



Influence of Religious Symbols on Community Perception and Architectural Aesthetics of Religious Buildings towards Multi-Religious IKN

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Abstract. In multi-religious areas, such as the government new plan of IKN, there is a need for easily accessible religious facilities building. However, each place of worship exhibits distinct architectural aesthetic aspects, often manifested through religious symbols. This study aims to investigate whether the aesthetics of religious architecture are derived from religious symbols and whether they influence the perceptions of religious adherents. The methodology employed in this research involves conducting a questionnaire distribution, data analysis, and correlation analysis using statistical methods. The questionnaire is disseminated to the populace of Surabaya as a case study through random distribution, limited to 87 residents of Surabaya with various cultural and religious backgrounds. The collected data will be analyzed and processed into diagrams to classify the people's perception regarding the architectural elements and its impact to the sustainability. The outcome depicts the Surabaya community's perception towards the symbolism of religion in their vicinity. The aspiration of this study is to serve as recommendations for future policymakers regarding the development of sustainable dan resilient religious architecture.

Keywords: Perception, Religious Buildings, Religious Symbols, Sustainable Architecture, IKN.

1 Introduction

IKN (*Ibu Kota Negara*) will become the capital center for the country. Moving a nation's capital city is a significant decision with profound political and infrastructural implications, offering a unique opportunity to establish a revalued national identity [1]. Capital city characterized by a rich multiculturalism, including diverse religious practices, like Surabaya, the demand for accessible religious facilities in IKN will be paramount to accommodate the diverse spiritual needs of its inhabitants. Generally, religious buildings are constructed at the center of the community's activities [2]. Each place of worship in these areas will typically exhibit distinct architectural aesthetics, often articulated through religious symbols unique to each faith [3]. Jokowi's ideology in developing Indonesia with modernity and unity in diversity as the prominent goal aims to enhance the nation's competitiveness [4]. To maintain energy security, economic security, cultural security, and a way to reduce conflict, it is necessary to adopt a multicultural education that takes into account regional ethics, customs, faith, and tolerance [5]. This holistic approach ensures that the architectural design of religious buildings not only meets aesthetic and spiritual needs but also fosters an environment of mutual respect and understanding among different faith communities.

Religious architecture has long been a subject of interest in both theological and architectural studies. It is commonly accepted that the aesthetic qualities of religious buildings are significantly influenced by the symbols and iconography associated with their respective faiths. These symbols, which may include crosses, domes, minarets, or other iconographic elements, do more than merely adorn these structures; they embody and convey profound spiritual meanings and narratives intrinsic to each religion. A symbol represents, either visually or conceptually, that which is unseen and invisible [6]. Religious symbols point beyond themselves to a deeper reality, participating in its power and making its meaning intelligible, thus transcending mere signs or images. Symbolism primarily derives from faith, which is directly connected to culture—a product of people [6]. Therefore, symbolism for any community or group of people is a direct expression of their beliefs, ideas, fears, and celebrations, which is often reflected in their living spaces and architectural designs [7]. Surabaya being one of the many melting pots of Indonesia where various people and cultures historically resides is the inspiration of this research to further study how the social culture perspective and tolerance that are truly affecting the spaces and internal image in communities of Indonesia regarding the religious symbols and how it affects how people think and feel.

Furthermore, this study will explore how these religious symbols are perceived among adherents of different faiths. How do followers of one religion perceive the symbols and architectural elements of another? Do these symbols foster a sense of respect and understanding, or do they contribute to feelings of division and exclusivity? Does Indonesia as a country of many religious backgrounds see religious symbols that can be united in a sense that design can analyze and unite the differences of how these symbols are perceived? By addressing these questions, the study aims to contribute to a deeper understanding of the role of religious symbols in multi-faith environments.

Ultimately, the findings from this research will not only shed light on the importance of religious symbols in architectural aesthetics but also provide valuable insights for architects and planners involved in designing multi-faith community centers. These insights can guide the creation of spaces that respect and reflect diverse religious traditions, fostering an environment of inclusivity and mutual respect.

2 Literature Review

Religious architecture has historically played a pivotal role in shaping the urban environment, serving as both a spiritual and physical cornerstone of city development. In the context of Kielce, Poland, the city's urban landscape has been significantly influenced by its sacred spaces. Initially, the first religious building constructed in Kielce was a church, around which the local populace gradually focused their activities, leading to the development and organization of the urban area. Today, religious buildings remain an integral part of Kielce's urban fabric, functioning seamlessly within the historical urban framework. For instance, the Church of St. Wojciech, with its surrounding square and old trees, provides a tranquil refuge from the modern city's hustle and bustle. This church, along with other religious structures, serves the local community and those seeking reflection, acting as a local landmark that defines public spaces within the city. The widely accessible urban spaces near the Cathedral Basilica of Najświętszej Marii Panny (NMP), combined with green areas like parks and squares, have been central to community gatherings and religious ceremonies for centuries. The medieval courtyard between the Basilica and the Palace of Bishops plays a crucial role in Kielce's urban composition. Recent modern renovations have restored valuable historical aspects of these spaces, emphasizing the prestige of sacred structures and their historical significance. The diversity of spatial elements enhances the cultural and historical value of Kielce, showcasing the city's evolution through different epochs and systemic changes.

The experience of Kielce underscores the profound impact of religious architecture on urban planning, demonstrating how sacred spaces can effectively shape urban layouts and foster community cohesion. This phenomenon is not unique to Kielce; it is a testament to the broader potential of religious architecture in urban development. Drawing parallels to the ambitious development of Ibu Kota Nusantara (IKN), Indonesia's new capital, religious architecture can similarly be employed to shape the emerging urban environment. By strategically situating places of worship within the city's master plan, urban designers can create focal points that foster community cohesion and cultural continuity. Such integration not only enhances the aesthetic and spiritual dimensions of the urban landscape but also promotes an efficient and harmonious urban layout. The experience of Kielce offers valuable insights into how the incorporation of religious architecture in IKN can serve as a foundational element, ensuring that the new city not only meets the functional demands of a modern metropolis but also resonates with deeper cultural and spiritual values. As demonstrated in Kielce, religious architecture can form strong internal structures within the urban fabric, defining public spaces and contributing to the city's overall identity and historical continuity.

3 Methods

The separation of religious buildings is a common occurrence, often leading to inefficiencies in the development of a new capital city. Therefore, a potential solution is to consolidate these buildings within a single area to enhance the efficiency of the capital city's construction. The methodology employed in this research involves conducting a questionnaire distribution and data analysis. The questionnaire, disseminated through an online platform by random sampling, acquiring 87 individuals who either reside in or have previously visited Surabaya with considerations of various religious background. This approach ensured broad and convenient access, allowing for a diverse sample of respondents. By gathering responses from individuals with firsthand experience in Surabaya, the research aims to capture a wide range of perspectives on the integration of religious symbols and architectural aesthetics in multi-faith environments.

The collected data will be systematically analyzed to identify patterns and insights into perceptions of religious symbols and architectural aesthetics in multi-faith environments. Quantitative responses will undergo statistical analysis to highlight key trends, making the data more accessible and interpretable. This methodological framework is designed to provide a comprehensive understanding of how religious symbols influence architectural aesthetics and interfaith perceptions in Surabaya. By analyzing user preferences for the implementation of this concept in the new capital city (IKN), the research will draw conclusions that could inform future urban planning and architectural designs. The findings aim to demonstrate the potential benefits of a consolidated

approach to religious building placement, thereby enhancing the overall efficiency and cohesion of the new capital city's development.

Table 1. Questionnaire list

Code	Questionnaire	Category
A1	Religious symbols in my religious community building are important to have.	Symbolizationn in religious community buildings
A2	I feel that religious buildings without religious symbols lack identity.	
A3	Religious symbols can enhance the aesthetics of religious community buildings.	
B1	I feel uncomfortable having symbols of other religions around me.	Interfaith Symbolism Preferences
B2	I feel uncomfortable having symbols of other religions near my place of worship.	
B3	There should not be any symbols of other religions in my home or the buildings where I work.	
C1	Do you agree with having three places of worship of different religions in the same area?	Religious building design idea
C2	Do you agree with having three places of worship of different religions in the same building?	

Table 2. Repondent's Religions

No	Religions	Frequency	Percentage
1	Islam	59	68%
2	Christian	11	13%
3	Catholic	8	9%
4	Hindu	6	7%
5	Buddha	1	1%
6	Other	2	2%
	Total	87	100%

4 Result and Discussion

Profile of Respondents. The profile of respondents for this study includes residents of Surabaya with diverse religious affiliations, reflecting the city's varied religious landscape. The sample encompasses adherents from different faiths, mirroring the average percentages of religious populations in Surabaya. This includes significant representation from Islam, Christianity, Hinduism, Buddhism, and other religions. The diversity of the respondents provides a comprehensive overview of the multi-religious context of Surabaya, ensuring that the study captures a broad spectrum of perspectives and experiences related to religious symbols and architectural aesthetics.

According to data from the Ministry of Home Affairs (Kemendagri), the population of Indonesia reached 277.75 million by the end of 2022. This represents an increase of 4.43 million people compared to the same period the previous year, when the population was 273.32 million. Of this total, 241.7 million Indonesians, or 87.02% of the population, practiced Islam by the end of the year. Christianity was followed by 20.65 million people, or 7.43% of the population. Catholicism was practiced by 8.5 million people, or 3.06%. Hinduism was adhered to by 4.69 million individuals, or 1.69%. Buddhism was followed by 2.02 million people, or 0.73%, and Confucianism by 74,899 individuals, or just 0.03%. Additionally, there were 117,412 people, or 0.04%, who followed other belief systems [8].

Table 3. Questionnaires on the preferences for religious building symbolism

Question	STS	STS	TS	TS	KS	KS	S	S	SS	SS	Total of Frequency	Mean
Islam												
A 1	0	0	4	6.78	11	18.64	23	38.98	21	35.59	59	4.03
A2	4	6.78	10	16.95	27	45.76	12	20.34	6	10.17	59	3.1
A3	0	0	5	8.47	15	25.42	22	37.29	17	28.81	59	3.86
Catholic												
A1	0	0	0	0	2	25	2	25	4	50	8	4.25
A2	1	12.5	0	0	2	25	2	25	3	37.5	8	3.75
A3	0	0	0	0	1	12.5	5	62.5	2	25	8	4.12
Christian												
A1	1	9.09	0	0	1	9.09	6	54.55	3	27.27	11	3.91
A2	1	9.09	1	9.09	2	18.18	4	36.36	3	27.27	11	3.64
A3	0	0	5	45.45	1	9.09	3	27.27	2	18.18	11	3.18
Hindu												
A 1	0	0	0	0	1	16.67	2	33.33	3	50	6	4.33

A2	0	0	0	0	2	33.33	2	33.33	2	33.33	6	4
A3	0	0	0	0	1	16.67	2	33.33	3	50	6	4.33
Buddha												
A 1	1	100	0	0	0	0	0	0	0	0	1	1
A2	0	0	1	100	0	0	0	0	0	0	1	2
A3	1	100	0	0	0	0	0	0	0	0	1	1
Other												
A 1	0	0	0	0	2	100	0	0	0	0	2	3
A2	1	50	0	0	1	50	0	0	0	0	2	2
A3	0	0	0	0	2	100	0	0	0	0	2	3
Total											87	

Religious Building Symbolism. To understand preferences regarding religious symbolism in places of worship, respondents were asked several questions. The questions were designed to explore various aspects of religious symbols and their impact on architectural aesthetics. For instance, question (A1) inquired whether the presence of religious symbols in community buildings is considered important. Question (A2) addressed whether respondents feel that religious buildings without religious symbols lack identity. Finally, question (A3) sought opinions on whether religious symbols enhance the aesthetics of community religious buildings.

From the data analysis, categorized into Strongly Disagree (SD), Disagree (D), Slightly Disagree (KD), Agree (A), and Strongly Agree (SA), the findings reveal distinct trends among different religious groups. Followers of Islam, Catholicism, Christianity, and Hinduism exhibit a similar tendency, with high average scores in the Agree (A) category for each statement. This indicates a general consensus among these groups regarding the positive impact of religious symbols on the aesthetics and identity of religious buildings. For instance, from question (A1), we found that followers of Islam, Catholicism, Christianity, and Hinduism believe that religious symbols in their community buildings are very important, whereas followers of other religions do not hold the same view.

Similarly, question (A2) revealed that respondents from Islam, Catholicism, Christianity, and Hinduism feel that religious buildings without religious symbols lack identity, while those from other religions do not share this sentiment. Question (A3) further supported this trend, indicating that religious symbols enhance the aesthetics of religious buildings for Islam, Hinduism, Catholicism, and Christianity. Conversely, respondents from other religions show a tendency toward Disagree (D) across the questions, suggesting differing

perspectives on the role of religious symbols in enhancing architectural aesthetics and identity.

Interfaith Symbolism Preferences. To understand the preferences of religious adherents regarding the presence of symbols from other faiths in their environment, respondents were asked a series of targeted questions. These questions aimed to gauge their comfort levels with interfaith symbolism in various contexts. Specifically, question (B1) asked whether respondents feel uncomfortable having religious symbols from other faiths around them. Question (B2) inquired about their discomfort with such symbols near their places of worship. Lastly, question (B3) addressed whether respondents believe that symbols from other religions should not be present in their homes or places of activity. These questions were designed to capture the nuances of how religious symbols from different faiths are perceived and their impact on personal and communal spaces.

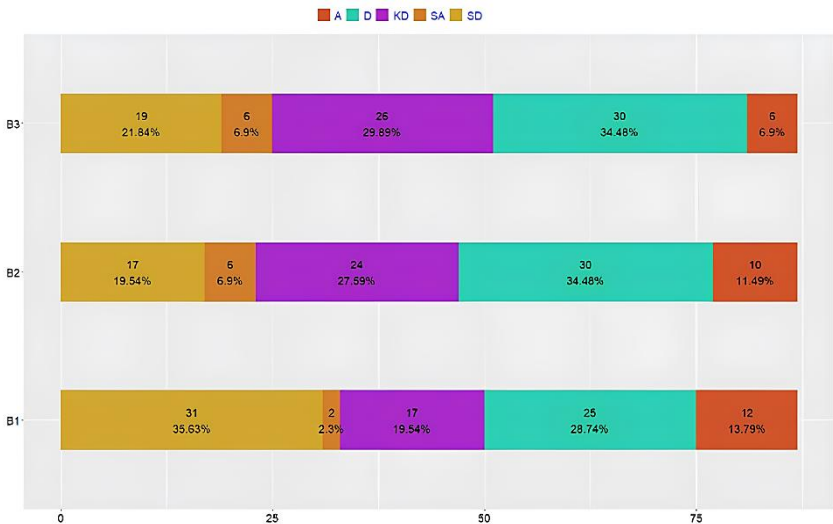


Fig 1. Percentage graphic of the interfaith symbolism preferences

Table 4. Questionnaires on the Interfaith Symbolism Preferences

Question	STS		TS		KS		S		SS		Total Frequency	of Mean
	STS	TS	TS	KS	KS	S	S	SS	SS			
B1	31	35.63	25	28.74	17	19.54	12	13.79	2	2.3	87	2.18
B2	17	19.54	30	34.48	24	27.59	10	11.49	6	6.9	87	2.52
B3	19	21.84	30	34.48	26	29.89	6	6.9	6	6.9	87	2.43



Fig 2. Abrahamic family house (left), House of one (right)

From the data analysis, categorized into Strongly Disagree (SD), Disagree (D), Slightly Disagree (KD), Agree (A), and Strongly Agree (SA), the following trends were observed. For question (B1), which asked whether respondents feel uncomfortable with the presence of religious symbols from other faiths around them, the average response was in the Disagree (D) category, with a mean score of 2.18. This indicates that, on average, respondents do not feel particularly uncomfortable with such symbols. Regarding question (B2), which inquired about discomfort with religious symbols from other faiths near their places of worship, the average response was also in the Disagree (D) category, with a mean score of 2.52. Similarly, for question (B3), which addressed whether religious symbols from other faiths should be excluded from their homes or places of activity, the average response was in the Disagree (D) category, with a mean score of 2.43. These findings suggest a general tendency among respondents to not feel strongly adverse to the presence of interfaith symbols in their personal and communal environments.

Religious Building Design Idea. To understand community preferences regarding the construction of religious community buildings, the precedent shown in Figure 2 was provided in the questionnaire. The first precedent is the Abrahamic Family House, which serves as an example of religious buildings situated within the same area. Located in Abu Dhabi, the Abrahamic Family House is a complex that brings together places of worship for the three Abrahamic religions—Islam, Christianity, and Judaism—within one integrated area, promoting interfaith dialogue and understanding. In this arrangement, the religious buildings are separated by religion but located within the same vicinity.

The second precedent is the House of One (Fig.2), an example of religious buildings constructed within a single structure. Located in Berlin, the House of One is designed to house a synagogue, a church, and a mosque under one roof. The aim of the House of One is to provide a shared space for worship that fosters harmony and mutual respect among the three major religions, integrating them

physically and functionally within one location. These two precedents illustrate different approaches to the integration of religious buildings, either within one area or within one building, and provide context for understanding how communities might perceive and choose various models of religious construction.

Table 5. Questionnaire on the religious building design idea

Questi on	STS		TS	TS		S		S		Total SS	of Mean Frequency	
	1	5	4	4.6	2	9	7	3	3			4
		1.				25.2	3	42.5	2	26.4		
C1	1	15	4	4.6	2	9	7	3	3	4	87	3.89
		9.		16.		28.7	2	25.2	1	20.6		
C2	8	2	14	09	5	4	2	9	8	9	87	3.32

From the data analysis (Table 5), categorized into Strongly Disagree (SD), Disagree (D), Slightly Agree (SA), Agree (A), and Strongly Agree (SA), the following trends were observed. For Question C1, which asked respondents if they agreed with the proposal of placing houses of worship in one area, as seen in the Abrahamic Family House precedent, the average response was 3.89, indicating general agreement with this approach. Conversely, for Question C2, which addressed the proposal of building houses of worship under one roof, as seen in the House of One precedent, the average response was 3.32, also indicating a level of agreement. These result show that the community agreed that buildings can be constructed within one area or a single building, creating effectiveness in urban development. This approach supports promoting a more cohesive and resource-efficient urban environment.

5 Conclusions

The research findings reveal that for followers of Islam, Christianity, Catholicism, and Hinduism, religious symbols play a significant role in community religious buildings and contribute to their aesthetic appeal. Additionally, the study indicates that the presence of symbols from other religions in their environment does not cause discomfort among these communities, showing a general acceptance and appreciation of religious symbols in enhancing the visual appeal of religious spaces while maintaining a respectful coexistence with symbols from other faiths. Furthermore, the idea of constructing religious buildings within the same area or within the same building is deemed acceptable by these communities. The development of religious buildings in the capital city of Ibu Kota Nusantara (IKN) can be more sustainable and efficient. By consolidating religious structures within shared areas or buildings, resources can be utilized more effectively, leading to more efficient urban development. This approach benefits urban planning by reducing land use and infrastructure requirements. Moreover, it fosters interfaith harmony while aligning with Sustainable Development Goal (SDG) 11, which aims to create sustainable cities and communities. This integrated strategy promotes a more cohesive and resource-efficient urban environment.

Furthermore, the placement of religious buildings or places of worship in urban areas needs to be determined with significant consideration. These places have a profound impact on urban spaces, serving as landmarks for community and cultural activities, and often becoming pivotal spaces for community engagement. Properly planned religious architecture can enhance the identity and functionality of urban spaces, marking important community and cultural sites within the city. This careful placement not only respects the spiritual significance of these sites but also integrates them into the urban fabric, enriching the overall urban experience and supporting the harmonious coexistence of diverse communities.

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