SECURITY FUNCTIONS PERFORMED BY NATURAL ELEMENTS IN TRADITIONAL MALAY LANDSCAPES ACCORDING TO MALAY MANUSCRIPT

(Fungsi Keselamatan Unsur Alam dalam Landskap Tradisional Melayu berdasarkan Manuskrip Melayu Tradisional)

Siti Rabiatul Adawiah Jaffar sitirabiatul_adawiah@msu.edu.my

Centre for Fundamental Studies, Management & Science University, Malaysia.

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Abstract

Natural elements in a landscape refer to elements that are naturally present in the landscape. These elements contribute towards creating an aesthetic landscape ecology, which is a landscape that can fulfil the needs of its inhabitants, including security requirements. Traditional Malay landscapes are not behind in this aspect with their natural terrain, water sources, as well as flora and fauna. However, Malay communities today are largely unaware of Malay landscapes, which has resulted in an undefined vision of what Malay landscapes constitute of, and rendered Malay landscapes weaker compared to others. Moreover, studies on landscapes in Malay manuscripts still have not been receiving due attention despite traditional Malay society's refined skills in choosing and building their own landscapes to the point that it has become a local wisdom. Following this, using library research and the application of the Landscape Aesthetic Theory, this article will identify natural elements in Malay landscapes and explain

security elements in them based on the *Sulalatus Salatin, Syair Siti Zubaidah Perang China* and *Hikayat Patani*. This manuscript which has been recognised as a Full Registered Heritage and contains pertinent information regarding the subject at hand. There are three types of natural elements in traditional Malay landscapes based on the text, namely highlands, sources of water, and flora and fauna. All three natural elements are seen as security features that protect inhabitants from threats and danger. Therefore, it is hoped that the results of this study could showcase the local wisdom of Malay communities, and consequently become a guide for expanding studies on landscapes based on Malay manuscripts.

Keywords: Natural elements, traditional Malay landscape, security function, Malay manuscripts, aesthetic landscape ecology, security elements

Abstrak

Elemen semula jadi pada landskap merupakan elemen sedia wujud yang terdapat pada landskap tersebut. Elemen terbabit menyumbang kepada penghasilan ekologi landskap estetik, iaitu landskap yang dapat memenuhi keperluan khalayaknya termasuklah aspek keselamatan. Tidak ketinggalan, landskap Melayu tradisional dengan elemen semula jadi seperti bentuk muka bumi, sumber perairan, flora dan fauna. Namun begitu, masyarakat Melayu kini masih kurang kesedaran tentang landskap Melayu, sehingga menyebabkan landskap Melayu tidak jelas dan tidak kuat berbanding landskap yang lain. Tambahan pula, kajian landskap dalam manuskrip Melayu masih lagi kurang diberi perhatian walhal masyarakat Melayu tradisional sememangnya mempunyai kemahiran dalam memilih dan membina landskapnya sendiri sehingga dianggap sebagai salah satu kearifan lokal. Oleh itu, berdasarkan kajian kepustakaan dan pengaplikasian teori Landskap Estetik (Landscape Aesthetic Theory), makalah ini akan mengenal pasti elemen semula jadi pada landskap Melayu dan menjelaskan fungsi keselamatan berdasarkan teks Sulalatus Salatin, Syair Siti Zubaidah Perang China dan Hikayat Patani, iaitu antara manuskrip yang diiktiraf sebagai "Warisan Ingatan Dunia" yang di dalamnya terkandung pelbagai maklumat. Elemen semula jadi pada landskap Melayu tradisional yang terkandung pada teks dibahagikan kepada tiga, iaitu dataran tanah tinggi, sumber perairan, flora dan fauna. Ketiga-tiga elemen semula jadi dilihat berfungsi sebagai alat keselamatan yang melindungi masyarakatnya daripada ancaman dan bahaya. Oleh itu, diharapkan hasil kajian ini dapat mengetengahkan

kearifan tempatan masyarakat Melayu seterusnya menjadi garis panduan untuk meluaskan lagi kajian tentang landskap berdasarkan manuskrip Melayu.

Kata kunci: Elemen semula jadi, landskap Melayu tradisional, fungsi keselamatan, manuskrip Melayu, ekologi landskap estetik, elemen keselamatan

INTRODUCTION

Traditional Malay landscapes are made of two elements: Natural and manmade. Generally, Malay landscape constitutes two elements, namely softscape and hardscape. Softscape elements are natural elements that are found in the environment, while hardscape elements are elements that are made by humans using natural materials and placed in the landscape in order to complete it (Ahmad Zamil et al., 2013a). Both elements come together to result in a complete and useful (for local inhabitants) landscape architecture that fulfils certain functions and benefits while being attractive (Azman & Shahruddin, 2015; Ahmad Zamil et al., 2013a). Malay landscapes also influence the lifestyle of its inhabitants that incline towards Malay traditions, culture, and functions. Softscape or natural landscape elements boast various benefits on many levels including the protection afforded by the surroundings for their inhabitants (Azman & Shahruddin, 2015). In fact, studies on traditional Malay landscaping have shown that security features loom large in the design and creation of a landscape (Hasrina & Mariyati, 2016; Siti Rabiatul Adawiah et al., 2017; Siti Rabiatul Adawiah et al., 2019). This is seen in the design of traditional Malay landscapes that prioritises security functions, especially in the selection and establishment of residential areas including those in kingdoms and states. Natural elements form one of the main manifestations of security features in traditional Malay landscapes, which are prone to exhibit similar topographical patterns as well as consist of natural elements like plateaux, sources of water, and flora and fauna (Azman & Shahruddin, 2015; Hasrina & Marivati, 2016; Siti Rabiatul Adawiah, 2018).

Research on traditional Malay landscapes also include manuscriptbased studies which show that traditional Malay landscapes are part of a local wisdom that should be highlighted (Hasrina & Mariyati, 2016). The survey of Malay landscapes in Malay manuscripts is essential because the

texts not only describe the visual aesthetic of the landscape, but also its particular functions (Ahmad Zamil et al., 2013a). In fact, textual descriptions of Malay landscapes forge the latter's link with the identity and originality of Malay society. These are shown when the Malay manuscripts present information about customs as well as the architectural and literary rules of using natural elements, including in landscaping (Mohd Amirul et al., 2020).

LITERATURE REVIEW

This study focuses on security functions that are fulfilled by natural elements in traditional Malay landscapes based on a traditional Malay text, the *Sulalatus Salatin*. The study shows that Malay landscapes showcase the ability and skills of traditional Malay societies in architecture, which incorporates certain landscaping elements and their functions. Ahmad Zamil et al.(2017) did a study on Malay landscapes that sought to understand the uses of hardscape and softscape in Malay landscapes. The objective of their study is to identify the main elements of Malay landscapes based on the priorities of the inhabitants. Their survey of landscape elements shows that there are various hardscape and softscape elements appropriate with the age of the house in the Malay landscape. Hardscape uses natural building materials that are readily found in the surrounding area, but to adapt to changing uses over time, more durable building materials are used.

However, locals seem to have a low awareness of the importance of Malay landscapes due to lack of exposure to the subject. Their study also finds that psychologically, the architectural features of a landscape contribute to the feeling of security, tranquillity, and more (Ahmad Zamil et al., 2017).

The next study is by Muhamad Solehin Fitry et al. (2014), which assesses the cultural aspect by describing spatial identity in traditional Malay landscapes, particularly in Johor. Muhamad Solehin Fitry et al. (2014) expound this function based on the four largest sub-ethnic groups in Johor, in addition to looking at the two landscaping elements: Hardscape and softscape. Their findings explain how built landscapes show the identity of each sub-ethnic group from the aspect of everyday activities and the group's socio-culture. Moreover, Muhamad Solehin Fitry et al. (2014) finds that the resulting Malay landscape reflects its functions of identity-showing, security, medicine, and the community's socio-cultural features. Malay literature-based research by Mohd Amirul et al. (2020) posits two features of Malay landscapes, which are cultural values and the art of Malay symbolism. Their study found that the elements of a Malay landscape determine and clarify the characteristics, functions, and similarities between these aspects via symbolism in landscaping and Malay culture in Malaysia. The study concludes that Malay literary texts represent a considerable portion of Malay collective memory, and in fact are treated as a guide for the current generation to be acquainted with the culture and life of their community.

Malay literary texts characterise the life of the Malay society as interconnected with the environment even when it concerns spirituality, which is evident in Malay landscaping's endeavours towards sustainability. This character drives Malay landscaping as described in Malay literature towards more diverse and safer surroundings (Mohd Amirul et al., 2020). Ahmad Zamil et al. (2013a) also studied old Malay landscapes based on traditional Malay manuscripts, focusing on the design of Malay gardens and identifying the landscape furniture used in them. Based on six traditional Malay manuscripts, their study finds that past Malay communities possessed architectural skills and knowledge about the function of furniture as well as their component elements. These skills and knowledge were passed down from the previous generations, thus crystallising know-how that is rooted in the identity of Malay society.

Meanwhile, their study on plants in old Malay gardens based on traditional Malay manuscripts finds that traditional Malay communities possessed skills and knowledge about the functions of the plants that they cultivated, be it as food, medicine, for security, and for other uses (Ahmad Zamil et al., 2012). These skills and knowledge, too, were inherited from the previous generations. Both studies (Ahmad Zamil et al. 2012; 2013a) call for further research based on Malay manuscripts to be done because they deserve more attention than they are getting.

The next study examines the significant relationship between Islamic Malay landscapes and gardens that draw inspiration from the Quran. Nur Huzeima et al. (2018) state that the primary objectives of his study are to identify, analyse and determine landscape elements, design features and functions. The study finds that the assimilation that took place resulted in the Malays generally becoming inseparable from Islam, including in landscaping (Nur Huzeima et al., 2018). Malay landscaping tried to mimic Quranic descriptions of the gardens of Paradise, including features like

types of plants, spaces, and animals. This practice contributed towards performing certain functions that facilitate daily life – as mentioned in the Quran – like medicine, food and representations of virtue and beauty (Nur Huzeima et al., 2018). Md Azalanshah et al. (2019) also conducted a study on landscapes with a focus on the construction of Malay gardens.

This observation, interview and textual study-based research focuses on soft elements and hard elements (softscape and hardscape), including their characteristics and functions. The study finds that both elements are incorporated in Malay gardens based on the preservation of a community's knowledge and excellence. This comprises its function to guarantee security, stability, and the distinction of Malay society via local wisdom of things like security, medical treatment, and others (Md Azalanshah et al., 2019).

The next study on landscapes set out to examine folk landscape architecture in Malay films (Ahmad Zamil et al., 2013b). The objective of this study is to find out Malay landscaping elements that are presented by films as well as the lifestyle of Malay society as portrayed in films. The study identifies a number of softscape and hardscape elements that are often used as props in Malay films and categorises each element according to its type and the function it plays (Ahmad Zamil et al., 2013b). The successful portrayal of Malay lifestyle through film is seen to depend on the film production crew as well as the extent of their knowledge on the portrayal of life and Malay landscape in their production (Ahmad Zamil et al., 2013b).

To summarise, many studies have been carried out on various aspects of traditional Malay landscaping based on Malay manuscripts. This body of literature can be referred to as a guide for further studies on traditional Malay landscapes.

PROBLEM STATEMENT

Studies on Malay landscapes are by no means new, and this subject has been treated by a number of scholars before this. Nevertheless, contemporary Malay society still does not understand landscaping very well. In fact, a large portion of the Malay community are not highly aware of aesthetic values in landscaping (Ahmad Zamil et al., 2017). This problem arose because Malay society inherited knowledge of landscaping without the understanding and knowledge of previous generations, while publicity on Malay lifestyle is lacking. These factors have contributed towards the eclipse of Malay landscapes when compared to other landscaping styles (Ahmad Zamil et

al., 2017; Md Azalanshah et al., 2019; Azman & Shahruddin, 2015; Ahmad Zamil et al., 2012). This situation is made worse when authoritative bodies do not invest much effort in spreading awareness about the concept of Malay landscaping (Md Azalanshah et al., 2019). However, Malay society actually possesses solid knowledge about landscaping to the extent that it has become part of local wisdom (Hasrina et al., 2016; Md Azalanshah et al., 2019). This scenario has been expounded by numerous Malay manuscripts. In line with the opinion of Md Azalanshah et al. (2019), Malay manuscript texts have very early on addressed the subject of Malay landscapes, and even explained the functions of Malay landscaping through the elements featured in it, particularly natural ones. These functions were the strength of Malay landscapes, so much so that they became a symbol of Malay civilisation (Ahmad Zamil et al., 2013a). Although landscape studies based on Malay manuscripts have been conducted before, many are still unaware of the richness contained in landscaping knowledge as conveyed in Malay manuscripts (Ahmad Zamil et al., 2013a). Consequently, this study will expound the subject of landscaping as it is portrayed in the text of Malay manuscripts, with a focus on natural/softscape elements, and subsequently focusing in onto the security function of these elements. This paper will focus on the text of Sulalatus Salatin, Syair Siti Zubaidah Perang China and Hikavat Patani which contain much information on Malay culture, including Malay landscaping. Therefore, this study will focus on two objectives, first to identify natural elements in Malay landscapes based on traditional Malay manuscripts, and the second objective is to analyse the security function of natural elements in Malay landscapes based on traditional Malay manuscripts.

METHODOLOGY

This study relies on library research to obtain data by consulting primary and secondary sources such as books, dissertations, and journal articles. Four research phases have been mapped out in the production of this study, namely the selection, collection, analysis, and conclusion of data. In the data collection phase, the author examines the manuscript which was chosen with the view to fulfil the research objectives. Every reading of manuscript content is scrutinised and noted down, especially information that pertains to the subject matter. In the data analysis phase, focus is given on the data obtained during the first phase, while in the third phase, the

collected data is analysed. The fourth phase is where an overall conclusion is made regarding the subject.

This study employs the principles of the prospect-refuge theory by Appleton or the biological principles as the standard for analysing the security function inherent in the natural elements of Malay traditional landscapes. According to Appleton (1975), evolutionary development causes humans to incline towards choosing landscapes that can fulfil intangible ecological needs (places to seek refuge in), to be able to assess the overall prospects, and in the end, these needs become their priority. Appleton's theory is presented as one that not only explains a theory of landscape that is needed by humans, but also by animals. Both species achieve the enjoyment of aesthetics through the same fundamentals; that is, when humans or animals use their surroundings to save themselves via hiding, fleeing, or fighting (Bourassa, 1988). Appleton (1975) states that as prey and predator, humans make use of the landscape as their protector.

The surroundings in a landscape that can fulfil biological needs exhibit an attractiveness, thus showing that attractiveness is a character that points towards survivability (Bourassa, 1988). In other words, humans tend to choose landscapes whose features cater to their survival needs as a fulfilment of aesthetics. Moreover, Appleton emphasised the ability to see without being seen, which enables humans to hide themselves from enemies and threats. Biological satisfaction for humans and animals will be fulfilled when the surroundings of a given landscape provide safety from threats and predators, allow them to detect the presence of enemies and take precautionary steps to avoid future dangers or disasters (Mumcu et al., 2010). This theory also posits that survival features that are apparent in a landscape highlights it as a good landscape to be made into a habitat that can ensure biological posterity and offer aesthetic enjoyment (Bourassa, 1988; Zaleskieně, 2014; Lee; 2018). High-quality ecology in a landscape is related to aesthetic qualities, for humans see landscapes as habitats, where aesthetic enjoyment is achieved through their experience of choosing a habitat. The landscape in question must fulfil the needs of the human, including security needs. This matter is explained thus:

Habitat theory postulates that aesthetic pleasure in landscape derives from the observer experiencing an environment favourable to the satisfaction of his biological needs. Prospect-refuge theory postulates that, because the ability to see without being seen is an intermediate

step in the satisfaction of many of those needs, the capacity of an environment to ensure the achievement of this becomes a more immediate source of aesthetic satisfaction. (Appleton, 1975:73)

DISCUSSION AND ANALYSIS

 Table 1 Natural elements featured in traditional Malay landscapes.

Historical Site/Location	Highlands	Source of Water	Flora and Fauna
Dinding	/	/	
Temasek	/	/	/
Semudra	/	/	/
Pasai	/	/	/
Biawak Busuk			/
Melaka	/	/	/
Pagoh			/
Kuala Johor	/	/	/
Pahang		/	/
Siak		/	
Langiu		/	
Kelantan	/	/	
Palembang	/	/	/
Bangka Hulu		/	/
Inderagiri	/	/	
Selat Air Tawar		/	/
Bintan	/	/	/
Bemban	/	/	/
Bukit China	/	/	
Tanjung Batu		/	
Cempa	/		
Patani		/	
Seluyud		/	

Historical Site/Location	Highlands	Source of Water	Flora and Fauna
Makam Tauhid		/	
Batu Sawar		/	
Pasir Raja		/	
Pagar Ruyung		/	/

Table 1 shows three categories of natural elements in traditional Malay landscapes, namely highlands, source of water, and flora and fauna. Natural elements that constitute a character of traditional Malay landscapes are seen to be aligned with and contributing to security functions in the landscape. For Temasek, Semudra, Pasai, and Melaka, the choice of landscape to build a traditional Malay kingdom depends on the structure of the terrain, which in turn becomes a point of attraction in that landscape. This is demonstrated by the *Sulalatus Salatin* as follows:

Seri Teri Buana then takes leave to see the land of Temasek, accompanied by his courtiers. He witnessed the superiority of the terrain, which rises into a hill and forms a plateau on its summit, while the rest of the land are made of fields. (A. Samad, 1979:37)

From the passage, we could see that Seri Teri Buana was enchanted by the terrains' high elevation. Based on the text too, we understand that a highland plateau becomes an important element in the defence infrastructure of the kingdom.

After some time, Raja Suran reached a land called Gangga Negara, whose ruler was named Raja Gangga Syah Johan. This kingdom was located on a hill; when viewed from the front, it appears very high, while from behind, it appears lower; now, this city is in the mainland of Dinding, close to Perak. (A. Samad, 1979:10)

The high plateau described in the text above has been characterised clearly, which demonstrates its advantage as a defence mechanism in the landscape. The steep slope on one side of the hill (the front side) makes it hard for enemies to scale the hill during a siege. On the other hand, the

gentle slope on the opposite side of the hill allows residents to flee quickly should an attack take place. This defence mechanism is also portrayed in the following passage: "All of Raja Suran's men failed to approach the citadel; (and) the king charged forward on a ferocious elephant. Thus some of his men were stabbed and shot at with arrows from the top of the hill." (A. Samad, 1979). This scenario describes how Raja Suran's army, when they attempted to attack Kota Gangga Negara, found it difficult to climb the hill and take over Kota Gangga Negara due to the steepness of the highland, which means that the inhabitants of the kingdom possessed an advantage when an ambush occurs (Abdul Halim, 1990).

The text explains how an elevated plateau in a landscape functioned as a defence structure which could protect its inhabitants from hostile threats. This corresponds with the biological theory in the Landscape Aesthetic Theory which emphasises the capability to see without being seen when the surroundings of a given landscape are able to save its people from their enemies.

The natural landscape, which is the plateau is also used as a security mechanism when it becomes an observation post area. As written in *Syair Siti Zubaidah Perang China* below:

Anakanda diperbuatkan mahligai tinggi, Samalah tengah Pulau Peringgi, Gunung Bertatah emas pelangi, Indahnya tidak lagi terperi.

Sangat tingginya melepaskan hutan, Dari jauh tampak kelihatan, Di atas tampak ke tengah lautan, Kemuncak tampak berkilat-kilatan.

.... Bertitah kepada Dang Ratna Sari, Bedil apa gerangan peri, Bahannya besar sampai kemari,

Entahkan musuh menyerang negeri.

Berdatang sembah Dang Ratna, Tiadalah pereksa hamba yang hina, Pendengaran patik sebelah sana, Bunyi bedil gemuruh bahana.

Silakan tuanku muda ter'ala, Kita melihat kepada jendela, Entahkan kapal raja Menggala, Datang ke mari membuat gila.

Mendengarkan sembah dayang jauhari, Segeralah bangkit tuan puteri, Membuka jendela tatah baiduri, Sambil memandang ke tengah bahri.

Puteri Zubaidah lalu berkata, Sungguh pun tampak tiada nyata, Ambillah segera teropongnya beta, Ada terletak di atas kenta.

Lalu pergi dayang bestari, Turun ke bawah berperi-peri, Ke dalam bilik berlari-lari, Diambil teropong sambil berdiri.

Abang kembali dengannya segera, Persembahkan kepada Siti mengindera, Siti meneropong ke tengah segara, Meneropong kapal sultan putera.

Di dalam teropong dipandang rata, Besarnya tidak dapat dikata, Manusia seperti semut melata, Kapal dan kici samalah serta.

Pakaian itu putih dan hitam, Songkok dan serban bermacam, Bangsanya itu Turki dan Syam, Bangsa Habsyi orangnya hitam.

Ada yang setengah menurunkan layar, Ada yang duduk ada bersiar, Pergi datang memikul istaggar, Berkilat cahaya pedang dan khanjar.

Semua dilihat olehnya Siti Zubaidah, Tampak dipandang berbagai-bagai, Setengah berjanggut setengah bermisai, Ada yang memegang pedang perisai.

[Your child was made a high castle, Same in the middle of Peringgi Island, Mountain studded with rainbow gold, The beauty is indescribable.

Very high let go of the forest, From afar it seems to be visible, Above looks to the middle of the ocean, The peak looks shiny.

.... Said to Dang Ratna Sari, What kind of gun is it, The material is big until here, Is the enemy attacking the country.

Come to worship Dang Ratna, Do not examine the humble servant, My hearing on the other side, The sound of the gun roared.

Please my young master, We look to the window, Is the ships of the Menggala king, Come here and go crazy.

Listening to the words of Dayang Jauhari, Get up soon princess, Opening the *baiduri* inlaid window, While looking at the middle of the sea.

Princess Zubaidah then said, Even if it seems unreal, Take my binoculars immediately, It is located on the *kenta*. (Al-Ahmadi, 1994:110-119)

Then go wise maiden, Go down and down, Into the room running, Taken binoculars while standing.

Brother come back soon, Offer it to Siti Mengindera, Siti gazed into the middle of the sea, Staring at the prince's ship.

In the binoculars all look, The greatness cannot be said, Humans are like ants cascading, Ships and *kici* are the same.

The clothes are white and black, Various bows and turbans, His people are Turks and Shams, Abyssinian people are black.

Some half lowered the sails, Some are sitting there are strolling, Go come and carry *istinggar*, Shining light of sword and *khanjar*.

Everything was seen by Siti Zubaidah, Seen in various ways, Half bearded and half moustached, Some hold shield swords.]

The poem shows that the position of the palace on the plateau makes it easier for Siti Zubaidah to detect the presence of ships going in and out of Peringgi Island. This facility can be an initial preparation as a precautionary measure to ensure the safety of the country involved. The natural elements involved contribute to the security aspect when it becomes one of the important defence and protection mechanisms of the old Malay community. In this regard, the old Malay society made the element of the highlands as an element capable of protecting the government from any threat and danger.

The Biological Theory in the Landscape Aesthetic Theory emphasizes the importance of the ability to see without being seen when the landscape environment is able to save the community from the threat of the enemy. The old Malay community sees the natural elements involved as a mechanism that offers protection and is able to protect itself from any threat (Hasrina, 2015).

Besides that, sources of water that occur naturally in a landscape have their own attractions. Sungai Pahang has been described in Malay manuscripts as one of the attractions in Pahang which led to Melaka's conquest of that state:

As for this, a story told by the one who has the story: there is a land, its name is Indera Pura; the water of the river is shallow, again with the long sandy region, there are too many islands in the river, the water is fresh up to kuala. The northern season storms its estuary; there is gold in the upper reaches, many wide fields there. The forest is filled with elephants, rhinos, tigers, wildebeests and all kinds of game. It is said that wildebeest meat is less grilled than elephant meat. Once upon a time, Indera Pura was under the subjugation of the Siamese continent, the name of the king was Maharaja Dewa Sura, the family also belonged to Paduka Bubunnya.

After Sultan Mansur Syah heard the news of the country, he felt that he wanted too much; then his majesty ordered the Treasurer of His Majesty the King to attack Indera Pura, he brought two hundred equipment. (A. Samad,1979:90)

Bodies of water are vital elements in a landscape due to the survival values that they offer (Lee, 2018). This is evident from the following passage:

Upon hearing about Raja Suran's arrival, Raja Gangga Syah Johan commanded his subjects to gather, to barricade the gates of the city, to guard the buildings, and to fill the waterways with water. (A. Samad, 1979:10)

The text explains Raja Gangga Syah Johan's strategy in defending his kingdom in Dinding, Perak by making use of the waterways in its landscape. In defending the citadel, waterways like ditches are used to prevent the onslaught of enemies from advancing further into the city. Mior Ahmad Noor (2003) explains that waterways like ditches are important in defence and are used as shortcuts.

The use of ditches as a safety mechanism is also expressed through the *Hikayat Patani* as in below:

Even after a long walk, Apya Deca reached Kayu Kelat. So it was presented by people to Paduka Syah Alam. As for that time, the city in Kelampang was under construction and not ready yet. So Temenggung Seri Paduka Tuan rode the elephant named Jarum Perak and went to Kelampang; he told them to raise all the fences and put them on the unfinished city, there were ten layers, and there were too many big guns arranged at the same distance. Arakian then all the Siamese people came to attack the unfinished city, some had gone down halfway through the Kelampang moat, then they were fired upon by the Patani people, too many of the Siamese people died, countless death and some Siamese warriors who had been driven away were unable to cross. (Siti Hawa, 1992:37)

The above passage explains the Siamese army that wanted to attack Patani through Kelampang City. The Siamese army tried to cross the Kelampang ditch but failed. In addition, the frequent gun attacks added to the difficulties of the Siamese army that wanted to conquer Patani. The construction of ditches in this context proves the importance of building elements or landscape elements as one of the powerful security mechanisms.

The use of bodies of water as defence mechanisms shows the fulfilment of aesthetics for the inhabitants of the landscape, even in life-threatening situations. This natural element ensures that the landscape can be protected in order to fend off threats and prevent disasters, which effectively offers a chance of protection as has been posited in the Landscape Aesthetic Theory (Bourassa, 1988).

Elements of flora and fauna in a landscape also play a role in the security function when they are used as defence equipment when controlling the activities of an attacking army. During Siam's attack on Melaka, Tun Perak exploited natural elements on the beaches of Melaka to confuse the enemy.

When night fell, Awi Dicu approached Melaka. Bendahara Paduka Raja instructed his army to build fires fuelled by mangrove trees, nyirih, and tumu; until blazing fires lit up (the beach). Upon seeing the many fires, the Siamese captain said, "If the Malays are this populous, what would happen if they attacked us? We failed to even defeat a boatful of them just now." So Awi Dicu said, "You are right, let us (give up and) turn back." (A. Samad, 1979:88)

The above passage shows how security depends on the ability to control the moves of the enemy as well as the ability to see without being seen. In this matter, Bendahara Tun Perak's strategy comprised of using natural elements to control the enemy's moves. The Siamese army felt threatened by the perceived number of "the subjects of Melaka" who were lying in wait along the beach, when in fact, the human shadows they saw were the trees along the bank of Sungai Melaka to which torches have been fixed by the Bendahara to intimidate the Siamese army.

In this sphere, the security function can be achieved by the Malays in Melaka through the use of natural elements that were available along the banks of Sungai Melaka, including mangrove trees, nyirih, tumu, and apiapi. These natural elements were turned into a medium by which they could befuddle the enemy and subsequently force them to give up. This natural element in the landscape played an essential role in defending Melaka at that time. Additionally, the security and self-defence function must be given due attention when choosing a landscape so that the landscape aesthetic values vis-à-vis the surroundings can be at its optimum level (Bourassa, 1988:245).

CONCLUSION

Traditional Malay landscapes as portrayed in Malay manuscripts show that natural elements functioned as security tools or mechanisms which were needed by the inhabitants, thus manifesting the ecological aesthetic values in traditional Malay landscapes. However, the selection of Malay landscapes that fulfil ecological aesthetics were rooted in the experience of the Malay society in choosing suitable landscapes that possess features which fulfil those functions. In fact, the security function that is inherent in traditional Malay landscapes can be enhanced or improved using elements created by society, thus perfecting the cultural landscape of the Malay society. This study offers certain benefits, especially to the Malay society in their effort to strengthen their knowledge and skills in landscaping, which will then ensure that Malay landscapes can compete with other landscape styles. This study could also aid authoritative bodies like the Malaysian

Ministry of Tourism, Arts and Culture in their endeavours to highlight the richness of Malaysian society not only by showcasing physical evidence, but also by using written materials. This paper only focuses on a small portion of Malay manuscript materials, but there are many more Malay works which deserve scholarly scrutiny in the study of Malay landscapes during the age of the Malay Sultanates. It is hoped that in-depth studies of Malay landscapes that fulfil the security function could be applied and used in the building of modern Malay landscapes while becoming the standard for more detailed studies in the future.

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