The influence of 19th century Dutch Colonial Orientalism in spreading *Kubah* (Islamic Dome) and Middle-Eastern architectural styles for mosques in Sumatra

Kemas Ridwan Kurniawan\(^a\) and Ratu Arum Kusumawardhani\(^b\)

*Department of Architecture, Faculty of Engineering, Universitas Indonesia, Kampus UI Depok, 16424, Indonesia*

\(^a\)kemas.ridwan@gmail.com \(^b\)arum_q@yahoo.com

This paper researches the possible representation of Orientalism and the spread of Middle Eastern inspired architecture in Indonesia, particularly in Dutch colonial practices in the 19th-century. It challenges the dominant opinion of the people that the Middle Eastern merchants in the East Indies were the only ones that introduced the use of *kubah* (dome) shape to mosque architecture in Indonesia. Consequently, this paper has two objectives: firstly, by looking at the historical relationship between religious architecture and colonial politics, especially in the construction of the Baiturrahman Mosque in Aceh and secondly, by considering Orientalism (besides those beliefs existing in Moslem communities) to be one of important intellectual agencies for mixing architectural cultural symbols. The socio-political narrative is analyzed in the context of an Indonesian-Islamic building typology and the relationship between space, people, power, and time. The research itself is based on literature searches specifically related to colonialism and orientalism, along with archive studies and field investigations, including interviews with related historical experts. In order to replace ‘non-architectural’ traditional roofs, which were considered as representing a less-developed civilization, Dutch political interests were instrumental in bringing the universally-styled Middle Eastern architectural elements into mosque architecture of the Netherland Indies. This political motivation ultimately led to the spread of *kubah* (dome) as an architectonic element in Indonesian mosque architecture throughout the archipelago, specifically in Sumatra.

**Keywords:** colonialism, kubah (dome), mosque, power, orientalism

1. **INTRODUCTION: SOCIO-POLITICAL NARRATIVE**

The colonialism in the Dutch Indies had brought huge changes in the social, cultural life, and spatial identities of its architecture and its cities. One architectural inheritance, presumed to be originally from the Dutch colonial era, was the introduction of Middle Eastern architecture with its *kubah*\(^1\) (dome) for mosques in Indonesia. The Baiturrahman Mosque, which was designed in a Middle Eastern architectural style, was built in 1877 by the Dutch to replace the old traditional mosque burnt down in the Aceh War in 1874.\(^2\)

The union of Islamic Kingdoms in Eastern Sumatra under Dutch Indies government happened after political changes in the Dutch Indies, which introduced liberalism and capitalism that caused the abolition of slavery, specifically, the application of the Sugar Act and Agarian Act (*Agarische Wet*) in 1870. Modern colonialisation policies dismissed monopolistic practices by the state and opened the possibility of many European private investments that subsequently entered into the archipelago. In Sumatra, plantation and mines represented a large portion of investments through large land concessions that involved concentrated capital outlay and many plantation labourers. These combined measures of liberalism and capitalism

---

\(^1\) *Kubah* in Bahasa Indonesia (from Qubah) is translated as ‘Islamic dome’. In 622 CE the first mosque was built in the village of Quba, outside of Medina. It is known as the Quba Mosque. However, the Baiturrahman Mosque recalls the *kubah* (dome) shape in the Mughal and Indo-Islamic architecture in India. Precedents for the *kubah* (dome) mosques occur in Arabian, Indian (Hindu, Mughal, Rajput), Middle Eastern, Moresque, Moorish (Andalusia), Moroccan, Ottoman, Persian, Russian, and Tunisian architecture. Islamic architecture is used to signify Muslim architecture located in the Islamic world. References vary widely depending on the period in history, the country of origin and the author’s preferences.

\(^2\) Recently, the tsunami in Aceh at 26th December, 2004, captured the phenomena of Aceh Baiturrahman Mosque, which was able to survive and remain standing after the great disaster.
were applied by the Dutch Indies government in order to keep stability in its colonial regions.

Along with the growing emphasis on non-Western cultural studies during the mid-19th century, the kubah (dome) and Middle Eastern-inspired architecture began to be used universally for Mosques and Palaces in Sumatra (Riau, Medan, Deli, Aceh and Siak). Traditional architecture that used non-permanent materials, such as wood, bamboo, and coconut palms, was slowly being replaced by more monumental architectural styles using more permanent materials, such as stone and cement. Most of the styles used were the syncretic imitations of the Western, Middle Eastern and other Oriental styles.

Literature searches identified the Baiturrahman Mosque in Aceh, which has Arabian, Moorish and Mughal architectural styles as prime examples of the transformation of indigenous mosque architecture to monumental Muslim architecture, inspired by Middle Eastern precedents as surveyed in Arsitektur Mesjid dan Monumen Sejarah Muslim, (Sumalyo, 2000). In Masjid-masjid Bersejarah di Indonesia (Narlswandi et.al., 1994), the mosque was rebuilt under consultation with the authorities, (penghulu masjid) in Bandung. According to Narliswandi et.al, Snouck Hurgronje (1857-1936), a Dutch Orientalist thinker, was reputedly involved at that time in the design. Unfortunately, these previous studies did not specifically reveal or attempt to analyze the social-historical and political narrative leading to the use of the kubah (dome) mosques.

Interestingly, during our recent research, we found that there was no proof of the involvement of Christiaan Snouck Hurgronje (Abd al Ghaffar, 1857-1936), a leading Dutch Orientalist, in the creation of Baiturrahman Mosque as mentioned by Narliswandi et.al earlier. Our finding is based on the fact that Hurgronje had not been in the Netherland East Indies at that time. He came to Aceh later in 1889.3

The missing link in the history of kubah (dome) in Indonesia was that kubah mosques were spread by Middle Eastern merchants and pilgrims. Based on our research, there is no actual proof of this happening. Besides that, this research also has its limitation due to the lack of any archives about Sultans’ (the Native authority) involvement in the design ideas. Therefore, the main hypothesis of this paper is that Orientalism might be only partially influencing the spread of kubah mosques in the East Indies. This paper analyzes the relationship between colonial power and the formation of religious identity in the Netherland East Indies (Indonesia), especially in relation to mosques built during 19th-century Dutch colonialisation. This research intends to provoke new debate and further in-depth architectural studies of Indonesian mosques, which were often reduced to descriptive narratives related to the physical and aesthetical aspects only. This social-political research aims to explore the initial spread of Middle Eastern architectural styles and the spread of the kubah (dome) in Indonesian mosque architecture, as well as in Netherland Indies architecture.

In the context of a Western perspective towards Orientalism and Islamic architecture that was believed to be synonymous and identical with the Middle East, colonial government politics in the late 19th-century were aimed at obtaining the sympathy of the local people. The importance of this research is to transform postcolonial public perception about Indonesian mosque architecture in relation to colonial politics and the universal interpretation of Islamic architecture.

The research is based on the dialectical relationship between history in the context of the space-time continuum and the political aspects and identity issues related to socio-cultural life. In particular, the analysis probes the in-depth influence of colonial politics of identity and colonial tactics of representation related to Orientalist practices in the formation of sacred mosque architecture and syncretism of architecture as a cultural symbol in the Netherland East Indies. This research is limited.

---

3 Hurgronje spent his time in Makkah and studied about Islam and Aceh people. He advised the Dutch to secularize the Acehnese people by removing the Acehnese people far from Islamic mindset. He also advised the Dutch colonial government to capture ulama (Islamic guru) in order to win battles against Acehnese rather than to detain royal families.
in its scope to the Baiturrahman Mosque in Aceh as a prime example of a kubah mosque. Related kubah mosque precedents occur in northern and eastern parts of Sumatra, as the subject of parallel research.

The research methodology included primary data collection obtained from structured interviews with historians and the people in the society, as well as from field observations. Besides typological studies, the architectural artefacts were re-measured and re-drawn using computers to record the historical data, including the structural systems and the ornamental details.

Secondary data, including historical records, were obtained from the archives (photographs, documents and images) found in KITLV Leiden, in the National Archives and the National Library in Indonesia.

2. THE IMPACT OF ORIENTALISM AND ORIENTALIST ARCHITECTURE

Orientalism is the Western-centric way of thinking, seeing and perceiving the East, either in a cultural or societal context. In architecture, colonial buildings physically manifested the existence of Orientalism and symbolized the influential power of Western thinking over the Oriental peoples during the colonial period. The practice of colonisation, which was theorized as an on-going discourse, deals with how colonisers viewed the ‘colonised’, the peoples of the Orient, as part of Western attempts at political, economic and social domination. In Orientalism (Said, 1979) a Western style of thought is brought forward to restructure the colonies and to have authority over the Orient. Orientalist and colonialism operated in parallel. Orientalist studies focus on the construction of European centricism in relation to Oriental culture, while colonialism deals with how the West, as a dominant power, occupies a territory of marginal power over the colonised in the interests of the western imperial culture.

Colonialism is related to the views of how the coloniser regards the ‘colonised’ as a representation of the Westerners’ domination over the Oriental peoples. Edward Said in Orientalism noted that this practice brought the Western way of thinking to restructure society and this authority was imposed onto Oriental cultures without the consensus of the majority of the colonised peoples.

Expressing the difference in perception between the coloniser and the ‘colonised’, a Dutch Orientalist, Van den Berg’s narrative portrayed a negative image of the Acehnese people. He wrote that: “Nowhere in the archipelago have I seen so many repulsive faces; even their headdresses are worn in an untidy way...The Acehnese are people without future, even under European guidance... (T)he Dutch fought against mutinous, uncivilized, and barbarian people... (Therefore, there is only one solution the)... extermination of the Acehnese people, like the Red Indians of the North America.”

Representation of Oriental culture by Western society was practiced through several modes and media. It is implicitly understood during the course of this research that since the colonial authorities in conjunction with the Sultans were ultimately responsible for appointing foreign architects that the generic spread of the kubah (dome) was influenced by the popularity of the International Exhibitions in London and Paris. Again it is assumed that foreign architects would be aware of these exhibitions, even if there is insubstantial evidence that they had read books about or actually attended the exhibitions. For instance, International World Exhibitions or Fairs were held in Europe and the United States during mid-19th and early 20th centuries. The non-Western culture, including the material culture, was brought to Europe and North America to be exhibited, separated from the spiritual essence of the original cultural context. In this sense, the uniqueness of indigenous culture was reproduced or transferred through the varieties of images on a map and in pictures, photographs, books, calendars, postcards, in order “...to convey a sense of European mastery over its colony.” In this kind of spatial


6 It is also important to acknowledge writings on Oriental architecture that became the main sources for spreading thoughts on Middle Eastern architecture in the West. For instance, the book by the 19th century British design theoretician and architect Owen Jones, The Grammar of Ornament (1856), received worldwide attention. In this book, Jones examined the Middle Eastern decorative arts that were derived from Arabian, Turkish, Moresque, Persian and Indian ornament. This seminal sourcebook influenced the school of thought on Oriental architecture in the latter of half of the 19th century. Western architects who used this Victorian classic pattern book as a source of compositional inspiration introduced a generic Middle Eastern aesthetic vocabulary to an architectural genre for Mosques and Royal Palaces in the Dutch Indies.

7 Kusno (2000), p. 27.
8 Kusno (2000), p. 27.

4 For further reading please see Edward Said (Said, 1979).
representation of the Orient, there is a discrepancy between these images and real experience, between culture and context. In reality, the indigenous society understood their culture differently.

Since the early 19th-century, Oriental architecture, such as Moroccan and Moorish architecture, had been widely introduced in Europe. The Great Exhibition of 1851 in London, contained one of the most popular exhibits, a replica of the Alhambra Palace built inside the Crystal Palace (designed by the British architect Owen Jones). Certainly by 1851, foreign architects would be well conversant in the architectural vocabulary of Orientalist architecture as promulgated by such Owen Jones’ design. The exhibition was followed up by Universal Exposition in Paris in 1867 where Moroccan and Tunisian pavilions captured people’s attention. In this Expo, Islamic cultures were mostly represented by pavilions from the Ottoman Empire. European perception about architecture in the Islamic kingdoms was misleading, in particular related to stylistic interpretations such as Moroccan, Tunisian or Moorish architectural styles as the real representation of Islamic cultures. Art and architecture from the Eastern World, which was also known by Westerners as the Islamic World, became synonymous with its aesthetic exoticism. Oriental architecture provided ample inspiration for many architects, especially because of its spatial characteristics, such as decorative motifs, structure, and ornamentation.

European tendencies to amalgamate particular Islamic cultures as one entity, while denying their unique identity related to time, space and culture, have been criticized by various experts including Zeynep Celik who said that what architects did was to create representations of exotic colonial spaces that were exhibited inside International Exhibitions. According to Celik, colonial architects had designed buildings through seemingly rationalist approaches that viewed Islamic architecture as the basis for a scientific perspective of building composition that was also based on intuition, feeling and fantasy. Thus, the Islamic world was their source of inspiration. Since the Islamic world at that time was represented predominantly by the architecture of the Ottoman Empire and the classical representations of Alhambra, the European perspective was influenced and shaped by these major achievements of Islamic culture. These somewhat warped perspectives mistakenly led to the belief that the essence of Islamic culture had been found. Instead, this misinterpretation was actually an amalgamation of all Islamic cultures.

Figure 2: Brighton Pavilion in the UK (1815-1823), designed by John Nash, in the Mogul Regency Style with an onion-shaped dome, connoting the exoticism of the Orient (Source: www.oldukphotos.com)

Figure 3: The replica of gate of Al Kebir Mosque in Paris International Exposition in 1878 (Source: Celik (1992), p. 128)

The Dutch Indies colonial architectural style, through the creation of new mosques portrayed an image of the Middle Eastern kubah style as being symbolic of Islamic architecture, reinterpreted through European taste. This interesting 19th-century precedent coincided with a growing concern in the studies of non-western civilization that the Middle Eastern Dome style of architecture was introduced for important buildings, such as Mosques and Palaces, mainly in the Islamic Kingdoms of Sumatra such as Penyengat, Deli, Aceh, Langkat and Siak, This architectural typology replaced traditional architecture made from non-permanent materials with more permanent materials to create a truly monumental building style, albeit liberally and generically copied from non-specific Middle Eastern, Oriental, and Western architecture.

The first kubah mosque, Penyengat Mosque (1832-1844) showed a combination of Rajput, Mughal, Ottoman and Malay traditional styles, in other words, a polyglot of perceived Islamic styles. This Mosque was quite different compared to the latter
kubah mosques, showing a generic Hindu influence. On the second kubah mosque, Labuhan Deli (1870-1872), designed by Germany architect G.D. Langereis, the European taste for interpreting and mixing varieties of Islamic cultures exotically was visually apparent. Langereis’ aesthetic preferences for Islamic architecture were obtained from Oriental architectural references, which were known worldwide after the 1851 and 1867 International Exhibitions in Europe.

The third kubah mosque, the Baiturrahman Mosque (1877-1881) was one of the most intriguing examples of the transmigration of pattern type phenomena between the centre and the periphery. Meester de Bruins, an Italian-Dutch architect from Department of Water and Public Works in Batavia applied a reversed cruciform plan as if the mosque was a Mohammedan church. The 19th century Department of Water and Public Works itself was renowned for its civil projects. The Department did not necessarily put a priority on aesthetical or architectural qualities. Therefore, Bruins’ scheme for the Mosque seemingly copied the standard typologies for church and mosque buildings with the stepped gable, kubah (dome), minarets, and ogee arches. With advice from the Religious Councillor of Garut, he modified the plan and façade according to Islamic guidelines. Its façade referred to Deli Mosque and it was combined with the Moorish style. De Bruins probably was not familiar with designing either the kubah (dome) or a mosque. This assumption is based on evidence of ship-building techniques used in the dome construction, concealed by a drop ceiling.

Before the Aceh War and the Sumatra Tractaat, the Islamic Kingdoms in Sumatra, due to their geographical positions in Aceh, were on the frontier of international relations, especially with the Ottoman Empire, compared to other Sultanates outside Sumatra. The Ottoman Empire granted protectorates to these kingdoms for the purpose of strengthening trading and political domination against Western colonial enterprises.9

The 19th-century was also the period when colonial powers (Dutch, French and English) were consolidating their power. The Dutch strengthened their existence through their domination over the entire East Indies. Thus, the colonial struggles were fought with military and cultural means, including the symbolic value of the kubah mosque.

3. CASE STUDIES & EMPIRICIAL DATA: THE KUBAH MOSQUES

Riau, Deli, Aceh and Siak are places in the eastern part of Sumatra Island, which had direct connections to the strategic Malacca Straits. We explored the initial mosques built during colonial times in the Netherland Indies that were designed in non-local architectural styles. Most of them applied architectural styles which were commonly known as Middle Eastern styles that included Mughal, Moroccan and Moorish architecture, which influenced early 19th-century European architecture and art. The main inspiration for Islamic architecture was especially influenced by the territory of the Ottoman Empire during the Mughal, Andalusian and Safavid eras. Thereafter, we narrowed the field of research for this paper to the Baiturrahman Mosque in Aceh.

3.1 Early Appearance of Kubah (Dome)

The London Tractaat in 1824 divided Malay kingdoms into two territories: the northern side of the territory included Singapore, Malaya, Aceh and Penang Island as well as India that belonged to British, while the southern side of the territory from Riau/Lingga, Palembang to Java was maintained by Dutch. The first indicative kubah (dome) or Islamic dome being used in the Dutch Indies Mosque can be found in the Penyengat Island, built by the descendant of Buginese Sultanate of Riau. The Mosque was designed by an anonymous Indian architect from Singapore who was commissioned by Sultan Abdurrahman Yang Dipertuan Muda Riau VII in 1832 and was completed in the reign of his brother, Raja Ali (1844-1857). It was located near the east coast facing Tanjung Pinang town, which according to Matheson was ‘to stand as an

---

9 Besides the Ottoman Empire, these kingdoms also had international trading relationships with other Islamic states such as Hadramaut (Yemen) and Gujarat (Ahmedabad-India).

Figure 4 – Atjeh Monument in the International Colonial Export Exhibition in Amsterdam in 1883. This monument commemorated the death of Dutch soldiers during Atjeh War. It was later returned to Batavia and was placed in Wilhelmina Park, Weltevreden (Source: KITLV, Leiden)
Islamic challenge to the kafirs across the water. The site-plan of Penyengat Mosque reflected the influence of Indian temple/Rajput Style architecture, enriched with four stylized Ottoman minarets and Malay cultural motifs. The Mosque complex was built three-metres above the ground on stone platform on 32m x 54m in size, and its 50cm-thick wall covering the main building for prayer which was 19.8m x 18m in size. Its 13 cupolas consisted of four-sided, hexagonal and octagonal cupolas made from sand, gravel and cement, while its main cupola was supported by four columns. According to local sources, the mixture of egg whites and lime was added to strengthen the structure of cupola, minarets and other parts of the Mosque.

After the establishment of the Mosque in Penyengat Island, there were no other such Kubah Mosques built in the East Indies for the next 30 years.

3.2 Colonial Gift: Baiturrahman Jami' Mosque, Aceh Darussalam Kingdom

Compared to the heavy cementitious structure of the Penyengat Kubah Mosque, the oldest lightweight structure of Kubah Mosque was made from an iron-frame structure and copper sheeting that was used to build a Mosque for a rich and prosperous kingdom of Deli Sultanate in the 19th century. The Mosque, namely Al Osmani Jamı’ Mosque was located in Labuan Deli, which was also the former capital of Deli Kingdom until the end of 19th century when Sultan Mahmud Perkasa Alam moved the capital from old Deli to the South, closer to Medan. Medan itself was the city initially developed by the Netherland Indies government after obtaining the land concession from Deli Sultan.

Al Osmani Jamı’ Mosque was first built by the 7th Deli Sultan, Sultan Osman Perkasa Alam (1850-1858). In fact, the name of this mosque was taken from his name eponymously. When it was first built in 1854, the shape of the Mosque still followed traditional Malay architecture with a tiered roof and its wooden material was imported from Penang. The architect came from China and the construction was carried out through a mutual cooperation (gotong royong) of the local people.

The Deli Kingdom gave a land concession to an agricultural enterprise, Deli Maatschappij (Company), as a continuation of a relationship formed at 21st August 1862 after the Deli Kingdom agreed to be under the power of the Netherland Indies. This agreement brought a lot of prosperity, some of which was used for the renovation of Al Osmani Jamı’ Mosque, furthering signifying the relationship between successful trading enterprises and mosque construction. At the same time of the signing of Sumatra Tractaat, in the reign of Sultan Deli VIII Mahmud Al-Rashid, the previous traditional wooden building was transformed to a more permanent one using the best materials, including stones from Europe and Persia to give the mosque a permanent appearance. The construction work was carried out in 1870-1872, with GD Langereis from Germany as the architect. He extended the size of the mosque to 26 x 26 metres. In order to give a new identity for the Mosque, Langereis applied the copper octagonal dome structure for the roof of the Mosque, which was more representative of an Islamic building compared to previous one. The exterior showed the mixture of Moorish and Mughal architectural styles.

Langereis had proper architectural knowledge in terms of designing Middle Eastern styled domes, as proven from the technology he used that produced a form which was viewed from the interior space.

The shape of the floor plan was a symmetrical square. The mihrab faced the king’s palace. On each of the other three sides, there were three doors of different heights. It is said that these doors were a present from Tjong A Fie, the richest Chinese descendent entrepreneur in Medan at that time. If we look closely to the doors, we can see geometrical decorations similar to those found in Chinese architecture. The inner and outside parts of the wall were decorated by yellow and green decorations, which were special colours of Malay kingdom. The Middle Eastern influences appeared in the curved shapes in the columns and beams, which formed curved gates.

There were five copper domes in the roof. The mosque’s main room was covered with a big main octagonal copper dome. The weight of this dome was believed to be more than 2.5 tons. The wooden ceiling under the dome was also curved, following the shape of the dome. Even though the structure of the dome could not be seen, the information from the mosque management told us that iron frames were used as the main structure of the dome.

Table 1: The typology of early Kubah Mosques in Dutch Indies

<table>
<thead>
<tr>
<th>Mosque Name</th>
<th>Built Period</th>
<th>Architect</th>
<th>North Side</th>
<th>South Side</th>
<th>East Side</th>
<th>West Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jami' Mosque in Penyengat Island</td>
<td>1832 - 1844</td>
<td>An Indian architect from Singapore</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Al Osmani Jami’ Mosque</td>
<td>1870-1872</td>
<td>GD Langereis (Germany)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baiturrahman Mosque</td>
<td>1879 - 1881</td>
<td>de Bruins/de Bruchi/de Brunc</td>
<td></td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stabat Jami’ Mosque</td>
<td>1890-1894</td>
<td>Unknown</td>
<td></td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Azizi Jami’ Mosque</td>
<td>1900-1902</td>
<td>A German</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Al Ma’shun Mosque in Medan</td>
<td>1906</td>
<td>AJ. Dingemans</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Syahabuddin Jami’ Mosque</td>
<td>1926</td>
<td>Unknown</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Al Osmani Jami’ Mosque had undergone several renovations, including the one made by Deli Maatschappij in 1927. However, all of these renovations did not change the original shape of this mosque. The renovations only fixed the damaged or dilapidated parts of the mosque.

After Labuhan Deli Mosque, the next Kubah Mosque was Baiturrahman Mosque, located in the heart of Kutaraja (Banda Aceh). The West and North sides of this mosque, which amazingly survived the 2004 tsunami attack, are directly adjacent to Pasar Aceh (Aceh traditional market). The south side border is Taman Sari area. The east side, where the main entrance is located, is an open garden that has gates and towers located symmetrically. The mosque, which has seven kubah with four towers on its roof, had undergone several changes and renovation before reaching to its final shape today.
The original mosque was first built in the Sultan Iskandar Muda era (1607-1636 CE), when Aceh was at the pinnacle of its glory. From Peter Mundy’s sketch (1637) of Banda Aceh, we can see that Baiturrahman Mosque was a square building made of wood. The shape of its roof was a four-tiered pyramid with a wide hipped meru roofs, (without any minarets). This building was surrounded by several layers of fortresses. Johannes Vingboom’s sketch made several years after that, at the end of 17th century, shows the roof only had three layers, instead of four.

The transformation of Baiturrahman Mosque’s roof from a layered pyramid roof to a kubah (dome) occurred at the end of 19th century when Aceh Darussalam Kingdom was at war with the Colonial Dutch Indies over mercantile treaties. The economic interaction between Aceh and several European countries (such as England and France) and Ottoman Empire, had raised Dutch fears that these countries had a desire to control Aceh. As a result, the Netherland Indies government, represented by F.N. Nieuwenhuijsen, engaged in a political manoeuvre to make Aceh become a part of the colonial Netherland Indies Empire. However, the Aceh Darussalam Kingdom refused this offer because it chose to be an independent kingdom. As a consequence, the colonial government entered into its first acts of aggression in Aceh at 26th March, 1873. One of its strategies to destroy the power and spirit of Acehnese people was by demolishing the palaces and mosques.12

After many days of battle, on 6th January, 1874, the Dutch troops were able to take control of Baiturrahman Mosque. It was a very difficult fight that caused the death of the Dutch leader, Major General J.H.R. Kohler, who was killed outright. Over Dutch 400 troops also died. The Dutch victory in destroying Baiturrahman Mosque was followed by the next victory, the fall of Dalam (Keraton or King’s Palace) in Kutaradja (King’s City or Banda Aceh today), 18 days after the first victory, on 24th January, 1874. Dalam was also burnt down by the Dutch troops. The fall of Baiturrahman Mosque and Dalam, followed by the death of the Aceh Sultan (King of Aceh) due to cholera, triggered the Dutch claim that they had won the war.

A subsequent strategy was the colonial tactic to obtain the sympathy of the people in their new colony. In the case of Aceh, the colonial government rebuilt the burnt Grand Mosque in Aceh as a gift or gesture of reconciliation, leading to an agreement of better cooperation between the colonial government and its colonised kingdom. The Aceh War (1873-1903) was the longest guerrilla combat and the most difficult defeat for Dutch during its determination to gain domination over the northern part of Sumatra. It caused great monetary loss for the Dutch government. As the result, Governor General J.W. van Lamsberge rebuilt the Baiturrahman Mosque in order to get the sympathy of Acehnese people.13 After having lost this long war that had resulted in the deaths of many victims and had consumed considerable financial resources, which almost made the Dutch government bankrupt, the Netherland Indies government finally decided to limit their power over the territory and to control only the Kutaraja region. They also admitted that their strategy to burn Baiturrahman Mosque was a mistake.

On 9th October 1879, at the exact location of previous Baiturrahman Mosque, the Netherland Indies government built a luxurious new mosque, completely different from its previous shape. Lieutenant General Karel Van der Heijden, who was the leader of Netherland Indies troops in Aceh, witnessed Teungku Kadhi Malikul Adil, the counsellor

---

12 For further reading please refer to: Reid (1995), Witnesses to Sumatra. A Travellers’ Anthology, and Reid (1979), The Blood of The People. Revolution and the End of Traditional Rule in Northern Sumatra.
of Sultan Aceh for religious affairs, placing the first stone as a symbolic act to begin the new mosque’s construction. The mosque was designed by an Italian-Dutch architect, namely Meester de Bruins from Burgelijke Openbare Werken (Department of Public Works) in Batavia. The construction was supervised by L.P. Luyks and several other experts. In order to assure that the mosque was correctly designed in accordance with Islamic law, the construction was also supervised by Penghulu Masjid Besar Garut.

The government assigned Lie A Sie, a Chinese lieutenant in Aceh, to be in charge for the construction. The cost agreed was £ 203,000 (gulden). Most of the materials came from outside Aceh. Lime or mortar was from Penang Island, several varieties of stones were from the Netherlands, marble that was used for floors and stairs was from China, iron frames for the windows were from Belgium, wood for the window frames was from Burma and iron pillars were from Surabaya. The cost of the mosque construction became very expensive and exceeded its initial calculation because of these imported materials. After two years of construction, the colonial government finally handed over the mosque to the Acehnese people at 27th December 1881 through an official ceremony, in which Netherland Indies General Governor for Aceh, A Pruys van der Hoven, symbolically gave the key of the mosque to Teungku Kadhi Malikul Adil as the representative of the Acehnese people. Teungku Syeh Marhaban, a religious leader from Pidie was in charge of the mosque management.

The new Baiturrahman Mosque was reminiscent of Arabian, Classical European and Moorish architectural styles. The Moorish style was clearly shown from the interior and front entrance, recalling the Alhambra. The main characteristic was the use of geometrical shapes as the main element of decorative ornamentation, including naturalistic Arabesque motifs. The shape of the mosque’s floor plan was a reversed cruciform with 28 round columns and 16 square columns that became part of the building’s main structure. The mosque was 800 square metres in size. It had one main entrance, The wall surrounding the mosque had 34 high windows with iron Arabesque trellises.

The roof was covered by a main kubah (dome) characteristic of the Mughal architecture of Orchha and Jahangir Mandir (1605). The shape of the kubah’s base looked like an octagonal tambur or drum. The dome was made of wooden structures with one big column in the centre as the main column was used for supporting an umbrella-like structure in order to form its onion shape. This structure was covered by wooden boards that were heated or steamed to obtain the curved shape. (This technique was similar with ship-building methods). Finally, over these boards, the dome was covered by sirap (roof shingles).

The octagonal tambur created enough space for people to enter. This space could function as an office. This tambur had a stair leading down to the

---

14 The Aga Khan ArchNet website cites de Bruchi as the architect (Available at: http://archnet.org/library/sites/one-site.jsp?site_id=7487). On the other hand, Izziah Hassan indicates the Baiturrahman Mosque (House of the Merciful) was designed by a French architect de Brunc (please read Hassan, Izziah (2009), “Architecture and the Politics of Identity in Indonesia: A Study of the Cultural History of Aceh”. Thesis submitted for a Doctor of Philosophy. The University of Adelaide, School of Architecture, Landscape Architecture and Urban Design, Centre for Asian and Middle Eastern Architecture (CAMEA), September, p. 102 of 348). Also available at: http://digital.library.adelaide.edu.au/dspace/bitstream/2440/65554/1/02whole.pdf. It is likely that de Bruchi (Italian), de Brunc (French) and de Bruins (Dutch) are malapropisms for the same name.

mosque’s main room. However, this stair is closed now and cannot be used. The tambur also was surrounded by terraces, from which people could see the town of Banda Aceh and the muazin could call the daily prayers (adzan).

The tambur’s floor was made of wood that also functioned as the ceiling of the mosque’s main room. The wooden floor was supported by 12 columns underneath it. The main columns, which were located in the corners of octagon modules, had a square base whereas on its four sides there were round-shaped base columns. The distance between each column was approximately three metres and this became the main structure to support the whole weight of the roof. In the beginning, the main room was covered with a dome-shaped roof and the other rooms were covered with pyramid hipped roofs.

In tracing and imagining the flow of architectural attributes from one part of the Islamic world to another, the Baiturrahman Mosque recalls the kubah (dome) shape of the Mughal and Indo-Islamic architecture in India. The use of chattris or domed pavilions is derived from the Rajput architecture of the Jahangir Mandir (1605). Indicating a bi-lateral flow of symbolic architectural references between the coloniser and the ‘colonised’, the stepped gable is reminiscent of the 16th-century Dutch merchant houses in Amsterdam. The Baiturrahman Mosque symbolizes an amalgamation of Occidental and Oriental cultures and supports the idea of exchange occurring not only in economic matters, but also in architecture.

The precedence for ogee arches can be traced to Moorish and Mughal architecture. The stucco infill panels for the Patio de los Arrayanes, Court of the Myrtles (14th-19thc.) recalls the rhythm of the arches and columns with diagonal Moorish lozenge diaper work used on the front façade of the Baiturrahman Mosque. The Jaipur Palace, (Rajendra Pol Gateway, 1880) is contemporary and synonymous with the Baiturrahman Mosque in the delicate repetition of columns and ogee arches.17

However, the rebuilding of the mosque could not automatically soften the hearts of the Acehnese people since they refused to use the mosque for several reasons. The first reason was that the mosque was built by the Dutch, who were the enemy of the Acehnese people. The Aceh War,

which had been seen as not only as a war for power and territory, but also as a religious war between the Dutch *kape* and the Acehnese Muslims, had created a strong resistance toward the existence of the mosque. This resistance became even stronger due to the reversed cruciform of the mosque’s floor plan. De Bruins had designed a Mosque as a Mohammedan church represented his Euro-centric views over Islam and Moslem. This such mislead understanding produced spatial conflicts between colonialized and colonializer. Therefore, in 1936, the Governor Van Aken instructed BOW ('Burgelijke Openbare Werken' – Department of Public Works) to build an extension of the Mosque in order to hide the reversed cruciform plan. Since these changes, the plan of the Mosque was transformed into a rectangular plan. Following these changes, the perception of Acehnese people towards the Mosque also changed to be more positive.

4. CONCLUSION

From the research, we found that the role of European architects was one of important agents in spreading universal Islamic architectural styles such as *kubah* (dome) mosques to the Netherland Indies. Although the first *kubah* Mosque in Penyengat Island (1832) was designed by an Indian architect, there was a 30-year gap before the introduction of lightweight dome structures by European architects that occurred in Deli Kingdom in 1870 and Aceh in 1877. These soon were followed by development of other *kubah* Mosques in Sumatra designed by European architects, such as in Langkat (1902) and Medan (1906).

These Mosques were built after political changes in the relationship between Northern and Eastern Sumatran kingdoms (Aceh, Medan-Deli, Langkat and Siak) with the Dutch Indies colonial government, in which these kingdoms fell one-by-one and became part of Dutch Indies colonial state. With the exception of Aceh Darussalam, which was defeated only after a long guerrilla war and the expenditure of considerable financial resources (that ultimately caused the Dutch Indies government to limit its territory around Kutaraja), the Dutch Indies power in Medan-Deli, Langkat and Siak Sri Indrapura kingdoms was achieved through political negotiation accomplished by F.N Nieuwenhuijsen from the Dutch side.

Since 19th-century, there were considerable efforts to obtain better understanding about Islamic cultures, which grew and spread widely in the Eastern world with increasing intensity and frequency of different kinds of cultural relationships between East and West. These efforts from the colonial government towards its colony had taken effect with its policy of persuasion and appeasement to win the sympathy of local people in Aceh. The Dutch colonial government’s tactic towards reconciliation in Aceh Darussalam was partially achieved by rebuilding Baiturrahman Mosque, which was burnt down by Dutch colonial government during the Aceh War in 1874. This was a political strategy to soften the hearts of the Acehnese people in order to end the insurgency. The new Mosque was built in the same location as the old sacred Mosque, which previously was also part of Aceh Sultan’s palace complex.

By spending considerable sums for the transformation of the new Mosque from a traditional wooden Acehnese architectural style, regarded as improper by Dutch or European taste, into a new stone monument derived from Middle Eastern architectural styles, the first step towards reconciliation occurred. The result was an uncommonly unique Mosque for the Native peoples who were used to performing prayers in accordance with their old traditions. The introduction of Middle Eastern architecture with its curved geometrical form and *kubah* (Islamic dome) reflected European perceptions about Oriental cultures, particularly the universal symbol of the dome in Islamic architecture.

As a consequence of anti-Dutch sentiment for more than 50 years after it was rebuilt, especially with its reversed cruciform plan, the Baiturrahman Mosque received only a half-hearted response from local people and was mainly used by migrants and traders. After the 1936 extension of the Mosque by the Dutch government, the reversed cruciform plan transformed into rectangular plan. The image of the Mosque as a gift from the colonial authority was slightly altered and it became a new icon for Banda Aceh. After independence, many mosques in Banda Aceh and the region were built, referring to Baiturrahman Mosque or else Middle Eastern *kubah* (domes). Poignantly, the iconic mosque survived the devastating tsunami in 2004.

For conclusion, although there is still a skeptical view about the important roles of Orientalism in spreading *Kubah/Dome* or Middle Eastern style architecture in Sumatra, however, there is no substantial proof of the involvement of Middle Eastern Merchants in Sumatra in the development of design ideas of these initial Middle Eastern styles. The research founds an active involvement of European architects being commissioned by some rich Sultanates in Sumatra to design Royal Mosques and Palaces. The next questions arising from this research are how these Sultans knew these
architects, and how the architects obtained their Middle Eastern style architectural knowledge? Why did these Sultans give such trust to European architects? What was the role of Sultan in proposing Kubah/Dome or Middle Eastern Style architecture together with these European architects? These questions are some key topics for further potential research.

APPENDIX

| Willemkerk in Batavia in 1865 (built in 1835) | Deli Mosque built in 1870 |
| Goenoengan, Sultan Aceh in 1874 | The Residence of Aceh Governor in 1877 |

Figure 13: Some buildings in the Dutch Indies which refer to nineteenth-century architectural styles influencing the Baiturrahman Mosque in Kutaraja, Aceh (Source: KITLV, Leiden and Tropen Museum, Amsterdam)

ACKNOWLEDGEMENTS

The earlier version of this paper was partly presented and recorded in the Congress Proceedings (CD format) of the International ‘Domes in the World’ held in Florence Italy from 19 to 23 March 2012. The new paper published in this Journal thus added new information and revised the previous paper.

On this occasion, we would like to give special appreciation to Diane Wildsmith, RIBA for her critical comments on the Islamic influence on International architecture. We also would like to give special credits to Widyarko and Hary Mufrizhon for their support and contribution during field research and making drawings of the Mosques.

REFERENCES

Drakard, Jane (1990), A Malay Frontier, Unity and Duality in a Sumatran Kingdom, Cornell University, New York.
Lombard, Denys (2006), Kerajaan Aceh Zaman Sultan Iskandar Muda 1607 – 1636


Archival Sources:

Arsip Nasional Republik Indonesia (ANRI), Jakarta (http://www.anri.go.id/)

Royal Tropical Institute (KIT), Amsterdam (http://www.kit.nl/kit/Royal-Tropical-Institute-)

The Koninklijk Instituut voor Taal-, Land- en Volkelkunde (KITLV), Leiden (http://www.kitlv.nl)

Tropen Museum, Amsterdam (http://www.tropenmuseum.nl)

Internet Sources:

