



UNIVERSITI PUTRA MALAYSIA

***VISUAL LANDSCAPE EVALUATION OF TOURISM AREAS IN
WEST JAVA, INDONESIA BASED ON TRISAKTI UNIVERSITY
EMPLOYEES' PERSPECTIVES***

INA KRISANTIA

FRSB 2012 20

**VISUAL LANDSCAPE EVALUATION OF TOURISM
AREAS IN WEST JAVA, INDONESIA BASED ON
TRISAKTI UNIVERSITY EMPLOYEES' PERSPECTIVES**



INA KRISANTIA

**DOCTOR OF PHILOSOPHY
UNIVERSITI PUTRA MALAYSIA**

2012

**VISUAL LANDSCAPE EVALUATION OF TOURISM AREAS IN WEST JAVA,
INDONESIA BASED ON TRISAKTI UNIVERSITY EMPLOYEES' PERSPECTIVES**

By

INA KRISANTIA

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in
Fulfillment of the Requirements for the Doctor of Philosophy Degree**

January 2012

DEDICATION

In the Name of Allah S.W.T., I dedicate this work to:

Those who love good and appreciate create good

Those who have put interest in this study and are going to use its findings

Those who have a special place in my heart:

My beloved husband, Aji Kusmantri

My sons, Imam Munandar and Ihsan Satriawan

My parents, Sumarmit (alm) and Yuhenni (alm)

Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Doctor of Philosophy

**VISUAL LANDSCAPE EVALUATION OF TOURISM AREAS IN WEST
JAVA , INDONESIA BASED ON TRISAKTI UNIVERSITY EMPLOYEES'
PERSPECTIVES**

By

INA KRISANTIA

January 2012

Chairman : Noorizan Mohamed, PhD

Faculty : Design and Architecture

In landscape, visual aspects are very important and contribute to our regional identity, while also giving value to the environment. In Indonesia, there are many tourism areas that are losing their visual attractiveness due to rapid development. This situation will affect the value of visual landscape. Based on this situation, it is imperative for visual landscape to be preserved. This study intends to evaluate visual landscape with an emphasis on preference, meaning, and economic value in relation to its preservation. This study uses a public preference method and as well as contingent valuation. 204 respondents were selected through convenience sampling among members of the public in Trisakti University to participate in a survey, where they were

asked to rate their preference based on 50 photographs of landscapes in several tourism areas of Indonesia. They were required to provide their reasons for preference in closed and open-ended descriptions by choosing 5 scenes they preferred most and also rate their willingness to pay to preserve the scene. The results found that there were three categories of preferred scenes with Resort and Highland scenes exhibiting a high preference, while Beach scenes having a moderate preference. The most preferred scenes were those of Highland landscape, which are considered to be strong in mystery, the meaning of *serenity* due the *experience* such as tranquility, smoothness through the ground texture from lawns. To preserve visual landscape in the highland category, the mean amount respondents were willing to pay was \$USD 10.85 (RP108.550,-). There were relationships between preference, meaning, and willingness to pay with a positive relationship between preference and meaning showing a significant correlation. There was a negative relationship between preference and willingness to pay because the quantity of experience increases with landscape quality, and that causes utility to diminish. There was also a positive relationship between willingness to pay and meaning. In terms of meaning, meanings such as complexity contributed to preference of people for scenes in the highland and beach category, while coherence contributed to people's preference of scenes in the resort category. Besides that, the meaning of mystery contributed to Willingness to Pay in the highland category, while legibility contributed to the Willingness to Pay in the resort category. Therefore, it can be concluded that people preferred scenes from the highland and beach category because of the complexity offered in the

scenes, while preference for scenes from the resort category was due to the meaning of coherence. In addition, people had the tendency to pay for the preservation of scenes from the highland category because of the mystery and legibility associated with scenes from resort category. Without doubt, this research has a big potential to create a model to evaluate visual landscape and in the same time it gives visual value to preserve the scenes in tourism areas.



Abstrak thesis yang dikemukakan kepada Senat Universiti Putra Malaysia
sebagai memenuhi keperluan untuk Ijazah Doktor Falsafah

**PENILAIAN VISUAL LANDSKAP DI KAWASAN PELANCONGAN JAWA
BARAT INDONESIA BERDASARKAN PERSPEKTIF KAKITANGAN
UNIVERSITAS TRISAKTI**

Oleh

INA KRISANTIA

Januari 2012

Pengerusi : Noorizan Mohamed, PhD

Fakulti : Rekabentuk dan Senibina

Dalam landskap, aspek visual adalah sangat penting dan ianya menyumbang kepada identiti wilayah dan juga memberikan nilai kepada persekitaran. Daya tarikan visual bagi banyak kawasan pelancongan di Indonesia makin berkurangan disebabkan oleh perkembangan dan pembangunan yang pesat. Berdasarkan hal ini, visual landskap sangat penting dan perlu dipelihara. Tujuan kajian ini adalah untuk menilai visual landskap dengan memberi penekanan pada aspek kesukaan, maksud, dan nilai ekonomi. Kajian ini menggunakan kaedah pilihan awam dan kaedah *contingent*. Kajian ini melibatkan 204 responden yang dipilih menggunakan *convenience* sampling daripada orang awam di kawasan Trisakti University.

Responden diberikan soal selidik dan diminta untuk memberikan kadar kesukaan terhadap 50 gambar kawasan pelancongan. Mereka juga diminta memberi penjelasan atas sebab pemilihan mereka dan juga menjelaskan maksud dari lima gambar kesukaan yang di pilih di samping menyatakan kesediaan untuk menyumbang wang kepada usaha pemeliharaan kawasan tersebut.

Hasil kajian menunjukkan bahawa terdapat tiga kategori pemandangan, di mana pemandangan jenis Tanah Tinggi dan juga Resort menunjukkan tahap kesukaan yang tinggi di kalangan responden, manakala pemandangan bagi kategori Pantai menunjukkan tahap kesukaan yang sederhana. Namun begitu, didapati bahawa jenis pemandangan yang paling disukai oleh responden adalah daripada kategori Tanah Tinggi, yang dikatakan mengandungi unsur-unsur misteri, maksud ketenangan sebagai hasil daripada pengalaman seperti keheningan dan kelembutan tekstur tanah daripada rumput. Responden menunjukkan kesanggupan membayar untuk pemeliharaan landskap visual bagi kawasan Tanah Tinggi sebanyak \$USD 10.85 (RP108.550,-).

Berdasarkan hasil kajian, terdapat hubungan yang positif di antara tahap kesukaan, maksud, dan kesanggupan membayar. Hubungan antara tahap kesukaan dan maksud menunjukkan korelasi yang signifikan bagi kawasan-kawasan pelancongan di tanah tinggi, resort, dan pantai.

Walau bagaimanapun, hubungan yang negatif antara tahap kesukaan dan kesanggupan membayar diperhatikan bagi kawasan-kawasan resort , pantai dan kategori tanah tinggi.

Bagi hubungan antara kesanggupan membayar dan maksud pula, hasil kajian menunjukkan bahawa ianya adalah hubungan positif yang signifikan. Kesediaan responden membayar di kawasan tanah tinggi kerana misteri dan kemudahan di kawasan – kawasan resort . Sedangkan hasil kajian menunjukkan kesukaan respondent di kawasan tanah tinggi dan pantai kerana kepelbagaian, sedangkan di kawasan resort kerana keteraturan kawasan tersebut. Kesimpulannya terdapat hubungan antara darjah kesukaan, maksud pilihan dan kemahuan membayar. Tanpa di ragui lagi, kajian ini mempunyai potensi yang besar untuk membina model untuk menilai visual landskap dan memberikan nilai terhadap visual landskap agar dapat dipelihara di kawasan pelancongan tersebut.

ACKNOWLEDGEMENT

I would like to acknowledge and convey my deepest appreciation to the members of my supervisory committee for their guidance in the preparation of this thesis. Associate Professor Noorizan Mohamed, PhD (the Chairperson), Professor Mustafa Kamal Mohd. Shariff, PhD. and Professor Awang Noor Gani have been supporting me throughout the course of the research with valuable insights and critical comments.

A special thanks is conveyed to Faculty of Landscape Architecture and Environmental Technology, Trisakti University, Indonesia, and the Faculty of Design and Architecture, Universiti Putra Malaysia.

My appreciation also goes to the Dean of the Faculty of Design and Architecture, Universiti Putra Malaysia and the rest of the faculty members for their support and interest in the research and also to those who have assisted me in gathering the research materials.

Last but not least, my deepest appreciation goes to my husband Aji Kusmantri and my sons Imam Munandar and Ihsan Satriawan for their continuous encouragement, which enabled me to persevere and successfully complete the thesis and also taught me to see each step of the process in the right perspectives.

I certify that a Thesis Examination Committee has met on 20 January 2012 to conduct the final examination of Ina Krisantia on her thesis entitled “ Visual Landscape Evaluation of Tourism Areas in West Java, Indonesia Based On Trisakti University Employees ’ Perspectives ” in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U. (A) 106] 15 March 1998. The Committee recommends that the student be awarded the degree of Doctor of Philosophy.

Members of the Thesis Examination Committee were as follows:

Norsidah Ujang, PhD
Associate.Prof.
Faculty of Design and Architecture
Universiti Putra Malaysia
(Chairman)

Mohd.Shahwahid Haji Othman, PhD
Professor
Faculty of Economics and Management
Universiti Putra Malaysia
(Internal Examiner)

Ramdzani Abdullah, PhD
Associate .Professor
Faculty of Environmental Studies
Universiti Putra Malaysia
(Internal Examiner)

Patrick Miller, PhD
Professor
Department of Landscape Architecture
Virginia Polytechnic Institute and State University
United States
(External Examiner)

SEOW HENG FONG, PhD
Professor and Deputy Dean
School of Graduate Studies
University Putra Malaysia
Date: 27 September 2012

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

Noorizan Mohamed ,PhD

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

Mustafa Kamal Bin Mohd.Shariff,PhD

Professor. LAr.
Faculty of Design and Architecture
Universiti Putra Malaysia
(Member)

Awang Noor Gani,PhD

Professor
Universiti Putra Malaysia
(Member)

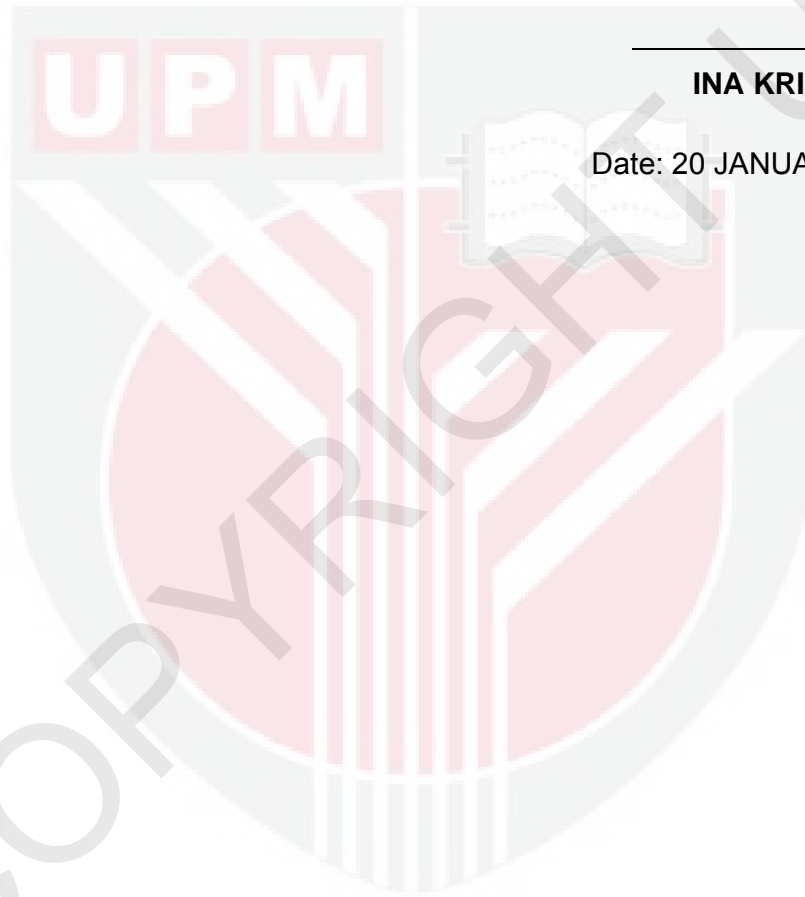
BUJANG BIN KIM HUAT, PhD

Professor and Dean
School of Graduate Studies
Universiti Putra Malaysia

Date:

DECLARATION

I declare that the thesis is my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously, and is not concurrently, submitted for any other degree at Universiti Putra Malaysia or any other institution.



INA KRISANTIA

Date: 20 JANUARY 2012



TABLE OF CONTENTS

	Page
DEDICATION	i
ABSTRACT	ii
ABSTRAK	v
ACKNOWLEDGEMENTS	viii
APPROVAL	ix
DECLARATION	xi
LIST OF TABLES	xv
LIST OF FIGURES	xix
LIST OF APPENDIXS	xx
LIST OF ABBREVIATION	xxi
CHAPTER	
1. INTRODUCTION	1
1.0 Introduction	1
1.1 Background	2
1.2 Problem Statement	7
1.3 Goal	12
1.4 Objective	13
1.5 Hypothesis	13
1.6 Scope of Study	14
1.7 Significance Study	14
1.8 Limitations Study	15
1.9 Organization of this Thesis	15
2. LITERATURE REVIEW	17
2.0 Introduction	17
2.1 Definitions	17
2.1.1 Landscape	18
2.1.2 Landscape Scenes	18
2.1.3 Visual landscape evaluation	19
2.1.4 Visual landscape assessment	19
2.2 Visual landscape Preference	23
2.2.1 Theory related to Landscape preference	23
2.2.2 Landscape Perception	27
2.2.3 Landscape Preference	28
2.3 Landscape meaning	33
2.4 Economic value of landscape	34
2.4.1 Economic view	34

2.4.2	The Importance of Willingness To Pay in Visual Landscape	36
2.4.3	Economic assessment of landscape and their Element	38
2.44	Factor influencing willingness To Pay	39
2.5	Methodology for Visual Landscape Evaluation	40
2.5.1	Phases of landscape evaluation	40
2.5.2	Landscape Evaluation Method	41
2.5.3	Methods of Landscape valuation	47
2.5.4	The development of methodology for research	49
2.6	Theoretical Frame Work	54
3.	RESEARCH METHOD	56
3.0	Introduction	56
3.1	Research design	56
3.2	Sampling Plan	58
3.3	Data Collection	67
3.3.1	Questionnaires	67
3.3.2	Pre Testing	69
3.3.3	Procedure data collection	70
3.4	Method	70
3.4.1	Public Preference Method	70
3.4.2	Contingent valuation Method	73
3.5	Analysis of Data	75
3.5.1	Analysis preference	75
3.5.2	Content Analysis	77
3.5.3	Determination of economic value	78
3.5.4	Analysis relationship between preference, meaning and willingness to pay	81
4.	RESULT AND DISCUSSION	83
4.0	Introduction	83
4.1	Demography Information	83
4.2	Visual Landscape Perception	87
4.2.1	Landscape Function	87
4.2.2.	Landscape Experience	97
4.3	Visual Landscape Preference	103
4.3.1	Preference for selected scenes	103
4.3.2	Perceptual Categories	114
4.3.3	Relationship between preference and reason, Experience, demography	122
4.4	Visual Landscape Meaning for Selected Scenes	126
4.4.1	General meaning of selected scenes	126
4.4.2	Specific meaning of selected scenes	132
4.5	Economic value of visual landscape	139
4.5.1	Mean Willingness to pay for selected scenes	139

4.5.2	Factor influencing Willingness to Pay	143
4.6	Relationship between Visual Landscape Preference, Meaning and Willingness to Pay	155
4.6.1	Relationship between Landscape Preference and Meaning	156
4.6.2	Relationship between Landscape Preference and Willingness to pay	163
4.6.3	Relationship between Landscape Meaning and Willingness to Pay	167
5.	CONCLUSION AND IMPLICATION	188
	REFERENCES	201
	APPENDICES	209
	BIODATA OF THE AUTHOR	265
	LIST OF PUBLICATIONS	266