



## **ISLAMIC ARCHITECTURE: THE CORRELATION BETWEEN CULTURAL DIVERSITY AND MOSQUE ROOF TYPES IN PALEMBANG**

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### **ABSTRACT**

Cultural diversity influences different types of mosque roofs that can be seen even in neighboring districts. This paper examines the differences in mosque dome types in two areas that differ in terms of cultural diversity, namely the Ulu and Ilir areas of Palembang City. The Ulu area is known to have much lower cultural diversity than the Ilir area. The survey was conducted on 50 mosques located in Palembang City and spread across the two regions. We then categorized them into three roof coverings: dome, pyramid, and mixed. We also calculated a diversity index to assess social diversity in each region. Fisher's Exact test was then conducted to determine whether there were differences in dome types by region. It was found that round domes dominated the Ulu region, while pyramids and mixed domes dominated the Ilir region. The paper concludes that the cultural composition in the Ulu, which the Palembang Malay ethnic group dominates, encourages of using of the standard round dome. In contrast, the relatively high cultural diversity in the Ilir leads to the prominence of the identity of the elites who prioritize the pyramid dome and efforts to accommodate multiculturalism with the mixed dome. In particular, this article can encourage efforts to develop theories on architectural dynamics under the influence of cultural diversity in urban and rural areas.

### **Keywords:**

Cultural Diversity; Islamic Architecture; Mosque Roof; Multiculturalism; Palembang

### **1. INTRODUCTION**

Social diversity refers to the diversity of society in terms of various social indicators such as language, culture, religion, occupation, social status, and economic status [1]. Theoretically, social diversity has a dual effect on social harmony. In the short term, social diversity triggers conflicts due to the differences of each social group. However, in the long run, social diversity leads to harmony after each group understands each other and complements each other's needs [2]. Over time, a society with high social diversity will lead to rapid economic development and greater prosperity as people help each other.

However, a small minority of community members in highly socially diverse societies, the elite minority, will retain their identity. This elite minority transmits their symbolic capital across generations, thus maintaining their identity as a member of a diverse society [3]. As a result, in a developed region, several social elite groups will be observed, who maintain their old heritage and become part of the historicity of the region.

Based on the social diversity theory above, two forces stand out in a society with high social diversity. First, there is an elite group that maintains its identity so that it becomes part of the region's heritage treasures. Second, there are pluralist groups that build symbols of social diversity in the region. The emergence of this pluralist group is an integral part of the transition between conflict and harmony in the history of social diversity. This pluralist group will become a bridge between various social groups, which then dialectically form a more peaceful and constructive city dynamic.

Due to its flexible nature, Islamic architecture can reflect two forces in a socially heterogeneous society [4]. On the one hand, Islamic architecture will display the heritage of an elite minority. On the other hand, Islamic architecture can also be a platform for innovations that emphasize the value of plurality.

Contemporary literature emphasizes that specific components of Islamic architecture are chosen for aesthetic and cultural reasons [5]. Islamic architecture tries to accommodate various cultural meanings into its form so that it always provides a positive meaning from the perspective of any culture in which it stands. Therefore, Islamic architecture becomes a realistic historical interpretation grounded in its cultural, scientific, social, and political environment [6].

It is in line with Islamic teachings that strongly seek to protect diversity. Surah al Hujurat 49:13 confirms that Islam recognizes differences between people and encourages people to know and respect each other. In line with this, Surah Hud 11:118 also asserts that Islam recognizes and respects identity in forming human groups. Islamic teachings and architecture protect culture regarding human dignity, diversity appreciation, and knowledge dissemination [7].

The literature in the field of cultural transmission and diversity persistence highlights the evolution of culture and characterizes the conditions under which cultural diversity can be maintained. [3], [8], [9]. According to Bisin and Verdier [10], a critical factor for cultural diversity is the existence of an elite minority that transmits their symbolic capital across generations.

Indeed, religion itself can be said to be a component of culture [11]. However, the fact that two cultures can practice the same religion positions religion as an aspect that can promote cultural competence. Religion is a significant force shaping individual and social psychological processes in society. [12]. The relevance of religious values in cultural life determines how religion can be transmitted across generations and cultures [3]. Religious commonalities encourage productive social interactions in cross-cultural settings [8]. This is particularly important in the context of Islam (and other religions of the Big Gods), which is the foundation for the development of modern civilization [13]. For Islamic architecture, the mosque is a sacred building. While interiorly, the mosque has standards that cannot be ignored, exteriorly, it has great freedom to adapt to the community's social conditions. The roof is one of the most prominent parts of the mosque's exterior. Naturally, the roof is significant because it houses the entire mosque and is visible from afar, especially when the mosque and the observer are at different elevation.

In line with the assertion of cultural diversity in Islamic architecture, there will be variations in the form of domes based on the cultural makeup of where they are located. Several studies have been conducted to establish a typology of mosque roofs and domes. [14]–[16]. However, no studies have attempted to correlate the type of roof with the cultural diversity of the location. Therefore, this research can contribute not only to Islamic architectural literature but also to cross-cultural literature. Previous studies distinguish mosque roofs into three types: dome, non-dome, and mixed. The dome type is a mosque roof that originated in the Middle East, where Islam originated. However, since Islamic teachings do not require mosques to have domed roofs, there is freedom for people to use the non-domed type. The non-dome type is especially dominant in areas outside the Middle East. In Indonesia, the pyramid type is the most common non-dome roof type because it adapts the inverted boat shape that has become a characteristic of roof coverings in tropical Austronesian regions. Faced with two choices, whether to use a dome or pyramid roof, mosque architects can create a third option, a mixed roof. This mixed roof can be a dome over a pyramid or a pyramid over a dome. The mixed roof is a solution for the acceptance of Islam and the affirmation of local culture. It can also reflect social diversity as it emphasizes the adaptive nature of houses of worship. It can symbolize that Islam accepts diversity, that Islam does not kill local culture (or the original culture of a social group), or that Islam is open and flexible. It is in line with the opinion of Netto [17] that standard architectural solutions directed at certain groups in society will damage social diversity, so nonstandard architectural solutions are needed to maintain social diversity. These solutions integrate local wisdom and religion to overcome [18] or recognize [19] social diversity. In this context, such nonstandard architecture is non-dome or mixed-dome.

In line with the theoretical thinking above, the researcher hypothesizes that areas with high social diversity will have a high proportion of mosques with pyramid roofs and mosques with mixed roofs. Conversely, areas with low social diversity will have many mosques with dome roofs. The pyramid roof is a symbol of the elite minority, while the mixed roof is a symbol of pluralism. Dome roofs are symbolic of Islamic teachings, although not a mandatory requirement. The presence of dome roofs in homogeneous communities confirms that they follow the teachings of Islam. Islamic architecture has provided a distinct flavor and architectural response to the sociocultural and physical environment in many countries. Islamic architecture in Indonesia has taken root and assimilated with older traditional and Hindu Buddhist architecture. It is reflected in mosques, palaces of kings, and tombstones [20]. This acculturation created a distinctive flavor of Islamic architecture, along with the role of Islam as a democratic religion that does not recognize social status and degrees and ranks [4].

Palembang City is Indonesia's oldest city, established in the 7th century AD. There have been many studies on Islamic architecture in Palembang City [21]–[23]. These studies show various typologies of Islamic architecture in Palembang City but have not explained the relationship of these typologies with the unique cultural makeup of Palembang City. This research examines the mosque dome as a significant part of the mosque's exterior concerning the influence of cultural diversity in Palembang City. The results of this study will contribute to understanding the dynamics related to architecture and cultural diversity in a dynamic urban society and its implications for tourism development and preservation of Islamic culture in Palembang City.

## 2. METHODS

The roofs of mosques in Palembang City, Indonesia, and their classification into various categories are the scope of this research. This research uses a descriptive approach to collect data on mosque roof types using photography. The roofs were then classified based on geometry. The number of similar types in each sub-district was counted so that each sub-district has diverse domes. Based on this consideration, domes were classified into three types: dome, *limasan* (pyramid), and mixed. This study used a sample of 50 mosques from 1,366 mosques in Palembang City in accordance with Google's rating capacity. In addition, the number of 50 samples is sufficient for simple statistical tests with one or two variables, such as Fisher's Exact Test and Chi-Square Test. After the sample was obtained, it was mapped by region, and it was found that 11 mosques were in the Ulu area and 39 were in the Ilir area. This number is relatively proportional to the population in the Ilir area, which is relatively denser than the Ulu area. In addition, administratively, there are 13 sub-districts in the Ilir area, while the Ulu area only has five sub-districts.

Meanwhile, the author used data on the number of residents based on the religion practiced in each sub-district for cultural diversity. Although religion does not imply ethnicity, this is relatively the same in Indonesia. Islam is generally practiced by Javanese and Malay ethnic groups, Protestantism and Catholicism by Batak and Dayak as well as Papuan and NTT ethnic groups, Hinduism by Balinese ethnic groups, and Buddhism by Chinese ethnic groups. The point is that there is a correlation between religious diversity and cultural diversity. No statistical data on cultural diversity in Palembang City is available. The absence of this data is due to the Indonesian Government's policy of trying to formalize ethnic identity based on national unity. The classification provided by BPS Palembang consists of five religions: Islam, Protestantism, Catholicism, Hinduism, and Buddhism. Diversity per region was calculated using the Shannon-Wiener Index [24], i.e.:

$$H' = - \sum_{i=1}^s p_i \ln p_i$$

Where  $H'$  is the diversity index, and  $p_i$  is the percentage of the number of individuals in one species to the total individuals in the population. For analysis, the author divides Palembang into two regions: the Ulu region and the Ilir region. This division is a historical division that has been in place since the abolition of the Palembang Sultanate by the Dutch in 1823. This division system was later abolished when Indonesia was established in 1945, but the two regions' sociocultural characteristics remain today. The Ilir region is generally considered more advanced and developed than the Ulu region. The Ilir region was considered more advanced in the past because it was the center of the Sultanate's government, while the Ulu region was seen as a conquered area [25]. The author then conducted the Fisher's Exact Test to determine the difference between the dome types of mosques in the Ulu and Ilir areas. The chi-square test was then used to detect the location of the difference if the Fisher's Exact Test found a fundamental difference between the Ulu and Ilir areas of the data. Chi-square analysis can perform this function if done manually [26].

## 3. RESULT AND DISCUSSION

### A. DISCUSSION

This study aims to identify the impact of cultural diversity on mosque dome types in Palembang City. Table 1 shows that the Ilir area has higher cultural diversity than the Ulu area. The diversity index for the Ulu area is 0.1068, while for the Ilir area, it reaches 0.4106. Shannon-Wiener states that a diversity index of  $< 1.0$  is low,  $1.0-3.0$  is medium, and  $> 3.0$  is high. It can be concluded that the diversity in both Ulu and Ilir is low. However, the diversity value of the Ilir area is four times higher than the Ulu area, indicating a significant difference between the diversity of the Ulu and Ilir areas.

Table 1. Calculation of cultural diversity of Palembang City [processed from BPS Kota Palembang (2019)]

Regency	Reg	Islam	Protestant	Catholic	Hindu	Buddha	Total
Ilir Barat II	Ilir	69.722	992	806	25	2.877	74.423
Gandus	Ilir	67.304	189	165	3	117	67.778
Seberang Ulu I	Ulu	184.811	690	501	75	2.433	188.510
Kertapati	Ulu	98.316	359	112	28	561	99.376
Seberang Ulu II	Ulu	100.631	688	341	31	839	102.530
Plaju	Ulu	94.103	728	380	47	692	95.950
Ilir Barat I	Ilir	137.109	2.220	1.555	110	6.567	147.561
Bukit Kecil	Ilir	46.676	836	671	62	1.578	49.823
Ilir Timur I	Ilir	60.381	4.686	5.934	106	17.229	88.330
Kemuning	Ilir	84.767	2.337	1.304	17	5.042	93.467
Ilir Timur II	Ilir	170.086	5.257	3.811	131	11.518	190.803
Kalidoni	Ilir	114.790	3.086	1.652	63	3.081	122.672
Sako	Ilir	86.291	3.860	2.117	72	2.764	95.104
Sematang Borang	Ilir	36.104	2.186	999	6	207	39.502
Sukarami	Ilir	145.383	4.812	2.556	112	3.130	155.993
Alang-Alang Lebar	Ilir	88.702	2.788	945	77	4.063	96.575
<b>Total</b>	<b>Ulu</b>	<b>477.861</b>	<b>2.465</b>	<b>1.334</b>	<b>181</b>	<b>4.525</b>	<b>486.360</b>
	<b>Ilir</b>	<b>1.107.315</b>	<b>33.249</b>	<b>22.515</b>	<b>784</b>	<b>58.173</b>	<b>1.222.030</b>
<b>Percentage</b>	<b>Ulu</b>	<b>98,25%</b>	<b>0,51%</b>	<b>0,27%</b>	<b>0,04%</b>	<b>0,93%</b>	
	<b>Ilir</b>	<b>90,61%</b>	<b>2,72%</b>	<b>1,84%</b>	<b>0,06%</b>	<b>4,76%</b>	
<b>Diversity index</b>	<b>Ulu</b>	<b>0,1068</b>					
	<b>Ilir</b>	<b>0,4106</b>					

The types of mosque domes from the research are shown in Table 2, Table 3, and Figure 1 below. It can be seen that round masjid domes dominate mosques in the Ulu area, while the Ilir area is the opposite, dominated by pyramid-shaped domes and combinations. The round dome type can be divided into ½ dome, ¾ dome, onion, and oval. The pyramid dome type is divided into the rectangular pyramid type, the octagonal pyramid, and the tajug, a typical Southeast Asian tiered roof from the 15th century [27]. The combination type is the shape of an octagonal pyramid with the pointed top replaced by a dome.

Table 2. List of mosques surveyed in this study

Name	Roof	Location	Name	Roof	Location
1 Al Falah	Combination	Ilir Timur I	26 Dharul Hijrah	Pyramid	Ilir Timur II
2 Al Hanif	Pyramid	Sako	27 Habibaturrahman	Dome	Plaju
3 Al Hikmah	Pyramid	Ilir Timur II	28 Hamamatussalam	Dome	Ilir Timur I
4 Al Ikhlas	Pyramid	Sako	29 Jami' Adha	Dome	Sako
5 Al Ikhlas	Dome	Ilir Timur II	30 Jami' Al Aqobah III	Pyramid	Sako
6 Al Ikhlas	Dome	Sako	31 Jami' Al-Itihadiyah	Combination	Ilir Timur I
7 Al Mu'awwanah	Combination	Ilir Timur I	32 Jami' Amalia	Dome	Ilir Barat II
8 Al Mukhlisin	Pyramid	Sako	33 Jami' Istiqlal	Combination	Sako
9 Al Munawaroh	Combination	Kalidoni	34 Jami' Plaju	Dome	Plaju
10 Al Muntaha	Combination	Sako	35 Kauman	Dome	Plaju
11 Al Mustaqim	Dome	Plaju	36 Masjid Baitullah	Dome	Ilir Barat I
12 Al-Balaagh	Pyramid	Ilir Timur II	37 Masjid Besar Al-Ikhlas	Combination	Sako
13 Ar Ruhana	Pyramid	Plaju	38 Masjid Raya Taqwa	Dome	Ilir Barat II
14 As-Sayyidah	Dome	Ilir Timur I	39 Muhajirin	Combination	Sako
15 Atqo	Pyramid	Kemuning	40 Nur Iman	Pyramid	Gandus
16 Baiturrahman	Combination	Sako	41 Nur Izzah	Pyramid	Plaju
17 Baiturrahman	Combination	Sako	42 Nuraidy	Pyramid	Sako
18 Chengho	Dome	Seberang Ulu I	43 Nurul Amal	Pyramid	Ilir Timur II
19 Darul Askar	Pyramid	Sukarami	44 Nurul Fitriyan	Pyramid	Kemuning
20 Darul Mukminin	Combination	Sako	45 Nurul Iman	Combination	Sako
21 Darul Muttaqien	Combination	Ilir Timur II	46 Nurul Insan	Pyramid	Kemuning
22 Darul Quddus	Combination	Kemuning	47 Nurul Islam	Combination	Plaju
23 Darul Ridhwan	Dome	Plaju	48 Nurussalam	Combination	Ilir Barat I
24 Darussaid	Combination	Ilir Timur II	49 Taqwa	Pyramid	Sako
25 Darussalam	Dome	Plaju	50 Yardan Fawwaz	Dome	Plaju

Table 3. Types of mosque domes in regency

Regency	Dome	Pyramid	Mixed	Total
Ilir Barat II	2	0	0	2
Gandus	0	1	0	1
Seberang Ulu I	1	0	0	1
Kertapati	0	0	0	0
Seberang Ulu II	0	0	0	0
Plaju	7	2	1	10
Ilir Barat I	1	0	1	2
Bukit Kecil	0	0	0	0
Ilir Timur I	2	0	3	5
Kemuning	0	3	1	4
Ilir Timur II	1	4	2	7
Kalidoni	0	0	1	1
Sako	2	6	8	15
Sematang Borang	0	0	0	0
Sukarami	0	1	0	1
Alang-Alang Lebar	0	0	0	0
<b>Total Ulu</b>	<b>8</b>	<b>2</b>	<b>1</b>	<b>11</b>
<b>Total Ilir</b>	<b>8</b>	<b>15</b>	<b>16</b>	<b>39</b>

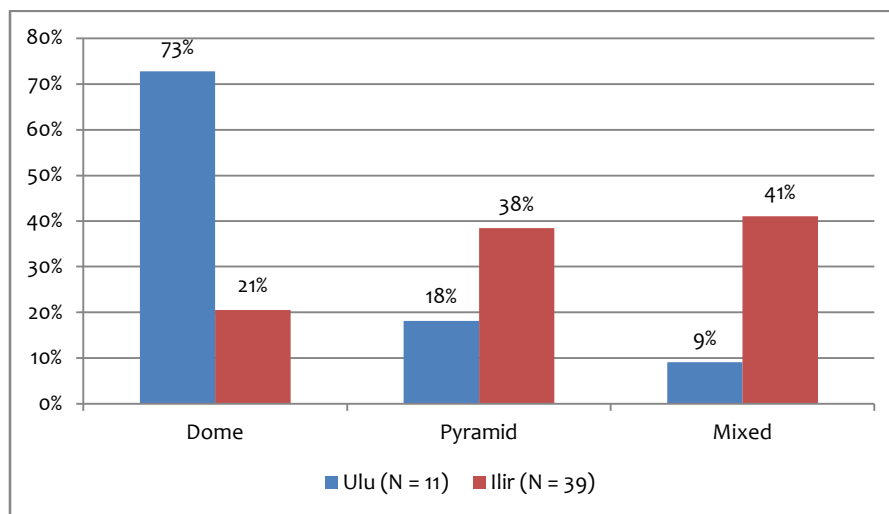


Figure 1. Distribution of roof sample by percentage

Tables 4 and 5 depict the representative examples of each mosque dome for each area in Palembang City. It can be seen that the Ulu region does not have mosque domes that have oval and octagonal types. On the other hand, the Ilir area has no mosque domes of the  $\frac{3}{4}$  dome type. There is only one mosque in Palembang City with a dome with  $\frac{3}{4}$  sphere type, namely Darul Ridhwan mosque in Plaju, Ulu region. The mosque dome used is a  $\frac{3}{4}$  circle dome. If we look at the round shape of the dome, it is only  $\frac{3}{4}$  of a ball, almost a full circle.

Similarly, there is only one mosque in Palembang City with an octagonal roof, namely Jami' Al-Aqobah Mosque in Sako, Ulu area. The mosque roof is octagonal with an additional rectangular roof that cones to the top. There are two mosques with oval domes in Palembang City, Jami' Amalia Mosque and Al Ikhlas Mosque. However, both are in the Ilir area, namely Ilir Barat II and Ilir Timur II Regency.

Table 4. Visual representation of mosque dome types in the Ulu Region














½ sphere	¾ sphere
 <p>Masjid al Islam Muhammad Cheng Ho, Seberang Ulu I</p>	 <p>Masjid Darul Ridhwan, Plaju</p>
<p>Ogive</p>  <p>Masjid Al Mustakim, Plaju</p>	<p>Oval</p> <p>No representative</p>
<p>Pyramid</p>  <p>Masjid Nur Izzah, Plaju</p>	<p>Octagonal</p> <p>No representative</p>
<p>Tajug</p>  <p>Masjid Ar Ruhana, Plaju</p>	<p>Combination</p>  <p>Masjid Nurul Islam, Plaju</p>

Table 5. Visual representation of mosque dome types in the Ilir Region

½ sphere	¾ sphere
 <p>Masjid Raya Taqwa, Ilir Barat II</p>	<p>No representative</p>
<p>Ogive</p>  <p>Masjid Al-Ikhlas, Sako</p>	<p>Oval</p>  <p>Masji Jami' Amalia, Ilir Barat II</p>
<p>Pyramid</p>  <p>Masjid Nuraidy, Sako</p>	<p>Octagonal</p>  <p>Masjid Jami' Al-Aqobah, Sako</p>
<p>Tajug</p>  <p>Masjid Nurul Fitriyan, Kemuning</p>	<p>Combination</p>  <p>Masjid Al Muntaha, Sako</p>

A cluster analysis of the roof sub-types in the two areas indicates that all roof sub-types in the Ulu area are more similar in number than the roof sub-types in the Ilir area. This comparison can be seen in Figure 2, which uses the Eukclidean distance to represent the degree of similarity/ dissimilarity. The scale at the top of the dendrogram is the combined cluster distance rescaled in the range 0-25, which is proportional to the number of each sub-type. The more distinct the two sub-types are, the further they are from the branching center. As shown in Figure 2, the roof sub-types in the Ulu region are all within one branch, while the roof sub-types in the Ilir region are more spread out over three branches. Therefore, the analysis shows that the diversity of the number of roof sub-types of dome, pyramid, and mixed types is higher in the Ilir area than in the Ulu area.

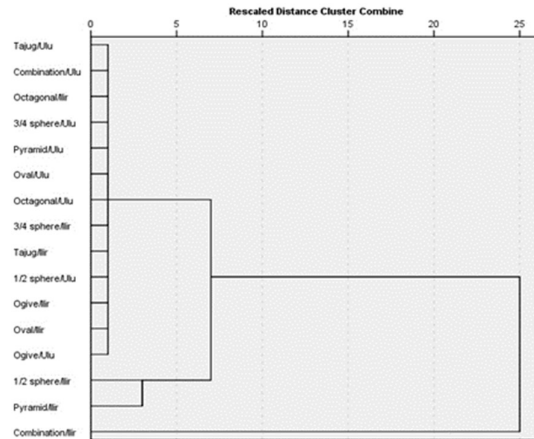


Figure 2. Dendrogram comparing the number of roof sub-types in Ulu and Ilir areas

The Fisher Exact test was conducted. Fisher's exact test was chosen instead of chi-square because 50% of the cells had an expected count of less than 5, ideally only a maximum of 20%. The Fisher's exact test results are shown in Table 6 below. It can be seen that the Fisher's Exact Test results are significant, with  $p=0.006 < 0.01$ . This shows a significant difference between the dome types of mosques in the Ulu and Ilir areas.

Table 6. Fisher's Exact Test Results

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	10.921 <sup>a</sup>	2	.004	.005
Likelihood Ratio	10.589	2	.005	.016
Fisher's Exact Test	9.593			.006
N of Valid Cases	50			

a. 3 cells (50.0%) have an expected count of less than 5. The minimum expected count is 3.52.

The author then examined the real differences. The author conducted a manual chi-square analysis to compare observed and expected values. The observed value is the data's direct value, while the expected value is the product of the row total value and column total value divided by the overall total value. The expected value is only compared to the observed value if the column chi-square value is  $> 1.00$ , indicating that the difference is significant. The results of the chi-square analysis are presented in Table 7.

Table 7. Chi-Square test results

	Observed		Total	Expected Value		Chi-Square	
	Ulu	Ilir		Ulu	Ilir	Ulu	Ilir
Dome	8	8	16	3.52	12.48	5.70	1.61
Pyramid	2	15	17	3.74	13.26	0.81	0.23
Combination	1	16	17	3.74	13.26	2.01	0.57
Total	11	39	50				

The Chi-Square test results show a significant difference between the ulu dome, ilir dome, and ulu combination cells. The chi square for limasan ulu, limasan ilir, and combination ilir is less than 1 (i.e. 0.81, 0.23, and 0.57), indicating that the differences in these cells are insignificant. Meanwhile, the chi-squares for the ulu

dome, ilir dome, and ulu combination cells are all greater than 1 (i.e., 5.70, 1.61, and 2.01), indicating a significant difference in these cells compared to the chance condition. The expected number of mosques with domes in the Ulu region is 3.52 (rounded to 4). However, in reality, there are eight dome mosques in the Ulu region, indicating that the number of dome mosques in the Ulu region exceeds the expectation if the value appeared by chance. Similarly, the number of mosques with dome roofs in the Ilir region was expected to be 12. However, only eight were found, indicating that the number of dome-roof mosques in the Ilir region is lower than expected. Overall, this confirms that one or more factors are at play, resulting in a higher-than-expected number of mosques with dome roofs in the Ulu region, a lower-than-expected number in the Ilir region, and a lower-than-expected number of mosques with combination roofs in the Ulu region. Concerning the much higher diversity index in the Ilir area than in the Ulu area, the author suspects that at least one of these factors is cultural diversity.

## B. RESULT

The purpose of the analysis results presented in the previous section is to provide a sufficient overview to see the differences in mosque dome types based on the diversity of the surrounding community.

First, the homogeneous Ulu community does not seem to place much importance on variations in mosque domes because identity is not prioritized. The community is still collective and less intensely segmented than in Ilir. The mosque is entirely a place of worship; anyone can pray anywhere without caring too much about the exterior architecture of the mosque. This area is a peri-urban area for Palembang City, where houses are still relatively uniform, trees are very lush, and social life is still rural. Simplicity is prominent and part of people's daily lives.

Second, the Ilir community is more heterogeneous, and the diversity of mosque architecture is noticeable from place to place. The community has become more segmented with a mixed ethnic distribution pattern. In this society, the mosque identity has become critical, and the traditional round-domed types have been abandoned in favor of more mixed and traditional types. As a result, on the one hand, there is a revivalist group that seeks to return to the original wooden mosque model. On the other hand, some pluralists seek to combine traditional architecture with more flexible architecture while emphasizing the fusion of the particular identities of local communities and Islam globally.

Finally, the existence of a traditional domed mosque can be interpreted as the existence of an elite group in society that seeks to maintain tradition [10]. The Palembang Sultanate Mosque is pyramid-domed. This elite group maintains the pyramid mosque type in the Ilir region, so this type remains. Meanwhile, the dome mosque was not promoted in the Ilir area because it reflected traditionalism but had not reached the elite stage. It is traditional because it is cheap, while the pyramid mosques, although traditional, are elite because wood is now much more expensive than in the past.

An important aspect is that the mosque is commonly seen as a symbol of Palembang's multiculturalism, and the Cheng Ho mosque is located in the Ulu area (Figure 1, top left). The Cheng Ho mosque is round-domed but uses Chinese architecture. After all, the dome architecture has to be maintained because the body of the mosque itself has been filled with Chinese architectural characteristics that seem identical to the Tri Dharma teachings (Buddhism, Confucianism, Taoism), which can be said to be exclusively Chinese. Although the Chinese community itself is generally focused on the Ilir area, they can view the Ilir area as a leisure and ritual area. In the past, the Chinese community mostly settled in the Ulu area. [28]. They initially lived in raft houses and then were allowed by the Dutch to live on the mainland of Palembang in the Ulu area. Subsequently, many then moved and settled in the Ilir area [29].

Another unique aspect of the Ulu area is an Arab village. Al Munawwar Arab Village is the oldest Arab descent in Palembang City. This community continues to exist and is concentrated in 7 Ulu, 12 Ulu, 13 Ulu, and 14 Ulu [30]. We might expect that their mosques retain a dome roof. Nevertheless, Musholla Al Munawwar is a mosque with a pyramid roof. They adapted to local materials and built a mosque that increased the diversity of mosques in the Ulu area.

In this case, the interaction between cultural diversity and mosque roof type in the Ulu and Ilir regions becomes more complex. Both areas have their cultural diversity. The Ilir area is diverse regarding religion and culture with an even distribution. This is manifested in the diverse mosque domes with a preference for traditional elite domes and multicultural mixed domes. The Ulu area is ethnically diverse, with one primary ethnicity (Palembang Malay and its tribe members) and two enclave ethnicities (Chinese and Arab). The manifestation of this diversity is the homogenization of domes, where the spherical dome is dominant over other dome forms.

In this case, we can conclude that heterogenization in the Ilir area leads to elite symbols and multicultural symbols, while homogenization in the Ulu area leads to egalitarian symbols. Of course, aesthetic factors need



to be considered here [5]. The aesthetics of the Ilir mosques are more prominent because they have more diverse buildings, like a growing urban area. This is where diversity is intertwined with the community's economy [31].

Another relevant aspect is the Ampera bridge that connects the Iliran and Uluan areas of Palembang City. The Iliran and Uluan areas are separated by the Musi River, which is 250-500 meters wide. This river causes two different cultural identities in vernacular architecture [32]. The Iliran and Uluan dichotomy dates back to the Sultanate and is embedded in the cultural heritage on both sides of the river [25]. This is still preserved today in the name of tourism so that the Ulu area is seen more as an area of leisure and rest while the Ilir area is an area of work and activity [33]. As a result, we can see that the Ulu area is an area that celebrates homogenization rather than brightly lit and vibrant urban heterogeneity. The Ulu area becomes a site for the practical and discursive production of cultural diversity based on the particularity of rural imagery that differs from the super-diverse Ilir experience [34]. This is certainly realized and preserved in the buildings in the Ulu area. Both are multicultural but have different architectural manifestations.

In light of the above discussion, theoretical implications can be drawn. Urban cultural diversity and rural homogeneity result in a relationship of interdependence [35]. As a result, architectural diversity in urban areas and low architectural diversity in rural areas should be viewed as complementary. Each serves the needs of the other. The Iliran can worship in their proud mosques because of their uniqueness and begin to contemplate more universality in the homogeneous mosques of the Ulu, allowing them to gain more from the spiritual aspect of religion.

#### 4. CONCLUSION

This research was conducted to raise awareness and understand the types of mosque domes built in Palembang City and the diversity of the surrounding community. Categorization and data analysis showed that the Ilir area has higher cultural diversity than the Ulu area. In line with this, the Ilir area also has a higher diversity of domes than the Ulu area. Specifically, the Ulu area has far more round domes than it should; on the other hand, there are fewer combination domes. The Ilir area has fewer round domes than it should.

The round dome is not native to Indonesia, as it originated in the Middle East, where round domes are made using short materials. Domes native to Indonesia and the Southeast Asian region are generally pyramid-shaped as they can be made with long timbers that are widely available in the tropics. However, the round dome has been the standard for mosque construction in Indonesia since modern times when the round shape can be achieved using flexible materials. On the other hand, pyramid-domed mosques are increasingly rare due to the scarcity of wood. The finding of many round domes in the relatively monoculture area of the Ulu region suggests that the people of the Ulu region have had enough of using modern materials without the need to accommodate cultural diversity.

On the other hand, the lack of round domes in the Ilir area shows that the spirit of identity and multiculturalism is growing. In these multicultural societies, the identity of the mosque has become necessary, and architects have started building unique and distinctive mosques despite the cost. Hence, we observe a trend away from round domes towards the trend of using pyramids or combination domes. If the Ilir region is not as diverse as the Ulu region, we can expect that round domes will also dominate the Ilir region. It can be concluded that Islamic architecture is very open to diverse cultures. This shows the importance of cultural diversity in the context of Islamic architecture and future development in mosque architecture. Further research in other regions of Indonesia may provide a bigger picture of the influence of diversity on dome shape in Indonesia.

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