



UNIVERSITI PUTRA MALAYSIA

***IDENTIFICATION OF LANDSCAPE ELEMENTS
IN MALAYSIAN GARDEN DEVELOPMENT***

KASHINO NAOHIRO

FRSB 2018 21



**IDENTIFICATION OF LANDSCAPE ELEMENTS
IN MALAYSIAN GARDEN DEVELOPMENT**

By

KASHINO NAOHIRO

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in
Fulfilment of the Requirements for the Degree of Master of Science**

February 2018

All material contained within the thesis, including without limitation text, logos, icons, photographs and all other artwork, is copyright material of Universiti Putra Malaysia unless otherwise stated. Use may be made of any material contained within the thesis for non-commercial purposes from the copyright holder. Commercial use of material may only be made with the express, prior, written permission of Universiti Putra Malaysia.

Copyright © Universiti Putra Malaysia



Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Master of Science

IDENTIFICATION OF LANDSCAPE ELEMENTS IN MALAYSIAN GARDEN DEVELOPMENT

By

KASHINO NAOHIRO

February 2018

Chair : Associate Prof Lar. Suhardi bin Maulan, PhD
Faculty : Design and Architecture

Malaysian garden might not have been developed to the equivalence of English, French, Chinese, or Japanese garden. In the literature review, the achievement of developing Malaysian garden might be determined parallel to cultural development similar with other type of gardens. It is posited that Malaysian garden is currently at the preliminary development stage of basic structure or 'sub-structure.' The development of 'sub-structure' arguably will lead to the formation of the 'base course' of garden-making practice which will then be transfer to be actual garden style or the 'surface layer'. In order to identify the basic or 'sub-structure' of Malaysian garden, three methods have been employed to determine landscape elements perceived as important for Malaysian garden through the relationship between nature and garden. From the web analysis, it is found that the garden image is closely related with nature especially in the established garden cultures such as Chinese, Japanese, French, and English garden. However, for Malaysian garden, analysis found that there is no relationship between the images of Malaysian garden with Malaysian nature. In the self-photo analysis, one hundred photographs of Malaysian landscape have been analyzed through content analysis method. The analysis found that plants are the most frequently used to representation Malaysian landscape followed by geographical feature such as mountains, stones/rocks, and islands. Meanwhile, twelve ordinary Malaysian consist of Malay, Chinese and Indian have been interviewed to identify their experiences with landscape and nature from their pasts and the results were examined and analyzed. The analysis reveals that the participants have positive attachment to nature especially waterfalls, streams, forests and trees. The participants also enhanced the importance of landscape spaces for social bonding, relationship to nature, village environment and family affairs. Findings from these three methods are triangulated and, landscape elements are categorized into primary, secondary and minor subjects in conclusion. Among the primary elements are plants, moving water features and rocks and these elements are important to be basic or sub-structure for Malaysian garden. Moreover, the landscape also must function

for community social activity spaces. These elements shall be included in the development of Malaysian garden.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Master Sains

MENGENALPASTIAN ELEMEN LANDSKAP DALAM PEMBENTUKAN TAMAN MALAYSIA

Oleh

KASHINO NAOHIRO

Februari 2018

Pengerusi : Professor Madya LAr Suhardi Maulan, PhD
Fakulti : Rekabentuk dan Senibina

Taman Malaysia mungkin telah tidak dibangunkan sama seperti taman Inggeris, Perancis, China dan Jepun. Daripada kajian literatur, kejayaan membangunkan taman Malaysia akan ditentukan selari dengan pembangunan budaya selari dengan pembangunan taman lain yang telah dinyatakan. Adalah dinyatakan bahawa pembangunan taman Malaysia kini adalah di peringkat pembangunan awal ataupun di panggil struktur asas. Pembentukan struktur asas ini akan membentuk landasan utama kepada amalan pembentukan taman sebelum permukaan utama rekaan dapat dibentuk. Di dalam usaha untuk mengenal pasti struktur asas ini, tiga kaedah penyelidikan telah di jalankan untuk mengenal pasti elemen landskap yang penting untuk taman Malaysia melalui hubungan antara alam semulajadi dan taman. Melalui analisa laman web, telah ditemui bahawa imej taman adalah berkait rapat dengan alam semulajadi sesuatu tempat terutamanya bagi taman China, Jepun, Itali dan Inggeris. Namun, kajian mendapati imej taman di Malaysia tidak melihatkan hubungan yang kuat dengan alam semulajadi. Melalau analisa foto sendiri, sebanyak satu ratus foto alam semulajadi Malaysia telah di analisa. Dapatan kajian mendapati bahawa tumbuh-tumbuhan adalah elemen landskap yang paling banyak digunakan untuk mewakili alam semulajadi Malaysia diikuti oleh elemen geografi seperti gunung, batu batan dan pulau. Manakala, didalam proses temubual bersama dua belas orang rakyat Malaysia yang terdiri dari kaum Melayu, China dan India bagi mengenalpasti pengalaman mereka dengan landskap dan alam sekitar, adalah didapati bahawa mereka mempunyai perasaan positif kepada alam sekitar terutamanya air terjun, aliran air, hutan dan tumbuh-tumbuhan. Mereka juga menyatakan hubungan mereka dengan kepentingan kawasan landskap untuk ikatan sosial, hubungan mereka dengan alam sekitar, suasana kampung dan bekeluarga. Dapatan dari 3 kaedah ini setelah proses triangulasi dijalankan, kesimpulannya bahawa tumbuh-tumbuhan, elemen air terutamanya yang mengalir serta batu-batuan adalah elemen landskap yang penting untuk menjadi struktur asas kepada taman Malaysia. Selain itu landskap juga harus berperanan untuk aktiviti sosial masyarakat Malaysia. Elemen ini perlu diterapkan didalam membangunkan rekabentuk taman Malaysia.

ACKNOWLEDGEMENTS

My first and foremost gratitude is paid to the late Mr. Kitayama Yusuke, who advised me to pursue post graduate studies despite my age and social position. Without his stunning suggestion, no first step of mine into academic research would have begun.

And my appreciation goes to Dr. Suhardi Maulan, who positively received my will to go under his supervision, and who advised me throughout the extended semesters to date. His tireless advice on my non-academic thinking and unbelievably diligent checking of my thesis drafts were crucial in bringing this research to completion.

To Dr. Yazid Yunos, who encouraged my idea of entry to UPM and led me through. Also to Dr. Norhuzailin Hussain, who guided me with positive opinions. Thanks to both members of the supervisory committee.

I am also thankful to all staff and post graduate students of FRSB for their guidance, cooperation and smiles. Especially to Pn. Nursyida Mansor, who was always kind to my innocent wonders.

My appreciation extends to my office colleagues who acknowledged my external activity and quietly cheered my pursuit. Upon a success of my academic achievement, I would place the result as a joint effort among members of Aroma Tropics Sdn Bhd.

I thank my family, too. My wife, Kashino Atsuko, always offered unconditional support to my selfish desire for school study. My first son, Yume-Maru Kashino, who helped name the title of this thesis in the deep discussion at the end of preparation. My second son, Yujin Kashino, who was completing his own study almost with the same timing as mine, and that made my wish positive.

I am only glad if my sincere gratitude reaches the hearts of the people mentioned above.

This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Master of Science. The members of the Supervisory Committee were as follows:

Suhardi bin Maulan, PhD

Associate Professor
Faculty of Design and Architecture
Universiti Putra Malaysia
(Chairman)

Mohd Yazid bin Yunos, PhD

Senior Lecturer
Faculty of Design and Architecture
Universiti Putra Malaysia
(Member)

Norhuzailin binti Hussain, PhD

Senior Lecturer
Faculty of Design and Architecture
Universiti Putra Malaysia
(Member)

ROBIAH BINTI YUNUS, PhD

Professor and Dean
School of Graduate Studies
Universiti Putra Malaysia

Date:

Declaration by graduate student

I hereby confirm that:

- this thesis is my original work;
- quotations, illustrations and citations have been duly referenced;
- this thesis has not been submitted previously or concurrently for any other degree at any other institutions;
- intellectual property from the thesis and copyright of thesis are fully-owned by Universiti Putra Malaysia, as according to the Universiti Putra Malaysia (Research) Rules 2012;
- written permission must be obtained from supervisor and the office of Deputy Vice-Chancellor (Research and Innovation) before thesis is published (in the form of written, printed or in electronic form) including books, journals, modules, proceedings, popular writings, seminar papers, manuscripts, posters, reports, lecture notes, learning modules or any other materials as stated in the Universiti Putra Malaysia (Research) Rules 2012;
- there is no plagiarism or data falsification/fabrication in the thesis, and scholarly integrity is upheld as according to the Universiti Putra Malaysia (Graduate Studies) Rules 2003 (Revision 2012-2013) and the Universiti Putra Malaysia (Research) Rules 2012. The thesis has undergone plagiarism detection software.

Signature: _____ Date: _____

Name and Matric No.: Kashino Naohiro GS40098

Declaration by Members of Supervisory Committee

This is to confirm that:

- the research conducted and the writing of this thesis was under our supervision;
- supervision responsibilities as stated in the Universiti Putra Malaysia (Graduate Studies) Rules 2003 (Revision 2012-2013) are adhered to.

Signature: _____
Name of Chairman of
Supervisory
Committee: Dr. Suhardi bin Maulan

Signature: _____
Name of Member of
Supervisory
Committee: Dr. Mohd Yazid bin Yunos

Signature: _____
Name of Member of
Supervisory
Committee: Dr. Norhuzailin binti Hussain

TABLE OF CONTENTS

	Page
ABSTRACT	i
ABSTRAK	iii
ACKNOWLEDGEMENTS	iv
APPROVAL	v
DECLARATION	vii
LIST OF TABLES	xii
LIST OF FIGURES	xiv
LIST OF APPENDICES	xviii
 CHAPTER	
 1 INTRODUCTION	 1
1.1 Problem Statement	2
1.2 Research Goal and Objectives	4
1.3 Significance of the Research	5
1.4 Scope and Limitation	5
1.5 Thesis Arrangement	5
 2 LITERATURE REVIEW	 7
2.1 Garden of the World	7
2.1.1 Ancient Gardens	7
2.1.2 Chinese Garden	8
2.1.3 Japanese Garden	9
2.1.4 Islamic Garden	10
2.1.5 Indian and Mughal Gardens	10
2.1.6 Medieval Europe and Italian Renaissance Gardens	10
2.1.7 French Garden	11
2.1.8 English Garden	12
2.2 General Findings from the Garden Comparison	14
2.3 Process of Garden Culture Development	14
2.3.1 Process of Cultural Development	17
2.3.2 Application to Garden Culture Development	18
2.3.3 Evolutional Stages of Four Gardens	19
2.4 In Search of Malaysian Garden	21
2.5 Conclusion of Literature Review	24
 3 METHODOLOGY	 25
3.1 Web analysis	26
3.1.1 Method of Analysis for Web Data	28
3.1.2 Validation of Web Data Collection and Analysis	28
3.2 Self-photo observation	29

3.2.1	Method of Analysis for Self-photo Observation	29
3.2.2	Validation of Self-photo Observation and Analysis	29
3.3	Interview	30
3.3.1	Method of Interview	30
3.3.2	Analysis of Interview Results	31
3.3.3	Validation of Interview and analysis	31
4	RESULT: WEB ANALYSIS	33
4.1	Web analysis: China	33
4.1.1	Nature of China	33
4.1.2	Chinese garden	34
4.1.3	Comparative Analysis of Chinese Nature and Garden	36
4.2	Web analysis: Japan	37
4.2.1	Nature of Japan	37
4.2.2	Japanese garden	38
4.2.3	Comparative Analysis of Chinese Nature and Garden	39
4.3	Web analysis: Bali	40
4.3.1	Nature of Bali	40
4.3.2	Balinese garden	42
4.3.3	Comparative Analysis of Balinese Nature and Garden	43
4.4	Web analysis: Italy	45
4.4.1	Nature of Italy	45
4.4.2	Italian Garden	47
4.4.3	Comparative Analysis of Italian Nature and Garden	48
4.5	Web analysis: France	49
4.5.1	Nature of France	49
4.5.2	French garden	50
4.5.3	Comparative Analysis of French Nature and Garden	52
4.6	Web analysis: England	53
4.6.1	Nature of England	53
4.6.2	English garden	54
4.6.3	Comparative Analysis of English Nature and Garden	55
4.7	Web analysis: Malaysia	56
4.7.1	Nature of Malaysia	56
4.7.2	Malaysian garden	58
4.7.3	Comparative Analysis of Malaysian Nature and Garden	59
4.8	Synthesis of Web Analysis	60
4.9	Sub-structure of Gardens	63
5	SELF-PHOTO OBSERVATION	65
5.1	Observation Results	65
5.2	Brief of stimuli	66

5.3	Conclusion of Self-Photo Observation	71
6	INTERVIEW RESULTS	74
6.1	Interview Result	74
6.1.1	Interview 1; Chinese female (late 40s)	74
6.1.2	Interview 2; Chinese male (49)	75
6.1.3	Interview 3; Chinese male (60s)	76
6.1.4	Interview 4; Malay male (42)	76
6.1.5	Interview 5; Malay male (62)	77
6.1.6	Interview 6	77
6.1.6a	Malay male (66)	77
6.1.6b	Malay female (45)	78
6.1.7	Interview 7; Malay female (25)	78
6.1.8	Interview 8; Chinese female (40)	79
6.1.9	Interview 9; Malay female (20s)	80
6.1.10	Interview 10; Chinese female (50)	81
6.1.11	Interview 11; Indian female (30s)	81
6.1.12	Interview 12; Indian male (56)	81
6.2	Analysis of interview	82
6.3	Results of Post Interview Questionnaire	86
6.4	Findings from the interview	87
6.4.1	Physical Landscape Elements for Malaysian Garden	87
6.4.2	Potential Non-material Sub-structure of Malaysian Garden	87
6.4.3	Potential Sub-structure of Malaysian Garden	88
7	CONCLUSION AND RECOMMENDATION	89
7.1	Conclusion of Research	89
7.2	Recommendation	91
7.2.1	Forest and Trees	91
7.2.2	Other Plants and Vegetation	94
7.2.3	Waterfall and Stream	95
7.2.4	Light Structure	102
7.2.5	Beaches and Sea	102
7.3	Contribution of Research and Future Study Direction	103
7.3.1	Landscape Elements	103
7.3.2	The People's Longing	104
7.3.2.1	The People's Attachment to Nature	104
7.3.2.2	The Social Bonding	104
7.3.3	Beyond Studies	105
	REFERENCES	106
	APPENDICES	109
	BIODATA OF STUDENT	157
	PUBLICATION	158

LIST OF TABLES

Table		Page
2.1	Sub- structure, Base course and Surface layer of gardens	21
3.1	Garden culture samples	27
4.1	nature of china element count	34
4.2	chinese garden element count	35
4.3	chinese nature garden comparison	36
4.4	nature of japan element count	37
4.5	japanese garden element count	39
4.6	japanese nature garden comparison	40
4.7	nature of bali element count	41
4.8	balinese garden element count	42
4.9	balinese nature garden comparison	44
4.10	nature of italy element count	46
4.11	italian garden element count	47
4.12	italian nature garden comparison	48
4.13	nature of france element count	50
4.14	french garden element count	51
4.15	french nature garden comparison	52
4.16	nature of england element count	53
4.17	english garden element count	55
4.18	english nature garden comparison	56
4.19	narture of malaysia element count	57
4.20	malaysian garden element count	58
4.21	malaysian nature garden comparison	59
4.22	Comparison of total nature-garden related elements	60
4.23	Comparison of soft/hard landscape, water and ground/rock in gardens	61
4.24	Garden and its Sub-structure based on literature review and Web analysis	64
5.1	Stimuli count	66
5.2	Comparison of element group between Web analysis and self-photo observation	71
5.3	Potential of Malaysian nature as Sub-structure (nature's potential)	73
6.1	Distribution of cultural group, gender and age group of Interviewees	74
6.2	Elements remarked by Interviewee 1	75
6.3	Elements remarked by Interviewee 2	75
6.4	Elements remarked by Interviewee 3	76
6.5	Elements remarked by Interviewee 4	76
6.6	Elements remarked by Interviewee 5	77
6.7	Elements remarked by Interviewee 6a	78
6.8	Elements remarked by Interviewee 6b	78
6.9	Elements remarked by Interviewee 7	79
6.10	Elements remarked by Interviewee 8	79

6.11	Elements remarked by Interviewee 9	71
6.12	Elements remarked by Interviewee 10	81
6.13	Elements remarked by Interviewee 11	81
6.14	Elements remarked by Interviewee 12	82
6.15	Elements to describe nature mentioned by Interviewees	82
6.16	Summary of entire interview results (Interview 1 – 6b)	84
6.17	Summary of entire interview results (Interview 7 – 12)	85
6.18	Aggregation of answer to post interview questionnaire	86
7.1	Summary of elements in three analysis	90



LIST OF FIGURES

Figure		Page
2.1	Sectional profile of Ha-ha (Credit: Wikipedia-Wikipedia commons)	13
2.2	Sectional profile of road (Credit: Encyclopedia Britannica, Inc.)	17
3.1	Research Design	24
3.2	Post interview validation questionnaire	32
4.1	nature of china – 1 (Green trees, mountain, water surface, geographical feature and boat)	33
4.2	nature of china – 2 (Green trees, mountain and water flow)	33
4.3	nature of china – 3 (Mountain and paddy field)	33
4.4	nature of china – 4 (Green trees, water surface, and traditional building)	33
4.5	chinese garden – 1 (Green trees, rocks, water surface and traditional building)	35
4.6	chinese garden – 2 (Green trees, rocks, water surface and walkway)	35
4.7	chinese garden – 3 (Green trees, rocks, water surface, bridge, traditional building and seasonal floral attraction)	35
4.8	chinese garden – 4 (Green trees, rocks, circular gate and walkway)	35
4.9	nature of japan – 1 (River, bridge and trees)	37
4.10	nature of japan – 2 (Traditional building, pond, floral attraction and trees)	37
4.11	nature of japan – 3 (Traditional building, mountain and cherry blossom)	37
4.12	nature of japan – 4 (Traditional building, pond and trees)	37
4.13	japanese garden – 1 (Dry stream, rock arrangement, trimmed shrub, bonsai and trees)	38
4.14	japanese garden – 2 (Pond, traditional building, bridge, trimmed shrub and trees)	38
4.15	japanese garden – 3 (Water surface, bridge, autumn leaf, trimmed shrub, lawn and trees)	38
4.16	japanese garden – 4 (Traditional building, bridge, floral attraction, lawn and trees)	38
4.17	nature of bali – 1 (Green trees, palm tree and terraced paddy)	41
4.18	nature of bali – 2 (Green trees, paddy, path, mountain, sunset/sunrise and human)	41
4.19	nature of bali – 3 (Green trees, water body, mountain and traditional building/feature)	41

4.20	nature of bali – 4 (Palm tree, water body, resort hotel and floral attraction)	41
4.21	balinese garden – 1 (Bushy plants, garden paving and gate)	42
4.22	balinese garden – 2 (Bushy plants, garden structure and gazebo)	42
4.23	balinese garden – 3 (Bushy plants, garden paving and garden object)	42
4.24	balinese garden – 4 (Bushy plants, water feature, garden paving and garden object)	42
4.25	nature of italy – 1 (Plain, mountain, coniferous tree, sky, path and cliff)	45
4.26	nature of italy – 2 (Traditional building/feature, plain, mountain, green trees and coniferous tree)	45
4.27	nature of italy – 3 (Traditional building/feature, plain, sky and low plants attraction)	45
4.28	nature of italy – 4 (Traditional building/feature, green trees, sky, water body and cliff)	45
4.29	italian garden – 1 (Garden object/structure, green trees, walkway/plaza, low plants attraction, lawn, hedge and steps)	47
4.30	italian garden – 2 (Garden object/structure, green trees, walkway/plaza, lawn, hedge, coniferous tree and traditional building)	47
4.31	italian garden – 3 (Garden object/structure, green trees, walkway/plaza, low plants attraction, lawn, hedge and coniferous tree)	47
4.32	italian garden – 4 (Garden object/structure, green trees, low plants attraction, lawn, water feature, hedge and coniferous tree)	47
4.33	nature of france – 1 (Green trees, mountain, agricultural field and low plants attraction)	49
4.34	nature of france – 2 (Green trees, sky and mountain)	49
4.35	nature of france – 3 (Green trees, traditional building and agricultural field)	49
4.36	nature of france – 4 (Green trees, water body, mountain and traditional building)	49
4.37	french garden – 1 (Green trees, lawn, walkway, low plants attraction and hedge)	51
4.38	french garden – 2 (Water body, walkway, low plants attraction, hedge and topiary)	51
4.39	french garden – 3 (Green trees, traditional building, walkway, low plants attraction and hedge)	51
4.40	french garden – 4 (Green trees, water body, Traditional building, lawn, walkway and topiary)	51
4.41	nature of england – 1 (Green trees, plain and traditional building/feature)	53
4.42	nature of england – 2 (Green trees, plain and water body)	53

4.43	nature of england – 3 (Green trees, plain, traditional building/feature, mountain and sky)	53
4.44	nature of england – 4 (Green trees, traditional building/feature, sky and low plants attraction)	53
4.45	english garden – 1 (Green trees, low plants attraction, walkway, tilted garden ground, lawn, traditional building/feature and hedge)	53
4.46	english garden – 2 (Green trees, low plants attraction, garden object, tilted garden ground and lawn)	54
4.47	english garden – 3 (Green trees, low plants attraction and traditional building)	54
4.48	english garden – 4 (Green trees, low plants attraction, walkway, tilted garden ground, lawn and traditional building)	54
4.49	nature of malaysia – 1 (Sea, sky and palm tree)	54
4.50	nature of malaysia – 2 (Forest or thick vegetation and boardwalk/ trail)	57
4.51	nature of malaysia – 3 (Forest or thick vegetation and mountain/rock)	57
4.52	nature of malaysia – 4 (Forest or thick vegetation, mountain/rock and waterfall)	57
4.53	malaysian garden – 1 (Garden paving/ deck, timber furniture, shade structure, tall plants, pot and pebbles)	57
4.54	malaysian garden – 2 (Timber furniture, water feature, shade structure, tall plants, pot and floral attraction)	58
4.55	malaysian garden – 3 (Garden paving/deck, building feature, timber furniture, water feature, tall plants, pot, pebbles and lawn)	58
4.56	malaysian garden – 4 (Garden paving/ deck, timber furniture, water feature, tall plants and pebbles)	58
5.1	Non-Diptero Section	67
5.2	Mangrove and Boats	67
5.3	Twins behind Yellow Flame	68
5.4	Rubber Plantation	68
5.5	Hibiscus	69
5.6	Klang Gates	69
5.7	Langkawi Islands	70
5.8	Mangrove Boardwalk	70
5.9	Ulu Yam Stream	71
7.1	Sectional profile of typical rain forest	93
7.2	<i>Nephrolepis biserrata</i>	95
7.3	<i>Pandanus veichii</i>	95
7.4	Example of stream system	96
7.5	Example of stream in Malaysian garden	97
7.6	Natural stream of Malaysia	98
7.7	Waterfall, stream and pond with forest environment at a garden restaurant	99

7.8	Malaysian garden waterfall viewed from a hotel lobby	100
7.9	Waterfall in Sarawak	100
7.10	Malaysian garden at a museum	101
7.11	Malaysian garden for social bonding	105



LIST OF APPENDICES

Appendix		Page
A	Image Data obtained from Google Images for Web Analysis	109
B	100 Selected Photographs of Malaysian Landscape by the researcher for Self-Photo Observation	123
C	Verbatim Record of Interview	130

CHAPTER 1

INTRODUCTION

I have had a chance to visit south-east Asian countries; Thailand, Burma, Cambodia, Vietnam, etc. In these countries of the south-east Asia which hold the important part of Asia, I could find no garden which is traditionally inherited from the national civilization. While in architectural field there are many examples built in their own national style, the gardens seen there are only those of perfect European style which the western people initiated in old days, or otherwise, there were no gardens at all belonging to buildings. I could not see even the gardens of semi-foreign style. In Japan, there exist deep relations between Buddhist civilization and gardens. We may see many distinguished gardens maintained in the Buddhist temples anywhere in Japan, but in south-east Asian countries, the temples seem quite unconcerned about the gardens (O'no, K, 1963, p. 16).

O'no argues that there have not been a dominant garden culture established in South-East Asian countries. He concludes that China is only another Asian culture that enhances garden culture with nature within the human living environment, besides Japan. O'no guesses that people in these places do not have a concept to create a garden.

When a particular culture develops its own garden identity, there must be a necessary natural process during certain period of time. In the case of Malaysia, an opportunity for garden development process might not have been given during the long colonial era by Portuguese, Dutch, British, and Japanese. Therefore, a visualization of specific landscape form could not occur to achieve a firm style of Malaysian garden. In other words, Malaysian garden could have been achieved if an appropriate time line had permitted.

Apart from historical events which have always influenced the development of garden, another matter that might catalyze garden development is a political order. One of the examples is the French formalism garden which was rapidly developed by André Le Nôtre (1613–1700) under the financial support of King Louis XIV.

The new vista garden reached its zenith both in scale and unity at Vaux-le-Vicomte and Versailles, both designed by the doyen of French garden architect, Andre le Nôtre. Of these two, Vaux-le-Vicomte is much the superior as a work of garden art. It has a freshness, vivacity and humanity of scale which the larger garden lacks. Its creator, Nicolas Fouquet, was finance minister to Louis XIV (the Oldhams, 1980, p. 183-184).

Malaysia too, may have had an opportunity during the peak time of Putrajaya development in the late 1990s. Numerous landscape works with cultural attempts were produced but the change of guard in Putrajaya discontinued the enthusiasm, resulting no

new phases of achievement to have followed. Today, Malaysian garden identity has not reached its maturity, presenting landscape developments as mosaic-patching universal design styles, filling the blank spaces of cityscape.

1.1 Problem Statement

Garden seems to exist in every country and every town. When travelling abroad, travelers often admire historical gardens recommended as tourists' destinations in a travel guide. Also while visiting relatives or friends, private gardens are presented with the owner's pride and enthusiasm. Garden is a fruit of cultural development, and is a result of human activity.

The word 'garden' is found in English dictionary (The Concise Oxford Dictionary, 1995, p. 558) as:-

1. a piece of ground, partly grassed and adjoining a private house, used for growing flowers, fruit, or vegetables, and as a place of recreation.
2. ornamental grounds laid out for public enjoyment (botanical gardens)
3. a similar place with the service of refreshments (tea garden).
4. a- (of plants) cultivated, not wild. b- for use in a garden (garden seat).
5. a street, square, etc. ...

Niwa, the equivalence of garden, is also defined in the Japanese dictionary (Daijisen, Shougakukan, 1995, p. 2035) as:-

1. a ground in building compound with certain openness, where often plants are planted and water features or earth mounds are provided (take care of *Niwa*, build *Niwa*).
2. a place an event such as religious occasion or ceremony takes place (*Niwa* of education, *Niwa* of battle).
3. an earthed floor of traditional house. ...

Hence, garden is commonly understood in English and Japanese as an outdoor space often with cultivated plants, and seemingly related with human activities.

Gardens have been created by numerous communities in the history of mankind. Gardens have always reflected particular communities' life style, culture, social needs and consequently philosophy. In other words, garden exhibits people's way of life and story and it should not be an exception in the context of Malay community in Malaysia.

It is noted that there are Malay words represent garden. In Times Kamus Dwibahasa (1996), a garden is defined and categorized as follows:-

1. *Bustan* flower garden (p. 597)
2. *Laman* garden, area in front of the house (p. 765)
3. *Taman* garden, court (pleasure, playing etc.) ground; hard-working (p. 925)
4. *Ujana* garden, park (p. 959)

According to A Zamil, Z; Ismail, S & M Sabrizaa, AR (2014), the old manuscripts of *Nagarakartagama*¹ describe the situation of gardens in Malay society as follows:-

At the time of *Majapahit* Kingdom in the 14th century, there is an extremely beautiful palace garden, red stonewalled, thick and high. In front of the west entrance, there is a square, and in the middle there is a circle. There is a *Brahmana* tree (*Ficus religiosa*) of row upon row, lined-row *Bodhi* tree (*Ficus rumphii*), *Nagasari* (*Mesua ferrea*) or *Topen* plant (*Mallotus floribunda*) and, *Cempaka* (*Michelia campaka*) as well as flowering plants magnificently planted (Zamil, Ismail & Sabrizaa, p. 58).

Hence, garden is presumed to be part of Malaysian (or rather Malay community's) culture, based on the description of garden found in the ancient texts. However, the same garden concept is not seem to have been practiced to date.

Today, Malaysia consists not only of Malay community but also of Chinese and Indian communities who had mingled and settled during the historical event of mining's and plantation industry's thriving period from 18th to 19th century. According to Malaysia Demographics Profile (2016), Chinese compose 22.6% of Malaysian population, Indians 9.2%, Malays 50.1% and indigenous community at 11.8%. This distribution signifies the cultural diversity in determining matters on Malaysian garden.

According to Oldham, J & R (1980), Poet *Ssu-ma H'siang-ju* wrote of a Chinese hunting park and pleasure ground built by the Emperor *Ch'in Shih Huang Ti* of *Ch'in* Dynasty (221 – 207 B.C.) as follows:-

Have you not heard of the *Shang-Lin* Park of the Son of Heaven? Within the park spring the *Pa* and *Ch'an* rivers, the *Feng*, the *Hao*, the *Lao* and the *Chueh*, twisting and turning their way through the reaches of the park...they race and tumble, pouring through the chasms of Pepper Hill, skirting the banks of the river islets, winding through the cinnamon forests, and cross the broad meadows... Behind them rise the tall mountains, lofty crests lifted to the sky...(the Oldhams, 1980, p. 39).

From the Oldhams' description, it is learnt that Chinese culture is inclined to admire and enjoy nature in a park/ garden at ancient times. Nature was not only concluded within the park/ garden, but extended to the river, mountains and the sky.

¹ *Nagarakartagama* : According to Shaharir M.Z & Alinor M.B.A.K. (2017), *Nagarakartagama* was written by Prapanca 1365 AD

The Oldhams also elaborate garden development in India particularly in the context of Hinduism, Buddhism and Islamic influences. According to the Oldhams, one of the oldest evidences of a garden was the depiction on Ajanta murals dated 400 - 700 A.D. Among other evidences are garden of *Humayan's Tomb* in Delhi, the water channel of *Ram Bagh*, the water ladders of *Shalimar Bagh*, garden of *Nishat Bagh* at *Dal Lake* in Kashmir, and the garden of *Taj Mahal* that provides insight on rich garden culture and history in the Indian society.

Chinese and Indians have settled in Malaysia for approximately three hundred years and live together with the Malays today. These three communities make up majority of Malaysian populace and interestingly all of the communities have their own garden history and tradition. From social evolutionary point of view, there should be a Malaysian garden by now, but one may have difficulty to see it.

Fruit trees such as coconut and rambutan in the images of Malay garden do not really represent a Malaysian garden in comparison with the mosses and *bonsai* in the images of Japanese garden. In addition, Malaysian urban parks such as Kuala Lumpur Lake Garden and Taiping Lake Garden are very much influenced by English natural romanticism landscape. Further, the contemporary landscape design either in commercial, housing or public spaces are similar to those observed in other part of the world and in the international urban landscape magazines. Therefore, the identity of Malaysian garden is unclear. Why?

Here are the questions this research intends to answer along with the progress of study:-

1. Why is it hard to visualize Malaysian garden?
2. Is Malaysian garden possible to be developed as a specific style?
3. What could landscape elements in Malaysian garden be like?

1.2 Research Goal and Objectives

The goal of this study is to explore Malaysian landscape and its elements that are relevant to Malaysian garden, so that the findings can be utilized as a guideline for Malaysian garden concerns. In order to achieve the goal of the study, the following objectives have been outlined:-

1. To explore people's perception of landscape that is important for Malaysia,
2. To identify people's perception of landscape elements that matter to a development of Malaysian garden, and
3. To provide implication of research findings for the actual development of Malaysian garden.

1.3 Significance of the Research

This study is important and here are the considerable reasons:-

Firstly, sequence of garden development will be known to people by the result of this study. Garden must have certain mechanism to begin, establish itself and be presented to an existence. By tracing the path of garden developing process, a new garden culture might be established.

Secondly, Malaysian cultural identity in landscape architecture, perhaps not wholly but partially, will be revealed by this study. A revelation of genuine Malaysian garden principle may help garden designers and landscape architects as a reference for design.

Thirdly, the needs for provision of landscape spaces can be understood in better way by various professions involved in landscape development such as architects, engineers and town planners. As to date, landscape spaces have been provided by them as rectangular left over spaces, limiting opportunity for the site to attain meanings as a garden.

1.4 Scope and Limitation

This study is designed to cover the following scope:-

1. Garden is the concerning matter, and landscape in general is covered as an extension of the former,
2. The result shall be limited to Malaysian context only and not be applied to other part of the world,
3. Understanding of garden is from the perspective of ordinary people but not from the view of garden experts such as landscape architects and landscape artists.

1.5 Thesis Arrangement

Upon clarification of goals and objectives in the introduction chapter, relevant literature regarding to landscape and garden development will be analyzed in Chapter 2. At first, how garden has been developed should be examined in well-known gardens of the world. Along the way, details of some of famous gardens are looked into. From there, garden culture needs to be studied in its process how it is usually developed. After that, Malaysian context in garden achievement is to be examined.

The explanation of the study method is covered in Chapter 3. The method consists of 1- Web analysis for macro views of gardens globally and locally, 2- professional views of Malaysian landscape by Self-photo observation and 3- public views of nature by Malaysians via Interview.

Chapter 4, 5 and 6 will discuss the findings and the implications of the study, before the entire research be concluded in Chapter 7.



REFERENCES

- Ahmad Zamil Zakaria, Ismail Hafiz Salleh, Mohd Sabrizaa Abd. Rashid. (2011). *Landscape Furniture Present in the Ancient Malay Garden According to Old Manuscripts and their Effects on the Formation of Malay Garden Design Concept Model in Malaysia*, Visual Preferences For The Development of a Malaysian Garden Identity
- Ahmad Zamil Zakaria, Ismail Hafiz Salleh & Mohd Sabrizaa Abd. Rashid. (2014). *The Malay Garden Concept Opportunity to be Developed as the Tourism Product*, Hospitality and Tourism: 58
- Banerjea A. K. (2014), *Philosophy of Gorakhnath with Goraksha-Vacana-Sangraha*, Motilal Banarsidass, Retrieved from <https://en.wikipedia.org/wiki/Yogi>
- Baridon, Michel. (1989). *History, Myth, and the English Garden*, *Studies in the History of Art Vol. 25, Symposium Papers*, National Gallery of Art: 373
- Bayer K. (1993), *People and Landscape: Mediated Perception of a Philosophy of Life Dominating a Society*, Place in Space: Pudoc Scientific Publishers: 1
- Benedict, Ruth. (1934). *Patterns of Culture*, Boston, New York: Houghton Mifflin Company: 17
- Csikszentmihalyi, M. (1997). *Finding Flow: The Psychology of Engagement with Everyday Life*, Retrieved from <https://en.wikipedia.org/wiki/Autotelic>
- Daijisen (1995). Shougakukan: 2035
- Eagleton, Terry. (2000). *The Idea of Culture*, Maiden, MA: Blackwell Publishing: 8
- Elliot, T. S. (1962). *Notes towards the Definition of Culture*, Edition in 2010 by Faber & Faber, London: 4
- Encyclopedia Britannica
- Folk, Moe & Apostel, Shawn. (2013). *Online Credibility and Digital Ethos*, Information Science Reference (IGI Global): 141
- Francis, Mark and Hester, Randolph T. (1990). *The Meaning of Gardens, -Idea, Place, and Action*, Cambridge, MA: The MIT Press: 2
- Fraser, Evan D.G. & Kenney, W. Andrew. (2000). *Cultural Background and Landscape History as Factors Affecting Perception of the Urban Forest*, *Journal of Arboriculture*: 107
- Gothein, Marie Luise (Translated by Laura Archer-Hind). (1913). *A History of Garden Art, From the earliest times to the present day, Volume 2*, Cambridge University Press: 59, 61

Handler, Richard. (2005). *Critics against Culture*, Madison, Wisconsin: The University of Wisconsin Press: 125

Honour, H. & J. Fleming. (2009). *A World History of Art*. 7th edn. London: Laurence King Publishing: 604, Retrieved from https://en.wikipedia.org/wiki/Charles_Le_Brun

Hunt, John Dixon & Willis, Peter (1988). *The Genius of the Place, -The English Landscape Garden 1620 – 1820*, The MIT Press: 17, 21

Ismail Said. (2001). *Pluralism in Terrace Housing Community through Ethnic Garden*: 44, 52

KAWAI, Noriko. (2017). *A Monograph on the Possible Growth of Real Estate Market of High Quality Japanese Residences with Japanese Gardens Regarding the Globalization*, Technical Reports of Landscape Architecture 9, Vol. 80

Kazuo Saito. (1982), *Japanese-gardens from the Viewpoint of Culture in Spacing*, Journal of the Japanese Institute of Landscape Architecture 46(2): 122

Keswick, Maggie; Revised by Hardie, Alison. (2003). *The Chinese Garden, The History, Art and Architecture*, Cambridge, Massachusetts: Harvard University Press: 17, 22

Le Dantec, Denise & Le Dantec, Jean-Pierre (Translated by Levine, Jessica). (1987). *Reading the French Garden, Story and History*, Paris: Librairie Plon: 16

Locher, Mara. (2010). *Traditional Japanese Architecture, -An Exploration of Elements and Forms*, Tuttle Publishing: 18, 20

Mina Kaboudarahangi, Osman Mohd Tahir, Mustafa Kamal M.S, Suhardi Maulan. (2011). *Visual Preferences for the Development of a Malaysian Garden Identity*, Australian Journal of Basic and Applied Sciences, 5(11): 2246-2253, ISSN 1991-8178

Nor Zarifah Maliki. (2008). *Kampung / Landscape: Rural-urban Migrants' Interpretations of Their Home Landscape. The Case of Alor Star and Kuala Lumpur*

Nur Huzeima Mohd Hussain & Suriati Ahmad. (2010). *Malay Landscape: Typical Design for Contemporary House at Dese Wawasan*: 101

Oldham, John and Ray. (1980). *Gardens in time*.

Ono, Kenkichi. (2009). *Japanese Garden*, (in Japanese), Iwanami Shinsho:

O'no, Kazunari. (1963). *My Brief Observation on the Gardens in the South-east Asia*, Landscape magazine Vol. 26. No. 4: 16

Oxford Concise Dictionary of Ecology (1996): 51, 52, 54

Oxford Concise Dictionary of Botany (1992): 75

- Pugh, Simon. (1988). *Garden-nature-language*, Manchester University Press: 2, back cover
- Shaharir M.Z, & Alinor M.B.A.K. (2017). *The Sensitivity of the Past Malayonesian Leaders and Scholars Toward Sustainability*, 'Ulum Islamiyyah: The Malaysian Journal of Islamic Sciences: 192
- Shaules, Joseph. (2007). *Deep Culture -The Hidden Challenges of Global Living, Languages for Intercultural Communication and Education 16*, Multilingual Matters Ltd.: 2, 12
- Strathern, Marilyn. (1992). *After nature: English kinship in the late twentieth century*, Cambridge University Press: 3
- Szilagyi, Kinga. (2011). *The Evolution of English Picturesque Landscape Garden to Urban Public Park*, First International Conference "Horticulture and Landscape Architecture in Transylvania", Agriculture and Environment Supplement: 186-187
- Times Kamus Dwibahasa* (1996): 597, 765, 925, 959
- The Concise Oxford Dictionary* (1995): 558, 907, 1014
- The Sydney Morning Herald –News Site of the Year-, Retrieved from <http://www.smh.com.au/comment/obituaries/made-wijaya-landscape-architect-author-and-stranger-in-paradise-20160831-gr58qs.html>
- Tuan Yi-Fu. (2008). *Discrepancies between Environmental Attitude and Behaviour: Examples from Europe and China*, Toronto: The Canadian Geographer: 1
- Warren, Robert Penn & Erskine, Albert. (1955). *Six Centuries of Great Poetry*, New York: Dell Publishing
- Watanabe, Mamoru. (1975). *The Science of Art* (in Japanese), Tokyo University Press
- Wikipedia- Wikimedia commons
- Wikipedia, Mihaly Csikszentmihalyi, 1997
- Williamson, Tom. (2013). *An Environmental History of Wildlife in England 1650 – 1950*, Bloomsbury Academic: 4-5