Understanding The Application Of Feng Shui Principles In A Residential Landscape Design
Davari Nor Atiah Ismail, Ng Kang Yew, Mohd Yazid Mohd Yunus, Noor Fazaminah Arifin, Sumarni Ismail

ABSTRACT

Background: The daylight factor is an established way to measure daylight level in an indoor space, whereby natural illumination level indoors (Ei) is compared to the simultaneous illumination outdoors (Eo). Objectives: This paper suggests a way to measure %DF using field work data taking samples of 2 rooms with the worst case scenario of facing directly East and West for comparison. Results: Two varied window to wall (WWR) and window to floor (WFR) ratios were tested for this experiment. The %DF values calculated from this research were in the range of 0.8 to 2.3% and natural illumination levels were found to be more than adequate for normal bedroom activities. Conclusion: The west room experiences slightly lower average %DF values compared to east room. From the average %DF values, how bright they translate into illuminance level in the rooms under the real Malaysian skies could be seen in the average, max and min Li data collected

KEY WORDS: Daylight factor %DF, Window to wall ratio (WWR) window to floor ratio (WFR)

INTRODUCTION

Feng Shui is not an unusual terms for the Malaysian community and it is greatly practices among the Chinese society as compared to other ethnicities. As Han (Han, Ke-Tsung, 2001) informs that Feng Shui compose of Chinese philosophy and traditional technique on selecting site flavour for inhibit, either for the living or for the dead. Practise of Feng Shui however, not only limited to the Chinese society but spreading among the western countries (Nor Atiah Ismail et al., 2015). The fundamental knowledge of Feng Shui is based on the observation of three major aspects: namely astronomical phenomena, natural phenomena, and human behaviour, and these aspects are combined with Chinese astronomy, geography and philosophy to devise the Feng Shui theories. The goal of Feng Shui is to archive harmony and auspicious existence in architectural design while practice of Feng Shui as an instinctive technique combined with cosmography and relevant to the western concepts of geometry in architecture. Feng Shui has evolutionary and ecological values for selecting optimal human habitations. Han (2001) in his book entitled In contract to western landscape design, Feng Shui informs that landscape design does not attempt to conquer the nature nor differentiate human being with nature. Briefly, Feng Shui learns the function of natural mechanism, furthermore enhance the process to obtain the optimum performance between human and nature (Lao, Lee, 2010) Feng Shui treats human as organic component which belong to nature and the ultimate goal is to form a mutual relationship between human and nature.

Literature Review:
The Concept of Feng Shui:
Xu (2009) informs that Feng Shui originated at least 3,000 years ago in the Western Chou Dynasty (1100-771 B.C.). Feng Shui started with the philosophy of traditional Chinese technology to perform site selection. The selected site should be the suitable locations for dwellers either for living and dead (Han, Ke-Tsung, 2001). The main purpose of practicing Feng Shui is to integrate both natures in conjunction with the cultural consideration in order to pursue a harmony state of living place. Feng Shui practice seeks for balance between nature and human as well as relationship within human (Han, Ke-Tsung, 2001). This could easily observe that most of the elements implemented in Feng Shui landscape are mostly related to the outlook and properties of nature. Feng Shui is a knowledge mimicking the beauty of nature in human perspective and eases the living of human at the same moment.

Feng Shui is adopted in varies fields of living such as spiritual, psychological, religious and sociological. The ultimate gold in Feng Shui is still, aims to achieve harmonious and balance within interaction of human, environment and cosmos. (Han, Ke-Tsung, 2001; Wilson, A., 1992; Chen, X. and J. Wu, 2009).

Most of the time, Feng Shui is related to the manipulation of Qi (Energy). Qi literally means flow with the wind and accumulated by the water (Han, Ke-Tsung, 2001). Thus, the terms Feng Shui translated into English is barely mean wind and water. The Feng Shui masters’ judgments are intuitive and somewhat subjective, but two schools of Feng Shui theory can guide them. One is called Luan Tou (mountain peak), which is based on analyses of physical phenomena at a site, such as topography, vegetation, and climate. The other is Li Chi (arranging Chi), which emphasizes using a compass (Lou Pan) to judge proper site orientation and placement for settlements according to the residents' birthdays. Ancient Chinese believed that the specific year, date, and time of birth were closely related to a person's character and fate (Chen, Bi Xia; Nakama, Yuei, 2004). This school can calculate a perfect compass orientation for each individual's birth time, day, and year in order to maximize his or her harmony.

Feng Shui is complex, yet incorporated human common sense knowledge. The applications are very much depending on which school of taught and the available resources at the site. Today, Feng Shui continues to be widely practiced in societies and influenced by Chinese culture, such as Mainland China, Taiwan, Hong Kong, Singapore, Japan, and Korea (Wilson, A., 1992)

### 2.2 The Design Philosophy and Importance in Residential Garden:

Garden is essential for human life as establishment of good home garden allows human being to live in healthier environment while influencing their social behavior. Bhatti & Church (1999) suggest that garden is the media to exhibit the shifting of culture, personal identify even the relationship in the home. Garden design endures the principle from landscape like proportion, variation, plant texture, combination and foliage. Garden becomes so remarkable after post-war. There is several researches showing that garden design had move toward to reflect human achievement either culture, change of social and economic pattern (Skene, J., 1996). Thus, the growth of gardening is exponential based on the mention factors and featuring throughout literature (Anderson, K., 1997; Askew, L.E and P.M. Mc. Guirk, 2004) These factors probably increase the peoples’ interests to develop their very own and personalized residential garden.

In many occasion, garden design in modern days often display the way nature to be altered or controlled by person’s culture (Anderson, K., 1997; Nor Atiah Ismail et al., 2015). Caldicott (1997) further emphasizes the importance of cultural identity in a residential garden elaborate more from. She explains that garden as a platform for human to interact with nature and greatly modified according to individual’s culture and action from gardener. Studying residential garden helps the authors to understand the way people modify, creating and maintain the landscape around their living area. Besides human landscape and garden cultural alteration, researcher suggests that garden design should also obey the natural system which recently becomes a trend in garden design. Danielle Dagenais (2012) argued that most ancient landscape designer notify the influence of ecological science on contemporary garden. These ideologies have further changing the basic of design principle before the design process.

House garden is among the best treat to the residents. Residential garden is a representation of natural environment is an immediate house setting (Bhatti, M., 1999). And as residential area should be able to provide varies enjoyment to people. Putnam (Robbins, P. and J.T. Sharp, 2003) suggests garden should be equipped with centralize leisure and recuperation. There is no doubt for residential garden is as important as it provide garden function like home and private haven shelter from work and politics of life.

### 2.3 Feng Shui in Residential Garden:

Feng Shui develops and evolves in China thus every aspects of it are strongly referred to Chinese culture and practices. And in the past, garden is privilege for Royal house. Wan (Chen, X. and J. Wu, 2009) informs that Chinese Feng Shui garden is not only unique in their complex combination of structure but rich in poetic and pictorial splendor. This resulted into a Chinese garden as replication and representation of the natural form in a very artistic ways. In perspective of Feng Shui garden design, design is not merely to create pleasure and
decent visual appreciation. Feng Shui design garden is a cultural product which emphasize on aesthetic value and nature sentiment yearning from Chinese culture and civilization.

Taoism is another highly influential factor in Feng Shui design. Taoism stresses in nature concept of design and escape from the real world. The physical features of the Taoist paradise resemble a ‘world - in-a-pot’ which inclusive of flowing stream, open space, winding path leading to quiet shelter, narrow entrances and enclosure mountain (Chen, X. and J. Wu, 2009). These elements in Feng Shui landscape is generally transplant into garden with the same model of setting. Rossbach and Lin (2008) explained Feng Shui landscape design is actively copy the Taoist paradise. Thus, Feng Shui garden design express through kind of spiritual inner feeling instead of physical function or social culture which totally different from English and French garden (Lu, S., 2009).

As natural elements often come with irregular or curve forms, these principles are applied to Feng Shui garden design as well. This can be observed by the walkway and waterways both arranged in curve rather than the regular and inflexible straight line. Pathway in Feng Shui garden represented a mixture of reality and unreality in life (Lin, Y.T., 2008). In terms of arrangement of mountain and water, it will always follow to the laws of balance in the concept of Yin and Yang. Feng Shui in the residential garden design on uses these representation elements to mimic the ideal landscape.

Methodology:

Content analysis is a technique adopted in this study to analyze a secondary data. There are basically 3 major approaches that use to analyze secondary data which are the interpretative approaches, social anthropological approaches, and collaborative social research approaches. Feng Shui study is quite difficult to be understood in the forms of numeric data. It requires researcher to investigate the unwritten values and intangible taught. These restrictions make Feng Shui harder to be obtained thorough common quantitative survey. Thus, Content analysis is introduces to conduct this study. The most suitable approach is interpretative approach where social action and human activities are analyzed as text and condensed into a collection of value symbols and expressional layers of meaning. This research relies on the principles of four Feng Shui Masters namely Lilian Too, Joey Yap, Yuen Hui and Han.

RESULTS AND DISCUSSION

Understanding on Feng Shui by Lilian Too, the famous Feng Shui Master in Malaysia, mentioned outdoor Feng Shui design of residential area is lot more important than the indoor as auspicious energies could be created at outdoor setting. She believe that a good Feng Shui not only facilitates resident while promote their health, prosperous and happiness. The point of view for Lilian Too is quite similar to both Joey Yap and Yuen Hui. Both Feng Shui Master agreed Feng Shui is mostly manipulated by the exterior factors. Nevertheless, Joey Yap does emphasize that interior design for residential should consider as well to proper aligning the indoor design toward the exterior Qi. Joey Yap argued some man-made feature duly not affect the Feng Shui of the surrounding which different from Lilian Too and Yuen Hui. Han explained Feng Shui should always complement to the nature. Feng Shui concept is rather different from modern architecture which tends to conquer the nature. Thought reading the tough from these Feng Shui Master, we could easily notice Lilian Too and Yuan Hui having quite same ideology and understanding toward Feng Shui. Both master advocated outdoor Feng Shui design is the key to achieve good Feng Shui for residential. Joey Yap considers the interior and exterior of residential is equally important. Han however less tough about Feng Shui as standalone setting but look Feng Shui as a big picture of environment.

Yin and Yang theory is the foundation of Feng Shui principles. Yin and Yang derive elements and aspects into dark and light or passive and active. As mention by Joey Yap, both Yin and Yang is co-existing where these energies are restraining each other. Yin and Yang energy have to keep balance in order to archive good Feng Shui. Lilian Too briefs some lively example like decorating the shady (Yin) corner in your residential garden with some eye-catching color flowers or plants (Yang) to keep the garden balance in energy. Yuan Hui too emphasizes the important of keeping Yin and Yang balance, if the balance is not archive, scourges will bring to the family who reside the house.

Beside to Yin and Yang concept, Feng Shui Masters give the same priority to the flow of Qi (positive energy) in examine the Feng Shui of the land. Han, the expert in studying ancient Chinese Feng Shui explain the origin of Feng Shui is depending on two schools of studies which are Ruan Tou and Li Qi. Basically Ruan Tou is the study on mountain’s shape and river flows. This is the very first time Feng Shui Master discover the energy flow. Qi is important in Feng Shui where if the place manages to retain the Qi in the area, the place will be considering good Feng Shui and benefit the residents. The principle of Qi is well adopt by Joey Yap who suggested Qi could manipulated for specific goals for daily life. And the key to trigger flow of Qi is movement, specifically referring only to gentle movement rather than hash one. However, for Joey Yap, Qi is unable to be created through man-made element. This is similar the ideology of Han where Feng Shui element should always
follow nature’s context. There are some places named as ‘Dragon Acupoint’ where strong wind is unreachable thus retain energy and contain water to allow Qi to be layover. This is a place where good in Feng Shui and demanding. Qi could able to introduce too to your residential by technique named Li Qi. As told by Han, Li Qi enable formulate and arrange the place to archive balance of Yin Yang, Five Elements, and the Tight Trigrams thus inviting Qi to the place.

Lilian Too shared that residential Feng Shui should be the first to consider and should begin at your home. Unlike Joey Yap and Han, Lilian Too more focus on position Feng Shui. The most basic position Feng Shui divided the residential into 4 positions and represent by 4 animals, red phoenix for front of your house, black tortoise for back of your house, green dragon for left of your house and lastly white tiger for the right of your house. These position carry their own unique properties and suitable for specific landscape feature. Red phoenix represented opportunities, black tortoise represent support, green dragon and white tiger both represent protection for the house.

Methodology and Application of Outdoor Feng Shui:

A yin and Yang principle is the foundation of Feng Shui. Thus, it is important to keep it balance in your residential garden. Lilian Too suggest to have flower bed at the shady corner to allow flower serve as Yang energy to restrain the Yin energy at shady place. Same goes to the shady part at tall trees which may plant with varieties of low lying shrubs. Joey Yap on another hand advises the most Yin sector is located at south west of residential. Therefore, water feature are most welcome to introduce to this sector to create Yan energy. For the most Yang sector at north east of your house, it is great to have mountain as support for your family. Anyway, Hill or tall building is acceptable to serve the same purpose.

Planting Selection (Lilian Too, Yuen Hui & Han) Planting selection for Feng Shui landscape is quite flexible and manipulated to meet the household preference. There are still some suggested planting from Feng Shui Master which all these species should symbolic for great meaning and promote good fortune. Yuen Hui elaborates her understanding that the more suitable to plant Feng Shui planting is at north east. Some suggested species are Cycas Revoluta (sago palm), Philodendron bipinnatifidum (lacy tree), Epipremnum Aureum (money plant), Anubias barteri (Anubias), Sansevieria Trifasciata (mother-in-law's tongue) and Dracaena Braunnii (Lucky bamboo). Yuen Hui mentioned that torn planting treated at south west which belong to unprosperous direction. These planting can be like cactus, rose and bougainvillea which consist of torn bark easily neutralize the negative Qi. Lilian Too has the same opinion yet add-on by outdoor planting which are Crassula Ovate (Jade plant) – large decorative container near the front door. Paeonia sp. Is also a great choice to symbolize love.

Dendranthema grandiflorum (Chrysanthemum) is as great as Paeonia to symbolize happiness and joy. These plants definitely create great environment surrounding and inviting Qi to the space. Han agreed the same as per both Feng Shui Master. He also suggested the planting of Nelumbo Nucifera (Lotus) and Nymphaea Caerulea (Blue Lotus) in your residential as it mean gain of many child, purity and not influence by surrounding. Some planting should be avoided from residential garden such as, Salix Babylonica (Willow tree), Ficus sp. and Prunus Persica (Sakura trees). Even though these trees are ornamental planting which are common in park, yet it gives negative Qi to the house. Planting should appear to be stiff, strong and growth up right.

Ornamental statue helps in creating and rectify the Feng Shui at a particular place. Lilian Too believes that fishes, three legged frog, turtles and deer statues have various auspicious powers which facilitate the family in the house. The best location to place these statuses is at west or North West corners of garden.

Water Element is the most important element in Feng Shui as it serve as a place where the Qi overlay and retain at the area. Yuen Hui explained in Feng Shui, kinetic water is preferable. The character of water elements is favorable to move slowly and channel in meander stream. Joey Yap shares the common opinion on this statement. Joey Yap stated stagnant water is not generating Qi as moving water do. He remind that ripping could provide harmonious Qi flow hence allow the people around get rid of stresses and worries. Since moving water able to introduce Qi to the house, Yuan Hui suggested that it will be more desirable to have wider opening for the incoming waterway and narrow opening for the outgoing waterway. This work as retention for the Qi thus the house can collect the Qi for the benefit. In the context of Malaysia, we are having monsoon drain passing through our front and back yard. It is a different scenario explained by Joey Yap. Despite water is carry by the drain, this water usually moving fast and it tends to disperse and block the Qi to enter your house. In certain extend, these big monsoon drain will create Sha Qi (negative energy) toward your house. Therefore, try to avoid form your house if possible. In addition, water features is encourage to be placed at east, south east, north and south west of your house. This is applicable as to compensate the Yin energy of the cardinal direction (Water consider as Yang energy). If there is not steam or river passing through your house, a small pond or pool could serve the purpose to balance the Yin energy.

Most Chinese practice taboo of avoiding houses which facing direct the road junctions. This actually had been taught in Feng Shui where road junction and roundabout should avoid around your house. The main reason
is because road itself virtually acts as the carriers of water plus if the road is busy, if will flush away the Qi from your house. Thus, Joey Yap do recommend prospect house owner rather to pick a suitable place which have a conducive environment for Feng Shui rather than post rectification. As sometime, the rectification needed is not possible to implement. Yuan Hui and Han hold the same opinion on this situation. They urged for the house owner to build a screening wall to block the direct access of road toward your main entrance. This wall, act as a barrier for the strong wind and negative Qi to reach the house.

Some Feng Shui Master emphasize on site selection. For example, Joey Yap prefer a conducive site for Feng Shui instead the modified one. Examine the landform is first to be consider as this directly relate your fortune when live in this piece of land. Joey Yap clarified bowl shape land is favorable to accumulate Qi thus provide good Feng Shui. In contrast, mound land dispersed the Qi. He also recommend house with mountain sitting behind the house. Han elaborated high raised could be an alternative for mountain if there is none. Even if it is better to have mountain behind your house, it is not a good Feng Shui if your house is right beside the steep slope. Joey Yap warned that these areas should be avoided as it forms Sha Qi (negative energy).

Installation of landscape facilities completed the outdoor experience and enabled the Qi to facilitate to the house. Lighting is a good element which able to gather positive energy (Lilian Too, 1999). Providing the benefit of lighting, it is pleased to have them beside entrance of your house to invite the positive energy to you house. The main entrance of your house, on another hand, should keep it clean yet evergreen planting is encouraged to place beside the entrance. Pagoda in Feng Shui gives meaning of protection from flood and therefore usually placed beside river and water elements. The root edge for pagoda is considered as well. The edges of root should always heading upward which

Besides the functional landscape facilities, there are some landscape elements introduced in Feng Shui landscape to further rectify the bad energy which heading toward your house. Spirit Stone could place right in front of the junction which confront with you house’s entrances. The spirit stone is able to reflect Sha Qi. Another interesting apparatus is Monster Revealing Mirror. This mirror mostly set on the entrances of the house to prevent negative energies. Chinese believe that monster shun to represent mirror thus able to ward off the demon creatures.

Conclusion:

Feng Shui evolve from merely choosing a most prosperous site for living till now it is a knowledge to live harmony by adjust the adjacent environment in order to live harmony with the nature. As per discussion, garden is the place where human interact most with the nature. A residential garden adorned with good Feng Shui is not only able to maximize the restorative purpose of the garden but allow the residents to endure in additional benefits. Practicing Feng Shui elements in residential is more accessible as many aspects of harmony can be created or rectified through minor renovation or sculpture. By assessing four Feng Shui master in this research, water element and planting materials no doubt to be the most import elements in Feng Shui and to assess these element is always easy and handy. Yet, to ensure your residential have a good Feng Shui, you do not have to purchase an ideal place which may cause you more but just do some modification on arrangement and install some complementary landscape element for example water feature to your garden. Besides, the required materials in Feng Shui garden design is easy to get from Malaysia market as these planting strongly influences by China. Thus, most of the planting materials could survive in tropical climates.

In addition, garden design is gearing towards sustainable and environmental friendly design. Feng Shui landscape poses great potential to fit this tread. As mention by most Feng Shui Master, the ultimate goal of Feng Shui design is to find for the equilibrium of human and landscape, and prohibit for human overrule the nature. Feng Shui principle should further study and produce a complete framework to ensure the harmony relation give benefit to human and nature. Feng Shui landscape is strongly recommended to adopt into generic landscape design principle. These principles could improve the overall experience users toward the garden yet ensure the quality of residential garden is preserved.

REFERENCES


Yang Wang, 2012. A Comprehension of Feng-shui and Its Relevance to Landscape Architecture, Masterprogramme Urban Landscape Dynamics