The Continuity of Pre-Islamic Motifs in Javanese Mosque Ornamentation, Indonesia

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Archaeopress Publishing Ltd Summertown Pavilion 18-24 Middle Way Summertown Oxford OX2 7LG www.archaeopress.com

ISBN 978-1-80327-048-7 ISBN 978-1-80327-049-4 (e-Pdf)

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Cover: Kala, Djago temple (1268), East Java

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Abstract

This research aims to assess the continuity and significance of Hindu-Buddhist design motifs in Islamic mosques in Java. It is carried out by investigating four pre-Islamic motifs in Javanese mosque ornamentation from the 15th century to the present day. The research starts with the belief that typical Javanese ornaments were consistently used in pre-Islamic Hindu-Buddhist temples and Islamic mosques in Indonesia. This phenomenon was a result of syncretic Javanese Islam, composed of mystic animism, Hindu-Buddhism, and Islam, which differed from orthodox Islam in the Near East and Arab world.

Among many ornaments, the most frequent four motifs are prehistoric *tumpals*, Hindu-Buddhist *kala-makaras*, lotus buds, and scrolls, all of which have symbolic connotations and are used to decorate sanctuaries. *Tumpals* signify the Cosmos Mountain where gods abode; *kala-makaras* protect temples where the gods are believed to reside; lotus buds denote life and creation; and scrolls imply the start of life.

For a comparison between the temple and mosque ornamentation, 10 Hindu-Buddhist temples and 30 mosques were purposively selected, and a representative sample of each motif was taken during the researcher's fieldwork. In addition, 20 Indonesian scholars were interviewed to identify the origins of motifs in Javanese mosques.

To answer the research questions, the background, basic type of indicator and its subdivisions, five further characteristics, and other elements and principles of design were investigated. Four indicators were chosen to test each of the four motifs. *Tumpals* were examined by line, *kala-makaras* by shape, lotus buds by form, and scrolls by rhythm. A few examples of each motif explained how they were analyzed in two stages, by the presence of each characteristic and its modal value-total number. This assessment was based on an amalgamation of (1) the researcher's informed judgement, trained in art and design, (2) observations during the fieldwork, (3) elements and principles of design, according to literary sources, and (4) the respect to the Indonesian cultural heritage.

The findings revealed continuity in the four motifs across the pre-Islamic and Islamic periods. The continuities appeared in lines, shapes, forms, and rhythms. Lotus buds and *tumpals* showed significant continuities, while *kalamakaras* and scrolls changed in the transfer from temples to mosques. *Kala-makaras* needed to conform with the *hadith* (sayings of Prophet Muhammad), which forbids depicting living figures in Islamic ornamentation; thus, living images were rather abandoned and replaced by geometric shapes. Javanese scrolls in temples and mosques displayed the same characteristics of repetitive and continuous rhythms as the Islamic arabesque.

Consequently, there arose a beautiful syncretism in the four motifs in ideas and forms. Hindu-Buddhist symbolism was mingled with Islamic aesthetics, keeping local Indonesian characteristics. The symbolic connotations of the four motifs allowed them to continue, and their influence was dependent upon the creativity of the local genius in each epoch.

Acknowledgement

My Soul, My Mind, My Heart

Until yesterday, I was making a wandering odyssey on an Indonesian boat, bound for Oxford Brookes in the U.K. Today, I am returning to my original harbour, to lay an eternal anchor. My unutterable gratitude and indebtedness towards many individuals whirl into three waves: they go through my soul, my mind, and my heart. None of the three can be differed, as each presents priceless, immeasurable, and precious humbleness.

My first soul owes to my God who has provided me with his 'justice and safety' during my wandering journey. My second soul turns to my departed parents who imparted 'pride' and 'wisdom' to their daughter in the midst of the doubtable challenges. My third soul calls to my countries - South Korea, Norway, and Finland, where my lost 'identity' was rescued and my 'cultural crisis' was solved.

Simultaneously, my mind yearns to thank those people who have created this work with me. My first mind owes to my excellent supervisors; Professor Mike Jenks for his calm whisperings on my restlessness and his brilliant voices on my work; Dr. Nicholas Walliman for his detective eyes in finding routes out of impasse and his sketches for my straying red thread of argument; and Dr. Aylin Orbasli for her passionate engagement with my chapters and her disciplined positive attitude towards my endless changes. But, please wait! All these fragmental treasures could not be seen in splendour if there were no Mrs. Margaret Ackrill's intelligent and diligent reading in perfection. When she touches a word, the whole Pandora box is set in metamorphosis, thus all the ingredients twirl into a gourmet dish.

Cross over oceans, my second mind flies to the 20 Indonesian scholars whom I interviewed. Especially, my immense thanks call Professor Uka Tjandrasasmita for his profound knowledge, enthusiasm and hospitality. He saved me from being lost in the labyrinth of syncretic Java. Across waves once more, my third mind expresses thanks to the Research Coordinator, the Research Centre, the Department of Architecture, the Graduate Office, Oxford Brookes University, and Indonesian authorities, institutes, temples, and mosques, and many other countries where I imprinted my footsteps.

Simultaneously, my first heart longs to expose my thanks to my family, particularly my husband. He took over my official duties, acting marvellously in a double role in Indonesia. He encouraged me, understood me, and had confidence in me. His presence was visible and invisible, laying many tranquil carpets over my turmoil. My second heart runs to my sisters and brothers who eternally hold me in our inseparable destiny as a family of blood. My third heart is shared with my friends who were with me in solidarity on my voyage.

It was my utmost privilege to have cooperated with so many fabulous people through this research, embroidered by humane communication with the common thread of making others happy. This research has rejuvenated my life. On my reincarnation, my last golden moment will be prospered in contributing to society. It is calling upon my knowledge urgently. Let me hurry up!



Chapter 1.

Introduction and Background of the Research

1.1. Introduction

In 1859, Charles Darwin suggested a theory of evolution in his famous *On the Origins of Species*, while Johann Wolfgang von Goethe (1749-1832), a German poet, sacrificed his Werther to death in *The Sorrows of Young Werther* to continue his life in eternity. Whether a thing has died out by nature, or a human has disappeared by an act of will, the messages left behind tell us of continuity. Evolution implies creation; death proposes life. Exceptionally, these metamorphoses do not apply to Javanese temple and mosque ornamentation.

To testify this, the research deals with the degree of continuity and influence of four pre-Islamic motifs on mosque ornamentation in Java, Indonesia. It shows how prehistoric *tumpals* and Hindu-Buddhist *kala-makaras*, lotus buds, and scrolls have demonstrated their influences reaching from Hindu-Buddhist (5-15C) to Islamic periods (15C-the present). Accordingly, this chapter explains the approach to the research in different sections: (1) background theories, (2) gaps in knowledge, (3) research question and sub-questions, and (4) structure of the thesis.

1.2. Background theories

1.2.1. Islamic Ornament

Islamic ornament seems to be conceptual and intellectual rather than emotional, expressing contemporary ideas of beauty and aesthetic concepts to communicate Muslim thoughts and to reflect the spirit of their times.¹ In the context of a belief that 'God alone is the Creator', a new expression in ornament was created, using floral, geometric, and epigraphic motifs,² although it brings ambiguity to their function as decorative as well as possessing meanings. Islamic ornament was inherited from Byzantine and Sasanian culture, and changed over time, stretching from Spain to India and Indonesia. Detailed studies of the regional, social, and temporal variations of the techniques and use of individual motifs are necessary.³

Three genres of arabesque, geometry, and calligraphy developed. Arabesque is a stylized form of the vegetal

scrolls,⁴ signifying a concept of Paradise.⁵ Kühnel in *Die Arabesque* (1949) argues that arabesque is the most expressive artistic manifestation. Debates on the term 'arabesque' took place over a long period from the sole vegetal scrolls to the whole range of Islamic ornamentation. However, this research limits it to Islamic vegetal scrolls which appeared in Javanese mosques from the 15th century to the present day.

Moreover, Islamic ornament displays best in geometric patterns where basic devices of repetition, rotation, and reflection evoke mystical thoughts.⁶ As the only novelty, calligraphy became the key means of expressing symbolic connotation and aesthetic beauty.⁷ Muslims understand it as a visible form of the revealed Word of God, the Holy Koran. A fine script had to be developed as a Muslim's religious duty and the appropriate ornament for mosques.⁸ In maximizing beauty and symbolism in the mosque ornamentation, the three genres are interrelated.

1.2.2. Ornament as Beautification and Symbolism

A proper understanding of their meaning can only be reached by detailed studies not only of the formal and technical aspects of these decorations but also by considering the regional, social and religious variations of people who created and beheld them (Baer 1998: 89).

It has been a general acceptance that the function of Islamic ornament is beautification to endow visual pleasure, although many efforts have been attempted a symbolic role too.9 In this discussion, Brend (1991) argues that Islamic ornament rarely demands reading as a symbol; it stands as an affirming background with a latent symbolism. Hillenbrand (2001a) goes further, saying that Islamic ornament serves to beautify the structure, but can evoke a mystical idea. As no constant association between particular buildings and symbolic connotations exists, its visual pleasure is often the first aspect of the buildings considered.

The dual nature of ornament was earlier observed by Grabar (1987). The inscriptions in the Dome of the Rock

¹ Mitchell 1978

² Hillenbrand 2001

³ Grabar 1987; Baer 1998

⁴ Riegl 1893; Burckhardt 1976

Ardalan and Bakhtiar 1973

⁶ Irwin 1997.

⁷ Grabar 1987; Hillenbrand 2001

⁸ Davies 1982

⁹ Grabar 1987; Baer 1998

can be considered aesthetic; landscapes in the Grand Mosque of Damascus may symbolize Paradise, based on the Islamic concept. Clévenot (2000) shares Grabar's view that the omnipresence of plants conveys an idea of 'the Garden of Felicity', nourished by the Koranic description.

Nonetheless, notions of the divine are stressed through ornament. They are not expressed through devotional images but through the totality of form that unites and characterizes all the visual arts of Islam. Anyone who is overwhelmed by the amplitude of nature tries to convey the same multiplicity in both symbolic and abstract ways to pay tribute to the Creator.

This type of debate about combining beauty with symbolic meaning took place among Islamic scholars even within the first few centuries of Islam. Tha'libi and Muqaddasi said that the multiplicity of forms and colours in Islamic ornament leads the beholder to identify new features which arouse his curiosity and invite contemplation. In contradiction, al-Ghazzali (d.1111) claimed that ornaments are entirely related to religious beliefs and the notion of God.¹²

Whether aesthetic or symbolic in intention, Islamic ornament aims at concealing the structure of a building rather than revealing it.¹³ Or it can make them more attractive, bring out the essential nature of architecture, accentuate a plastic shape, and change it into something lively.¹⁴ 'Ornament did not conceal the frame; rather, it emphasized connections between vertical and horizontal elements, articulated links and joins, and framed access and openings.'¹⁵ From different views, ornament highlights architectural elements, interacting with them by disguising or revealing them or being subordinated to the architecture.

The function of Islamic ornament can be summarized as an adornment of the surface, expressing contemporary ideas of beauty and aesthetic concepts through forms, materials, and techniques. Some are for the communication of symbolic connotation. Its complexity is defined as 'Islamic art is not a mere concept, an abstraction, but is recognizably an entity, even if that entity defies easy definition."

1.2.3. The Three Genres: Arabesque, Geometry, Calligraphy

Islamic art is essentially a way of ennobling matter by means of geometric and floral patterns, united by calligraphic forms which embody the word of God as revealed in the sacred book, the Holy Koran (foreword by Nasr in Critchlow 1989: 6).

In broadly speaking, Islamic ornament consists of three genres of arabesque, geometry, and calligraphy. The reluctance to depict living figures in the Islamic religious context could direct attention towards the creation of the arabesque. However, it would be a mistake to regard them as fixed, because Islamic artists reinterpret nature through their creation. Hillenbrand (2001a: 13) characterizes the arabesque as 'a form that is a plant and yet not a plant. Imagination, not observation, was the key; nature, it is true, but nature methodized.'

The geometric mode appears in basic forms of angular repetitive grids, stellar patterns, or curvilinear networks on the windows of mosques and palaces. In appreciating the interlacement of the stonework, it needs to be read by allowing the eye to follow the flow of intertwining forces.18 Epigraphic decoration intends to evoke mystery. In many of the finest monumental inscriptions, their meanings are not clear, due to the rhythmic exuberance of the lettering and the pattern. All three genres are interrelated. Epigraphic letters are cramped into angular geometric forms. Vegetal arabesque unfolds concentrically or spirally. Geometric networks took off the angularity by using buds of leaves. The uniqueness of Islamic ornament lies in the fact that the three elements infiltrate each other, creating ambiguity about their function.19

1.2.3.1. Arabesque

Arabesque was identified during the 19th century as the principal Islamic ornament by Orientalists, who focused on the material culture of the Arabs in Syria, Egypt, North Africa, and Spain. Derived from the Italian word *rabesco*, the name referred to the style of ornamental pattern in Islamic design during the Renaissance.²⁰

Riegl in *Stilfragen* (*Problems of Style*, 1893) limited the term 'arabesque' to a stylized form of the vegetal, and regarded it as the creation of the Arab spirit. Its basic feature is the geometrization of the stems of the particular vegetal elements, growing from one another infinitely in any direction. Herzfeld (1938) notes the term 'arabesque' in its broader sense. It denotes Islamic ornament, comprising some figurative components.

¹⁰ Burckhardt (cited by Yeomans 1999: 16)

¹¹ Ardalen and Bakhtiar 1973

¹² Cited by Baer 1998

¹³ Jones 1978

¹⁴ Davies 1982

¹⁵ Behrens-Abouseif 1998: 152

¹⁶ Baer 1998

¹⁷ Hillenbrand 2001a: 256

¹⁸ Burckhardt 1980

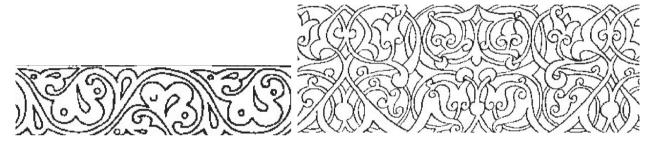
¹⁹ Hillenbrand 2001a

²⁰ Naddaff 1991





Acanthus during antiquity, Damascus, Syria (Image: the Author); Late Byzantine antique cornice, 5C (Kühnel 1949)



Mosque of Ibn Tulun in Cairo, the end of 9C (Kühnel 1949); Wood carving, Egypt, 13C (Kühnel 1949)

Figure 1.1. The historical development of arabesque

However, ornament can hardly be described and analyzed, due to the differences in display across time and place. It was Kühnel who claimed the arabesque as the most expressive artistic manifestation in Islamic ornamentation, emphasizing its ornamental character. In *Die Arabeske* (1949), he rejects Herzfeld's definition, and adopts Riegl's theory, adding geometric, calligraphic and stylized figural elements. Kühnel identified two aesthetic principles of the arabesque: (1) rhythmical and harmonious movement, and (2) filling the entire surface.

... whatever their origin and form may be, so it is also here that no symbolic meaning can be constructed. Decisive is a decorative intent which is devoid of a meaningful purpose (Kühnel 1949: 9).

The arabesque was further analyzed by Burckhardt (1976: 60-61), who includes both stylized plant forms and geometrical interlacing work. The former expresses a perfect transcription of the law of rhythm into visual terms, the sense of rhythm; the latter represents 'the spirit of geometry'. Its solely decorative notion met opposition from Sufi scholars, Ardalan and Bakhtiar (1973: 42-43). The arabesque recreates the cosmic processes of the Creator through nature. Its rhythmic element reflects movement, manifests time, and signifies infinity, glorifying the concept of the

'Garden of Paradise'. With a combination of geometry and calligraphy, it exhibits the harmony of unity and multiplicity.

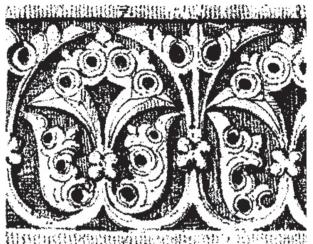
Despite its categorical debates, the arabesque in a vegetal form has received the most attention. It is a distant relation of the acanthus and vine scroll ornamentation from the eastern Mediterranean area before the advance of Islam.²¹ Curving vine scrolls first appeared in the Dome of Rock and Mshatta in the eighth century, and were established in the stucco and mosaic decoration of the Great Mosque of Cordoba two centuries later in the form of half-palmettes. By the 11th century, arabesque was in full development in the Great Mosque of Al-Hakim in Cairo and was later introduced into the Quwwat Al-Islam Mosque in Delhi, India in a combination of the acanthus and Hindu lotus.²²

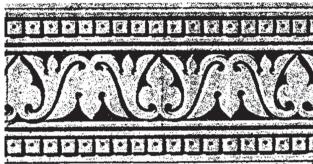
A few characteristics of the arabesque are discussed.²³ As its more detailed descriptions could identify the origins of scroll motifs in Javanese mosques in this connection, the researcher analyzed 20 literary sources to trace central concepts and components of the arabesque (full texts in Appendix).

²¹ Burckhardt 1976

²² Jones 1978

z³ Riegl 1893; Kühnel 1949; Ardalan and Bakhtiar 1973; Burckhardt 1976





Frieze from the mihrab of the Great Mosque of Cordoba, 9C (Riegl 1893); Stucco ornament from Ibn Tulun mosque, Cairo, 9C (Riegl 1893)



Arabesque samples, the Great Mosque of Cordoba, 9C (Image: the Author)

Figure 1.2. Arabesque of the Umayyad dynasty

(Jones 1856, 1982) continuous, geometrical, simple, infinite.

(Bourgoin 1873a) geometric, abstract.

(Riegl 1893, 1992) continuous, infinite, in any direction, abstract, anti-naturalistic, geometric, linear, oval, eccentric curves, polygonal, curvilinear, circular, two-dimensional, symmetrical, pointed, stylized, undulating, spirals, bifurcated.

(Kühnel 1949, 1960, 1977) linear, abstract, unnatural, bifurcated, regular, spiral, interlacing,

ever-continuing, geometric, rhythmic, movement, infinite repetition.

(Herzfeld 1953, 1987) infinite, dematerialization, abstract, anti-naturalistic, geometric, countless repetition.

(Dimand 1958) abstract, geometrical, circular.

(Grube 1966) stylized abstracted, geometrical, repeated.

(Burckhardt 1967, 1976) stylized, undulating, logical, rhythmical, mathematical, melodious, linear, continuous, repeated.

Table 1.2.3.1. A term 'rarely terminate' (o+) is intrepreted as 'infinite', and that of 'little remains of the vine' (o++) as 'abstract'.

No	Author	Year	abstract	anti(de)natural	circular	continuous	curved	geometrical	infinite, limitless	linear	mathematical	repetitive	simple	spiral	rhythmic	symmetric	stylized	undulating, moving	other expressions
1	Jones	1856; 1982				o		0	0				0						
2	Bourgoin	1873a	o					o											
3	Riegl	1893; 1992	0	0	0	0	0	0	0	0				0		0	0	0	oval, pointed, bifurcated
4	Kühnel	1949; 1960; 1977	0	0		0		0	0	0		0		0	0			0	regular, bifurcated
5	Herzfeld	1953; 1987	0	o				o	o			o							countless
6	Dimand	1958	0		0			0											
7	Grube	1966	o					o				0					o		
8	Burckhardt	1967; 1976				0				0	0	o			0		0	0	logical, melodious
9	Ardalan & Bakhtiar	1973			0	0		0	0			0		0	0			0	regular
10	Grabar	1973; 1987	0		0			0				0						0	concentric
11	Jones, D	1978		0		0	0	0	0		0	o			0			o	regular
12	Davies	1982			0	0			0		0	0			0		0		
13	Allen	1988						0											non-vegetal
14	Naddaff	1991		0								o			0	0		0	spatial
15	Irwin	1997	o	0								o							bifurcated
16	Baer	1998	0				o							0	0		o		soft, flat
17	Yeomans	1999						0	0+								0		dynamic, two- dimensional
18	Clévenot	2000	0							0							0		invade any unoccupied space
19	Hillenbrand	2001a	0					0			0								organized, strict,
20	Trilling	2001	0++									0	0						delicate
	total		12	6	5	7	3	13	8	4	4	11	2	4	7	2	7	7	





Windows of the Great Mosque of Cordoba, 785 (Image: the Author); Geometric designs, Alhambra Palace, Granada, Spain, 14C (Image: the Author)

Figure 1.3. Geometrical patterns

(Ardalan and Bakhtiar 1973) rhythmic, movement, regular, continuity, endless circular, repeated, infinite, geometric, spiral.

(Grabar 1973, 1987) concentric, circles, undulating, repetition, abstract, geometric.

(Jones, D 1978) denaturalization, continuous, regular, limitless, rhythmical, movement, repetition, curved, geometric, mathematical.

(Davies 1982) continuous rhythm, stylized, repeated, infinite, mathematical, circular.

(Allen 1988) geometric, non-vegetal.

(Naddaff 1991) denaturalized, repetitive, unnatural, symmetrical rhythm, repeated, spatial movement. (Irwin 1997) abstract, denaturalized, repeated, bifurcated.

(Baer 1998) rhythmic, curved, spiral, abstract, stylized, soft, flat.

(Yeomans 1999) dynamic, geometric, rarely terminated, stylized, two dimensional.

(Clévenot 2000) stylistic, abstract, linear, invade any unoccupied spaces.

(Hillenbrand 2001a) geometric, organized, mathematical, logical, abstract, surreal, strict.

(Trilling 2001) delicate, simplified, repetitive, little remains of the vine.

First and foremost, the description of the arabesque includes 'geometrical', but that of 'abstract' and 'repetitive' can be alternatives. 'Infinite', 'continuous', 'rhythmic', 'stylized' and 'undulating' are also favoured.

1.2.3.2. Geometry

The Islamic art of geometric form, then, can be considered the crystallisation stage, both of the intelligence inherent in manifest form and as a

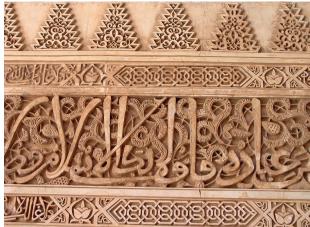
moment of suspended animation of the effusion of content through form (Critchlow 1976: 8).

Grabar (1992: 130-133) in The Mediation of Ornament suggests three functions of geometry: (1) framing (2) filling (3) linking motifs. The word 'geometric' is applied to three kinds of forms in Islamic ornament. (1) The first form is a geometric pattern in mosaic tiles and stuccoes, seen in the Alhambra in the 14th century. Despite changes in the composition and reconstruction and different social and contextual meanings, geometry denotes a 'regular' element which creates a 'regular' pattern. (2) The second is less rigid and more difficult to define than the first. In the Mshatta palace of the Umayyad, the majority of vegetal motifs are enclosed as a circular unit, which generates a regular outline and is classed as geometric. (3) The third is 'loose' geometry and includes all repetitive and rhythmic motifs in border patterns on mosaic floors and overall designs.

Returning to the first form, stricter linear and geometric shapes have been displayed in a variety of combinations in all periods. Geometric patterns were universal in antiquity, but Islam elaborated them in complexity and sophistication, transforming decorative geometry into an art form. It demonstrates Islamic artists' fascination with the visual principles of repetition, symmetry, and continuing generations of patterns, related to the study of mathematical calculations. All patterns were built up from a circle as a linear unit and a factor of the propositional system. The circle is developed into a square, a triangle or a polygon, and elaborated by multiplication and sub-divisions by rotation and by symmetrical arrangements, giving prominence to decorated surfaces.²⁴

²⁴ Burckhardt 1976; Irwin 1997; Jones 1978





Interlaced Kufic script (Image: the Author); Interlaced Naskhi script (Image: the Author)

Figure 1.4. Foliated calligraphy, Alhambra Palace, Granada, Spain, 14C

Islamic culture has proved itself in the application of geometric patterns for artistic effect. Anyone contemplating its abstract patterns can associate them with mystical thought²⁵ because geometric patterns reveal an aspect of the multiplicity of the Creator.²⁶ Circular roofs become a symbol of the cosmos; a square floor implies the earth itself. Both in harmony signify infinity.

Critchlow (1989: 23) interprets the lower half of the symbolic circle as representing 'the world of sense'; the upper half as 'the world of being'. A circle corresponds to the Islamic view of creation. The circle as a metaphor for Divine Unity is stressed by Nasr (1987)²⁷ that the Muslim love of geometry and number is directly connected to the doctrine of Unity (*al-Tawhid*). The sacred character of mathematics is evident in ornamentation, which presents the One and the many. For Grabar, geometry is an intermediary for displaying aesthetic beauty:

Geometry ... forces one to look and to decide what to think, what to feel, and see how to act ... The penalty of freedom in the arts is the loss of meaning ... It is meant only to be beautiful (Grabar 1992: 154).

1.2.3.3. Calligraphy

Recite in the name of thy lord who created Created man from a clot; Recite in the name of thy lord, Who taught by the pen, Taught man what he knew not (The Holy Koran, surah 96:1-5) The only novelty in Islamic ornament is calligraphy. It became a major vehicle for aesthetic energies and symbolic meanings because the word of God is recorded in the Holy Koran. Muslims understand that the use of a fine script (*kalle*, beautiful; *graphe*, writing) is both their religious duty and the most appropriate ornamentation for a mosque building. Forms and styles of calligraphy should be learned to underline epigraphy as a factor in Islamic ornamentation. Its advantage lies in the variety of styles, depending on the nature and context of texts in different periods. Sacred inscriptions take their position where any Muslim viewer can see them and learn them by heart, while an amalgam of lettering, texture, colour, and inscription embellishes the building. The same strength of the same str

Two main styles of calligraphy developed: (1) the script known as Kufic from the name of the city Kufa in Iraq in the seventh century, and (2) the Naskhi, a word derived from signifying 'to copy' and its meaning is almost equivalent to 'cursive'. The Kufic is a rectilinear and angular form for an aesthetic intention and scope. It was customary in the Holy Koran, due to the vertical strokes as its character and its more geometric configuration than the Naskhi.

Up to the 12th century, the Kufic was the script utilized in the ornamentation of mosaics and carved stones with its monumental character, easy transposition into various materials, and straight lines and empathic uprightness. The first use of epigraphic decoration was in the Dome of the Rock in Jerusalem in AD 685-691.³²

²⁵ Irwin 1997

²⁶ Ardalan and Bakhtiar 1973

²⁷ Cited by Necipoğlu 1995

²⁸ Jones 1978; Grabar 1987

²⁹ Davies 1982

³⁰ Burckhardt 1980

³¹ Hillenbrand 1994, 2001a

³² Papadopoulo 1980

The *Naskhi* was invented by Ibn Muqla and acquired its status as a major script at the hands of successive master calligraphers, such as Ibn al Bawwab and Yaqut al Musta'simi. The script was inherited from pre-Islamic and early Islamic scripts and appeared in a more systematized form at the end of the ninth century.³³ Less monumental than the *Kufic*, it was mostly applied to inscriptions. To architecture, its curves and oblique slants brought a supple and living element.³⁴

Yeomans (1999:190) posits Islamic calligraphy to be 'the geometry of line'. The proportion of the letters and the curved strokes go through mathematical calculations. And, the term 'spiritual geometry' describes both the structure of calligraphy and the essence and spirit of Islamic art. Mystical values are also manifest in calligraphy. A Sufi belief in awareness of God's presence and purpose in His creation is exemplified in the iconic form of calligraphy.

The very structure of calligraphy, composed of horizontal and vertical strokes woven into a fabric of profound richness, is potent with cosmological symbolism. The verticals ... provide an ontological relationship as well as a structure for the design, while the horizontals ... correspond to the creation that develops the balance and flow of the basic conception. It is through the harmonious weaving of the horizontal and the vertical that unity is achieved (Ardalan and Bakhtiar 1973: 45).

1.2.3.4. Commonality among the Three Genres

Similar expressions on the three genres appeared in various texts, such as geometric(al), linear, and mathematical, to show the interactive quality of Islamic ornament.

(Arabesque) abstract, anti-natural, circular, continuous, curved, geometrical, infinite, linear, mathematical, mystical, regular, repetitive, rhythmic, symmetric.

(Geometry) abstract, circular, continuous, geometric, linear, mathematical, mystical, regular, repetitive, rhythmic, symmetric.

(Calligraphy) curved, geometric, mathematical, mystical, rectilinear.

1.2.4. Regionalism in Islamic Art and Architecture in Southeast Asia and Java, Indonesia

Regionalism looks for sustaining spiritual forces and refuses to accept that a tradition is a fixed set of devices and images ... It ... deals with climate, local materials and geography in epochs before the arrival

Islamic culture and art have been influenced and remodelled by local traditions with countries with which they came into contact to comply with its religious and philosophical ideas. This interaction has enriched both the material culture of the Muslim world and those pre-existing ones.35 Today, Southeast Asia (the Malay)³⁶ including Java, represents almost onequarter of Islam's global community. Islamic civilization has been linked to the message of the Prophet since its arrival in Java in the early 15th century. Islam not only altered local cultural landscapes but also generated a unique heritage. One can ask why regionalism took place in this archipelago. Was it due to the awareness of continuing cultural heritage? The long geographical distance between the Arab world and Southeast Asia prevented the direct influence of the Islamic centre into this region at the beginning.37

However, the expression of faith in art and architecture articulated the creed of Islam and produced the complexity of regional variations.38 Two factors can argue about creating regionalism. First, living in a spirit of tolerance, flexibility, and openness, the Malay people were able to accept changes through careful selection, reflection, and modification without discarding their rich cultural traditions. They witnessed Hindu-Buddhist, Chinese, Islamic and western cultures, which had an impact on the lifestyle.39 Second, the arrival of Islam to the archipelago coincided with an era of spiritualism in the Islamic world. Sufi mysticism had first appeared in Persia and spread rapidly through international trade routes following the Mongol seizure of Baghdad in 1258. As the Sufi precept of 'universal toleration' could negotiate with pre-Islamic culture,40 the new Malay identity was quickly expressed in Malay art, to affirm the 'oneness of God'. Artists drew inspiration from a diverse heritage and transformed existing symbolism in line with Islam.41

of Islam. The aim is to unravel the layers, to see how indigenous archetypes have been transformed by invading forms, and in turn to see how foreign imports have been adapted to the cultural soil ... Beyond the particular, the regionalist tries to see the type, the general law, the originating principle (Curtis 1985: 74).

³³ Lee 2000

³⁴ Papadopoulo 1980

³⁵ Rogers 2005

³⁶ The term "Malay' was first appeared in the Buddhist Sriwijaya, but has altered to historical situations. Although the Malay world is sometimes synonymous with Islam, the regional circumstance makes it difficult to sustain (Bennett 2005). In this research, the term 'Malay' corresponds to 'Southeast Asia,' to which Indonesia belongs.

³⁷ Bennett, interview 2006

³⁸ Bennett 2005

³⁹ Yatim 2005

⁴⁰ Bennett 2005: 22-27

⁴¹ Yatim 2005

Besides, the close relationship between the rulers and Islam was spatially symbolized by placing Javanese palaces adjacent to the grand mosque and the town's centre. The common heritage in many mosques reflects the close political relationship between Muslim rulers in different regions. Shared features are a tripartite division (base/body/superstructure), a centralized plan, multi-tiered roof, soko guru (four master columns), mutsaka (crown), an outer colonnade, serambi (veranda), a walled courtyard with two gateways, drum, and graveyard.⁴²

Until the late 19th century, mosques were constructed in a vernacular style with a Hindu-Buddhist multi-tiered roof, using wood to accommodate local conditions. The persistence of indigenous buildings had to take into account the local profusion of natural resources and variable climates, resulting in exuberant and diverse architectural styles. Elements associated with Islamic architecture - the dome and geometric ornament - do not feature in these traditions. Multi-tiered roofs are the most suitable form for tropical weather against heavy rain and humidity, 43 and soko guru supports the uppermost roof, separating it from the double-layered outer roof, to admit light and to allow ventilation of the prayer hall. 44

As pre-Islamic traditions underline the form and setting of sacred places, mystical Sufis borrowed them, based on their belief of mosques to be sacred, creating a combination of indigenous and Islamic ideas and forms in mosque architecture. ⁴⁵ A three-tiered roof symbolizes the mystical paths to God. Soko guru signifies the spiritual context of the vertical unity between God and his believers, continued from the Hindu belief in the identity of self and the universal soul. ⁴⁶

According to a Malay perspective, art functions as delight and purity. The difference between Islamic art and art in Malay is its religious values inherent in the artefacts. Despite the influence of pre-Islamic beliefs and art forms on the pattern of life in Southeast Asia, a bond between Islam and the local culture has been steadfast, because existing influences encouraged Malay people to accept the Islamic ideologies, to develop a distinctive regional art. The concept of their godlike ancestors and the primary aesthetics of cosmological belief in Malay penetrated Islamic cosmology into the form of syncretic culture.⁴⁷

The avoidance of figurative representation separates Islamic art and architecture from the Hindu-Buddhist

aesthetic style. In this region, Islamic art needed reconciliation of the ambivalent relationship between the two religions, caused by the ruler's indigenous belief of the magic in art. The depiction of non-Islamic images such as the Hindu deity Ganesha or zoomorphic and anthropomorphic symbols with Koranic calligraphy requires understanding in light of the earlier animism. This method intended to represent non-Islamic images fitting into an aesthetic attitude tolerable to Islamic orthodoxy.

In the syncretic process, armed Ganesha resembles Ali's sword, leaving his Hindu iconography to suggest its transformative possibility. Another device was the metamorphosis of foliage into a figurative form. In a stone panel of Mantingan (1559), leaves and tendrils became a monkey shape. Makaras, disguised as foliate scrolls at Central Javanese temples, continued to adorn an Islamic ceremonial boat prow, signifying protection and richness. 48 The preference of emblematic depiction brought a potentiality in ornamentation. Narrative realism was replaced by vegetal patterns - meandering clouds whose endless spiralling floral and foliate scrolls form a visual dynamism. The shift from figural representation to frame decoration achieved its finest expression in the illuminated manuscripts, batik, and sculptured wood.49

Calligraphy enjoys a status higher than arabesque or geometry in Islamic ornament. As the medium for transmitting the Koranic words, the Arabic script played a spiritually unifying role and placed in a unique position among Muslims, ⁵⁰ regardless of their ethnic or social backgrounds. In Southeast Asia, Arabic calligraphy often decorates the illuminated manuscripts, instead of exploring sophisticated calligraphic styles. The blessed Islamic phrases are to be read for their association with the grace of the Koran, and inscriptions are perceived as powerful image of blessing and protection. The image of talismanic textiles suggests the influences of Sufi metaphysics.

Among many types of motifs in Hindu-Buddhist fauna and floral and Islamic ornaments including the winged gate in early Javanese mosques, Hindu-Buddhist *kala-makaras* and floral seemed to continue the most, particularly the lotus flower. Islamic poets describe a flower as a book, where one can study the knowledge about God. And its combination with birds is a characteristic of Islamic Javanese decorative art, despite a ban by the *hadith*. The winged gate was neither traceable in Hindu-Buddhist nor Islamic culture, but, as a bird of the vehicle of Vishnu in Hindu myth, the

⁴² Fontein 1990

⁴³ Noe'man and Fanani, interviews 2005

⁴⁴ O'Neill 1994

⁴⁵ Tjahjono 1998

⁴⁶ Isnaeni 1996

⁴⁷ Yatim 2005

⁴⁸ Bennett 2005

⁴⁹ Yatim 2005

⁵⁰ Rogers 2005

motif could be the Javanese invention at the beginning of Islamization.⁵¹

The Chinese settlements and their role in the creation of Islamic aesthetics in the archipelago are apparent in works of art. In Sumatra, where many Chinese settled and adopted Islam, the art of lacquer-making developed. In the timber-rich coastal Java, they influenced existing traditions of woodcarving and distinct batik styles.⁵²

Van Leur in *Indonesian Trade and Society* (1960) argues that Indonesian history must be understood in its terms and not in those borrowed from other cultures. In an interview held in 2004, Prijotomo, an Indonesian architect, underlined: 'We are Javanese, and then, our religion is Islam'. Islamic art became an extension, rather than a radical change from earlier aesthetic traditions.⁵³ The comments raise a question: what is the unique Javanese attitude on Islamic culture?

The answer finds in Kusno's article⁵⁴, which argues that Java was the centre of the universe before the arrival of Islam, but on facing Islam, Java was aware of its limit. To keep a religious balance, the Javanese Muslims had to localize orthodox Islamic culture to the continuing traditional symbolism, not to feel the radical shift of the centre. As a result, constructing the syncretic mosque of Agung Demak (1479) represents the power of the new faith in Java from the viewpoint of Islam. Islam has localized and incorporated to become an element within the broader cultural framework of Java from the Javanese perspective. Java was not part of Islam, but Islam was part of Java or Javanese life.

This philosophy has continued until five centuries later. A Javanese architect Mintobudoyo designed Soko Tunggal (1973) at Taman Sari in Central Java. The mosque has a single column, supporting four corner beams of the upper roof. The architect intended to construct a focus, a vertical centre that represents the 'unity' of the Javanese and the Islamic world. The vertical column pays tribute to global Islam; the horizontal spread of the four master pillars confirms the existence of the local power.

Surprisingly, the mosque orients itself to the east, away from *qibla*, and any deviation from this direction for a mosque would violate the Javanese rule. Indicated by a group of architectural historians in Indonesia, the architect clarified that it is Java which is at the centre of the whole negotiation, and his idea was acceptable. This story shows how the transformation of Javanese

Islam and its architectural form is inseparable from the social and economic contexts.

In 2004, Agung Semarang in Java was inaugurated. The architect Fanani⁵⁵ explains that his design principle is a combination of locality and Islam, nationalism and internationalism, and strictness and smoothness, symbolize the modern Javanese mosque. In architecture, pre-Islamic soko guru in the prayer hall extends through the roof, becoming minarets. In ornamentation, local floral motifs are designed according to the style of Islamic arabesque. Apparently, a return to the rich traditions of local culture with the pan-Islamic world becomes visible after 1945. However, the international solidarity of Islam and the unifying act of pilgrimage in the Arab world are in tension with the Javanese capacity to absorb and syncretize external elements. These factors can confuse attempts to distinguish and assess continuities and consistencies.⁵⁶

As a whole, Islamic cultural heritage reflects unity in diversity in Southeast Asia. In appreciating its development, one should be mindful of the context of the multicultural societies, which created a rich practice through the integration of tradition, ethnicity, geographical space and belief. It was due to the inspiration of the Malay people, who generated regional Islamic culture and Malay identity in this archipelago.⁵⁷

Regionalism in architecture is a concept of architectural design based on such determinants as the culture, the climate and the resources ... The history of civilization shows ... region and culture-specific architecture ... in different parts of the world (Muktadir 1988: 81).

1.2.5. Pre-Islamic and Islamic Java

Indonesia is located in Southeast Asia and is 1,900,000 sq km in area with an estimated population of 219,307,147 (www.world-gazetteer.com). Almost 90 % are Muslim, making Indonesia the largest Islamic nation in the world. Among its larger islands, Java contains 70 % of the whole population. With volcanoes, a tropical climate, rich rainfall, and fertile soils, Java has two cultures: Hindu-Buddhist and Islamic Java. Within the Hindu-Buddhist period (760-1500), Central (760-930) and East Java (930-1500) are distinguishable. In Islamic Java, a division of the three eras receives recognition: transitory (15C-1619), Dutch colonization (1619-1945), and contemporary (1945-the present).

⁵¹ Marwoto 2003

⁵² Bennett 2005

⁵³ ibio

Kusno 2003: 57-67; Saliya, Hariadi and Tjahjono 1990

⁵⁵ Fanani, interview 2004

⁵⁶ O'Neill 1993

⁵⁷ Bennett 2005

(1) Hindu-Buddhist Java

Leaving debates on Hinduization in Indonesia, Krom (1931) argues that Indian culture was imposed by Indians on indigenous Indonesians, shown in Hindu-Javanese temples characterized by 'an art originating in India, but executed by Hindu-Javanese'. To this, Bosch (1946) posits that the native inhabitants built these temples, describing Hindu-Javanese culture as the creative product of Indonesian society, guided by the Indian spirit. Kempers (1937) combines both: the two cultures are 'one indivisible whole', favouring the term 'a stream of culture' as a dynamic concept.⁵⁸

In the temple ornamentation, the continuity of the two cultures between Central and East Java is visible. Krom (1923) maintains a unity of two cultures and a continuous aesthetic principle in the temples of both regions. He named Central Javanese art 'Hindu-Javanese' and treated East Javanese one as a 'degeneration' of Central Javanese style. Holt (1967) and Fontein (1971) claim that ornamentation of Central Java is a direct influence of Indian elements. That of East Java was created by local indigenous people. The naturalness of trees and foliage became stylized in East Java, marking an innovative process. In the temples of Central Java, rich artistic imagination and luxurious ornamentation were present in variations on lotus scrolls.

Central Java was influenced by Indian civilization through the peaceful adoption of religion, kingship, culture, and art. By the eighth century, the Sanjaya and Sailendra kingdoms erected a grand scale of Hindu Prambanan and Buddhist Borobodur temples respectively. Around 930, political power shifted to East Java where the two great Hindu kingdoms of Singasari and Majapahit arose. The Majapahit was the most illustrious era in the whole of Southeast Asia, founding the temple complex of Panataran.

Spiritually, the Javanese have much in common with mystic animism. Into this, new Indian Sivaite Hinduism and Mahayana Buddhism penetrated, and there occurred a fusion of beliefs and cultural elements. The term 'Hinduization' implies the absorption of both Hinduism and Buddhism.⁵⁹ As an example, a *candi*, a temple, is a place where gods show their actual presence, to represent a replica of the Cosmos Mountain, Meru - the mythical abodes of the gods. In this regard, representing a god, a king receives respect after his death, and the temple of his burial place is much adorned.⁶⁰ As Hindu temples reflect the Cosmos Mountain, they symbolize the universe, and their

sculptural ornaments should conform with the law, according to ancient texts, named *silpasastra*.⁶¹

Temple walls, carved with human beings, animals, and mythological characters as well as floral motifs, have a specific place in the scheme of temple architecture. The floral depiction on temples functions both as possessing religious connotation and creating aesthetic beauty. Among naturalistic and geometric designs in the temple ornamentation, four motifs - tumpals, kala-makaras, lotus buds, and scrolls - were most frequent, due to their symbolic connotation. Triangular tumpal was originated in the prehistoric period and continued in Hindu-Buddhist temples. Wagner (1959) affirms that the tumpal was symbolic, because of its magic character, or because it conveyed an idea of fertility. Tjandrasasmita (interview 2005) views it as representing the Cosmos Mountain.

A kala head has a human face or a demon's head, and a makara is a combination of a fish and the trunk of an elephant. A combined kala-makara represents the celestial mountain and is believed to expel demonic influences from temples. It also denotes a duality of the cosmos. The most dominant motif can be the primaeval lotus, which signifies creation and sanctity in Hinduism, as it grows from the waters of eternity and brings forth the Brahma (the god of creation). The decoration of naturalistic lotuses on temple walls displays the ideal beauty.63 Lotus flowers underwent a series of transformations with different symbolic meanings, starting with a bud.64 Scrolls in Javanese temples are called 'recalcitrant' spirals,65 which are the rootstock of the undulating lotus producing nodes (Sanskrit, parvan) at regular intervals; from each of these, a leaf-stalk emerges in the shape of a coiled spiral. At the bottom of scrolls, 'the Golden Germ', the start of life, appears and discerns Hindu-Buddhist scrolls from Islamic arabesques.

(2) Islamic Java

Although Islam is the official creed and a means of unity in its present-day culture, ancestral and mythical beliefs provided a universal background to Islam in Java. Two types of religious manifestation exist. Agami Jawi (Javanese Religion) represents an extensive complex of mystically inclined Hindu-Buddhist beliefs and concepts, integrated within an Islamic frame of reference. Agami Islam Santri (Islam of the Religious

⁵⁸ Cited by Sudradjat 1991: 27-34

⁵⁹ Wagner 1959: 104-106; Holt 1967: 35

⁶⁰ Fontein 1971; Suleiman 1976

 $^{^{61}}$ The silpasastra discusses temple architecture and sculpture, but not temple ornamentation in depth. It is a canon of Hindu religious architecture (Sedyawati, interview 2005).

⁶² Gupta 1996

⁶³ Sedyawati 1990

⁶⁴ Bosch 1960

⁶⁵ van der Hoop 1949: 272

⁶⁶ Wertheim 1956

People) is closer to the formal dogma of Islam.⁶⁷ With the foundation of Muhammadijah organisation in 1912, which stresses pure orthodox Islam, Agami Islam Santri spread across the country, founding *ummat*, an Islamic congregation.⁶⁸

Among many debates about the spread of Islam in Indonesia, two principal routes are recognized. Indigenous Indonesians converted themselves after coming into contact with Muslims. Alternatively Muslim traders of Arabic, Persian, Indian and Chinese origins settled in Indonesia, practising their religion. Islam is likely to have been introduced through trade routes and arrived in Java in 1450.⁶⁹

The idea that the origin of Islam was in Gujarat in northwest India is favoured. Wertheim (1956: 193-196) stresses a 'secularized' Islam, which was adapted to trading cities in Southeast Asia. While Islam was spread by Muslim traders who married local women, in the heartland of Java, mystical Sufi teachers (walis, saints) had a significant role in Islamization. The animistic ancestor cult was both tolerated and incorporated into Islamic ritual. A ban on representing living beings in the hadith (the Prophet's sayings) was not strictly observed. Instead, stylized and modified wayang (shadow puppet) of Hindu-Buddhist tradition was a vehicle of spreading Islam.70 Muslim missionaries described Islam as a mystical doctrine to penetrate into non-Muslims by a fusion of animism and Hindu-Buddhism, creating syncretic Islamic religion.71

Javanese mosques inherited a number of architectural and symbolic components from Hindu-Buddhist temples, such as the tripartite division, a centralized plan, multi-tiered roof, etc.⁷² Krom was the first scholar to discuss syncretism in Java. Instancing the minaret (tower) of Kudus, its form was adapted from an old form, caused by the non-hostile attitude of Javanese Islam to established architectural tradition. His theory gained broad acceptance and has remained unchallenged until recently. Tjandrasasmita elaborates that Islam not only adopted local traditions into mosques but also contributed to the preservation of indigenous culture. The Sendang Duwur mosque (1561) is an example of a fusion of Hindu-Javanese and Islamic cultural elements, reflecting a close relationship between Hindu Majapahit and the coastal Islamic cities. Ornaments contributed to integrating Islam into Javanese culture and encouraged artists to adjust to new realities.73

on the north Javanese coast (pasisir) in the 15th century reveal pre-Islamic motifs: natural motifs such as the sun, fauna, floral, construction element, cross, pool, wayang and frame. Motifs appeared with Islam are heart-shaped leaf, geometric interlace, calligraphy, and the winged gate.

Investigated by Marwoto (2003), mosques and graves

According to the researcher's fieldwork in temples and mosques, tumpals, kala-makaras, lotus flowers or buds, and scrolls often appeared, due to their sacred character. The connotative lotus was much available in both Hindu-Buddhist and Islamic periods. Flowers with different numbers of petals in combination with birds are present on graves. Their coexistence accounts for the characteristic of Islamic decorative art in Java. Kala-makaras were stylized, to comply with the ban on living figures by the hadith. Tumpals continued, while scrolls had to cooperate with incoming Islamic arabesque.

The four motifs were frequent in the transitory period and gradually replaced by orthodox Islamic ornaments in the next periods. However, they continued in renovated and new mosques, probably initiated by the Javanese concern for cultural continuity. An extensive use of the four motifs in religious and secular buildings and objects represent regional motifs along with orthodox Islamic ornaments.

The tradition says that Islamic ornaments were brought to Java by traders and *ulamas* (religious leaders) at the beginning of Islamization. As Java had already megalithic geometry and Hindu-Buddhist scrolls, incoming Islamic geometry and arabesque were assimilated into the existing motifs. It was Arabic calligraphy that was highly respected and survived. It was a new motif for the Javanese and a means of recording the Holy Koran. Calligraphy was popular during the Dutch colonization; abstract geometry and arabesque are extensive in contemporary mosques in the response of the current stream of simplicity in architecture.⁷⁴

The origin of the Javanese mosque went through much debate. Two ideas developed. The first was 'cultural continuity' which the pre-Islamic architectural tradition was the source of a mosque building. The other was 'cultural influence' on the mosques from Islamic India and China. A mihrab, a prayer niche, requires extraordinary respect, as it indicates the direction of prayer toward Mecca⁷⁵ with lavish ornamentation in the Near East and Arab world. By contrast, traditional Javanese mihrabs tend to be simple in decoration with pre-Islamic motifs of symbolic *tumpals, kala-makaras*, lotus buds, and scrolls, creating a sacred atmosphere.

⁶⁷ Koentjaraningrat 1990

⁶⁸ Geertz 1964

⁶⁹ Schrieke 1957; Wagner 1959; Geertz 1964; Koentjaraningrat 1990; Ricklefs 1993

o Soemantri 1998

⁷¹ Pigeaud 1976; Koentjaraningrat 1990

⁷² Fontein 1990; Tjahjono 1998

⁷³ Cited by Sudradjat 1991

⁷⁴ Fanani, interview 2006

⁷⁵ Frishman 1994

⁷⁶ Irwin 1997

A beautiful mihrab is a strategy for encouraging non-Muslims to embrace Islam in Java.⁷⁷ The *hadith* neither forbad moderate ornamentation in mosques nor permitted it. Instead, it warned that the luxury would decrease Muslim faith in God, for fear of disturbing the prayers' concentration.⁷⁸

Islamic Java can be divided into three phases: (1) Continuation of pre-Islamic influence in the transitory period (15C-1619), (2) European and Islamic influences during the Dutch colonization of Java (1619-1945), and (3) a pure Islamic movement in the contemporary period (1945-the present).79 The first Islamic kingdom of Demak was founded on the northern central coast in the 15th century, conquering the Hindu Majapahit.80 Since then, Islam has became an indissoluble part of Javanese life yet retaining traditional socio-cultural structures.81 During the last decades of the 16th century, the Dutch were influential in the courts of Central Javanese kingdoms, and traders settled down in different regions, forming communities with the traditional Hindu-Buddhist style of mosques to be their life focus. From the end of the 19th century, new directions in theological education and social reform had introduced alternative architectural styles into Java. And the expansion of population brought renovations and constructions of mosques in the next decade, and designs from the Middle East, India, and North Africa took over local traditions. Although forms and symbols of pan-Islamic architecture made up a part of the cultural heritage, the details on many mosques still reflect their predecessors in the material or structural method, to continue the local culture.82

In the transitory period, a significant continuity of pre-Islamic tradition was shown, while foreign influences, such as European and Islamic, occurred during the Dutch colonization. In the contemporary era, pan-Islamic motifs began to replace existing ones, but a tendency to continue the local cultural heritage maintains a distinct regional style. Javanese mosques display an amalgamation of pre-Islamic and Islamic components, incorporating Chinese and European influences.

1.3. Gaps in knowledge

The study of Islamic art and architecture in Southeast Asia seems to be much marginalized. Bennett (2005) argues in *Crescent Moon-Islamic Art and Civilization in Southeast Asia* that, until the late 20th century, scholarly discourse on Southeast Asian art neglected

the significance of Islam's presence in the region. Exemplifying the marginalized Islamic art in Raffles' *The History of Java* (1817), none of the illustrations is found in this book. European scholars working from the cultural viewpoint often have trouble in comprehending the delicate dialogue between art and spirituality in this Islamic world. The chronological relationship of Islam to Hindu-Buddhist traditions has reinforced the dichotomy between religion (*agama*) and indigenous traditions (*adat*).

Hurgronje and Windstedt underlined Islam in Southeast Asian societies as somehow less authentic than that of the Middle East. For Geertz, Islam is more a social category than a belief system. Discussion on Islamic art would be constrained by the idea that Islam was another stream of influence in this region. It can be misleading that Islam followed the indigenous animistic societies and Hindu-Buddhist kingdoms chronologically as a part of a cultural dynamic; thus, Islamic art never achieved an identity regarding its unique aesthetic perimeters.

Among several pieces of research so far, very few have discussed ornamentation in Javanese mosques. Krom (1923, 1931), Bosch (1921, 1946, 1961), Vogler (1949), Stutterheim (1956), Kempers (1959), Geertz (1964), Holt (1967), Fontein and Soekmono (1971), de Graaf and Th. Pigeaud (1976), Dumarçay (1986), and Prijotomo (1988) dealt with different subjects about Indonesia. Sedyawati and Santiko published many articles in the 1990s. However, almost all literary sources concentrate on Indonesian archaeology, architecture, anthropology, history, culture, and art. If any topic of ornamentation was mentioned in their bibliography, it was a brief description. Practical analysis of pre-Islamic and Islamic motifs in art and design was hardly acquirable.

Regarding art, Subarna (1982-1983, interview 2004) discusses continuity of prehistoric ornaments into Javanese art, stressing that the same type of kala was already found in Indonesia before Hinduization in the fifth century. Of archaeology, Tjandrasasmita (1984, interview 2004) explains the earliest example of syncretic architecture and ornaments at Sendang Duwur. Anbary (1998) also explores the background of Hindu-Buddhist and Islamic archaeology. Of architecture, Sudradjat (1991) illustrates the history of Indonesian architecture, while Isnaeni (1996) focuses on the comparison between Hindu-Buddhist and Islamic architectural elements in terms of shared mystical concepts. Of ornament, two dissertations (Habib 2001; Marwoto 2003) have been available in light of archaeology. Habib writes on epigraphic research, and it is Marwoto, who mentions ornaments on the northern coast of Java. Marwoto borrows an expression from Sedyawati (1987: 4-6):

⁷⁷ Prijotomo, interview 2004

⁷⁸ Omer 2004

⁷⁹ Tjandrasasmita, interview 2005

⁸⁰ Raffles 1817; 1982

⁸¹ Tjandrasasmita, cited by Sudradjat 1991

⁸² O'Neill 1994

In Indonesia, the study of art history is still at an early stage. An effort to make a division in Javanese ancient art was made by Krom (1926). He showed the development from Central Java to East Java ... Bernet-Kempers (1959), in his study about Indonesian ancient art, created a kind of order, beginning with divisions into prehistoric, Hindu and early Islamic eras. Vogler (1949) carried further, examining Hindu-Javanese constructional art through the form of *kala-makara*. He made a distinction ... in Central Java, and East Javanese art.

No comprehensive, serious study of Javanese mosque ornamentation took place neither of the whole Java, nor across a given period, nor of specific ornaments, such as *tumpals*, *kala-makaras*, lotus buds, and scrolls, by using elements and principles of design as indicators. Identifying the origins of scrolls in Javanese mosques either as Hindu-Buddhist or Islamic or both was not done. These examples indicate significant gaps in knowledge about the continuity and influence of pre-Islamic ornaments on Javanese mosque ornamentation.

1.4. Research question and sub-questions

1.4.1. Principles of Research

This research starts from Java, where every earlier tradition had inclined to be adapted into new incoming systems, resulting in various syncretic forms. One of these forms appeared in the mosque ornamentation. Javanese mosques are likely to have taken over pre-Islamic traditions, proved in Sendang Duwur (1561). Ornaments in mosques need an inspection to determine whether or not their ideas and forms inherited Javanese Hindu-Buddhist tradition. Obtaining a broad view of the mystical ideas in animism, Hindu-Buddhism, and Islam can find their similarities and examine how these concepts have been formulated in the temple and mosque ornamentation. This is possible by investigating syncretic ornaments across pre-Islamic and Islamic periods. Moreover, the development of these ornaments within the Islamic period needs to be observed, in parallel with verifying their integration into orthodox Islamic arabesque, geometry, and calligraphy.

1.4.2. Purpose of the Study

Understanding of Javanese mosque ornamentation will not be possible without detailed studies of representative motifs, chosen from different periods and geographical areas in Java. In recording details of ornaments by using various disciplines - anthropology, archaeology, history, architecture, art, and design - a unique and profoundly developed ornamental tradition is achievable. And this research could place Javanese Islam with its wealthy conglomerate of religious and

cultural expression in its rightful place of the wider Islamic Arab world.

The purpose of this study is to examine the degree of continuity and influence of pre-Islamic ornament on Javanese mosque ornamentation through four motifs (tumpal, kala-makara, lotus bud, scroll) from the 15th century to the present in Java, Indonesia.

It also aims at investigating the chronological development of the four motifs within sub-sections of the Islamic period (Transitory/Dutch colonization/Contemporary). In particular, the motifs on mihrabs, the most adorned place in a mosque building, are compared with those in other locations, to see a commonality in their ornamentation. This study seeks to identify the origins of Islamic scrolls in Javanese mosques, in terms of idea and form. Were they derived from Hindu-Buddhist scrolls? Or were they taken from orthodox Islamic arabesques? Or were they a combination of both?

1.4.3. Research Questions

(Main question): What has been the degree of continuity of pre-Islamic ornaments in Javanese mosque ornamentation from the 15th century to the present day?

Prehistoric	Kalasan temple	Agung Yogya mosque

(Sub-question 2): The *hadith*, the sayings of the Prophet, prohibits living figures from being depicted in art. Why therefore has the *kala-makara*, a favourite animal motif in Hindu-Buddhist temples, been adapted into Javanese mosque ornamentation, and how has it been used in Javanese mosques over time?

Borobodur temple	Central Javanese temple	Agung Kasepuhan mosque

Pre-Islamic

Prehistoric

Dutch colonization (15C-1619)

Hindu-Buddhist

Islamic

Dutch (1619-1945)

(1945-the present)

Table 1.1. Development of the pre-Islamic and Islamic periods

(Sub-question 3): How frequent was the use of Hindu-Buddhist lotus buds in Javanese mosque ornamentation, and how important has the lotus bud been in mosques within the Islamic period?

East Javanese temple Agung Kasepuhan mosque

(Sub-question 4): What if any was the influence of Hindu-Buddhist scrolls on Javanese mosque scroll designs?

Kalasan temple	Agung Yogya mosque

1.5. Structure of the thesis

This thesis consists of nine chapters. Chapter 1 explains the background and objectives of this research, outlines the research activities and gaps in knowledge. To verify Islamic ornament in Java, Indonesia, general background theories on orthodox Islamic ornament of arabesque, calligraphy, and geometry are discussed with an emphasis on the commonality among them. A thorough examination of arabesque is done through literary sources. Were scrolls in Javanese mosques influenced by both Hindu-Buddhist scrolls and Islamic arabesques? Afterwards, regionalism in Islamic art and architecture in Southeast Asia, particularly in Java,

exposes a local flavour which is different from the Arab world. It prepares for a later discussion of how orthodox Islamic traditions cooperated with pre-Islamic ones in Javanese mosques.

Chapter 2 starts with an explanation of the three different Islamic periods in Java and observes whether history affected mosque architecture and ornamentation. And the main discussion concerns the methodology of tackling the research question. A research design, choice of methods for data gathering, observation, indicators, and other practical information can provide a broad view of the core methodology applied in this study. The limitation of the research is also defined.

An overview of the sources of references on Hindu-Buddhist and Islamic Java presents Chapter 3, along with the dissimilarity between Central and East Javanese temples. The crucial element of this research into the degree of continuity of pre-Islamic motifs in Javanese mosque ornamentation is an examination of four syncretic pre-Islamic motifs (tumpal, kala-makara, lotus bud, scroll) which persisted into the Islamic period. These four sacred motifs will explain the religious phenomena prevailed in Java and their roles in shaping ornamentation of temples and mosques. Instead of a new Islamic form imported from the Near East and Arab world, Javanese mosques continued non-Islamic traditions by adapting the existing ornaments into their mosques.

While Chapter 3 deals with Hindu-Buddhist and Islam ornaments, Chapter 4 focuses on interviews with 20 Indonesian scholars, tracing their opinions on the origins of motifs displayed in Javanese mosques. Are they Hindu-Buddhist or Islamic or both, in idea and form?

Chapters (5-8) take on the research questions and critical investigation of the degree of continuity of the four pre-Islamic motifs into Javanese mosque ornamentation. In Chapter 5, collected data about *tumpals* is analyzed by the line and summarized, to

arrive at the research findings. Chapters 6, 7, and 8 will repeat the same type of investigation into *kalamakaras*, lotus buds, and scrolls, in terms of shape, form, and rhythm respectively. In all four chapters, each sub-question is evaluated, and its detailed analysis presented. The outcome of investigating each motif determines the answer to the research question. In parallel with the examination of continuity between the pre-Islamic and Islamic periods, the four motifs within the Islamic period might show developments within it, because mosques built in a certain period may have different ornaments from those in another period. The observation of the use of the four motifs for mihrab ornamentation will enrich the result of the research.

Finally, Chapter 9 reviews the result of each chapter, drawing them together, to respond to the main question

of the research, namely the degree of continuity of pre-Islamic motifs into Javanese mosques. The evaluation of pre-Islamic *tumpals*, *kala-makaras*, lotus buds and scrolls in Javanese mosque ornamentation can reply to the research question and state conclusions that have not previously been published.

Java has been a melting pot of syncretism between mystic animism, Hindu-Buddhism, and Islam throughout history. Javanese people are tolerant of any incoming culture from outside but strive to preserve their cultural heritage. The beautiful amalgamation of all the factors is indebted to the local genius. The conclusion also makes several suggestions for further research.