

# Public Attachment to Religious Places: A Study of Place Attachment to Mosques in Malaysia

Mina Najafi, Mustafa Kamal Bin Mohd Shariff

**Abstract**—Religious place attachment is an affective bond that develops between people and their religious settings. The published literature shows that although religion has a significant impact on the public ‘place attachment’, the architectural features and attributes of the places could still play an influencing role in strengthening this attachment. However, the role of architectural characteristics and features of the religious places, as the components that give them meaning(s), has not been adequately explored. This paper reports the impacts of factors influencing the physical and ambience quality of different styles of Malaysian mosques from the Muslim public perspective. Thereby, a survey was conducted to investigate Malaysian public attachment to selected five Malaysian state mosques with respect to their architectural characteristics and features. The survey employed the results of series of interviews as its theoretical basis. The finding proved that Malaysian ‘Muslim’ society has equally strong attachment to all selected mosques in spite of their different architectural styles. The findings also confirmed that the emotional attachment to the impressive aspects of architectural features (e.g. dome, minaret etc.) and the unique identity of the studied mosques is irrespective of the architectural styles, e.g. Modern vs. Postmodern. The paper also argued that religious activities and pleasant architectural characteristic of the studied places including the functional facilities are equally important factors in forming place attachment. This is a new approach to the study of physical and ambience quality of mosques, hence providing sufficient theoretical basis for further investigations and improvements.

**Keywords**—Place Attachment, Place Identity, Physical Features, Malaysian Mosques.

## I. INTRODUCTION

STUDY of feelings and emotions that people develop towards places is getting increased attention, while the concept of place attachment lies at the heart of these studies [1]-[5]. Place attachment is defined as the emotional and affecting bond established between people and places. This sentimental connection could be developed towards places that differ in size and function, e.g. the room, the house, the neighborhood, the city, recreational settings, communities, religious places, etc. [1], [6], and [7]. Religious places are the physical settings correlated to religious or sacred events that could cultivate fundamental human values and enrich human soul [8]. These places are often embellished by architectural structures and art [9]. Several studies investigated the influencing factors that could shape the emotional place

attachment to the sacred places. They revealed the significant impact of architectural features (e.g. the constructional materials, the sacred geometry especially the height of the construction, the use of light, color, architectural aesthetic, sound etc.) in promoting the perceived meanings by people in sacred architectural spaces [6], [10], and [11]. However, attachment to different type of religious sites -albeit not being a new research area- should benefit from greater recognition.

In the Islamic culture, ‘Masjid’, or mosque, is considered as the most important sacred structure. As such, due to large Muslim population, Malaysia has numerous mosques dispersed all over urban and rural areas. However, they adopt varying architectural styles influenced by varying ethnic sub-cultures, periods of colonialism, foreign influences, technology utilization and the political environment [12]. Mazumdar and Mazumdar [14] argued that design, decor, and aesthetics of the religious places could bring people closer to religious ideals, spirituality, community, and peace and consequently influence their attachment. However, there is a theoretical gap in existing literature in investigating the impacts of the environmental characteristics of mosques on people’s attachment. In other words, the preceding subjective and descriptive studies often do not provide a sufficient theoretical basis for the academic investigations of this attachment.

In order to fill the aforementioned theoretical gap, this study investigated the actual parameters influencing people’s attachment to Malaysian state mosques by surveying public perceptions. Employing a mixed method research approach, the study discovered the multi-dimensional aspects of place attachment and its meanings in the aforementioned contexts. In this essence, the dimensions of place attachment were examined in the context of the five contemporary Malaysian state mosques from three different architectural styles, i.e. Modern, Postmodern and Vernacular. The study objectively highlighted the role of different architectural attributes of the studied places in strengthening people’s attachment and the significance of this attachment in creating the sense of place.

## II. THE CONCEPTS OF PLACE AND PLACE ATTACHMENT

Place is a space associated with people’s relationship with physical environments, individual and group activities, and conceptions or meanings [15]-[19]. In this case, physical features refer to the physical characteristics of a setting that not only define the type of a place but also could contribute to creation of meanings. Every place was built for supporting a particular action, so activities could refer to those human behaviors afforded by places. Activities constitute very

M.Najafi. is with the Department of Architecture, Faculty of Design and Architecture, University Putra Malaysia, 43400 UPM Serdang, Selangor D.E, Malaysia (phone: +60107715019; e-mail: mina\_artistic@yahoo.com).

M. Kamal B.M. Shariff is with the Department of Landscape, Faculty of Design and Architecture, University Putra Malaysia, 43400 UPM Serdang, Selangor D.E, Malaysia (e-mail: muskamal2008@gmail.com).

important parts of places so that Genereux [20] argued that people may differentiate places based on the behaviors and activities there. In this regard, Genereux [20] identified “behavioral component of place meaning” as a complex aspect which contributes to overall image of places. Meanwhile, meanings could refer to perceptual and psychological aspects of places that are perceived by people there. These meanings often hinge around three main poles, namely self, others, and the environment itself [21]. These meanings, however, are often implied by physical settings combined with what a person could bring to it. Consequently, places could play an essential role in humans’ life [21], especially by developing and maintaining self and group identities [22]-[25]. With regards to this matter, Proshansky et al. [23] identified significant impacts of physical environment and the attributes of the places on forming people’s self-identity. From a similar point of view, Bonaiuto et al. [24] advocated that there are theoretical links between the quality of the natural environments and processes that form social groups’ identity, perceptions, feelings, and behaviors. From another perspective, Devine-Wright and Lyons [25] argued that historical places (in particular) hold a significant share in creating and developing group identities at national levels.

What constitutes to human relationships with their surroundings has also attracted attention of a number of researchers. The published literature in this field indicates that places and their physical features could imply important messages and meanings that are perceived and decoded by people based on their roles, experiences, expectations, and motivations; and they are actually attached to these perceived meanings [26] and [27]. From a similar perspective, Altman and Low [1] suggested that ‘Sense of Place’, ‘Place Identity’, and ‘Place Attachment’ are strongly associated with the physical features, activities, and meanings occurring within places, so these physical qualities could determine the form and degree of people’s relationship with places.

#### A. Sense of Place

In experiencing a place, the physical forms and attributes, activities and meanings are combined together to form the sense of place [26], and [28]. Literature supports that sense of place could carry an overarching concept that is associated with the feelings and perceptions that people have through experiencing a place [6], [7], and [16]. It is a general way in which an individual feels about a place and assigns meaning or values to it. There are certain qualities of physical settings that have such a strong “spirit of place” which tends to have a similar impact on many different people [26]. Sense of place is an important factor in maintaining the quality of the environment and an essential aspect in integrating users with places as to contribute to better use, satisfaction and attachment to the places [3], [26], [29], and [30]. Shamai argued that the concept of sense of place is vague and its definition is very difficult to define and also to measure. Stedman [13] asserted that the assessing sense of place is not quite convenient as it is subjective because of its multidimensionality. Stedman thus recognized place

attachment as an objective dimension for measuring the sense of place.

#### B. Place Attachment

A place comprises of the physical attributes, activities, and meanings that intertwine in the experience of places [16]. Place attachment is defined as the emotional and affecting bond established between people and places [1]. It also determines the emotional investment with a place [31] and the extent to which an individual values and identifies a particular environmental setting [32]. According to Altman and Low [1], place attachment involves interplay of affections with emotions, knowledge with beliefs and behaviors with actions in reference to a place. Therefore, place attachment is mainly constructed as a result of people-place interactions, the constructed meaning(s) and its corresponding attributes. In this regard, Hidalgo and Hernandez [33] described this kind of attachment as a desire to maintain closeness to an object that generates the special feeling towards a particular place.

Place attachment is affected by several factors as follows: Socio-demographic characteristics [1], [21], and [34], Environmental experiences including people’s type of involvement with place [34], Degree of familiarity with places [35], Culture [36], and Place itself. From this point of view, familiarity includes learning about a particular place and recognizing it. Here, the familiarity refers to developing body of knowledge and people’s expertise about types of places [35]. With respect to culture, Tuan [37] argued that places may act as symbols for more abstract ideas (e.g. freedom, honor) and people’s feelings about places are not strong emotions unless places encompass significant personal or cultural events. From a different point of view, however, it has been stated that the attachment to a setting could also be influenced by the qualities and characteristics of the places per se. For instance, Gieryn [38] and Stedman [13] advocated the importance of place attributes and characteristics in construction of the place attachment.

#### C. Religious Place Attachment

Religion and ritual are the fundamental elements of the human consciousness and have long served as methods of illustrating mysteries of cosmos and places. Religious places are the places that are constructed in order to support religious activities during rituals and satisfy the basic human needs in terms of emotional security and social interaction [8]. In essence, religious architecture represents the physical space in which people often try to get closer to the divine [9] and [39]. Barrie [40] argued that architecture, in addition to directly symbolizing the belief system, acts as a stage that accommodates and facilitates the embodying myth via ritual. Thus, the essential quality of religious architecture is its provision of built myth that symbolizes cultural beliefs and facilitates the enactment of shared rituals. The method of producing this identification is through specifying a particular place. Architecture therefore is the synthesis of a variety of stimuli which, when experienced in totality, has a semantic function. Consequently in religious architecture, the corporeal

qualities of the space, its tactility, lighting, aural qualities etc. are the aspects which orchestrate a predetermined meaning that edifies the spirit of the believer. Watson and Kucko [10] argued that religious places could promote public attention to divine and increase demand for spirituality.

The reviewed of literatures also shows that there is a significant correlation between the sacred buildings' spatial arrangements, materials, and furnishings with the worshipers' feelings and perceived meanings within the places [6], [10], [11], [39], [41], and [42]. Watson and Kucko [10], revealed the significance of particular architectural components (e.g. building materials, sacred geometry of the construction, use of light, color, and sound together contribute to create the spirituality) in the perceived meanings and experienced peace and tranquility by people in sacred architectural spaces. From a similar point of view, Mazumdar and Mazumdar [39] advocated the role of natural elements (e.g. water sound, flowers' smell, lights, and natural landscape) in evoking people's spiritual and religious feelings. In addition, White [11] advocated the role of light as the most important building material in a well-designed church and Roberts [42] argued that light always is used as a metaphor for the Holy Spirit, for enlightenment, and for learning. Furthermore, the excessive height of sacred places was supported as the means through which worshipers lift their eyes toward heaven and God, so free themselves from earthly concerns [6], [11], [41]. Similarly, Roberts [42] hinted to the role of the volume in the sacred structure and argued that the volume of sacred spaces could make a difference by leveraging the feelings of sacredness within places. Roberts [42] also explained that the height of the building from the outside can act as a landmark and signify the presence of the sacredness. With respect to the role of nature, [43] argued that nature permits reflection and its components make it possible to find out what is on one's mind. Finally, Tuan [6] discussed the role of beauty of the sacred places in inspiration of sacredness.

As such, Mazumdar and Mazumdar [9] advocated the significant correlation between religion and public place attachment to sacred settings. They elaborated that religion can be important to people and contribute to a significant portion of many people's private and public lives, hence affecting their lifestyles. It also could have a profound influence on people's relations with places. According to Mazumdar and Mazumdar [9], significant places in religion can help believers learn identity and develop "self". Religion bestows these places symbolic meanings which not only help differentiate them from ordinary spaces, but also foster attachment, devotion, spirituality, certain disposition, ethos, and worldview in its believers. It supports their earlier proposition [39] that the design, decor, and aesthetics of the religious places could bring people closer to religious ideals, spirituality, community, and peace. In this regard, they argued that the architectural features and physical attributes of sacred places can transport people to a different place and reality, enabling them to experientially find heaven on earth. Thereby, it can be concluded that the design features of sacred structures can instill an inner tranquility and peace, by

providing an oasis of spiritual calm in a frenzied world [9]. This explains religious place attachment as a process not as a result of a single event.

The aim of this study was to explore the existing links between the attributes and characteristics of Malaysian state mosques and people's attachment to these places. The study relied on Relph's [16] 'Place' theory in investigating form and degree of this attachment. This which has been utilized and developed by Canter [15] defined three major components of place as follows: 1) physical attributes, 2) activities in the place, and 3) meanings. This study developed its variables and factors based on these three components in order to investigate form and degree of people's attachment to Malaysian state mosques. As such, the study measured its variables based on some factors that can be categorized into three groups: 1) physical attributes; 2) activities in the places; and 3) meanings. With respect to the first category of variables, the physical attributes, Section III explains the general aspects of the selected five mosques as the contexts of the study.

### III. CONTEXT OF THE STUDY

Islam came to Malaysia about 700 years ago, so variety of architectural styles has been developed in design of Malaysian mosques. Tajuddin [44] identified eighth architectural styles of mosques in Malaysia as follows: Traditional Vernacular, Sino-Eclectic, Colonial, North Indian, Modern Vernacular, Modernistic Expressionism, Postmodern Revivalism, and Vernacular Revivalism. This taxonomy also reveals that all contemporary Malaysian state mosques could fall in one of the aforementioned latest three categories. Consequently, this paper just investigated characteristics of Modernistic Expressionism, Postmodern Revivalism, and Vernacular Revivalism that coincide with the scope of this study.

In order to investigate the type and degree of people's attachment to different contemporary Malaysian state mosques, this study therefore equally focused on the mosques from Modern, Postmodern, and Vernacular Revivalism architectural styles as settings for investigation. It used Stratified Sampling Method [45] to choose five out of all 14 Malaysian state mosques. Basic criteria for selection of sample areas were: 1) the samples should be State mosques in order to fall in the scope of this research; 2) the samples should be representatives of Modern, Postmodern, and Vernacular Revivalism architectural styles of Malaysian state mosques; and 3) preferably the samples should be located at an affordable distance for the researcher to access. The selected mosques were expected to represent all Modern and Postmodern contemporary Malaysian state Mosques. In order to increase the validity of findings, the study also followed classification of Tajuddin [44] that is well-known among researchers working on the theory and history of Islamic architecture.



Fig. 1 Exterior (Top) and Interior (Bottom) of Masjid Negeri Sembilan

#### A. Modernistic Expressionism Architecture

Modern architecture is a wide expression in architecture which first arose around 1900. This term is given to a number of building styles with similar characteristics; primarily the simplification of form and the elimination of ornament. These methods of architecture which are also called International Style are de facto architectural styles of 20th century. Modern architecture is usually characterized by Tajuddin [46]: rejection of historical styles as a source of architectural form; an adoption of the principle that the materials and functional requirements determine the result; an adoption of the machine aesthetic; a rejection of ornament; a simplification of form and elimination of unnecessary detail; an adoption of expressed structure. There are some distinctive samples of modernistic style among contemporary mosques of Malaysia, e.g. Masjid Negeri Sembilan, Masjid Negara, Penang State Mosque, and the Kota Samarahan Mosque [44]. Among all these samples, this study chose Masjid Negeri Sembilan in Seremban (Fig. 1) and Masjid Negara in Kuala Lumpur (Fig. 2) as representatives of this style.

#### B. Postmodern Revivalism Architecture

Postmodern architecture is characterized by the [47] as incorporation of historical details in a hybrid rather than a pure style, use of decorative elements, more personal and exaggerated style, references to popular modes of building. Borrowing elements, references, color, and symbolism from the past, Postmodernism attempts to create architecture of meaning for the general public rather than the elite few. Putra Mosque, the Shah Alam Mosque, Masjid Wilayah, the

Sarawak State Mosque and many others are the examples of Postmodern Revivalism Architecture in Malaysia. Tajuddin [44] explained the vocabulary of this style as the use of an eclectic array of: a) Iranian or Turkish domes, b) Egyptian or Turkish Minarets, c) Persian Iwan gateways, d) lavish courtyards surrounded by the Sahn, e) an Arabian hypostyle planning composition, f) and pointed or semicircular arches bathed in sumptuous classical 'Islamic' decorations. Out of all postmodern mosques of Malaysia, this study focused on Masjid Putra in Putrajaya (Fig. 3) and Masjid Wilayah in Kuala Lumpur (Fig.4) as the representatives of this style.



Fig. 2 Exterior (Top) and Interior (Bottom) of Masjid Negara

#### C. Vernacular Revivalism

According to Tajuddin [44], the Vernacular Revivalism attempts to revitalize vernacular architecture of Malaysia; this style calls for a slightly less monumental approach with its use of the three tiered pyramidal roof form built either of concrete or timber. This study investigated the Melaka State Mosque (Fig. 5) as the only example which represents this style.

### IV. RESEARCH METHODOLOGY

#### A. Approach to the Methodological Framework

Some factors that were expected to influence people's attachment to the studied five mosques were as follows: length of engagement, familiarity with place, architectural characteristics of the mosques, culture and religion, and activities that are done by people in the places. In order to

make a clear understanding about the influences of these factors, this study relied on the findings of a previous study comprising 23 in-depth interviews conducted at these five selected mosques (please see [48] for further details).

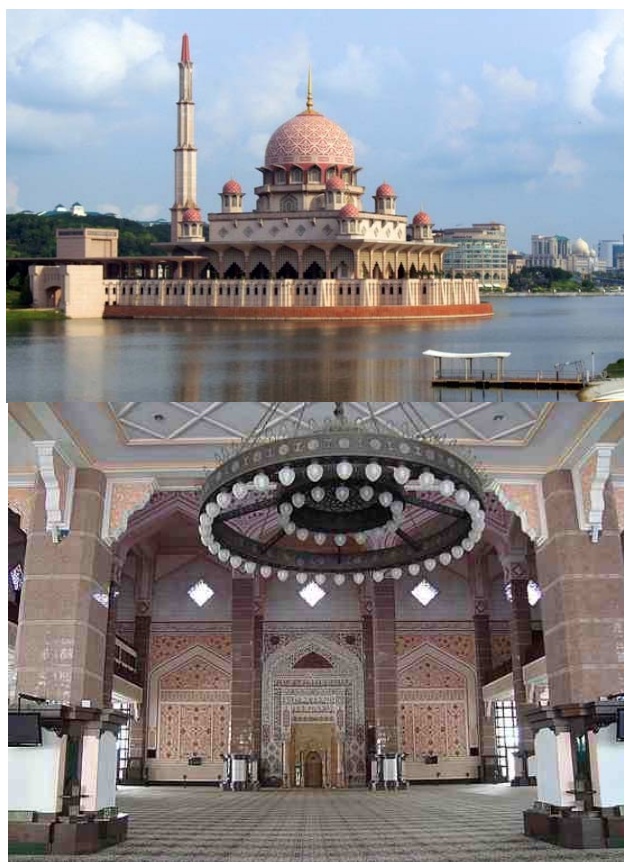


Fig. 3 Exterior (Top) and Interior (Bottom) of Masjid Putra

According to Najafi and Shariff [48], the purpose of the conducted in-depth interviews was to: understand 1) the interviewees' subjective and spontaneous feeling and impressions about the studied places, 2) the meanings and significance of these place for the interviewees, 3) the interviewees' motivation for being in the places, and 4) any other potential emerging related issues of concern during the interviews that could contribute to further evaluation of factors influencing public attachment to mosques in Malaysia. They adapted a semi-structured interview method with somehow predetermined questions as it could help them gather 'additional' and 'deeper' data by asking more questions based on interviewees' answers. Consequently, the questions were open-ended and interviews were conducted inside the mosques and within a person-to-person and face-to-face interaction.

With respect to determining the sample size, Najafi and Shariff [48] looked at the "saturation point" of data collected as suggested by Kumar [45]. Based on the nature of the problem, they also followed Purposive Sample Selection Method [45] for selecting their 23 interviewees. Each interview was also tape-recorded with the permission of participants for the later transcription purposes. Basically, the

subjects of the conducted semi-structured interviews were as the following: Engagement, Familiarity, Emotional attachment, Functional attachment, Socio-cultural attachment. In terms of data analysis, they articulated the collected data into three categories namely, physical feature, activities, and meanings, then dividing these three categories into codes and subcategories. Therefore, conducting qualitative content data analysis, Najafi and Shariff [48] sought for development of the aforementioned three headlines and their subcategories into key indicators of the study reported in this paper.



Fig. 4 Exterior (Top) and Interior (Bottom) of Masjid Wilayah

#### *B. Final Questionnaire Survey*

This study conducted quantitative surveys and measured public attachment to Malaysian state mosques using the indicators developed by Najafi and Shariff [48]. It also adapted the scale items introduced by previous place attachment studies in order to maintain internal consistency (i.e. reliability) and construct validity in measuring place attachment and its sub dimensions, namely place identity and place dependence [49]. In terms of the respondents' profile, the survey solicited data from randomly selected [50] 288 respondents. In terms of the respondents' profile, the number of male respondents was greater than females' number and majority of the respondents were in the young and middle ages

with low to medium monthly income. The majority of participants were at average level of education. In terms of the jobs, the majority of respondent were employed. Regarding the duration of the time spent in the mosques, the majority of respondents approximately spent 30 to 60 minutes for each visit. Most of the participants were very familiar with the mosques. The respondents in both phases were selected from Muslims' Malay, Indian, and Chinese.

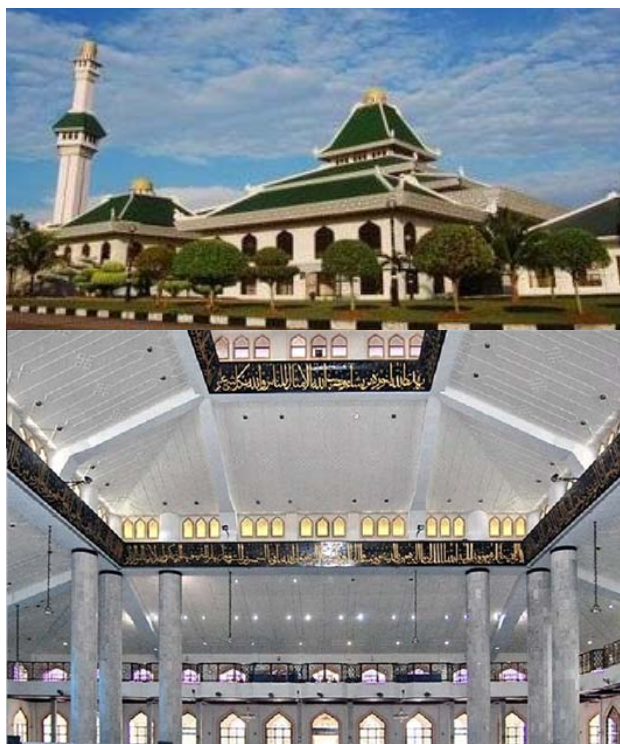


Fig. 5 Exterior (Top) and Interior (Bottom) of Masjid Al-Azim, the Melaka State Mosque

### 1. Population of the Study and the Selected Sample of Respondents

In terms of selecting sample population from prayers who pray at Malaysian state mosques, Probability sampling method [45] was employed as it could provide a statistical base for stating that the sample is the representative of the target population [51]. Besides, Systematic Random Sampling [45] method was adapted for this study as the other random sampling methods could not be applied without having the list of the members' names. In order to reveal total population size the study enquired from management of the studied mosques on top of direct observations. The total population size for the prayers at the selected 5 mosques was 1150 persons. The study then used a professional online software application which can calculate the sample size based on the given Confidence Level, Confidence Interval and size of the Population of the research. The results suggested a sample comprising of 288 respondents to be randomly selected from the whole population of study. Afterwards, the study employed Stratified Sampling Method [45] in order to determine the quota of each mosque from the determined total sample size.

### 2. Approach to Data Analysis

Basically, the ultimate end of the conducted survey was to identify Malaysian people's attachment to the selected five state mosques. In essence, the survey investigated the impacts of place identity, meanings [associated with places], the attributes and characteristics of places, and social and religious activities on attachment. It has been suggested that quantitative data require aggregation and sorting in order to clarify the meanings [52], [53]. As such, this study identified the keywords as indicators of the themes constructed and reported by Najafi and Shariff [48]. Based on these themes, this study coded and stored the data collected through survey as an SPSS data file. SPSS version 15.0 was then employed in order to facilitate the 'descriptive' and 'inferential' statistical analyses. In terms of descriptive analysis, the study first examined the internal reliability of the collected data by measuring the level of consistency of scale. Descriptive analyses were then employed when the study sought for the meaningful patterns when the respondents' perceptions varied from a factor to one another. Additionally, the study employed inferential statistics in order to test its hypotheses coming from the reviewed literature and analysis of results of the conducted 23 interviews.

In terms of descriptive analysis (frequency, percentages, mean values), the study used variety of graphs to visually assess the impact level of different factors contributing to people's attachment to each component of the places (i.e. physical attributes, meanings, and activities), prior to summarizing the findings in tables. In addition, the study further described these facts with aid of statements and description. A number of inferential statistical analysis methods were also employed in order to examine the relevance of the anticipated relationships between dependent and independent variables of this research (i.e. testing hypotheses of the study). Based on the scale of the dependent variables (i.e. ratio), these methods included basic correlation analyses, i.e. Pearson product-moment correlation coefficient test. This study also employed Stepwise Regression analysis for determining the contribution of each factor to the formation place attachment to the studied mosques. Finally, the survey performed Analysis of variance test (one-way ANOVA) when a hypothesis described the existing difference between attachment to different components of the studied places. Finally, through the triangulation process, the Malaysian public's attachment to the selected context was analyzed and discussed in the light of theoretical framework established for this study.

### 3. Validation and Reliability

In terms of securing the validity and reliability of the findings, for preventing potential disturbances in respondents' natural responses, the study was guided by Nasar [54] in working consistently within the structured questions based on the predefined criteria and designing the survey questions in a simple and direct form. Moreover, a pre-tested survey was conducted before final investigation in order to help the researchers examine the clarity of the questions [45] and

modify and correct words and meanings of the final questionnaire for providing appropriate information and examining internal consistency or reliability among the alternatives of scale [55]. As such, a pre-test survey was conducted in November 2009 involving two of the study areas, namely Masjid Negara and Masjid Putra. As suggested by Babbie [56], 10% of the average total daily prayer population for these two mosques (30 people from Masjid Negara and 25 people from Masjid Putra) was randomly selected for conducting the pre-test survey. The results of the pre-test survey were analyzed based on the consistency of the responses. When the value for Cronbach's alpha was smaller than 0.6, the examined questions were marked as 'misleading' and highlighted for latter amendments. By the aid of the conducted pre-test survey, the identified flaws of the questionnaire were amended by the researchers. The amended mistakes could be categorized as the format and layout problems, the appropriateness of the utilized terms, redundancy of statements and meanings, and some mistakes occurred due to the mistakes during the process of translation from English into Malay language. It was also noted that the respondents lost their motivation for answering all questions precisely as the number of questions in the initial questionnaire was too much. Consequently, this number was significantly reduced by collapsing some similar questions into integrated inquiry groups in the final questionnaire.

In terms of construct validity, this study adapted the majorities of scale items regarding the concepts of 'Place Attachment' and 'Attachment to the Religious Places' from the seminal literature (e.g. [9], [15], [16], [21], [23], and [57]). Williams and Vaske [49] asserted that the utilized set of questions have already demonstrated good construct validity in measuring Place Attachment and its sub-dimensions. As a result of all mentioned considerations, the conducted reliability test for checking the internal consistency in the

answers to the questions of the final survey showed an acceptable result (Cronbach's alpha was always greater than 0.6) which is an evidence of the reliability of the questions. Finally, utilizing Tajuddin's [44] classification about Malaysian mosques, secured the validity of samples according to the purpose of this research.

## V. RESULTS AND DISCUSSIONS

### A. People's Attachment to the Selected Mosques

The results revealed that Malaysian public has strong attachment to the all selected mosques. This attachment strongly formed by the emotional, functional and socio-cultural attributes. The emotional significance of the places can be linked to the importance of mosques as an Islamic sign and symbol. A measure which asked the participants about their thoughts and feelings regarding the respective mosques showed that the attachment to a mosque is something beyond a mere general environmental affection. The attachment to a mosque forms as a result of various means through which one could feel the senses of spirituality, peacefulness and tranquility. This was described through the people's emotional responses, sentiments, sense of pride and belonging. In parallel to literature [9], [14], [41], [58] the sense of spirituality, peacefulness and tranquility not only create by practicing religious duties but also architectural attributes and features of the religious places could have strong impact on the aforementioned feelings and emotions. It means that although religion, as a factor that evokes feelings [9], connects people to mosques through sacred acts and plays a significant role in people's attachment but architectural characteristics of the places strengthen the attachment. Table I shows the Mean values of the components of people's Emotional Attachment to the selected mosques.

TABLE I  
 MEAN VALUES OF THE COMPONENTS OF PEOPLE'S EMOTIONAL ATTACHMENT TO THE SELECTED MOSQUES

Components	Statements	Mean Value				
		Negara	Putra	Wilayah	Sembilan	Al-Azim
	01 I am very attached to this mosque	3.53	3.69	3.86	3.78	3.77
	02 I have positive impression about this place	4.04	4.18	4.23	4.12	4.24
	03 Coming here is one of the most satisfying things to do	4.14	4.16	4.26	4.24	4.57
Emotional Attachment N=288	04 I enjoy being here more than being in any other mosque	3.32	3.72	3.50	3.86	3.67
	05 I would prefer to spend more time here if I could	3.64	3.67	3.74	3.94	4.03
	06 I feel I am closer to Allah when I am here	4.03	4.14	3.77	4.34	4.41
	07 Here I can concentrate on my religious activities more than any other mosque	2.99	3.39	3.03	3.13	3.57
	08 The quality of the environment influence my concentration while praying	3.77	3.98	4.05	3.88	4.19
	09 I feel secure being in this mosque	3.27	3.59	3.58	3.24	3.56
Total		3.64	3.84	3.78	3.84	4.00

From the conducted survey, it could be concluded that the participants expressed a high degree of care and concern on all selected mosques. It concurs with Relph's [16] theory considering that the care for place is often associated with close and strong attachment. The functional attachment was linked to those qualities, facilities, and equipment that could facilitate the conditions to support public religious and social

activities. In essence, the majority of the users participated in the survey pointed that the qualities and facilities of the mosques could provide them with the conditions to better concentrate on their religious activities. The aforementioned conditions provide a calm, comfort and tranquil place. Majority of the users perceived the mosques convenient and comfortable to be. This could support the findings of other

scholars advocating that place attachment is often developed when the environment fulfill a functional need or goal [17], [23]. Table II shows the mean values of the components of Functional Attachment.

Results from the surveys presented in Table II indicate that the emotional and functional attachment is above the average (suggesting that the users' emotional and functional attachment to the selected mosques is strong). They identified strongly with the feeling of attachment, positive impression and satisfaction with the places. The mosques were acknowledged as meaningful and significant. Consequently, it could be concluded that the functional and emotional attachments can leverage public sense of place within the context of the selected mosques. Nevertheless, the functional

reasons could play a significant role in supporting and facilitating public emotional attachment ( $n=276$ ,  $r=.618$ ,  $\rho < .0001$ ). Besides, the conducted one-way "ANOVA" test for comparing mean values of the variables indicating that Malaysian public's Emotional Attachment to the different Malaysian state mosques is independent of the architectural styles of the aforementioned mosques [ $n=285$ ,  $f=2.248$ ,  $\rho > 0.05$ ]. It is therefore revealed that the form of attachment of people to different Malaysian sate mosque is independent of their architectural styles. The subsequent sections, would investigate the existing relationships between attributes of attachment and spatial qualities irrespective of the architectural style of the studied mosques.

TABLE II  
 MEAN VALUES OF THE COMPONENTS OF FUNCTIONAL ATTACHMENT

Component	Mosque						Average
	Negara	Putra	Wilayah	Sembilan	Al-Azim		
01 This mosque is convenient, comfortable and tranquil	3.96	3.95	3.98	4.04	3.86	3.97	
02 This mosque has appropriate facilities and equipment	3.78	3.79	3.92	3.78	3.86	3.82	
03 This mosque has a very good maintenance and management system	3.53	3.79	3.63	3.56	3.72	3.64	
04 No other place can compare to this place	3.15	3.32	3.22	2.71	3.06	3.12	
05 The access of this mosque is more and better	3.57	3.31	3.63	3.69	3.83	3.58	
06 A lot of social activities are done in this mosque	3.31	3.03	3.29	3.50	3.50	3.30	
07 The good facilities and equipment of this mosque influence my better concentration while doing religious activities	3.85	3.97	4.03	3.9	4.19	3.97	

*B. The Contribution of Place Identity on People's Attachment to Mosques*

This study discovered that in the context of the studied mosques, place identity could have a strong effect on the users' place attachment and making the sense of place [ $r = .878$ ,  $n = 283$  and  $p < .001$ ]. Respondents at all studied

mosques from different typologies expressed their strong 'sense of identification' with those places. In this regard, the majority of the participants expressed that the mosques let them know who they are and what type of person they are (Table III).

TABLE III  
 MEAN VALUES OF THE COMPONENTS OF PLACE IDENTITY

Components	Statements	Mean Value				
		Negara	Putra	Wilayah	Sembilan	Al-Azim
Place Identity N=288	01 This place says a lot who I am	3.60	3.65	3.78	3.78	3.78
	02 I feel most myself in this place	3.99	4.16	4.25	4.12	4.27
	03 Everything in this place is a reflection of me	4.13	4.11	4.25	4.24	4.57
	04 This place reflects the type of person I am	3.73	3.84	3.84	3.82	3.84
	05 This place is a part of me	3.63	3.67	3.75	3.94	4.03
Total		3.72	4.16	4.25	3.83	3.79

This is what Proshansky et al. [23] and Relph [16] referred to as the concept of 'place identity'. They explained it as a symbolic quality that could define the importance of a place and make the individual or groups attached to the places. The results of this study also revealed that the architectural styles of the selected mosques did not have any significant impact on the participants' sense of identity [ $n=282$ ,  $f=1.263$ ,  $\rho > 0.05$ ] and it is developed through people's personal and social experiences as a part of their personal and group identity. This author assumes that is because of the aforementioned intellectual character of the self-identity which is irrespective of physical characteristics of the place. This result therefore reaffirms Mazumdar and Mazumdar's [39] idea that religious

perceptions could play a significant role in forming people's attachment to the sacred places and protecting the individual and group identity there. It also coincides with Rose's [63] findings that the sacred places are often interpreted from their particular social positions and reasons.

*C. Meanings Associated with Places*

Meaning(s) is associated with the perceptual and the psychological aspects of environmental experience. Altman and Low [1] asserted that places often hold deep-seated meanings for people, and those meanings are tied to the places. They argued that places are bases for symbolic meanings which could enhance the public place attachment.



They associated these meanings, feelings and values with an individual's interaction with a place through cultural and social influences. This study further acknowledged the aforementioned findings when acknowledging that the users are emotionally attached to the selected mosques due to the evidence of various meanings. It also acknowledged Gustafson's [21] previous findings about three threefold nature of place meanings (i.e. self, others and environment)

when it discerned that the meanings of the place are related to personal as well as group experiences within the physical settings. Based on the developed theoretical framework through literature review and the conducted in-depth interview, this study identified six statements (Questions) which could explain various meaning towards the selected mosques. Table IV shows the Mean values of the meanings associated with the selected mosques.

TABLE IV  
MEAN VALUES OF THE MEANINGS ASSOCIATED WITH THE SELECTED MOSQUES

Components	Statements	Mean Value					
		Negara	Putra	Wilayah	Sembilan	Al-Azim	Average
Emotional Attachment N=288	01 Being in mosque is recommended by my religion	2.95	2.89	3.58	2.98	2.83	3.06
	02 I have friendship and intimacy with people who are in this mosque	3.56	3.27	3.6	3.68	3.48	3.52
	03 Religious and historical records and well-known people who came to this mosque before	2.68	2.5	2.13	2.24	2.2	2.39
	04 This place makes me recall my memories	2.49	2.41	2.03	2.36	2.22	2.32
	05 This mosque fits in well my cultural background	3.27	3.62	3.26	3.18	3.2	3.32
	06 This is such a spiritual place to be there	4.48	4.51	4.41	4.5	4.73	4.51

The analysis for testing the relationship between the variables representing meanings and emotional attachment showed that they are positively and significantly correlated. Moreover, the conducted Pearson product-moment correlation coefficient test showed that in the context of the studied mosques, the Attachment Associated with Meaning (s) have significant impact on the level of Emotional Place Attachment [ $r = .401$ ,  $n = 270$  and  $p < .001$ ]. Finally, the results of conducted Stepwise Regression analysis showed that among all 6 factors of Meanings variability of only 3 factors have significant influences on the variability of the Emotional Place Attachment. It also showed that 31.1% of variability of dependent variable is explained by the spirituality of the place; 27.6% of variability of dependent variable is explained by the respondents' friendship & intimacy with people who are in the mosque and 21.6% of it is determined by fitting the place with their cultural background. Therefore, the spiritual magnetism of mosques, the social ties and Islamic community that form in the mosques and the cultural factors are the most significant factors that influence the model of place attachment.

The spiritual aspect was one of the important concepts that the respondents hold in their mind regarding the selected mosques. Certain religious places might create 'magnetism' on peoples' perception [65]. This power was highly experienced in both interviews and surveys conducted at all selected mosques where the majority of participants declared that the mosques have spiritual attraction for them. The author also frequently observed this spiritual motive in their rituals within the mosques as the religious places, which allowed them to mediate away from the cares and distractions of their everyday lives. This implication was also supported by the majority of the respondents who explained their personal reasons for appearing in the mosque as follows: 'to improve their religious faith', 'to make stronger their belief', 'to be in a sacred place', 'to get closer to God', 'to mediate', 'to venerate', 'to be refreshed', and 'to pray'.

Social ties and being in a large Islamic community is the other important explored aspect in Malaysian public's attachment to selected mosques. Places often become meaningful for people due to their relationships with others living there, friends, acquaintances, relatives and the sense of community that such social relations create [64]. In this essence, this study noted that the existing social ties among the community of worshipers of God are the other important drivers in forming Malaysian public attachment to the studied mosques. These social ties could refer to making friendship with others or the contributions to the social and religious activities in the Islamic community within the sacred places.

The results determined that culture is one of the important drivers that could influence public attachment to the mosques. In this case, Tuan [36] emphasized on the force of culture on the people's relationship with places. With a similar focus, 'topophilia' is a new term that is used by Tuan [36] to describe the existing remarkable bounds between people and the physical settings. According to Tuan [36], public feelings regarding the places are strong enough if the place is the site of the significant personal or cultural events. In this regard, Tuan [36] argued that places could act as a symbol for more abstract ideas explains it. From a similar point of view, Rapoport [66] argued that cultural principals could play an important role in defining group identity in multicultural societies and could influence the character and identity of the place they inhabit. This study concurs with this view when indicating that Malaysian Islamic culture has the same significant impact on the Muslim majority's attachment to the studied mosques as they naturally try to connect to their identity and preserve it. Therefore, people make emotional bounds with the mosques as this place fits to their cultural background.

#### *D. The Physical Attributes and Characteristics Influencing Place Attachment*

Place attachment is formed as a result of the interconnection

of the physical features, activities and meanings through users' experience of a place [26], [59], and [60]. The findings of this research suggested that physical attributes and characteristics of the selected mosques have a significant influence on the people's attachment. In this case, good accessibility, proximity to transport nodes, and pleasant and remarkable location [landscape] of the mosque play an important role in strength of attachment. This is aligned with Mazumdar and Mazumdar's [39] identifying that the physical setting at particular locations, special sights, sounds [like water sound], and smells can evoke and foster the people's spiritual feelings and contribute in making place attachment. The results also revealed that environmental pleasance, spatial order of physical settings, facilities, and level of maintenance of the mosques has a significant influence on the people's attachment. These features and attributes make a comfortable place that has positive impact on people's activities. The physical features and appearance of the mosques therefore are so important in creating a calm and tranquil place that improves people's attraction and the sense of place. These results are parallel with the findings of Mazumdar & Mazumdar [9] who argued that although religion could endow religious places the symbolic meaning differentiating them from the ordinary physical settings, architectural design might have the same capability to develop place attachment, devotion, and spirituality in worshipers. They also argued that in the context of religious places design and aesthetics of the building could provide a person with better religious principles, holiness, society, and place attachment. From this perspective, Mazumdar and Mazumdar [9] claimed that the physical design and elements of a place therefore could take worshipers to another world, hence helping them to experience the paradise on the earth by providing them with an inner tranquility and calmness.

#### *E. The role of the Religious and Social Activities on People's Attachment*

Mosques traditionally have always played a central role in Muslim societies by organizing a place for religious and social activities. These places have also defined the identity of the Muslim societies acting as landmarks or points of reference for Muslims. Mosques have always been some places where Muslims gather to worship and also acquire social and political direction. According to the Islamic religious sources, performing religious activities in mosques are highly recommended by Islam; e.g., while praying can be performed everywhere, praying at mosque together with the other people is considered several times more commendable. The findings of the conducted in-depth interviews revealed that the religious and social activities are the most influential components making people attached to studied mosques; while the results of the conducted questionnaire survey showed just a significant correlation between the participants' activities and their place attachment [ $n=248$ ,  $r=.125$ ,  $p<.05$ ]. This reveals that a small part of the participants' attachment is explained by their religious activities within the studied mosques.

However, further analysis of the findings revealed that in spite of organization of various religious and social activities, in the context of the studied mosques, only praying has significant influence on the model of place attachment. In other words, mosques are often used with its basic function as a place of worship. This author assumes that this is because of the location of those mosques at non-residential areas of the state capital. This assumption overlaps with Tajuddin's [61] idea that the general attendees of daily and weekly prayers at such state mosques are the people who work nearby. With the aforementioned quality, the state mosques serve as an Islamic sign and symbol rather than a place for religious and social activities and act as a dominant structure in their own contextual setting and location. In other words, they became a recognized landmark, which could be recognized even from miles away as a place for practicing religious rites and worship. With respect to this iconic character, the state mosques often carry a different function from all of the other mosques [67]. They are usually some places under the centralized authority of the state government and projected in immense scale. Not only is this type of mosque a place for worshipers to practice, but it also is a means to express the state's commitment to Islam [68]. In this essence, Serageldin [67] emphasized that the state mosques are often considered as the country's monumental structures located at the government's administration precinct in large cities.

People are more attached to the places that they have the highest levels of experience that often resulting from long-time habitation in a particular locality or frequency and duration of visits [7], [21], [32]. Surprisingly, the results revealed that the frequency of visit, duration of stay, and [even] the type of environmental experience did not have any significant impact on the level of the people's attachment to the studied mosques. This inconsistency could be related to the nature of the mosques as remarkable religious places. In this regard, Mazumdar and Mazumdar [9] explained how religion could make some places like mosque sacred by giving them symbolic meanings. From a similar point of view, Mazumdar and Mazumdar [39] argued that sacred spaces (e.g. mosques) are so important places as religious socialization occurs there in the form of ritual, pilgrimage, and environmental experience. In other words, religion connects people to these places through sacred acts and the sacred activities always manifest themselves as a reality different from normal performances [41]. In essence, even the people who visit such place for the first time could feel in a similar way that more frequent visitors do. The results also indicated that in the context of the studied mosques different types of involvement in the places (e.g., passive as a visitor or active as a worshiper) do not have any significant impact on the level of place attachment. In other words, participants in both roles described the strong sense of attachment and belonging. This is parallel with the Mazumdar [62] idea asserting that people are often attached to their famous religious and sacred places. They argued that the believers may be strongly attached to the places that they have never physically visited, but often heard the descriptions of those places from the others, e.g. from the

pilgrimage of Mecca. A very strong attachment to the aforementioned places is often formed through an emotional connection made of the religious affections (not via physically experiencing the places). According to Mazumdar and Mazumdar [9], religion has a profound influence on people's relations with the sacred places and on their attachment to those settings.

## VI. CONCLUSION

The psychological, physical, and socio-cultural attributes of the studied mosques are strongly perceived by the users and contribute to their attachment to the mosques. However, the emotional attachment was the strongest form of their attachment. The significance of mosque as a religious and cultural symbol further intensifies to this impact. This research proved that not only the religious feeling but also the architectural beauty of the Malaysian mosques could strengthen the emotional connections between people and these places. The findings also revealed that different architectural styles of the studied mosques do not have any significant influence on people's place attachment. In terms of functional attachment, there is a significant bond between people and places. Architectural features with their spatial order, cleanliness as well as facilities and equipments for facilitating religious and social activities could improve public emotional attachment to these sacred places. Finally, the study also identified the main reasons for attachment to these mosques. These include the cultural values of the places, the users' experience formed by the spirituality and comfort of the mosques, social ties and Islamic community within the places, identity as a meaningful element in exposing people's self-identification, praying as a daily religious duty that attracts people to the mosques, facilities, comfortable surroundings, and the spatial order of the physical settings.

## REFERENCES

- [1] Altman, I. and S.M. Low, Place attachment. 1992, New York: Plenum Press.
- [2] Giuliani, M.V. and R. Feldman, Place attachment in a developmental and cultural context. *Journal of Environmental Psychology*, 1993. 13: p. 267-274.
- [3] Manzo, L.C., Beyond house and haven: Toward a revisioning of emotional relationships with places. *Journal of Environmental Psychology*, 2003. 23.
- [4] Kyle, G., et al., Effects of place attachment on users' perceptions of social and environmental conditions in a natural setting. *Journal of Environmental Psychology*, 2004. 24: p. 213-225.
- [5] Hernandez, B., et al., Place attachment and place identity in natives and non-natives. *Journal of Environmental Psychology*, 2007. 27: p. 310-319.
- [6] Tuan, Y.F., *Space and place: The perspective of experience*. 1977, London: Edward Arnold.
- [7] Hay, B., Sense of place in developmental context. *Journal of Environmental Psychology*, 1998. 18: p. 5-29.
- [8] Stokols, D., Instrumental and Spiritual Views of People-Environment Relations. *American Psychologist*, 1990. 45(5): p. 641-646.
- [9] Mazumdar, S. and S. Mazumdar, Religion and place attachment: A study of sacred places. *Journal of Environmental Psychology*, 2004. 24: p. 385-397.
- [10] Watson, S. and J. Kucko, Thorncrown and the Mildred B. Cooper Chapels: Sacred Structures Designed by Fay Jones. *Journal of Interior Design*, 2001. 27(2): p. 14 - 25.
- [11] White, J.F., *Protestant Worship and Church Architecture: Theological and Historical Considerations*. 2003: Eugene, OR: Wipf and Stock Publishers.
- [12] Ahmad, A.G. The Architectural Styles of Mosques in Malaysia: From Vernacular to Modern. in *Symposium on Mosque Architecture: The Historic and Urban Developments of Mosque Architecture*. 1999. King Saud University, Riyadh, Saudi Arabia.
- [13] Stedman, R.C., Is it really just a social construction: The contribution of the physical environment to sense of place. *Society and Natural Resources*, 2003. 16: p. 671-685.
- [14] Mazumdar, S. and S. Mazumdar, Religion, immigration, and home making in diaspora: Hindu space in Southern California. *Journal of Environmental Psychology*, 2009. 29: p. 256-266.
- [15] Canter, D., *The psychology of place*. 1977: The Architectural Press Ltd.
- [16] Relph, E., *Place and placelessness*. 1976, London: Pion.
- [17] Stokols, D. and S.A. Shumaker, People in places: A transactional view of settings, in *Cognition social behaviour and the environment*, Harvey, Editor. 1981, Lawrence Erlbaum Assoc.
- [18] Stedman, R.C., Toward a social psychology of place: Predicting behaviour from place based cognitions, attitude and identity. *Environment and behaviour*, 2002. 34(5): p. 561-581.
- [19] Smaldone, D., C. Harris, and N. Sanyal, An exploration of place as a process: The case of Jackson Hole, WY. *Journal of Environmental Psychology*, 2005. 25: p. 397-414.
- [20] Genereux, R.L., L.M. Ward, and J.A. Russell, The behavioral component in the meaning of places. *Journal of Environmental Psychology*, 1983. 3(1): p. 43-55.
- [21] Gustafson, P., Meanings of place: Everyday experience and theoretical conceptualizations. *Journal of Environmental Psychology*, 2001. 21: p. 5-16.
- [22] Davenport, M.A. and D.H. Anderson, Getting from sense of place to place-based management: An interpretive investigation of place meanings and perceptions of landscape change. *Society and Natural Resources*, 2005. 18: p. 625-641.
- [23] Proshansky, H.M., A.K. Fabian, and R. Kaminoff, Place- identity: physical world socialization of self. *Journal of Environmental Psychology*, 1983. 3: p. 57-83.
- [24] Bonaiuto, M., G. Breakwell, and I. Cano, Identity processes and environmental threat: the effects of nationalism and local identity upon perception of beach pollution. *Journal of Community and Applied Social Psychology*, 1996. 6(1): p. 157-175.
- [25] Devine-Wright, P. and E. Lyons, Remembering pasts and representing places: the construction of national identities in Ireland. *Journal of Environmental Psychology*, 1997. 17(1): p. 33-45.
- [26] Steele, F., *The sense of place*. 1981: CBI Publishing Company, Inc.
- [27] Rapoport, A., *The meaning of the built environment: a nonverbal communication approach*. 1990: the university of Arizona Press, Tucson.
- [28] Montgomery, J., *Making a city: urbanity, Vitality and urban design*. *Journal of Urban Design*, 1998. 3.
- [29] Kaltneborn, B.P., Nature of place attachment: A study among recreation homeowners in southern Norway. *Leisure Sciences*, 1997. 19: p. 175-189.
- [30] Williams, D.R., et al., Beyond the commodity metaphor: Examining emotional and symbolic attachment to place. *Leisure Sciences*, 1992. 14: p. 29-46.
- [31] Hummon, D.M., *Community Attachment: Local Sentiment & Sense of place*. 1992, New York: Plenum.
- [32] Moore, R.L. and A.R. Graefe, Attachments to recreation settings: the case of rail-trail users. *Leisure Sciences*, 1994. 16: p. 17-31.
- [33] Hidalgo, M.C. and B. Hernández, Place Attachment: Conceptual and Empirical Questions. *Journal of Environmental Psychology*, 2001. 21(3): p. 273-282.
- [34] Williams, D.R. and J.W. Roggenbuck, Measuring place attachment: Some preliminary results. in *Paper presented at the Outdoor Planning and Management, NRPA Symposium on Leisure Research*. 1989. San Antonio, TX.
- [35] Fried, M., Grieving for a lost home, in *The urban condition: people and policy in the Metropolis*, L.J. Duhl, Editor. 1963, Basic Books, Inc.: New York. p. 151-171.
- [36] Tuan, Y.-F., *Topophilia: A study of environmental perception, attitudes, and values*. 1974, Englewood Cliffs, NJ: Prentice-Hall.
- [37] Tuan, Y.F., *Place: An existential perspective* *The Geographical Review*, 1975. 65: p. 15-65.
- [38] Gieryn, T.F., A space for place in psychology. *Annu.Review of Sociology*, 2000. 26: p. 463-496.
- [39] Mazumdar, S. and S. Mazumdar, Sacred space and place attachment.

- journal of Environmental Psychology, 1993. 13(3): p. 231-242.
- [40] Barrie, T., *Spiritual path, Sacred place*. 1996, Boston: Shambala Publications, Inc.
- [41] Eliade, M., *The Sacred and The Profane: The Nature of Religion* 1957, New York: Harcourt Publishing.
- [42] Roberts, N.W., *Building Type Basics for Places of Worship*. 2004, Hoboken, New Jersey: John Wiley and Sons.
- [43] Kaplan, R., S. Kaplan, and R. Ryan, *With people in mind: Design and management of everyday nature*. 1998, Washington, D.C.: Island Press.
- [44] Mohamad Rasdi, M.T., *Mosque Architecture in Malaysia: Classification of Styles and Possible Influence* *Journal Alam Bina* 2007. 9(3): p. 1-37.
- [45] Kumar, R., *Research methodology. A step-by-step guide for beginners*. 2005: SAGE Publications Ltd.
- [46] Curtis, W., *Modern architecture Since 1900*. Third ed. 1996: Phaidon Press, Oxford.
- [47] Jencks, C., *The New Paradigm in Architecture: Language of Post-Modern Architecture*. 17 ed. 2002, London: Yale University Press.
- [48] Najafi, M. and M.K.M. Sharif, *Factors influencing public attachment to mosques in Malaysia*. *International Journal of Architectural Research (IJAR)*, 2011. 5(3): p. 07-24.
- [49] Williams, D.R. and J.J. Vaske, *The measurement of place attachment: validity and generalizability of a psychometric approach*. *Forest Science*, 2003. 49(6): p. 830-840.
- [50] Creswell, J.W., *Qualitative inquiry and research design*. 1998: Sage Pub.
- [51] Fink, A., *How to sample in survey*. 2003, London: Sage Publication Ltd.
- [52] Groat, L. and D. Wang, *Architectural Research Methods*. 2002: John Wiley and Sons, Inc.
- [53] Stake, E.R., *The art of case study research*. 1995: SAGE Publications.
- [54] Nasar, J.L., *Environmental aesthetic: Theory, research and applications*. 1998: Cambridge University Press.
- [55] Samah, B.A. and T. Suandi, *Statistics for Social Research*. 1999.
- [56] Babbie, E., *Survey Research Methods*, ed. second. 1990, Belmont, CA: Wadsworth Publishing Company.
- [57] Possick, C., *Locating and relocating oneself as a Jewish Settler on the West Bank: Ideological squatting and eviction*. *Journal of Environmental Psychology*, 2004. 24(1): p. 53-69.
- [58] Jones, L., *The Hermeneutics of Sacred Architecture: Experience, Interpretation, Comparison, Volume 1: Monumental Occasions: Reflections on the Eventfulness of Religious Architecture*. 2000, Cambridge: Harvard University Press.
- [59] Shamai, S., *Sense of Place: an Empirical Measurement*. *Geofimm*, 1991. 22: p. 347-358.
- [60] Jorgenson, B.R. and R.C. Steadman, *A comparative analysis of predictors of sense of place dimensions: Attachment to, dependence on, and identification with lakeshore properties*. *Journal of Environmental Management*, 2005: p. 1-12.
- [61] Mohamad Rasdi. M.T., *The mosque as a community development center: Programme and architecture design guideline for contemporary Muslim societies*. 1998, Johor Bahru: University Teknologi Malaysia.
- [62] Mazumdar, S., *Religious place attachment, squatting, and qualitative research: a commentary*. *Journal of Environmental Psychology*, 2005. 25: p. 87-95.
- [63] Rose, G. *Place and identity: A sense of place*. In D. Massey & P. J. (eds.) *A Place in the World? Place, Cultures, and Globalization* (pp. 88-132). 1995. Oxford: The Open University.
- [64] Lewicka, M. *What makes neighborhood different from home and city? Effectsof place scale on place attachment*. *Journal of environmental psychology*, 2009. 30: p.35-51.
- [65] Dubisch, J. *In a Different Place: Pilgrimage, Gender and Politics of a Greek Island*. 1995. Princeton: Princeton University Press.
- [66] Rapoport, A. *Human Aspects of Urban Form*. 1977. Oxford: Pergamon Press.
- [67] Serageldin, I. *Contemporary expressions of Islam in buildings: the religious and the secular*. Paper presented at the *Expressions of Islam in buildings*. 1990. Indonesia.
- [68] Khan, H.-U., & Holod, R. *The mosque and the modern world*. 1997. London: Thames, and Hudson.