Saussure Theory to Determine the Relationship between Sacred Space and Multicultural Community Node. Case Study: Gereja Ayam, Pasar Baru, Jakarta

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Abstract. Many aspects of the Pasar Baru community were influenced by the mixed ethnicity. Churches, Chinese temples, Sikh temples, and mosques, as well as architectural, gastronomic, and religious institutions, expanded across the Pasar Baru, resulting in a multicultural existence. The goal of this research is to see if there is a link between sacred space and community nodes as a signifier/signified of diversity in a multicultural community in order to enhance sustainable urban life. Also, based on the discovery of similar impacts, see if there is a strong recommendation to use the relationship between religious buildings and multicultural ethnic as a basis to construct a multicultural collaboration space. Pasar Baru and Geraja Ayam served as the case study. The semiotic theory of Ferdinand Saussure is employed as an analytical tool in this work. Gereja Ayam has become an icon of Pasar Baru district. Religious sites and community hubs have a strong association. While liveliness and livability can be improved, the (social) sustainability of tourism must be considered. The collaborative venue, which incorporates multicultural arts and designs, is proposed as a means of bringing those many traits to life and strengthening the concept of "Bhinneka Tunggal Ika" to generate income and employment.

1. Introduction
Pasar Baru Jakarta, in the past, was a Dutch-formed area that was created as a space to boost Batavia's economy, which was essential to support Dutch fortresses in Dutch East Indies[1]. They needed Chinese traders and farmers to support this development plan. Thus they forced the Chinese back to Batavia by giving them the authority to collect market tax and work in the trading field[1]. This authority made them settle in this new area, which most of the shops were their own. Pasar Baru then became one of the most developed areas in Batavia for decades. This rapid development attracted more other ethnic traders, such as Indians and locals, after the arrival of the Indian immigrant wave in the 1920s after World War I. The wave continued even more after India's independence in 1947, creating more Indian pockets in the Pasar Baru area, filled with shops, houses, and religious places. Ethnical plurality expanded after Indonesian independence as the Indonesian economy increased and Jakarta evolved as a metropolis city, followed by local traders immersion into the Pasar Baru area.

These multicultural ethnicities affected many aspects of the Pasar Baru community. Plurality life developed from architecture, culinary and religious establishments such as churches, Chinese temples, Sikh temples, and mosques spreading within the Pasar Baru area. These places are both spiritual and social apparatus essential for the residents [1]. One of those places is GPIB Pniel Church, also known as Gereja Ayam (Haantjes Kerk in Dutch or rooster church). It was named after the rooster sign on its
weather vane on top of its roof. This church is one of the oldest religious buildings in this area, as it was built in 1856 as one of few churches in Batavia [2]. This church is made for residents of multicultural ethnicities such as natives, Chinese and Indian [3], so it has a close relationship with the local environment. It is later taken as naming in several places around this area.

As part of the social and cultural aspect, the religious building remains an integral part of the urban space, functioning within historical urban [4]. Religious building as a center of religious events becomes a magnet for the people to celebrate the events. In contrast, it attracts much interest from its surroundings, such as culinary, entertainment, or even becoming a tourist attraction. A religious building is undoubtedly an essential determinant of the quality of public space through its architectural composition and urban planning, ensuring the readability of urban areas [4].

Some of the city's spatial structures are associated with sacred architectural objects, which determine the identity of the place and give the characteristics significant for the shared space [4]. From those researches, the relationship between the sacred space and community nodes has not been entirely clear. It is linked to the social, economic situation, and spatial structures, but the connection has not been stated. Our primary state of the art is to find the relationship between those sacred spaces and community nodes using Saussure's sign theory.

The main research question is whether the religious building may symbolize a multicultural mix and serve as community hubs in the area. This research aims to determine the relationship between sacred space and community node as a signifier/signified of the multicultural community's diversity to support sustainable urban living. It also uses the discovery of shared influences to determine whether it is a strong suggestion to use the relationship between religious buildings and multicultural ethnicities to create a multicultural collaborative space. Localized locations with open access to resources are referred to as collaborative spaces [5]. This research used Pasar Baru and the Geraja Ayam as the case study. It is useful to think about how space integrates people and what cooperation practices are sought in the space [5] [6].

Saussure's sign theory is implemented to analyze one of the most historic religious buildings in Pasar Baru to search for the connection between the sacred building and the multicultural community surrounding it.

![Figure 1. Sign element relationship. Interpretation from Saussure's theory of sign](image)

2. Materials and Methods

Ferdinand Saussure's theory of semiotics is taken as an analysis method in this research. According to Saussure, language is a sign system, a linguistic sign as a 'two-sided psychological entity" consisting of a concept and a sound image. The study of signs is characterized as semiotics [8]. The semiotic theory was used for the analytical studies to find the correlation between the sacred spaces and multicultural nodes surrounding the place.

The figure below is the first Saussure model of his language system. It represents the two sides within an ellipse which stands for the sign as a whole. An exemplification of the model shows the Latin word *arbor* as a sequence of sounds referring to the concept' tree.' The arrows indicate the "psychological association" between sound-image and concept. Their directions refer to speech production and reception processes within Saussure's speech circuit [3].
Figure 2. Saussure's model of the linguistic sign (left) with Saussure's exemplification. The image of a "tree illustrates the concept," the sound-image (image acoustique) by the Latin word arbor [9].

Saussure then introduced the new term signifier for the concept and signified for sound-image. The reason was that these two terms have the advantage of indicating the opposition that separates them from each other and from the whole of which they are parts. As shown in the figure below, a sign designates the whole, with the signified and the signifier as its two parts[8].

| SIGN | Signified (concept) | Signifier (sound - image) |

Figure 3. The three terms in Saussure's sign model [9]

The link between three elements of Signifier, Signified, and Sign as one interrelated system is examined using this semiotics theory. In architectural terminology, the relationship between a signifier, a physical form of the architecture, and a significance, a conceptual notion from that architecture and the actual function as the meaning provided, may be explained [7]. With the idea of meaning inherent in the object, the signified becomes a signifier, especially if the signifier's subject no longer exists [7]. It can be changed into a human who gives a sign in reality due to signifier actions and can be witnessed by another person using a signifier.

Figure 4. Method
As seen in the figure above, Saussure’s sign theory can be applied to this historic building. Gereja Ayam has become a signifier of the area. It becomes the area's identity that affected the naming of places surrounding it, triggered by the former multicultural community as its former congregation and then spreading this influence to the nearby area, unconsciously influencing the people and its community about the space meaning of the area.

3. Results and Discussion

3.1. Religious nodes in Pasar Baru
As a case study, Pasar Baru becomes a community living space that develops into a site with plural and multicultural characteristics in the spirit of liberalism that is forced to be developed that way due to the growth of Jakarta as a metropolis city [1]. This plurality has given space for many living aspects to grow; one of those is religion. Many religious establishments can be seen spread in this area, creating spaces as a social and religious instrument for those immigrants [1].

One of the oldest religious buildings in this area is GPIB Pniel Church, also known as Gereja Ayam (Haantjes Kerk in Dutch or rooster church). It was named after the rooster sign on its weather vane on top of its roof. This church is one of the oldest religious buildings in this area, as it was built in 1856 as one of few churches in Batavia at that time[2]. This church is made for residents of multicultural ethnicities such as natives, Chinese and Indian [3], so it has a close relationship with the local environment. It is later taken as naming in several places around this area.

Figure 6. religious building mapping around Pasar Baru [10]
3.2. **Theory of sign's application to religious nodes in Pasar Baru**

Adapted from Saussure's theory of sign [9], his theory of sign imposes the internal structure of human minds, a cognitive thought process to structure physical or abstract signs of the environments or surroundings, which allows them to function as human beings and communicate with each other.

![Diagram of Saussure's theory](image)

**Figure 7.** Saussure's theory interpretation to religious building in Pasar Baru

Saussure's theory was initiated from two primary components: signifier as a marker and signified as a concept. Signifier refers to something physical in material form; it exists and can be recognized by human senses. Signified relates to something more abstract, which literally and physically does not exist. Meanwhile, those components have a close relationship, referred to as the signification system [7].

In an architectural context, a signifier can be defined as the physical form of the environment related to the historic religious buildings in Pasar Baru. While signified is defined as a conceptual representation of the built environment in Pasar Baru, which is related to the religious community type of its building.

These two aspects of physical and conceptual contexts have a solid relationship to build a meaningful cognitive thought that architecturally is transformed as a significant space for the community. When this space is connected to the community, it creates something that can be identified as a signification related to the spatial meaning and related to the people. This system has the power to bond the community, whether through a physical system or normative system.

3.3. **Gereja Ayam**

Gereja Ayam, or GPIB Pniel Church, is located on Samanhudi street and Gereja Ayam street, Pasar Baru, the oldest church in the Pasar Baru area. It was started as a small chapel built in 1856 in Pintoe Besi street (now Gereja Ayam street), and its congregation is mostly natives, using Malay and Dutch language for its preaching.

![Old postcard of Haandtjes Kerk](image)

**Figure 8.** old postcard as it showed the former chapel of *Haandtjes Kerk* [2]
Since this chapel was the only worship place for the natives and surrounding community, it became overwhelmed, and this chapel then be restored as a bigger church in 1913 and finished in 1915, designed and built by an architect biro Cuijpers en Hulswit as it was written in the inscription inside this church [2]:

“Niewue Kerk: Gestiicht Door De Evangelische Gemeente To Batavia: Met Hulpe Van Enkele Milde Gevers: Dat Uwe Oogen Open Zijn, Nacht En Dag, Over Dit Huis (I Kon.8, vers 29): Gebouwd In De Jaren Onzes Heeren 1913-1915: Arch. ED. Cuypers & Hulswit Te Batavia - New Church: Founded By The Evangelical Congregation To Batavia: With Help From Some Mild Givers: That Thy Eyes Be Open, Night And Day, About This House (I Kings 8, verse 29): Built In The Years Of Our Lord 1913-1915: Arch. ED. Cuijpers & Hulswit In Batavia”

Figure 9. Left, old photo in the 1920s showed the new church of Haandtjes Kerk [2]. Right, Gereja Ayam in 2016’s [11]

It became well-known as Gereja Ayam (rooster church) or Haantjes Kerk in Dutch because of the rooster weathervane at the top of its tower.

3.4. Gereja Ayam as signifier

As a physical form in the architectural context in this area, a signifier can be referred to as Gereja Ayam. Since it has a historical background as one of the oldest religious buildings in Pasar Baru, it has become a landmark for the area. Its location, its architectural detail that represented the colonialism architectural influence, and its historical background.

This church is built as criticism for Batavia’s elite church nearby, Immanuel church in Gambir. Immanuel Church was only prohibited for Batavia’s elite and Netherlander, closed for the natives and traders, and used Dutch as its preaching language. Gereja Ayam or Haantjes Kerk was built for the more typical community, such as natives and Pasar Baru traders rather than the elites. It used both Malay and Dutch for its preachment [12].

It was started as a small chapel then later restored as a large church because its congregation has grown bigger. This church was a significant place because it became the only church that opened for the natives and traders in this surrounding community.

This church was designed by the architect firm Ed. Cuypers and M.J. Hulswit, a well-known dutch-indische architecture firm, influenced most of Batavia's city façade at that time. Their style was influenced mainly by Neo-Gothic and Art Nouveau style that has grown rapidly in Europe during the early 20th-century era [13], which adapted Indonesia's tropical climate condition into their design. This church has shown its eclectic design influences, which can be seen in the table below:
Table 1. Architectural element of Gereja Ayam.

| Element          | Figure | Analysis                                                                                                                                 |
|------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------|
| Building façade  | ![Figure](image1) [14] | The overall building adopted an indische art deco style that grew mainly during the early 20th century with a simple line. It has also adopted the symmetrical pattern of the European church, with twin symmetrical towers and side entrances. Its roof implemented a tropical climate with limas (pyramid style) shape with local clay roof tiles. |
| Weathervane      | ![Figure](image2) [15] | The rooster weathervane was very particular in this church, even in Batavia. It was adopted from weather vanes in European churches that became a must in catholic churches until the late 19th century. This weathervane cannot be seen in other churches during that time, so it became a trademark of this church and remains today. |
| Subsubsection     | ![Figure](image3) | This particular wheel window adopted Art Nouveau (Jugenstil) style, with seven stained glass wheels representing Rooster, Holy Bible, Candle, Boat, Anchor, Pigeon, and Lily flower associated with Christianity. |
| Window details    | ![Figure](image4) [3] | Its rounded window shape adapted a gothic style seen in most European churches during that century, including the effective use of colored stained glass for its window. |
| Interior space    | ![Figure](image5) [14] | The longitudinal space with a mezzanine floor to accommodate more congregation with chair arrangement surrounds the podium as it typical arrangement in Dutch-Indische era churches (this type of arrangement can also be seen in Immanuel church although it has a very different building shape) |
| Furniture         | ![Figure](image6) [15] | Some of the old furniture is remaining today, such as this wooden rattan chair. Although it has a simple shape adapting from the Indische art deco style that was grown at that time, it also adopted local materials such as teak wood and rattan weaving. The use of the material shows that although Dutch made this church, it still has the local touch to connect locals and make it approachable for them. |
According to the basic pattern of the European church during the late 18th century, the typical design of the church layout plan was a longitudinal space that was used for the procession and returned as a kinetic dynamism [17]. Gereja Ayam was also adopting this kind of longitudinal pattern for its layout. However, it differed from the Immanuel church exclusive to the Netherlands, a circular layout pattern.

As mentioned in the previous review, this church was built not as colonialism tools but as a worship space for natives and traders. During the Indische period, the Dutch Church Council (Kerkeraad in Dutch) was controlled tightly by the Indische government as the Dutch church must be used by the Netherlands. No natives and non-Netherlander were allowed to come [2]. As a tool to underline that borderline, that church only used the Dutch language, making it challenging for natives to understand its preaching. The first protestant church in Batavia, Immanuel church (before 1948 was known as Willemskerk, named after King Willem I as the initiator of this church), was also only designated for the Netherlander community, and it also used the Dutch language for their preaching. The protestant-Malay and other protestant congregations did not have a worship place as the government has limited their access to Dutch churches [2]. Therefore in 1856, the GIUZ (Genootschap van In-en Uitwendige Zending te Batavia - Society of Internal and External Mission in Batavia) tried to help to spread the Christian missionary to the larger community in Batavia with established a small chapel in Pintoe Besi street, now is known as Gereja Ayam street for Christian-natives and non-Netherlanders such as Tamils and Chinese [2]. This small chapel was expanded to a larger church for serving more congregations in 1915 and still serving the community until today.

Figure 10. Rooster weathervane above Gereja Ayam [11]

The rooster statue in the Gereja Ayam's weather vane has become an essential element in this signifier and signified Gereja Ayam's building context. In the early 6th century, Pope Gregory I called the cock the most suitable emblem of Christianity due to its association with St. Peter. During the reign of Pope Leo IV (847-855), a cock was mounted on the top of Old St. Peter's Basilica in Rome [18]. Later in the 9th century, Pope Nicholas I declared that all Catholic churches should mount the symbol of the cock on its dome or spire. This cock mounted statue became obligatory in all churches in Europe, and then the architect brought the cock symbol into this church. This rooster weathervane became unique because this symbol was only seen in this church, and the Haankertjes Kerk nickname has risen. It was later called Gereja Ayam in the Indonesian language. It remains that way, although its
official name is GPIB Pniel Church from 1953. Gereja Ayam's name unconsciously became a strong cognitive thought for this area.

As the historical background discussed above, the Gereja Ayam name became firmly attached to the community. Since Gereja Ayam became a landmark for that area, its name became a naming system, a signification system. Later it was officially used as a street name, and followed by the shops and places surroundings started to use the name as their place marker, as shown in this map below. Although some new churches are surrounding it, it has still become a landmark for this area.

![Map of Gereja Ayam location at Pasar Baru](image)

Figure 11. Map of Gereja Ayam location at Pasar Baru

This analysis shows that this church is a signifier of Batavia in Jakarta up until now. It becomes a signifier of the multi ethnics community that was grown in this area. Then it became a landmark. Even this area has many commercial places and other activities, but its influence remains until today. As a multicultural landmark, it has potential for this area to be developed as a collaborative space for the communities.

4. Conclusion

Gereja Ayam has become a Pasar Baru landmark and a symbol of the district. The community system is symbolized by a rooster weathervane and street naming and putting names. Sacred sites and community hubs are inextricably linked. The religious tower acts as a symbol of multiculturalism and a civic hub and functions as a gathering place for members of the same denomination.

The findings indicate the linkage between sacred space and multicultural community nodes. It was discovered that the multicultural community's concept created the sacred space and that the sacred space has served as a long-term symbol of the community. The religious structure serves as a symbol of multiculturalism. The building's association with different ethnicities resulted in a cognitive notion that eventually evolved into a significant area that was defined as a signifier.

It was strongly suggested that the theoretical concept of establishing a community node in Pasar Baru as a suitable location for a future project for local inhabitants and a tourist attraction be pursued. The collaborative venue, which incorporates multicultural arts and designs, is proposed to bring those many traits to life and strengthen the concept of "Bhinneka Tunggal Ika" in the future project to generate income and employment. While liveliness and livability can be improved, tourism's (social) sustainability must be considered [19].

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