



UNIVERSITI PUTRA MALAYSIA

**PRIVACY AND MODIFICATION OF TERRACE HOUSING AMONG
MALAY OCCUPANTS IN KLANG VALLEY, MALAYSIA**

ZAITON ABDUL RAHIM

FEM 2007 7



**PRIVACY AND MODIFICATION OF TERRACE HOUSING AMONG MALAY
OCCUPANTS IN KLANG VALLEY, MALAYSIA**

By

ZAITON ABDUL RAHIM

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

July 2007



DEDICATION

Specially to

*My beloved husband, Badrul Kamal b. Kamarul Bahrin,
My children, Asma' Umar, Aisyah and Hamzah,
For the sacrifices, patience and understanding*

and

*To my late father, Abdul Rahim and mother, Zubaidah
who taught me the value of knowledge*



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

PRIVACY AND MODIFICATION OF TERRACE HOUSING WITH MALAY
FAMILY OCCUPANTS IN KLANG VALLEY

By

ZAITON BINTI ABDUL RAHIM

February 2007

Chairman : Associate Professor Dr. Ahmad Hariza bin Hashim

Faculty : Human Ecology

Privacy at home is important for normal functioning of daily activity. However, in the context of housing in Malaysia, there are many opinions which suggest that existing terrace housing is incongruent with the privacy needs of its inhabitants. Inconsistency between the house as a site for privacy, and the occupants results in behavioural adaptation and redefining of privacy needs, which over time, changed the concept of privacy. Due to its importance, privacy is expected to be one of the main reasons for housing modification which has become a Malaysian culture.

This research is focused on examining the concept of privacy in the context of housing among Malay families living in terrace housing, and the relationship between privacy and terrace housing design and modification. The research employed a combination of survey interview and case study which uses in-depth interview, analytical review of housing layout drawings and site observation. The research involved 374 respondents for the



survey interview and 11 respondents for the case study from three housing schemes in Gombak and Kajang. SPSS (Statistical Package for Social Science Software) was used to analyse data from survey interview. Data from case study were interpreted and transcribed to provide consistent results which complement each of the analyses.

The research found that the concept of privacy in the context of terrace housing among Malay families has changed. Privacy of the family is given importance as compared to community ties and individual privacy. The changes are partly attributed to terrace house and housing environment which do not support the privacy needs of Malay family. It was found that at the private level, privacy is most affected by some aspects of terrace housing design particularly the lack of a clear division between the public and private spaces. At the public level, privacy is affected by the overall arrangement of housing units and the external factors of housing environment. Privacy is found to influence housing modification base on the specifics of design attributes modified. However, financial resources of the family, availability of space, individual family's privacy perceptions and expectations and housing environment influenced the level of privacy achieved after housing modification.

Abstrak tesis yang dikemukakan kepada Senat Univeristi Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah



PRIVASI DAN UBAHSUAI PERUMAHAN TERES YANG DIDIAMI
KELUARGA MELAYU DI LEMBAH KELANG

Oleh

ZAITON BINTI ABDUL RAHIM

Februari 2007

Pengerusi : Profesor Madya Dr. Ahmad Hariza bin Hashim
Fakulti : Ekologi Manusia

Privasi adalah penting untuk membolehkan kegiatan harian berfungsi dengan normal. Bagaimanapun, dalam konteks perumahan di Malaysia, terdapat banyak pendapat yang mengatakan perumahan teres sediaada tidak sejajar dengan keperluan privacy rakyat Malaysia. Ketidaksejajaran di antara rumah sebagai tempat untuk privasi, dan penghuni menyebabkan adaptasi tingkahlaku dan penakrifan semula keperluan privasi, yang selepas masa tertentu, mengubah konsep privasi. Oleh kerana kepentingannya, privasi dijangka menjadi salah satu sebab utama kepada ubahsuaian rumah yang telah menjadi budaya Malaysia.

Fokus kajian ini adalah meyelidik konsep privasi dalam konteks perumahan di kalangan keluarga Melayu yang tinggal di perumahan teres, dan hubungan di antara privasi, dan rekabentuk and ubahsuaian rumah, Kajian ini menggunakan gabungan soal selidik dan kajian kes yang menggunakan soal selidik secara mendalam, analisis lukisan pelan rumah dan pemerhatian tempat kajian. Kajian melibatkan 374 responden Melayu untuk soal selidik dan 11 responden Melayu untuk kajian kes, dari tiga kawasan perumahan di



Gombak dan Kajang. SPSS (Statistical Package for Social Science Software) digunakan untuk menganalisis data soal selidik. Data kajian kes diterjemah dan direkodkan dalam bentuk penulisan untuk memberikan keputusan yang konsisten dan sepadan dengan kedua-dua analisis.

Kajian mendapati konsep privasi dalam konteks perumahan teres di kalangan keluarga Melayu telah berubah. Privasi keluarga dipentingkan dibandingkan dengan pertalian masyarakat dan privasi individu tidak diutamakan. Perubahan konsep privasi sebahagiannya adalah disebabkan oleh rumah dan perumahan teres yang tidak menyokong keperluan privasi keluarga Melayu. Di tahap persendirian, privasi sangat terjejas oleh beberapa aspek rekabentuk rumah teres terutamanya ketiadaan pembahagian yang jelas di antara ruang persendirian dan ruang awam. Pada tahap awam, privasi terjejas oleh perancangan unit-unit rumah dan faktor-faktor luaran di kawasan perumahan. Privasi didapati mempengaruhi ubahsuai rumah seperti yang dicadangkan oleh spesifikasi rekabentuk yang diubahsuai. Bagaimanapun, sumber kewangan keluarga, kawasan rumah sediaada, pandangan dan harapan terhadap privasi, dan persekitaran perumahan mempengaruhi peringkat privasi yang dicapai selepas ubahsuaian.

ACKNOWLEDGEMENTS

This thesis has been made possible by numerous contributions from many people throughout the different phases of the research. I would like to thank the International Islamic University of Malaysia for the study leaves and the Government of Malaysia for the scholarship given to pursue this undertaking and relevant authorities and developers particularly Majlis Perbandaran Selangor, Majlis Perbandaran Sepang, Hillcrest and Negara properties, for their assistance.

My deepest gratitude to my supervisor, Associate Professor Dr. Ahmad Hariza Hashim for his valuable supervision, meticulous reading, constructive comments and encouragement, and my co-supervisors, Associate Prof. Dr. Azizah Salim and Dr. Norazizan Syed Abdul Rashid for their valuable supervision, guidance, and constructive comments throughout this research.

A special thank to my friends and colleagues, Syahriah and Nor Zalina for their assistance during data collection and the students from Kulliyah of Architecture and Environmental Design, IIUM who have significantly contributed during this stage of the research, and my dear friends, Noor Hanita, Zuraini and Normadiah for their continuous help, time and encouragement.

Many thanks to my friends and colleagues, Jamilah and Mariana for their assistance and continuous support.



Last but not least, my deepest appreciation and thank to my husband for his continuous support, tolerance and patience, and my children, Asma', Umar, Aisyah and Hamzah for being very good and supportive of their mother. My special thanks to my in-laws for their constant support, help and understanding.



I certify that an Examination Committee met on date of viva to conduct the final examination of Zaiton Abdul Rahim on his Doctor of Philosophy thesis entitled “Privacy and Terrace Housing Design and Modification Among Malay Families” in accordance with Universiti Pertanian Malaysia (Higher Degree) Act 1980 and Universiti Pertanian Malaysia (Higher Degree) Regulations 1981. The Committee recommends that the candidate be awarded the relevant degree. Members of the Examination Committee are as follows:

Chairman, Ph.D.

Dr. Norbaya binti Ahmad
Faculty of Human Ecology
Universiti Putra Malaysia
(Chairman)

Examiner 1, Ph.D.

Dr. Ma'arof bin Redzuan
Faculty of Human Ecology
Universiti Putra Malaysia
(Member)

Examiner 2, Ph.D.

Professor Dato' Dr. Elias @ Ilias bin Salleh
Faculty of Environmental Design
Universiti Putra Malaysia
(Member)

Independent Examiner, Ph.D.

Professor Dr. Abdul Ghani bin Salleh
Faculty of Housing, Building and Planning
Universiti Sains Malaysia
(Independent Examiner)

Hasanah Mohd. Ghazali, Ph. D.

Professor/Deputy Dean
School of Graduate Studies
Universiti Putra Malaysia

Date:



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

Ahmad Hariza bin Hashim, Ph.D.

Lecturer

Department of Resource Management and Consumer Studies

Universiti Putra Malaysia

(Chairman)

Azizah bt. Salim, Ph.D.

Lecturer

Department of Architecture

Faculty of Design and Architecture

(Member)

Sharifah Norazizan Syed Abdul Rashid, Ph. D.

Lecturer

Department of Social Science and Development

Universiti Putra Malaysia

(Member)

AINI DERIS, Ph.d

Professor/ Dean

School of Graduate Studies

Universiti Putra Malaysia

Date:



DECLARATION

I hereby declare that the thesis is based on my original work except for the quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at UPM or other institutions.

ZAITON ABDUL RAHIM

Date:



TABLE OF CONTENTS

	Page
DEDICATION	ii
ABSTRACT	iii
ABSTRAK	v
ACKNOWLEDGEMENTS	vii
APPROVAL	ix
DECLARATION	xi
LIST OF TABLES	xv
LIST OF FIGURES	xvii
LIST OF DEFINITIONS	xix
CHAPTER	
1 INTRODUCTION	1
1.1 Introduction	1
1.2 Research Background	3
1.3 Research Issues	6
1.4 Research Objectives	9
1.5 Focus of Research	10
1.6 Significance of Research	10
1.7 Scope of Study	11
1.8 Limitations and Assumptions	12
1.9 Structure of the Thesis	12
2 PRIVACY AND THE BUILT ENVIRONMENT	15
2.1 Introduction	15
2.2 Theories of Privacy, Behaviour and Built Environment	15
2.2.1 Theories of Privacy	15
2.2.2 Culture, Behaviour and Environment	29
2.2.3 Modification and Behavioural Adaptation	33
2.2.4 Theoretical Framework	35
2.3 Concept of Privacy	40
2.3.1 Definition of Privacy	41
2.3.2 Influences on Privacy	45
2.3.3 Privacy Need	48
2.3.4 Privacy Regulation	53
2.4 Conclusion	59
3 PRIVACY, THE HOUSE AND HOUSING SETTING	62
3.1 Introduction	62
3.2 The House and Housing Environment as Privacy Setting	62



3.2.2	Translation of Privacy in the House and Housing Environment	67
3.2.3	Typology of the House and Housing Environment in relation to Privacy	76
3.3	Privacy in Malay Culture, the House and Housing Environment	
3.3.1	Privacy in the Traditional Malay Society	79
3.3.2	Privacy in the Traditional Malay House	80
3.3.3	The Present Lifestyle of the Malay families in the Urban Areas	
3.3.4	Housing in the Urban Area	
3.3.5	Terrace Housing	
3.4	Housing Modification	
3.5	Conclusion	
4	RESEARCH METHODOLOGY	121
4.1	Introduction	121
4.2	Methodologies in Studies on Privacy	
4.3	Research Methods and Procedures	121
4.3.1	Review of Literature and Document Sources	122
4.3.2	Survey Interview	133
4.3.3	Case Study	145
4.3.4	Analysis of Data	151
4.4	Conclusion	154
5	FINDINGS AND DISCUSSIONS	156
5.1	Introduction	156
5.2	General background of Respondents	152
5.2.1	Differences in characteristics of respondents	
5.2.2	Summary of the General Characteristics of Respondents	
5.3	The Concept of Privacy in the Context of Malay Family Living in Terrace Housing	161
5.3.1	Definition of Privacy	162
5.3.2	Privacy Needs	181
5.3.3	Privacy Regulation	191
5.4	Privacy and Housing Design	201
5.4.1	Provision of Privacy in Existing Terrace Housing	202
5.4.2	Design Attributes of Terrace Housing Affecting Privacy of the Malay Families	203
5.5	Privacy and Housing Modification	217
5.5.1	The Influence of Privacy on Terrace Housing Modification	218
5.5.2	The Specifics of Design Attributes in Terrace Housing Modification for Privacy	219
5.5.3	Privacy Achieved after Modification	232
5.6	Findings	



5.6.1	The Concept of Privacy among the Malay Families in the Context of Terrace Housing	
5.6.2	Privacy in Terrace Housing	
5.6.3	Privacy and Housing Modification	
5.7	Conclusion	248
6	CONCLUSIONS AND RECOMMENDATIONS	265
	Introduction	265
	Conclusion	265
	Recommendations	267
	Direction for Future Research	273
		275
	BIBLIOGRAPHY	
		293
	APPENDIX	
		366
	BIODATA OF THE AUTHOR	



LIST OF TABLES

Table	Title	Page
3.1	Privacy and design attributes of the house and housing environment in Western and Eastern cultures	73
3.2	Privacy and design attributes of the house and housing environment in Muslim and other cultures	74
3.3	Similarities and differences in design attributes of the two-storey three bedroom terrace housing	94
4.1	Tabulation of households based on race and type of occupancy	122
4.2	Questions in the survey interview corresponding to research	134
5.1	Summary of background of the respondents	140
5.2	Differences in characteristics of respondents between design type	141
5.3	The emphasis in the definition of privacy	144
5.4	Differences in definition between genders, education levels, number of children, family income, age and type of housing design	145
5.5	Condition and function	146
5.6	Frequency in seeking and achieving privacy at home	148
5.7	Differences between housing design type in the frequency for needing and achieving individual privacy at home	149
5.8	Differences between housing design type in the frequency for needing and achieving privacy of the family at home	150
5.9	Predictors influencing attributes of privacy	151
5.10	Daily or general meanings of privacy	153
5.11	Privacy needs at public level	163
5.12	Difference in freedom for clothing as reason for visual privacy between gender	163



5.13	Regulating mechanisms	175
5.14	Physical components of behavioural regulating mechanisms in case study	177
5.15	Predictors influencing perception on privacy as one of the main reasons for modification	181
5.16	Design attributes of terrace housing affecting privacy of the Malay families	182
5.17	Differences in perception on design attributes affecting privacy between terrace housing design type	185
5.18	Predictor influencing perception of privacy as one of the main reasons for terrace housing modification	196
5.19	Terrace housing modification to provide privacy	197
5.20	The specifics of terrace housing modification in case studies	197
5.21	Difference between terrace housing design type for perception on privacy as the main reason for terrace housing modification	199
5.22	Difference between the number of children for addition of bedroom	204
5.23	Summary of privacy need, housing modification and level of privacy achieved after modification in housing type A	211
5.24	Summary of privacy need, housing modification and level of privacy achieved after modification in housing type B	212
5.25	Summary of Case A2	217
5.26	Summary of Case A6	222



LIST OF FIGURES

Figure	Title	Page
1.1	Summary of the research structure	14
2.1	Altman's perspective on privacy as the central process among space-regulation behaviour	25
2.2	Culture changes in tandem with built environment	26
2.3	The theoretical framework of the research	36
3.1	Concept of privacy in the Western house and the Japanese houses	65
3.2	The Iroquois Indian longhouse	67
3.3	Muslim courtyard houses	71
3.4	Ways to determine the position of windows in Muslim houses	72
3.5	Division of domains in the traditional Malay house	78
3.6	The traditional Malay house	79
3.7	A section on a window in the traditional Malay house	80
3.8	The traditional Malay housing setting	82
3.9	Types of terrace housing units	92
4.1	Site plan of Phase 4 and Phase 5 of Taman Sri Gombak	109
4.2	A view of housing scheme and an existing terrace housing unit in Taman Sri Gombak	109
4.3	Typical layout plans of terrace housing units in Taman Sri Gombak	110
4.4	Site plan of Phase 2 of Taman Kantan Permai	111
4.5	A view of housing scheme and an existing terrace housing in Taman Kantan Permai	111
4.6	A typical layout of terrace housing unit in Taman Kantan Permai	112
4.7	Site plan of Phase 5 Taman Melawati (Not to scale)	113



4.8	A view of housing scheme and an existing terrace housing unit in Taman Melawati (Phase 5)	113
4.9	A typical layout of terrace housing unit in Taman Melawati (Phase 5)	114
5.1	Extension of territory in Case study A3	172
5.2	Plants as buffer in Case study A3	176
5.3	Existing floor plans of terrace housings in the case study	183
5.4	Configuration of bedrooms	190
5.5	Location of bedrooms	190
5.6	Position and location of housing units in relation to other housing units and external elements	193
6.7	Extension on the ground floor in Case study A3	200
6.8	Extension of kitchen in Case study B3	201
5.9	Separate kitchen and dining in Case study A6	201
5.10	Dining as part of kitchen in Case study A7	202
5.11	Informal dining and relocation of third bedroom in Case study B4	202
5.12	Reorganisation and addition of bedrooms in Case study A7	205
5.13	Tinted casement windows in extended main bedroom in Case A7	206
5.14	Addition of family area in Case study B3	208
5.15	The ground floor plans of Case study A2 before and after modification	216
5.16	Location of housing unit Case A2 in relation to external elements	217
5.17	First floor plans of Case study A6 before and after modification	221



LIST OF DEFINITIONS

External components refer to external physical elements outside the housing units and within the neighbourhood such as fencing, walls, natural and landscape elements (trees, plants and hedges)

Family refers to an entity consisting of at least a husband, a wife and a child

In-depth interview refers to a qualitative method of data collection through personal interview with selected respondents and is part of the case study. The interviews are unstructured but are based on a list of prepared questions.

Physical elements refer to the elements which are not part of the existing housing design but are part of the house such as furniture, curtains, blinds and partitions.

Respondent refers to the husband or wife of a Malay family who participated in the survey interview and in-depth interview

Survey interview refers to the method of data collection employed in the study which involves face-to-face interviewing with respondents based on a set of questionnaire

Survey mapping refers to the procedure to identify the sample population for the study. It identifies Malay families living in their own terrace housing units in selected housing locations and is a pre-requisite for the actual survey interview

Terrace housing unit refers to two-storey terrace housing units with three bedrooms with or without a storage area, categorised as medium cost housing units at the time of construction

Conceptual and Operational Definitions

Achieved privacy refers to the level of privacy achieved in the existing housing units

Behavioural regulating mechanisms refers to behavioural patterns according to cultural norms, employed to regulate privacy which includes verbal and non-verbal behaviour and the act of controlling physical design attributes

Design attributes refer to the physical and non-physical components of a building. The physical components include the floor, roof, wall, partition, stairs, windows, doors and openings. The non-physical components are the appropriation and organisation of spaces.

Environmental mechanisms refer to the act of regulating privacy by through clothing, personal space and territoriality according to culturally based norms and customs (Margulis, 1977). In this study, the term focuses more on clothing and territoriality.

Privacy of the family refers to the ability to withdraw and control disclosure of information from unwanted public access, control of visual exposure, freedom of visual access and space, action and intrusion, and control of unwanted social interaction. In the study the focus is the privacy of the family in the context of housing.

Housing modification refers to any physical changes to the existing housing design which may include one or more of the followings; a) relocation and demolition of existing spaces, walls, partitions, and windows and doors, b) addition of spaces, walls, partitions, windows and doors, c) re-organisation of existing spaces and rooms, and d) changing the characteristics of existing windows and doors.

Optimum privacy refers to the level of privacy considered comfortable to the family

Privacy need refers to the collective needs for privacy based on the different types, functions and conditions of privacy

Personal privacy refers to the ability of an individual to be alone in the state of solitude and free from interaction and in the state of solitude. Personal privacy at home is seen in relation to the personal space level, such as privacy in a room and the relation of the sequential activities between the rooms.

Privacy regulation refers to the process of regulating privacy using behavioural and/ or environmental regulating mechanisms

Public space refers to the space in the house where non-family members or guests are restricted and limited. In the context of the terrace house the public space is limited to the living room or the guest area

Private space refers to the space in the house meant for family members such as bedrooms, activity/ family area, bathroom, kitchen and dining

Visual privacy refers to the ability to control visual exposure of the family, property and activities in the house and the ability to control visual access from inside the house

TABLE OF CONTENTS

	Page
DEDICATION	ii
ABSTRACT	iii
ABSTRAK	v
ACKNOWLEDGEMENTS	vii
APPROVAL	ix
DECLARATION	xi
LIST OF TABLES	xv
LIST OF FIGURES	xvii
LIST OF CONCEPTUAL AND OPERATIONAL DEFINITIONS	xx
CHAPTER	
1 INTRODUCTION	1
1.1 Introduction	1
1.2 Research Background	3
1.3 Research Issues	6
1.4 Research Objectives	9
1.5 Focus of Research	10
1.6 Significance of Research	10
1.7 Scope of Study	11
1.8 Limitations and Assumptions	12
1.9 Structure of the Thesis	12
2 PRIVACY AND THE BUILT ENVIRONMENT	15
2.1 Introduction	15
2.2 Theories of Privacy, Behaviour and Built Environment	15
2.2.1 Theories of Privacy	15
2.2.2 Culture, Behaviour and Environment	29
2.2.3 Modification and Behavioural Adaptation	33
2.2.4 Theoretical Framework	35
2.3 Concept of Privacy	40
2.3.1. Definition of Privacy	41
2.3.2 Influences on Privacy	45
2.3.3 Privacy Need	48
2.3.4 Privacy Regulation	53
2.4 Conclusion	59
3 PRIVACY, THE HOUSE AND HOUSING SETTING	62
3.1 Introduction	62
3.2 The House and Housing Environment as Privacy Setting	62
3.2.2 Translation of Privacy in the House and Housing Environment	63
3.2.3 Typology of the House and Housing Environment in relation to Privacy	72
3.3 Privacy in Malay Culture, the House and Housing Environment	75
3.3.1 Privacy in the Traditional Malay Society	75
3.3.2 Privacy in the Traditional Malay House	76
3.3.3 The Present Lifestyle of the Malay families in the Urban Areas	83



3.3.4	Housing in the Urban Area	87
3.3.5	Terrace Housing	91
3.4	Housing Modification	94
3.5	Conclusion	97
4	RESEARCH METHODOLOGY	99
4.1	Introduction	99
4.2	Methodologies in Studies on Privacy	99
4.3	Research Methods and Procedures	102
4.3.1	Review of Literature and Document Sources	103
4.3.2	Survey Interview	114
4.3.3	Case Study	126
4.3.4	Limitation of Data	131
4.3.5	Analysis of Data	132
4.4	Conclusion	135
5	FINDINGS AND DISCUSSIONS	137
5.1	Introduction	137
5.2	General background of Respondents	137
5.2.1	Differences in characteristics of respondents	141
5.2.2	Summary of the General Characteristics of Respondents	142
5.3	The Concept of Privacy in the context of families Living in Terrace Housing	142
5.3.1	Definition of Privacy	143
5.3.2	Privacy Needs	161
5.3.3	Privacy Regulation	170
5.4	Privacy and Housing Design	179
5.4.1	Provision of Privacy in Existing Terrace Housing	180
5.4.2	Design Attributes of Terrace Housing Affecting Privacy of the Malay Families	181
5.5	Privacy and Housing Modification	194
5.5.1	The Influence of Privacy on Terrace Housing Modification	195
5.5.2	The Specifics of Design Attributes in Terrace Housing Modification for Privacy	196
5.5.3	Privacy Achieved after Modification	209
5.6	Discussions	223
5.6.1	The Concept of Privacy among the Malay Families in the Context of Terrace Housing	223
5.6.2	Privacy in Terrace Housing	229
5.6.3	Privacy and Housing Modification	232
5.7	Conclusion	235
6	CONCLUSIONS AND RECOMMENDATIONS	237
6.1	Introduction	237
6.2	Conclusion	237
6.2.1	The Concept of Privacy in the Context of Malay Family Living in Terrace Housing	237
6.2.2	Privacy and Terrace Housing Design	239
6.2.3	Privacy and Terrace Housing Modification	240
	Recommendations	240
	Direction for Future Research	241