by experiencing it as if we are doing the rituals. Gate, path and place construct the spatial sequence, while every step of the rituals is urging the forming of symbols and particular nuances.

EXPLORING BAHRLUL ULUM MOSQUE
In this part, we will explain Bahrul Ulum Mosque’s situation and spatial configuration. We will also elaborate our exploration on it, focusing on Hoffman’s categorization of sacred space’s markers: architectural elements, archetypal elements and atmospheric ambiguity.

A. THE SACRED ENCLOSURE
Bahrul Ulum Mosque is situated on a green area of PUSPIPETEK, adjacent to Raya Serpong Street on the west side, PUSPIPETEK Street on the north side, the green area on the South side and a lake on the east side. The only access, for both pedestrians and vehicles, to this mosque, is through the north side, which passes PUSPIPETEK Street.

The position of the Bahrul Ulum Mosque is hidden from Raya Serpong Street. Although it is a public facility, the position creates quietness and a sense of private area. In order to mark its existence, there is a tall contemporary minaret, which can be seen from Raya Serpong Street.

The mosque uses some natural and physical borders to enhance its boundary. A fence separates the mosque area from Raya Serpong Street. Meanwhile, some vegetation and level differentiation at its south divide the mosque area and PUSPIPETEK Street. A lake at the east side of the mosque borders its area from the outside. These borders do not only define boundary in between the mosque and outside but also enhances sacred enclosure with its tranquility.
From the four sides of the mosque, only one of them uses physical border to enclose it. This creates the impression that the mosque is open and flexible. It does not directly segregate the outside. This is in line with *locri sacri*’s characteristic: it stands out, but it belongs to the same universe as its other dimension (Coomans, et. al, 2012, p.7).

**B. GEOMETRICS FORMS: SQUARE CONFIGURATION**

Bahrul Ulum Mosque’s spatial configuration is rectangular. It is formed by arrangement of the mass buildings, which consist of the main hall, *wudu*\(^1\), two plazas, and an office and education facility. Two main axes connect the form configuration. The first one lengthens from office and education facility to *mihrab*\(^2\) Another one elongates from main entrance to *wudu* room. Both axes intersect right in the middle of the main hall, which can be accessed from the mosque’s four sides.

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1 A room for washing hands, mouth, nostrils, face, arms, head, ear, and feet as a way to self-purify
2 A particular niche that symbolizes wall of qibla—the direction that Muslims should face when they are praying.
The mosque design configuration generates spatial sequence, which enunciates sacred impression. The following description will explain further about it.

C. ARCHITECTURAL ELEMENTS: PATH-SPACE RELATIONSHIPS

To enter Bahrul Ulum Mosque the ummah\(^3\) will have to go through the gate, then continue to walk on the path to find mihrab, the worship’s focal point, which is located inside the main hall. The entrance begins with a gate from the north side (Raya Serpong Street). From this gate, pedestrians and vehicle users start entering the mosque area. On the left of the main entrance, there is a parking lot for four-wheel vehicles that also connects with the path on the south side and the path of the east side (Figure 2). These paths give access to office and education facility.

There are three possible sequences that may be experienced by the ummah. The first one is the main access. Walking through it gives the ummah a chance to observe the minaret and the mosque's front part. The main access has two paths. Both paths are connected to walkways surrounding the plaza. The ummah will see the plaza welcoming while they are ambling through the walkways. From this position, the massive figure of the mosque will clearly be seen.

The different floor levels that gradually continue up to the main hall also show this sacrality impression. This vertical achievement is a form of application of axis mundi\(^4\). To produce a sacred impression that is felt when the ummah enters the courtyard. Moreover, the sequence from the plaza will give the ummah an experiential space in the walkways whose sides consist of repeated columns that seem to lead them to the main hall.

However, the mosque does not direct the ummah to enter straight to the main hall since it has a great view towards the outside. They are expected to circle the mosque plaza through the east side that has a serene lake view to run one of Islamic sacred ritual\(^5\): “the ablution”. The ummah usually does it in wudu room at south side of the main hall.

The first path does not only function as a circulation space but also gives impression as if the ummah must pass through a long path before worshipping. It seems situated as if they need to leave the profane life and to calm down before doing ablution and worship. From wudu room to the main hall, there is a wide terrace that acts as a transition space. The ummah must pass through it before entering the portal of the main hall.

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\(^3\) A Muslim community

\(^4\) Axis mundi refers to the imagined world center. Poles, trees, ladders, and other vertical elements to convey the essential concept of an axial center marking sacred place frequently symbolize it (Hoffman, 2010: 4).

\(^5\) Ritual in this context of this study refers to act to achieve a specific end. It usually has certain patterns and ceremonial movements and articulations that are carried out in a sacred context (Hoffman, 2010: 4)
The second path is shorter than the first one. It passes through the south side walkways, terrace, and the main hall. It gives opportunity to the ummah to directly enter the main hall. The ummah can pass through the terrace and does not need to encircle the plaza. This option is more useful for ummah who has previously performed ablution.
The third sequence begins from the parking lot to the office and education facility. In this sequence, the *ummah* face the plaza on east side of the mosque, pass through the walkways to the *wudu* room, and walks across the terrace before entering the main hall. They can also use the *wudu* room first before entering the main hall. This sequence option is practical for *ummah* who usually do activities at the office and education facility.
Generally, each path of Bahrul Ulum Mosque is linear. From the exploration, we notice that the important points of each sequence are entrance, vertical circulation space (such as stairs), walkways, terrace, wudu room, and main hall. The three paths do not only reach one point to another but also 'invites' the ummah to delve in every path. Every path subtly connects them to feel the divine, which is represented by the mihrab.
**D. ARCHETYPAL ELEMENTS**

Archetypal elements are symbols of a cosmic and unconscious link to realm of the sacred. The symbolic references to archetypes operate in many realms, but this study explores universal, religious (or mythic) and geometric ones. The universal refers to the ancient concept of four primary elements: earth, air, water, and fire.

The representation of earth in Bahrul Ulum Mosque takes many forms. These can be seen in the different levels on the site, starting from the low level of the vehicle circulation, going up to the court then the inner court of the site. The process of level differentiation is shown when the ummah starts to enter the main building, which starts from the corridor to the terrace, then enters the first floor to the second floor of the main hall. The process of level differentiation from outside to inside symbolizes hierarchy between the profane and the sacred. Furthermore, the representation of earth is also shown by the existence of various vegetation arranged around the building. Not only it functions as greenery, but the grass in the inner court also represents the existence of nature as human settlements that need to be maintained for providing life-giving renewal and increasing the healing process.

Representation of air (or sky) at the Bahrul Ulum Mosque is found at the aperture of the interior as well as the transition space between exterior and interior. These openings are found on the wall element, which is the circulation area for both visitors and air. In the interior of the mosque, the profane circulation is located along the north and south sides with openings such as doors and jalousies at the top as place for air circulation.

On the other hand, the lake and wudu room represents water element. With the existence of this water element, the ummah feels the difference of atmosphere from outside to inside the building. This lake serves to provide a transition from the profane to the sacred space for preparing worship. Not only in the mosque environment, but the water element’s appearance is also in the interior start from corridor, terrace, until the wudu room before entering the praying room. For Muslims, wudu is one of the requirements for praying. Nonetheless, the wudu room does not only serve as an area to perform it but also leads the ummah to prepare themselves to pray.

Meanwhile, the fire element is represented by the attraction of daylight and artificial lighting. The differences in lighting occur from the outside to the inside of the main hall. On the outside, the light is obtained excessively, while in the inside light is very minimal. It is designed to provide the ummah with a different atmosphere where they can feel solemnity presented by the minimal lighting. A quiet and different atmosphere also occurs when we enter the second floor of the praying room, where we feel the darkness from the stair before we are being greeted by maximum light from the jalousie.

Religious/mythic refers to the archetypes most commonly associated with cultural identification of religious beliefs, such as the existence of axial pillar. The axial pillar of the Bahrul Ulum Mosque first appears on the outside area. It is in a shape of minaret. Minaret serves as one of the elements of worship building, in addition to its function to signify a mosque in an environment. The minaret also serves for azan (a voice caller to remind Muslims the time for praying).

Entering the corridor area, we found regular and repetitive pillar arrangement, framed the corridor in human scale to the next journey to enter the terrace area. Pillars on the terrace also have regularity, but the space feels more spacious. When we come to the main hall, we will no longer find pillars. This wide-span room is welcoming the ummah. All of this arrangement gives them an opportunity to feel spatial experiences of a journey from a long corridor to a wider space. The divine representation in the praying room lies in the Ka’ba ornament above the mihrab. As we have mentioned before, this ornament guides the ummah to focus on the Qibla as the orientation in praying.
At Bahrul Ulum Mosque, the elements of archetypes can be found on its floors, walls, and roof. The building is clearly able to define space by presenting barriers of different levels, different floor patterns, walls, doors, and jalousie ornaments as a connection between the inside and outside. The wall creates a good distinction between the outside and the inside. Archetype is also seen in yard as a transition area between the outside and the inside. Meanwhile, the floor as the lower part of the building has a role to define the upper and bottom elements.

Bahrul Ulum Mosque has a rectangular form. It has a main hall without columns and has no dome on its roof. The mosque plan has 5 x 5 meter square module. This square module serves as the basis of development and forming unity as well as rhythm. It also supports linear ummah's activities. The square module makes it easy to show the direction of qibla while facilitating spatial division in the room. The repetition of this square geometry shapes the lobby area that frames the inner court as life-giving in the building site. This layout makes Bahrul Ulum Mosque look balanced and symmetrical.
The Bahrul Ulum Mosque has four elevations that are divided into the east, west, north, and south parts. The result of the geometry is rectangular and triangular on the roof. Repetition of structural elements (the column) is seen from the outside and the repetition of the non-structural elements of jalousie ornament is seen on the upper side of the main wall. In the main elevation (northern elevation), the main building becomes the "receiver" area. The main floor of the praying building is also raised. It indicates that praying room has higher hierarchy than the elevation of the court.

Element on the wall consists of columns, beams, walls, doors, windows, stairs, second floor, and jalousie at openings. In these elements, the obtained geometric elements are square, rectangular, and triangular.

The floor pattern geometry is formed by a rectangle of 10x20 cm on the corridor, 20x20 cm on the terrace, and the square of parquet in the main hall. Meanwhile, the geometry on the ceiling has a triangle configuration that forms a regular rectangular module. This ceiling element is equipped with hanging lamp ornaments placed on four spots within the worship building. These ornaments have squared and triangular geometry.

**Figure 8. Archetypal Elements in Bahrul Ulum Mosque: Geometric Symbols**

*Source: Authors' document, 2017*

**E. ATMOSPHERIC AMBIGUITIES**

Bahrul Ulum Mosque provides silence and noise experience via its building and environment. The ummah’s journey begins from the street next to the mosque area. This street has a high vehicle capacity so that its noise level is high as well. Soon after entering the mosque area, a lake and garden that can reduce the vehicle and visual noise will greet them.
At Bahrul Ulum Mosque, darkness and light are represented by the difference in lighting quality that begins from the outside to inside the building. On the outside, the daylight can be obtained optimally. As the ummah is entering the terrace, the light will be reduced. This light reduction will continue as they are going deeper into the building where lighting is extremely lacking. It is so if we are entering the second floor of the praying room, where minimal lighting is conditioned with the aperture situated on the north and south of the main building.

The emptiness and profusion are being represented by "sprawl and tight" elements. They are apparent on the outside where the maximum view of the mosque building is being provided. In a certain distance, the ummah will get experience of spatial sequence from "not ready" to "ready" for praying. These elements are also represented by the attraction of repetitive and rigid columns surrounding the inner court. The columns frame the emptiness and transform it into a "meaningful" space.

Humility and monumentality are indicated by contrast elements between the mosque building and the minaret. The mosque represents the "submission" to God, while the minaret represents the "divine power" itself. Likewise, as we are entering the main hall, we can clearly see that the vertical element of the wall represents monumentality, while the horizontal element of the floor and ceiling expresses humility.

Figure 9. Atmospheric Ambiguities in Bahrul Ulum Mosque
Source: Authors’ document, 2017
CONCLUSION
One way spatial sequence defines sacredness of loci sacri is by repeatedly giving contradictory symbols and creating ambiguous atmosphere. In the beginning, the mosque use level differentiation to tell the ummah that they are entering a holy place. They need to step stairs, as it is situated at higher level that symbolizes a more sacred area. Moreover, the plaza has a lower level than the walkways to show that earth is profane and the ummah is now on a higher level. It does not need pictures or icons, such as Arabic calligraphy, to tell the ummah about that. A tranquil spatial sequence that directs their ritual will allow them to feel the nuance.

On the other hand, there are archetypal elements that vividly underline the sacredness of loci sacri. Water elements in the mosque intensify ablution as a way to purify the ummah while lights that come through the geometrical jalousie represent the fire element. The mosque does not blatantly use icons of the elements nor dictate the ummah to interpret them as a manner of enhancing its sacredness.

To sum up, Bahrul Ulum Mosque’s spatial sequence defines its sacredness with level differentiation for preparation phase, the pillars’ repetition as a path to the holiest part, and unruffled arrangement of archetypal elements. It directs the ummah without overusing glaring (physical) icons. In this context, spatial sequence defines sacredness of loci sacri by emphasizing ambiguous nuance and subtle symbols.

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