A STUDY ON RESIDENTIAL GARDEN DESIGN FOR SINGLE-STOREY TERRACE HOUSE

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ABSTRACT

The research is in relation to discover the design criteria which is necessary in creating a successful residential garden. The study will give attention to the garden design for single-storev terrace house. Today, the development of housing area had increased due to the growth of population and one of the well-liked housing types is single-storey terrace housing which is affordable by people from all walks of life. Such residential housing does not only provide space for shelter but as well as a place to develop the physical and mental need of human. Subsequently, we can see that people are progressively aware of the landscape of their house compound. Socializing, eating, reading, entertaining, playing, gardening, meditating or simply relaxing are all activities which can take place in the residential site. It can reflect the owner's personality and attitude towards their environment. In fact, the garden can be turn out as a very wide-ranging place for family to strengthen their relationship other than just to be an outdoor space. Thus, the concept that should be bring into forward in designing a landscape for singlestorey terrace housing is also an issue in this study. Therefore, the design criteria should be given full emphasizes in order to set up a garden that can fully satisfy the owner. It is important so that it will not be jumbled up with other design criteria that can worsen the desired effect. In the end, the garden for single-storey terrace housing will be able to offer the owner with contentment physically as well as mentally.

List Of Figures

Figure 2.1

A successful landscape contains forms that balance and complement each other. Consider form when planning and purchasing plants.

Reference from Eric Clough, 1987.

Figure 2.2

The color of a house has a significant impact on the appearance of the landscape. Here, the color that links the concrete path and steps and the flower boxes to the blue façade of the home completes a well-composed entryway.

Reference from Dr. Micheal A. Dirr, 1996.

Figure 2.3

Square pavers, set diagonally, clearly point the way to a destination around the bend. Reference from Manuela Anne King, 1996.

Figure 2.4

Before: The unlandscaped front yard is so lacking in privacy that it is virtually useless as an outdoor living space. The entry path may be functional but the exposed entryway makes the transition from street to house uninviting. The windows at the front of the house are also completely exposed to the street and passers-by can look directly into the house when the front door is open.

Reference from Kenneth R. Burke, 1991.

Figure 2.5

Before: After landscaping, the lighted path invites visitors toward the front door, which is visually shielded by the small tree to the right. The curved fence to the left of the walk hides a new outdoor eating area. A planting of shrubs softens the fence, while a strategically placed smaller tree increases its effective height. The area on the street side of the fence is treated as a conventional front lawn.

Reference from Kenneth R. Burke, 1991.

Figure 2.6

Big pots are usually filled with water plants such as water lily as the Balinese love to use water element in their garden design.

Reference from Gede Ariana, 2002.

Figure 3.1

These big pots can be found in front of Encik Ismail's house. Pots are imperative element in Balinese Garden concept.

Figure 3.2

This figure shows the floor plan at the entrance.

Figure 3.3

This is the view of wakaf where the house owner loves to sit there with his family during free time while watching the fish in the pond.

This figure shows the floor plan of pangkin and fish pond.

Figure 3.5

The sculpture of 'batu giling' which flows out water from its mouth has also drawn the attention of visitors.

Figure 3.6

Tempayan is used to hold water and in this design, it is not only meant for that purpose but as well as to flow out water from the bamboo pipe. It gives outstanding appearance to the tempayan.

Figure 3.7

The mud on the decorative wall gives some aesthetic value to it. The more mud it has the more natural will it look.

Figure 3.8

In Balinese Garden concept, candle house like this is a familiar element that enhances the garden. It supports to panorama at night.

Figure 3.9

The slender cat's tail is planted in front of the house in a big pot consecutively to create a 'sense of welcoming' to guests.

Figure 3.10

Living things like Flower horn fish has become an attraction to the pond especially when they are aggressively react to get food.

Figure 3.11

A cluster of heliconia consists of various species are planted along side of the car porch. A candle house which can give dramatic effect at night can also be found next to the plants.

Figure 3.12

This figure shows the floor plan of heliconia and candle house.

Figure 3.13

Water plants that grow upwards are located in the pond. It gives the impression of being distinctive on its own.

Figure 3.14

Climbers are planted in coconut shell and hang on the pergola in order to enhance the structure next to it which is the *pangkin*.

Figure 3.15

The house owner adores white colour that commonly being used in Japanese Garden concept and that is why white sculpture like this candle house is being featured at the entrance.

This ficus tree is being trimmed into topiary which gives it a particular appearance at the entrance and indirectly becomes a softscape sculpture.

Figure 3.17

This figure shows the floor plan of heliconia and candle house.

Figure 3.18

This is the overall view of the garden at Puan Asiah's house. The approach is straightforward yet it still can catch the viewer's eyes.

Figure 3.19

This figure shows the floor plan of lawn area.

Figure 3.20

Climbers are planted in coconut shell and hang on the pergola in order to enhance the structure next to it

Figure 3.21

The unique from of the river stone draw the viewer's attention. Additionally, a small potted plant is placed there to enhance it.

Figure 3.22 These miniature mushroom sculptures are so endearing in revealing the garden as they are placed on the white pallid stones.

Figure 3.23 Duck sculptures are also being featured in the garden. Some small white stones are placed underneath them in order to draw attention to the sculptures from the lush green lawn.

Figure 3.24

This wooden candle house is to serve the purpose of brighten up the garden at night and creates a sole ambiance.

Figure 3.25

The owner had provided reflexology path in her garden so that her family can do some exercise during leisure time.

Figure 3.26

Bamboo is planted in the garden as to imitate the concept of Japanese Garden as it is a dominant feature in this type of garden.

Figure 3.27

Even though the space is limited, the owner had successfully made the wakaf feel comfortable to be utilized. Thus, it looks harmony with the scale of the inadequate area.

Figure 3.28 Simple and minimum use of furniture can make the space feel larger than the actual size.

Although the space is limited, it does not stop the owner to decorate the area.

Figure 3.30

Vertical form of Heliconia is best to be used at the side of the yard. It goes hand in hand with the dividing wall which becomes its background.

Figure 3.31

As the plant is in the middle of the pond, it is being accentuated because of its vertical form.

Figure 3.32

The combination of colour had resulted a splendour view in this small garden.

Figure 3.33

Conspicuous red of *Plumeria rubra* and *Alpinia purpurata* make distinct statement and affect the mood of the home.

Figure 3.34

When car is parked at the porch, people will face some difficulties in approaching the wakaf due to the limited circulation.

Figure 3.35

The more the mud grows, the more attractive it is.

Figure 3.36

This figure shows the floor plan of the garden of Encik Ismail's house.

Figure 3.37

This figure shows the section of the garden of Encik Ismail's house.

Figure 3.38

Miniature mushroom sculpture.

Figure 3.39

Miniature duckling sculpture.

Figure 3.40

Miniature chicken sculpture.

Figure 3.41

It looks harmony when the rounded form of topiary and the similarly the same shape of river stone are put together.

Figure 3.42

The owner prefer to use plants with fine texture and minimum leaves like the bamboo to enhance her garden.

There is no certain circulation in the garden as people may freely walk around on the grass.

Figure 3.44

This figure shows the floor plan of the garden of Puan Asiah's house.

Figure 4.1

A second entrance would be pleasant to the garden as it will lead people into the garden without passing the porch.

CONTENTS

- i. Title
- ii. Acknowledgement
- iii. Abstract
- iv. Contents
- v. List of Figures

1.0 INTRODUCTION

- 1.1 Research background
- 1.2 Goals
- 1.3 Objectives
- 1.4 Problem statement
- 1.5 Methodology
 - 1.5.1 Literature review and reference study
 - 1.5.2 Case study
 - 1.5.3 Data gathering
 - 1.5.4 Data analysis
- 1.6 Conclusion

2.0 RESIDENTIAL GARDEN DESIGN FOR TERRACE HOUSING

- 2.1 Introduction
- 2.2 Gardens In Tropic
- 2.3 Design criteria

- 2.3.1 Scale and form
- 2.3.2 Color and texture
- 2.3.3 Rhythm and axis
- 2.3.4 Circulation
- 2.3.5 Maintenance
- 2.4 Conclusion

3.0 CASE STUDY AND DATA ANALYSIS

- 3.1 Introduction
- 3.2 Case study 1
- 3.3 Case study 2
- 3.4 Data analysis and assessment
 - 3.4.1 Data analysis and assessment of Case study 1
 - 3.4.1.1 Analysis and assessment through observation
 - 3.4.1.2 Analysis and assessment through interview
 - 3.4.2 Data analysis and assessment of Case study 2
 - 3.4.2.1 Analysis and assessment through observation
 - 3.4.2.2 Analysis and assessment through interview
- 3.5 Conclusion

4.0 RESULT FINDING

- 4.1 Introduction
- 4.2 Finding
 - 4.2.1 Scale and form
 - 4.2.2 Color and texture

- 4.2.3 Rhythm and axis
- 4.2.4 Circulation
- 4.2.5 Maintenance
- 4.3 Conclusion

5.0 CONCLUSION

- 5.1 Introduction
- 5.2 Discussion on recommendation
- 5.3 Conclusion

6.0 REFERENCES



1.0 INTRODUCTION: A STUDY ON RESIDENTIAL GARDEN DESIGN FOR SINGLE-STOREY TERRACE HOUSING

The area in the boundary of a residence is the most important environment. It serves numerous utilitarian, aesthetic, and psychological functions for the residents as well as for visitors, neighbours and passers-by. The residential site can be thought of as an exterior extension of the functions, which occur inside the home. Socializing, eating, reading, entertaining, sunbathing, recreating, gardening, meditating or simply relaxing are all activities which can take place in the residential site. In addition, the site can be considered as an expression of the lifestyle and values of the owner. It can reflect their own personality and attitude towards their environment. Due to that, the purpose of this research is to provide a study of the design criteria that should be implemented in designing residential garden mainly for single-storey terrace house.

1.1 RESEARCH BACKGROUND

The area in the boundary of our homes is ours to use. This is the place for the beauty of trees, shrubs and groundcovers. It is a place for relaxing, entertaining, lounging, dining, games and hobbies. It also acts as the extension of the house interior and particularly a direct transition from house to yard. A garden landscape can beautify our home, increase our property value and add to our usable living space. By designing the garden

landscape at our home, we can create an aesthetic environment that able to please us. Although there is a scientific and technical side to garden landscape design, the resulting product is meant for enjoyment. Nowadays, people are getting keener in designing their residence's garden. However, due to lack of knowledge and information on the design criteria and principle that should be followed as a guideline in designing residence's garden, many of the residential gardens failed to portray a good landscape design. Therefore, the primary function of the garden, which is to fulfil the need of the house owner, cannot be performed. This research is aimed to look deeper into the suitable design of residential garden mainly for single-storey terrace house in the tropics. This is done to provide the foundation for making suggestion on improving the process and quality of residential garden design.

1.2 GOALS

The goal of this study is to look into the design criteria for residential mainly for single-storey terrace house in terms of scale, space, form, circulation, elements of design which includes hardscape and softscape as well as the matter of maintenance, functions it offers between various natural and cultural amenities including the attraction of human activity and wildlife.

1.3 OBJECTIVES

- To study the design criteria that is suitable for single-storey terrace house.
- To identify the suitable and favourable design concept that suits our local single-storey terrace house.
- To identify any design principles that being used in proposed case studies.

1.4 PROBLEMS STATEMENT

In learning the type of landscape that suitable to be applied for residential garden mainly for single-storey terrace house, there are several problems that require for us to look deep into the matter. First of all, we must swot up what are the design criteria that suit the residential garden design for terrace house mainly in the tropics. Nowadays, we can see people are getting keener in designing their house yard, no matter how big the space is. But sometimes, we may also find that the design is not proper and it ending up being a jungle in house yard. Next, we also need to know whether it really provide a proper setting for the house, furnish pleasant outdoor spaces for living, or simply function in a desirable manner. It is important to discern what the outdoor spaces are for so that we can have a vision towards what are we going to do deal with it. Subsequently, we also need to know whether the typical residential site in particular single-storey

terrace house actually meet the need of the owner. From there, we may perhaps discover whether the average site look attractive and provide a sense of pleasure for the eye and mind, and serve as a haven from daily vigors.

1.5 RESEARCH METHODOLOGY

In conducting the research, four main approaches have been selected in order to gather information and data for this topic. The research methods applied are:

- 1.5.1 Literature review and reference study
- 1.5.2 Case study
- 1.5.3 Data gathering
- 1.5.4 Data analysis

1.5.1 Literature review and reference study

Literature review provides information on the garden design criteria that should be taken into consideration in designing residential garden for single-storey terrace house. Various selections of garden design theme and style particularly dealing with residential environment is to be studied. It is hoped that from literature review, better understanding about residential garden

design mainly for single-storey terrace house can be discovered as guidelines and modules for future development.

1.5.2 Case study

To get clearer picture and comparison on what are the characteristics for residential garden design for single-storey terrace house, site visits to a few single-storey terrace houses will be conducted. The chosen houses are the house of Encik Ismail Chik in Johor Bahru, the winner of Best Landscape for Terrace Housing 2000 in a local design magazine and the house of Puan Asiah Talib in Segamat. Each house is selected for their different approach to residential garden design. Therefore, we can study the different type of residential garden design and compare them with each other. Also the size of each single-storey terrace house lot will be investigated.

1.5.3 Data gathering

Data will be collected through interviews, observations and photo taking. Interviews will be conducted at the respective sites. The interviewees are the house owner for every house that has been chosen. The interviewing is focusing on the design approach that being applied by the owner in designing their yard. Then it is about

on how they manipulate the design towards achieving their own favourable theme and style for the garden. The owners will also be able to advice and give opinion about type of plants selection that suits each type of garden style. Meanwhile, observation and photo taking are also a part of important data gathering techniques. We can see how the design is being implemented to fit the size of single-storey terrace house lot and the suitability with its surrounding. Photos will be taken in order to see the differences from each house yard.

1.5.4 Data analysis

The results from the data analysis will be used to implement new design proposal. The main focus of the analysis is trying to test design criteria for a residential garden design that can be applied to single-storey terrace house yard. Literature review will be the reference study to the design criteria for desirable design such as scale, form, colour, texture, rhythm, axis, circulation, material, element of design, which includes hardscape and softscape, and maintenance. This will help in designing a house yard that can be fully utilized and enjoyed by the house owner. Therefore, the real function of residential garden, which are to enhance the house yard as well as to give pleasure to the owner, can be fully performed.

1.6 CONCLUSION

The feel of a garden should develop from the site in which the house sites. It is the relationship of the garden to its setting, both physically and mentally, that ought to pervade every aspect of the design. Therefore, this study will provide some information on garden design for single-storey terrace housie that can be referred to as reference in the future.



2.0 A STUDY ON RESIDENTIAL GARDEN DESIGN FOR SINGLE-STOREY TERRACE HOUSING

2.1 INTRODUCTION

The chapter will be provided with the knowledge on what are the design criteria that should be taken into consideration in designing a garden for single-storey terrace house. But before that, we must learn to know what are the design concept that recurrently being applied by the house owners these days in decorating their residences. For this study, the concept of modern Balinese Garden is chosen as the main focus of the whole idea to design a garden for single-storey terrace house. As a result, a garden that can please the eye can be achieved and plus, house owner can fully enjoy their garden while doing their family activities.

2.2 DESIGN CRITERIA

2.2.1 Scale and form

Scale is an expression of relative size (Eric Clough, 1987). The principle of scale refers to the thing being looked at or experienced and something else that acts as a reference. The most comfortable reference point in a residential landscape is the human body. Properly scaled spaces, ones that relate well to the people using them, are necessary for a successful landscape design.

Getting the scale of spaces and materials right is a concern that all designers share. However, there is no one right scale for each type of space. Decisions or feelings regarding whether a space is in scale with its occupants often vary. Therefore, it is important that you take note of the outdoor spaces that make you feel most comfortable. Probably the easiest way to set the scale of your landscape is to base it on the scale of your house.

The principle of form relates to the shape and structure of the various elements in a design rather that to the materials used for those elements (Eric Clough, 1987). A well-designed landscape contains forms that balance and complement one another. If there are too much of one type form such as too many tall elements, too many curves or too many rectangles will make a design uncomfortable. The form in a landscape should be in keeping with the overall landscape style.

Certain types of forms have deep-seated symbolic connotations that we all intuitively comprehend. For example, vertical forms induce a sense of awe. Diminutive and intricate forms evoke curiosity and interest. The static nature of the horizontal plane promotes feelings of peacefulness or passivity and gives the

appearance of permanence. Water rests at a horizontal level. Circular forms give a feeling of closure. They are complete in themselves. Curves are visual symbolic of harmony. When you design a paved walkway or the edges of a narrow planting bed, consider using gentle, sweeping curves that flow from one to another.



Figure 2.1
A successful landscape contains forms that balance and complement each other. Consider form when planning and purchasing plants.
Reference from Eric Clough, 1987.

Meanwhile, the **form** of a **plant** is its **shape** or **silhouette**. Plants have a wide variety of forms including vertical, columnar, round, vase shaped, weeping, pyramidal and horizontal. Plants that are tall and thin are said to have vertical form and add strong accent to a design. Plants that are wider than they are tall have horizontal form. Massing of plants can accentuate their form. The use of contrasting forms can create focal points in a garden. For instance, a group of tall trees has a strong vertical form and will draw the viewer's eye in a landscape in which most of the plants have a horizontal from.

2.2.2 Color and texture

The use of color in a landscape makes distinct statement and affects the mood of the home (Dr. Michael A. Dirr, 1996). A yard done in shades of green will be more soothing than one in a bright color. Cooler colors such as green and blue, tend to recede into distance whereas warm colors such as red, orange and yellow making distance seem shorter. Following this principle, a small garden can be made to seem larger if cooler colors are used in the design. Simple color combinations with one color dominant are generally the most successful. It is best to use restraint when mixing a number of colors together for a unified effect. The result