

DEVELOPING THE ARCHITECTURE OF ASTANA SERI MENANTI DURING
THE EARLY PERIOD OF FEDERATED STATES

NURDIYANA BINTI ZAINAL ABIDIN

A thesis submitted in fulfilment of the
requirements for the award of the degree of
Doctor of Philosophy

Faculty of Built Environment and Surveying
Universiti Teknologi Malaysia

JANUARY 2020

DEDICATION

This thesis is dedicated to my parents, who taught me that knowledge is the key to a better future in life and love with patience is a virtue in attaining said knowledge. This thesis is also dedicated to my sisters, who both taught me that hard work is important but so does taking a break and doing things that we love. Furthermore, I dedicate this thesis to my husband, who believed in me and taught me that I am stronger than I think I am. Lastly, to my daughter and son, both of whom filled my daily struggles with laughter and joy and taught me that sometimes it is the little things in life that we should look forward to.

ACKNOWLEDGEMENT

In preparing this thesis, I was in contact with many people, researchers, academicians, and practitioners. Alhamdulillah with the grace of Allah the most merciful I was able to further my studies and was met with many important people along the way. First and foremost, I would like to honour and wish to express my sincerest appreciation to my Main Supervisor, Assoc. Prof. Y. M. Dr. Raja Nafida Bte Raja Shahminan for her encouragement, guidance and critics in the preparation of my thesis. She dedicated her time and efforts towards the completion of this thesis and strived to provide advices not only on this topic but also in life as whole. My appreciation also goes out to my co-supervisor Assoc. Prof. Dr. Fawazul Khair Bin Hj Ibrahim who has continuously provided me with supportive and encouraging comments for this research during monthly meetings and presentations.

I am also indebted to the Malaysian Ministry of Education (KPM) for generously funding my PhD study and research. From the start of my studies in 2014 until the end of the funding in 2017, the MyPhD scholarship has provided me with financial stability to continue furthering my studies. Furthermore, I would also like to thank officers at the National Archives Kuala Lumpur especially to Pn. Siti Kamalia Bt. Madil at the Seksyen Rujukan dan Akses. Not forgetting officers at Jabatan Ukur dan Pemetaan (JUPEM) Negeri Sembilan who gave their utmost cooperation in providing letters and permissions allowing me to get copies of important documents and maps of Negeri Sembilan. The staffs in mention were Mr. Zulkifle Nayan and Sr. Jasni Bin A. Rahman, the Director of JUPEM Negeri Sembilan. Additionally, the staffs at the Center for the Study of the Built Environment in the Malay World (KALAM), Universiti Teknologi Malaysia (UTM) and librarians at Universiti Teknologi Malaysia (UTM) also deserve special thanks for their assistance in supplying the relevant literatures for this research. Other places that should be mentioned are officers from the National Library, Kuala Lumpur, staff at the Museum Adat, Rembau, Negeri Sembilan, officers in charge of the Library at the Negeri Sembilan State Museum, Seremban and officers at the National Museum, Kuala Lumpur.

In London, England, I would like to firstly acknowledge the tremendous guidance given by Dato' Dr. Annabel Teh Gallop, the Lead Curator of Southeast Asia at the British Library. She provided me with details on where to find information, who to contact and readily took the time to meet me for a little interview at the British Library. I would also like to further extend my thanks to staff and officers at the National Archives in Kew, London, for most of the old documents were archived here. This is especially to Mr. Padej Kumlertsakul who was the Reader's Adviser of the Defence, Maritime and Environment and Mr. Daniel Gilfoyle who was the Remote Enquiries Duty Officer at the National Archives, Kew, in London. They both provided me with the list of available documents on Negeri Sembilan which included photographs, written documents and books that were of help in my research.

In Cambridge, England, I would like to thank Ms. Rachel M. Rowe for her assistance and help in providing me the instructions and guidance in finding information at the Cambridge University. As the Smuts Librarian for South Asian and Commonwealth Studies, she was the person to direct me specifically to the information I needed, and I am grateful to her for her kind help even before I left for England. Furthermore, thank you also to Ms. Louise Clarke who was the Deputy Superintendent of the Manuscripts Reading Room in Cambridge University Library, Cambridge University. She guided me in the usage of the library and the processes of getting information from the library. I would like to specifically mention that this data collection was made possible due to the Research Grant my supervisor provided me with for me to collect data and information in England.

In Padang, West Sumatera, I would like to extend my gratitude to the endless help from staff at the Pusat Dokumentasi dan Informasi Kebudayaan Minangkabau in Padang Panjang. The information given was helpful in confirming the data of this research. Furthermore, site visits to Museum Istana Basa Pagarruyung and Istana Siliduang Bulan were conducted in order to determine the similarities and differences between Astana Seri Menanti. These site visits proved to be very fruitful and informative in the findings of this research.

Not forgetting many thanks and my sincerest appreciation extends to all of my colleagues who have aided at various occasions throughout this research. Their views and tips are useful in one way or another. Finally, I am grateful to my parents and sisters for providing me with the physical, emotional and financial help throughout my studies. I am forever indebted to them and am thankful that they were all available to lend a hand in more ways that I could list down. Last but not least, to my dearest husband who has been there for me from the start until the end of this journey, sometimes staying apart, sending me back and forth and giving me the emotional support, I needed. A special mention goes to my lovely daughter for her companionship and laughter throughout that made this hard and long journey more bearable and tolerable on those lonely nights. Alhamdulillah thank you Allah for everything that you have given me for it is He who plans for the best of things in our lives. Thank you.

ABSTRACT

The Early Federated Malay States was a time when Malaysia was at the dawn of a new political governance under the British rule through the unification of Perak, Negeri Sembilan, Selangor and Pahang. The new system also introduced the British Resident system as a means of having a localized ruling system for each of the Malay State. It was evident that this new political movement affected the ruling societies specifically in Negeri Sembilan. In particular was the impact on state funded government projects especially Astana Lama Seri Menanti. Hence, the purpose of the current study is to establish the factors that influenced the architecture of Astana Seri Menanti during the early period of the Federated Malay States. The objectives include establishing the contextual requirement for constructing Astana Seri Menanti, identifying the role and involvement of the individual prominent figures and establishing the relationship of the prominent figures in shaping the final architectural design of Astana Seri Menanti. Qualitative research methodology was utilised in this research through Document Analysis methods which encompassed triangulating historical studies (archival); comparative studies; and empirical research (case study). Research samples for Traditional Malay Royal Palaces were obtained from Measured Drawings archived at the Centre for the Study of Built Environment in the Malay World (KALAM); Universiti Teknologi Malaysia (UTM); National Archives in Kew, London; Arkib Negara in Kuala Lumpur; Cambridge University Library; and Negeri Sembilan State Museum in Seremban. Findings indicated that the construction of Astana Seri Menanti was initiated as a result of British involvements and the consequent loss of the royal palace which left the Yamtuan who is the a ruler without a palace. Furthermore, it was identified that the involvements of the prominent figures such as the Malay Tukang, the British draftsman and the Chinese contractors was influential in the construction of Astana Seri Menanti. Last but not least, the relationship of these different prominent figures contributed in the development of the Astana's architectural design through traditional construction methods. In short, the involvements of the Malay, British and Chinese prominent figures in the construction of the Astana Seri Menanti during the early Federated State resulted in an architectural design that is characterised as a traditional vernacular palace with a western spatial layout, built using colonial construction methods but utilising traditional construction materials. The findings of this study provide significant contribution to studies on vernacular palace architecture specifically on timber palaces in the 20th Century. It is hoped that future generations can benefit from the findings of this study and encourage future generations to appreciate and conserve Malay Royal Palaces.

ABSTRAK

Penubuhan awal Negeri-negeri Melayu Bersekutu adalah ketika Malaysia berada di awal pemerintahan kerajaan British melalui penyatuan negeri-negeri seperti Perak, Negeri Sembilan, Selangor dan Pahang. Sistem baru ini juga memperkenalkan sistem Residen British sebagai sistem pemerintah setempat bagi setiap negeri di Malaysia. Didapati pergerakan politik baru ini memberi impak kepada masyarakat pemerintah khususnya di Negeri Sembilan. Terutama kesan terhadap projek kerajaan yang dibiayai oleh kerajaan khususnya Astana Lama Seri Menanti. Oleh itu, tujuan kajian ini adalah untuk mewujudkan faktor-faktor yang mempengaruhi seni bina Astana Seri Menanti semasa penubuhan awal Negeri-negeri Melayu Bersekutu. Objektif yang dikenal pasti adalah mewujudkan konteks keperluan pembinaan Astana Seri Menanti, mengenal pasti peranan dan penglibatan tokoh-tokoh terkemuka dan mewujudkan hubungan antara tokoh-tokoh terkemuka dalam membentuk reka bentuk seni bina akhir Astana Seri Menanti. Kaedah penyelidikan kualitatif telah digunakan dalam kajian ini melalui kaedah Analisis Dokumen yang merangkumi triangulasi kajian sejarah (arkib), kajian perbandingan dan penyelidikan empirikal (kajian kes). Sampel kajian untuk Istana Diraja Tradisional Melayu diperoleh dari Lukisan Terukur yang diarkibkan di Pusat Pengajian Alam Bina Dunia Melayu (KALAM), Universiti Teknologi Malaysia (UTM), Arkib Negara di Kew, London, Arkib Negara di Kuala Lumpur, Perpustakaan Universiti Cambridge dan Muzium Negeri Sembilan di Seremban. Dapatan menunjukkan bahawa pembinaan Astana Seri Menanti telah dikenal pasti berpunca daripada penglibatan British dan dari ketiadaan istana bagi Yamtuan Negeri Sembilan. Di samping itu, penglibatan tokoh-tokoh terkemuka seperti Tukang Melayu, pelukis deraf lukisan binaan pihak Inggeris dan kontraktor Cina berpengaruh dalam pembinaan Astana Seri Menanti. Akhir sekali, hubungan tokoh-tokoh terkemuka ini menyumbang dalam pembangunan reka bentuk seni bina Astana Seri Menanti melalui kaedah pembinaan tradisional Melayu. Ringkasnya, penambahan tokoh-tokoh Melayu, British dan Cina dalam pembinaan Astana Seri Menanti semasa penubuhan awal Negeri Bersekutu mengakibatkan reka bentuk seni bina yang dicirikan sebagai istana tradisional vernakular dengan tata letak ruang barat, dibina dengan menggunakan kaedah pembinaan kolonial tetapi menggunakan bahan pembinaan tradisional. Dapatan kajian ini memberi sumbangan besar kepada kajian mengenai seni bina istana vernakular khususnya di istana kayu di Abad ke-20. Diharapkan generasi akan datang dapat memperoleh manfaat daripada penemuan kajian ini dan menggalakkan generasi akan datang untuk menghargai dan memulihara Istana Diraja Melayu.

TABLE OF CONTENTS

	TITLE	PAGE
	DECLARATION	iii
	DEDICATION	iii
	ACKNOWLEDGEMENT	iv
	ABSTRACT	vi
	ABSTRAK	vii
	TABLE OF CONTENTS	viii
	LIST OF TABLES	xxiii
	LIST OF FIGURES	xxiv
	LIST OF APPENDICES	xxiii
CHAPTER 1	INTRODUCTION	1
1.1.	Background Statement	1
1.1.1.	The Term ‘Influence’	2
1.1.2.	The Role of Rulers During Early Federated Malay State	4
1.1.3.	Brief Background of Negeri Sembilan in the Early Federated Malay State	4
1.2.	Problem Statement	7
1.3.	Research Aim	9
1.4.	Research Objectives	9
1.5.	Research Questions	10
1.6.	Research Methodologies	10
1.7.	Research Gap	11
1.8.	Research Framework	14
1.9.	Scope & Limitations	15
1.10.	Significance of Research	16

1.11.	Conclusion	17
CHAPTER 2	LITERATURE REVIEW	19
2.1.	Introduction	19
2.1.1.	Key Theory: Affect of Culture on Vernacular Architecture	20
2.2.	Brief Background of Vernacular Architecture in Malaysia	22
2.2.1.	Brief Background of Traditional Malay Towns	23
2.2.2.	The Roles and Types of <i>Tukang</i> (Malay Carpenter)	28
2.2.3.	The Role of the Draftsman (British Officer)	30
2.2.4.	The Role of the Contractor (Chinese Capitan / Towkay)	31
2.3.	Traditional Malay Royal Palaces	32
2.3.1.	Brief Timeline of Traditional Malay Royal Palaces in Malaysia	33
2.3.2.	Typologies of Traditional Malay Royal Palaces	39
2.3.3.	Functions of Traditional Malay Royal Palace	41
2.3.4.	Construction Methods of TMRP	42
2.3.5.	Construction Materials of TMRP	43
2.3.6.	Spatial Organization of TMRP	45
2.3.7.	Architectural Elements in TMRP	48
2.3.8.	Ornamentations in TMRP	49
2.3.9.	Influences in TMRP	51
2.4.	Conclusion	55
CHAPTER 3	RESEARCH METHODOLOGY	57
3.1.	Introduction	57
3.1.1.	Theory of Empiricism	57
3.2.	Qualitative research Methods	59

3.2.1	Qualitative research Methods of Selected Researchers	60
3.2.2	Qualitative Research Method 1: Md Mizanur, 2013	62
3.2.3	Qualitative Research Method 2: Mawar Masri, 2012	63
3.2.4	Qualitative Research Method 3: Christine Baron, 2012	64
3.3	Adapted research Methodology	66
3.3.1	Precedent Study of Vernacular Architecture in Negeri Sembilan	70
3.3.2	Selected Vernacular Buildings	71
3.4	Conclusion	74
CHAPTER 4	CASE STUDY	75
4.1	Introduction	75
4.2	Brief Timeline of Astana Seri Menanti	76
4.3	Location of Astana Seri Menanti	78
4.4	Construction Methods of Astana Seri Menanti	81
4.4.1	1902 Blueprints	83
4.4.2	1904 Drawing	85
4.4.3	1986 As-built Drawings	85
4.4.4	1993 Measured Drawings	86
4.5	Construction Materials of Astana Seri Menanti	87
4.5.1	Kayu Ponak	90
4.6	The <i>Tukang</i> : <i>Tukang</i> Kahar	92
4.6.1	<i>Tukang</i> Kahar's House	92
4.7	Conclusion	94

CHAPTER 5	CHANGES ON ASTANA SERI MENANTI	95
5.1	Introduction	95
5.2	Changes on Astana Seri Menanti	96
5.2.1	Changes on Preliminary Design and Concept	96
5.2.2	Renovations and Changes of Astana Seri Menanti	102
5.2.2.1	Roof Materials and maintenance	102
5.2.2.2	Re-painting and Maintenance	106
5.2.2.3	Extensions and Additions	108
5.3	Conclusion	112
CHAPTER 6	ANALYSIS AND FINDINGS	113
6.1.	Introduction	113
6.1.1.	Method of Research Analysis	114
6.2	Analysis & Findings 1: Establishing the context for the needs of constructing Astana Seri Menanti	115
6.2.1	Traditional Malay Houses (TMH) in Negeri Sembilan	116
6.2.2	Traditional Mosques (TM) in Negeri Sembilan	120
6.2.3	Traditional Malay Royal Palace in Negeri Sembilan	123
6.2.4	Analysis and Findings on the Columns Placement	125
6.2.5	Analysis and Findings on the Roof Typologies	128
6.2.6	Analysis and Findings on the Elevation	130
6.2.7	Analysis and Findings on the spatial layout	133
6.3	Design of Astana Seri Menanti	135
6.3.1	Design & Furniture	135
6.3.2	Museum Repairs	137
6.3.3	Architectural Analysis	141
6.3.3.1	Design & Concept	141
6.3.3.2	Structural Configuration	142

6.3.3.3	Spatial Organization	143
6.4	Findings on Need of Astana Seri Menanti	144
6.4.1	Preliminary Design & Concept	154
6.5	Role of Prominent Figures	156
6.5.1	The Malay <i>Tukang</i>	157
6.5.2	The British Draftsman	158
6.5.3	The Chinese Contractor	162
6.6	Conclusion	163
CHAPTER 7	CONCLUSION AND RECOMMENDATIONS	165
7.1.	Conclusion	165
7.2.	Contributions to Knowledge	168
7.3.	Future Suggestions of Research on Traditional Malay Royal Palaces	169
REFERENCES		171
APPENDICES		177

LIST OF TABLES

TABLE NO.	TITLE	PAGE
Table 3.1	List of selected vernacular buildings in Negeri Sembilan	73
Table 6.1	List of selected vernacular buildings in Negeri Sembilan	115
Table 6.2	Measured Drawings of Tukang Kahar's house	119
Table 6.3	Measured drawings of Masjid Lama Kampung Parit	121
Table 6.4	Measured drawings of Masjid Lama Tanjung Beringin	122
Table 6.5	Measured Drawings of Istana Ampang Tinggi	124
Table 6.6	Analysis on the Columns Placements	126
Table 6.7	Findings on the column placements	127
Table 6.8	Roof Typologies Analysis	128
Table 6.9	Findings on the roof forms	130
Table 6.10	Front Elevation Analysis	131
Table 6.11	Findings on the Front Elevations	132
Table 6.12	Spatial Layout Analysis	133
Table 6.13	Findings on the Spatial Layout	134
Table 6.1	List of Traditional Malay Royal Palaces in Malaysia	144
Table 6.2	Selected Traditional Malay Royal Palaces of 1800s until early 1900s	148

LIST OF FIGURES

FIGURE NO.	TITLE	PAGE
Figure 1.1	<i>Portugese d'Eredia</i> Map in 1613 (The National Library of Brazil)	6
Figure 1.2	Research gap undertaken in this study	13
Figure 1.3	Research frameworks undertaken in this study	15
Figure 1.4	Scope and limitations of research	16
Figure 2.1	The entrance gates to Istana Balai Besar in Kelantan with British officers and the Sultan present c. 1950s	24
Figure 2.2	<i>Bendul</i> connected by a Pasak (wedge) on the floor decking (Hanafi, 1996)	25
Figure 2.3	The construction of <i>Bendul</i> within the floor and column of a Traditional Malay House	26
Figure 2.4	A sectional drawing of a Traditional Malay House in Negeri Sembilan adapted from KALAM, UTM	27
Figure 2.5	Construction of vernacular architecture of pre-colonial until post-colonial era in Malaysia	28
Figure 2.6	The Roles of the <i>Tukang</i>	30
Figure 2.7	An image of Tokay Tam Yong	32
Figure 2.8	Istana Besar is a masonry palace built in Johor which was constructed in 1866	34
Figure 2.9	Istana Anak Bukit built in 1927 in Kedah	35
Figure 2.10	An image of an abandoned Istana Seri Akar which was later demolished	35
Figure 2.11	Istana Besar Seri Menanti built in 1933	36
Figure 2.12	Istana Sri Terentang in Pahang which was built in 1908 which was later demolished	36
Figure 2.13	Istana Arau in Perlis which was built in 1930	37
Figure 2.14	Timeline of Palaces in Malaysia	38
Figure 2.15	Typologies of Traditional Malay Royal Palaces according to functions	39

Figure 2.16	Typologies of Traditional Malay Royal Palaces according to the spatial planning	40
Figure 2.17	Single-type palace and multiple-type palace roof plans	41
Figure 2.18	Functions of Traditional Malay Royal Palaces	42
Figure 2.19	Construction Elements of Uwan Sinab's House	43
Figure 2.20	A Traditional Negeri Sembilan Malay House constructed using timber	44
Figure 2.21	Istana Kenangan in Perak which was built using bamboo and timber	45
Figure 2.22	Spatial layout of a Traditional Malay Village	46
Figure 2.23	The domains with a Traditional Malay Royal Palace	47
Figure 2.24	Woodcarvings at the stairs of Istana Kenangan, Perak	50
Figure 2.25	Woodcarvings on internal walls and door of Istana Tengku Long, Kelantan	51
Figure 2.26	Istana Sepahchendera in Kedah was a masonry palace	52
Figure 2.27	Istana Bukit Serene in Johor	53
Figure 2.28	Istana Bandar in Selangor	53
Figure 2.29	Influences on the architecture of Traditional Malay Royal Palaces in general	54
Figure 3.1	Qualitative research methods through the 'triangulation' Method	60
Figure 3.2	Research methodologies undertaken by Mawar Masri	63
Figure 3.3	Research methodologies undertaken by Md. Mizanur	64
Figure 3.4	Research methodologies undertaken by Baron	65
Figure 3.5	Sources for archival research in qualitative methodology	67
Figure 3.6	Adapted research methodology for this study	69
Figure 3.7	TMH within a 500m radius of Astana Seri Menanti	71
Figure 4.1	Location Map of the four known palaces in Seri Menanti	77
Figure 4.2	Brief background of Astana Seri Menanti	79
Figure 4.3	Site plan of Astana Seri Menanti in 1904	79
Figure 4.4	A 1907 Map of Negeri Sembilan showing the site of Astana Seri Menanti	80
Figure 4.5	Examples of scholars on Negeri Sembilan vernacular architecture and palaces	82

Figure 4.6	Front elevation of Astana Seri Menanti	83
Figure 4.7	Longitudinal Section of Astana Seri Menanti in the 1902 Blueprint by PWD	84
Figure 4.8	A 1904 drawing of the Rear Elevation of Astana Seri Menanti	85
Figure 4.9	As-built Drawings of Astana Seri Menanti's Longitudinal Section by JKR in 1986	86
Figure 4.1	Front Elevation of Astana Seri Menanti by KALAM, UTM for Measured Drawings	87
Figure 4.11	Penak timber and Chengal timber shown in the Negeri Sembilan Government Gazette dated 22nd December 1897	88
Figure 4.12	The usage of <i>Kayu Penak</i> in the construction of Astana Seri Menanti in 1902	89
Figure 4.13	The roof material was noted as <i>Rumbia Atap</i> Roof in the 1902 blueprints of Astana Seri Menanti	90
Figure 4.14	The distribution of hard wood species in Malaysia and with focus in Negeri Sembilan (Adapted from Saw, 1991)	91
Figure 4.2	Isometric View of <i>Tukang Kahar's</i> House by KALAM, UTM	93
Figure 5.1	Similarities of the roof structure in the 1902 Blueprints with <i>Istano Silinduang Bulan</i> in Padang, West Sumatera	97
Figure 5.2	Similarities between 1904 Rear Elevation (top) and Rear Elevation by KALAM, UTM in 1993	98
Figure 5.3	Lesser Undang's House of Sungai Ujong, Kg. Ampangan, Seremban (Wan & Abdul Halim, 2011)	99
Figure 5.4	Astana Seri Menanti	100
Figure 5.5	Column placement analysis of first floor plan in 1902 Blueprints by PWD, Seremban (top) and 1986 JKR As-built drawing (bottom)	101
Figure 5.6	Istana Ampang Tinggi which is currently situated in the Negeri Sembilan State Museum, Seremban	103
Figure 5.7	Image of Carbo-lastic product used in 1906	104
Figure 5.8	A telegram dated 19 th July 1924 asking for Carbo-lastic by the Acting State Engineer of Negeri Sembilan	105

Figure 5.9	PWD Report by J. R. Spence the State Engineer of Negeri Sembilan	107
Figure 5.10	Additions and changes made on the First Floor Plan on Astana Seri Menanti in 1902	108
Figure 5.11	Timeline of the Functions of Astana Seri Menanti in 1902 until current	110
Figure 5.3	Timeline and info-graphic illustration of the functions of Astana Seri Menanti	111
Figure 6.4	Tukang Kahar's house Negeri Sembilan (KALAM, 1993)	116
Figure 6.5	The types of <i>serambi</i> and the location in a Traditional Malay House in Negeri Sembilan	117
Figure 6.6	Symmetrical and Asymmetrical plans of Istana Ampang Tinggi and Puan Norfiah Hassan's House	118
Figure 6.4	Telegram from E. C. H. Wolff, the Acting Secretary to Resident on new furniture and silverwares for Astana Seri Menanti in 1904	136
Figure 6.5	Conditions of the landscape beside the palace before the repairs done by the National Museum Department	138
Figure 6.6	A newspaper article chronicling Astana Seri Menanti as the new Royal Museum in 1977	140
Figure 6.7	Astana Seri Menanti in 2015	142
Figure 6.8	Spatial layout of Astana Seri Menanti	143
Figure 6.7	Traditional Malay Royal Palaces in the late 1800s until early 1900s	150
Figure 6.8	Selected timber palaces of late 1800s until early 1900s	152
Figure 6.9	Astana Seri Menanti in 1920's with Yamtuan Muhammad and British officials present (Arkib Negara)	154
Figure 6.12	Sketch plan of palace grounds by E. W. Birch during Yamtuan Muhammad's coronation in 1898	155
Figure 6.13	Possible palaces existence before the construction of Astana Seri Menanti	156

Figure 6.14	A letter of Appointment of Tukang Kahar as the Panglima Besar in 1918 (Arkib Negara)	157
Figure 6.15	An advertisement calling for tender of Astana at Sri Menanti, Kuala Pilah, Negri Sembilan in 1902	158
Figure 6.16	An article showing the Seremban Sanitary Board Meeting as printed in the Negri Sembilan Government Gazette 1901	159
Figure 6.17	First mentions of Mr. Woodford, the draftsman for the drawings of Astana Seri Menanti	160
Figure 6.18	Processes of Astana Seri Menanti with British influences regarding the tender process until completion	161
Figure 6.19	The influences of the Malay Tukang, the British draftsman and the Chinese contractor in the Astana Seri Menanti construction	162

LIST OF APPENDICES

APPENDIX	TITLE	PAGE
Appendix A-1	First Floor Plan of Astana Seri Menanti Blueprints (PWD, 1902)	177
Appendix A-2	Second, Third and Fourth Floor Plans of Astana Seri Menanti Blueprints (PWD, 1902)	178
Appendix A-3	Longitudinal Section of Astana Seri Menanti Blueprints (PWD, 1902)	179
Appendix A-4	Cross-section of Astana Seri Menanti Blueprints (PWD, 1902)	180
Appendix B-1	Rear Elevation of Astana Seri Menanti (PWD, 1904)	181
Appendix C-1	Front Elevation of Astana Seri Menanti As-built Drawings (JKR, 1986)	182
Appendix C-2	Right Elevation of Astana Seri Menanti As-built Drawings (JKR, 1986)	183
Appendix C-3	First Floor Plan of Astana Seri Menanti As-built Drawings (JKR, 1986)	184
Appendix C-4	Second, Third and Fourth Floor Plans of Astana Seri Menanti As-built Drawings (JKR, 1986)	185
Appendix C-5	Longitudinal Section of Astana Seri Menanti As-built Drawings (JKR, 1986)	186
Appendix C-6	Cross-section of Astana Seri Menanti As-built Drawings (JKR, 1986)	187
Appendix D-1	Front Elevation of Astana Seri Menanti Measured Drawings (KALAM, 1993)	188
Appendix D-2	Rear Elevation of Astana Seri Menanti Measured Drawings (KALAM, 1993)	189
Appendix D-3	First Floor Plan of Astana Seri Menanti	

	Measured Drawings by (KALAM, 1993)	190
Appendix D-4	Second Floor Plan of Astana Seri Menanti	
	Measured Drawings (KALAM, 1993)	191
Appendix D-5	Third Floor Plan of Astana Seri Menanti	
	Measured Drawings (KALAM, 1993)	192
Appendix D-6	Fourth Floor Plan of Astana Seri Menanti	
	Measured Drawings (KALAM, 1993)	193
Appendix D-7	Longitudinal Section of Astana Seri Menanti	
	Measured Drawings (KALAM, 1993)	194
Appendix D-8	Cross-section of Astana Seri Menanti Measured	
	Drawings (KALAM, 1993)	195
Appendix D-9	Isometric of Astana Seri Menanti Measured	
	Drawings (KALAM, 1993)	196
Appendix E-1	Floor Plan of Tukang Kahar's House	197
Appendix E-2	Front Elevation of Tukang Kahar's House	198
Appendix E-3	Right Elevation of Tukang Kahar's House	199
Appendix E-4	Rear Elevation of Tukang Kahar's House	200
Appendix E-5	Longitudinal Elevation of Tukang Kahar's House	201
Appendix E-6	Cross Section of Tukang Kahar's House	202
Appendix E-7	Isometric of Tukang Kahar's House	203
Appendix F-1	Floor Plan of Masjid Lama Kg. Parit Istana	204
Appendix F-2	Front Elevation of Masjid Lama Kg. Parit Istana	205
Appendix F-3	Right Elevation of Masjid Lama Kg. Parit Istana	206
Appendix F-4	Rear Elevation of Masjid Lama Kg. Parit Istana	207
Appendix F-5	Longitudinal Elevation of Masjid Lama Kg.	
	Parit Istana	208
Appendix F-6	Cross Section of Masjid Lama Kg. Parit Istana	209
Appendix F-7	Isometric of Masjid Lama Kg. Parit Istana	210
Appendix G-1	Floor Plan of Masjid Lama Tanjung Beringin	211
Appendix G-2	Front Elevation of Masjid Lama Tanjung	
	Beringin	212
Appendix G-3	Right Elevation of Masjid Lama Tanjung	
	Beringin	213
Appendix G-4	Rear Elevation of Masjid Lama Tanjung	

	Beringin	214
Appendix G-5	Longitudinal Elevation of Masjid Lama Tanjung Beringin	215
Appendix G-6	Cross Section of Masjid Lama Tanjung Beringin	216
Appendix G-7	Isometric of Masjid Lama Tanjung Beringin	217
Appendix H-1	Floor Plan of Istana Ampang Tinggi	218
Appendix H-2	Front Elevation of Istana Ampang Tinggi	219
Appendix H-3	Right Elevation of Istana Ampang Tinggi	220
Appendix H-4	Rear Elevation of Istana Ampang Tinggi	221
Appendix H-5	Longitudinal Elevation of Istana Ampang Tinggi	222
Appendix H-6	Cross Section of Istana Ampang Tinggi	223
Appendix H-7	Isometric of Istana Ampang Tinggi	224

CHAPTER 1

INTRODUCTION

In this chapter, the details of the topic titles are explained, as well as the background, research questions and methodologies used to reach the research objectives. The influential factors affecting the architecture of the Astana will also be defined within this chapter and will be further elaborated within the upcoming chapters. The results achieved during the course of this investigation increases the understanding of the architecture of Astana Seri Menanti during the Early Federated Malay State. The involvements of prominent figures in the construction of Astana Seri Menanti are investigated in the next chapters including the roles they played in shaping the architecture of the palace. Then further discussions will emphasise on the direction of the study and the focus of the research which is directed at understanding the architecture of Astana Seri Menanti during the early Federated Malay States.

1.1 Background Statement

In order to understand the determining factors to be investigated in this research, a better understanding of the background on Malaysia's political situation during early Federated Malay States will be discussed in the following subtopics. This is because the research timeline on Astana Seri Menanti involved events happening during the pre-independence state of Malaya and during the early establishment of early Federated Malay States. The political situation within this era also had some influences on the final architecture of the Astana. Hence, the terminology of 'influence' within the Colonial period will be introduced within this chapter.

The earliest form of pre-independence federalism in Malaya, though not classified truly as such, before the colonial ruling of the British government, was unofficially in the form of federalism practiced by the Yam Tuan Besar of Negeri Sembilan through the unity of the nine states (Aun, 1999). When the British colonial government officially introduced the Federated Malay States in 1895, they united four states which were Perak, Negeri Sembilan, Selangor and Pahang by replacing the resident system (Rudner, 1976). During this era, the political system practiced was further developed by the colonial system of federation as a means of uniting the country under a centralized unit of governance by the British (Raja Nur, 2012). This system benefitted the British because the indirect ruling means that it was cheaper to govern and the system softened the blow on the ruled nation (Emerson, 1937). Federal ruling influenced and shaped the political state of the country and indirectly influenced the living conditions of the people. The effects of this kind type of ruling undeniably affected the overall architectural language of the country as many vernacular buildings that were deemed ‘traditional’ were categorized as cultural assets and had political implications (Brown & Maudlin, 2012). Implications such as this can be regarded as political influences specifically on vernacular architecture or ‘traditional buildings’. Furthermore, political influences also enabled the governments to use vernacular architectures as substitutions to create and implement national and sub-national identities (Brown & Maudlin, 2012).

1.1.1 The Term ‘Influence’

The term ‘influence’ can be derived from its origins of epistemology from as early as thirteenth century France whereby the word was referred to the indefinable effects that were caused by the stars, upon the fate of mankind (Paris: Centre National de la Recherche Scientifique, 1983). Furthermore, the term ‘influence’ is rooted in historiography and has ideological connotations which functions during a written approach (Lee, 1998). This means that what happened in the past that could be defined as an ‘influence’ depends primarily on the historical interpretation of the on-goings during that time and not based on what is considered as ‘objectively true’.

Additionally, the term 'influence' referred to any continual but indirect means by which information or opinions, rather than the character of the physical body, could be restructured or drastically changed (Lee, 1998). According to Canguilhem (1988), the usage of the term 'influence' is the basis of consistency within historical writings in history.

In relations to the Astana Seri Menanti, the scopes of influence that will be discussed are the cultural influences on the Astana and the following political influences that occurred during the early Federated Malay State. These influences were derived on the basis of the research objectives which were the participations of the prominent figures during the palace construction. It can be understood that when studying cases as such, it is not only the buildings that are being studied, but also their inhabitants, possessions and furnishings which in return can be defined as 'cultural influences' (Rapoport, 2005). A simplistic understanding of 'culture' is defined as the inclusion of technology, symbolism and worldview, economics, social structure, and political organization (Kent, 1990). Culture is also acknowledged as one of the most important variables which influenced the interactions between architecture and the use of space (Kent, 1990).

According to Rapoport (2005), when discussing the architecture of a specific 'culture', the most influential typology of building would be the dwellings (housing) as all culture possess a unique form of dwelling. Furthermore, dwellings are the most common type of vernacular building and most influenced by culture and encompassed a majority of the environment (Rapoport, 2005). In relation to this, a royal's dwelling is the royal palace and hence the importance of Traditional Malay Royal Palaces to the Malay culture and architecture. Since a royal leader rules over his people, the role and influence of the royal is undeniable and can be seen by the payment of respect and gratitude shown towards the royal rulers. Hence, when the formation of the early Federated Malay States, the position of the royal amongst the Malays was untouchable and the British had to remain inclusive in the configuration of the new governing system (Aun, 1999).

1.1.2 The role of Rulers during early Federated Malay States

Upon detailed consideration by the British who needed power to reign Malaysia, they acknowledged the importance of the Rulers and their usefulness to the British colony (Rudner, 1976). However, the adoption of the feudal system indirectly influenced the traditional Malay social structure by dividing it into two dominant groups; the aristocrats in the palaces and the commoners in the villages, jungle and seaside (Siti Zainon, 1986). Even so, the loyalty of the Malays to their Rulers played an important factor in the inclusiveness as the British was aware that the Ruler-subject issue was a sensitive matter within the nation (Aishah, 1993). Hence, it was granted that the Royal Ruler has some form of autonomy on their states even though in reality their powers were dwindling. Hence, the Rulers were given limited power to implement sovereignty of the central government, external relations, provide leadership in foreign wars and to represent and signify the unity and interests of the state (Gullick, 1958). The Rulers were required to remain under the advice of the Residents under all matters except for religion and culture which in return minimized the Sultan's powers to only personal and religious affairs (Aishah, 1993). However, the royal Rulers wanted to include issues pertaining to Malay rights into the constitution as a means to protect the native people of Malaysia who were the Malays (Aishah, 1993). Therefore, upon careful consideration by the British and after several boycotts by the Malays, it was agreed that the rights of the natives is included in the constitution by means of protection Islam as the official religion, the position of Rulers, and issues on Malay privileges (Aishah, 1993).

1.1.3 Brief Background of Negeri Sembilan in the Early Federated Malay State

According to Winstedt (1934), the term 'Negeri Sembilan' was an unknown state according to the *Portugese d'Eredia* map in 1613. Furthermore, the term 'Negeri Sembilan' was not made aware of to the author of the Malay Annals in 1612 nor did the Dutch became aware of its existence in their Dagregister Journal in 1682

(Winstedt, 1934). Winstedt concluded that the existence of the term ‘Negeri Sembilan’ must have been after the coming of Raja Melewar in 1773. However, even though the term ‘Negeri Sembilan’ was not known yet, the states of Linggi, Sungai Ujong, Seri Menanti, Serting, Naning, Jempol and Rembau existed in the Portugese d’Eredita’s map (in 1613). This proves that there were local occupants of these lands that were natives to the pre-existing states of the future Negeri Sembilan. Hence some of the nine states of Negeri Sembilan did exist but it was probably not identified by the same name or they could have been separate districts or even independent cities.

These different districts had a tribe leader according to Adat Perpatih which was known as the *Buapak*. Each Buapak leads his tribe/clan who ultimately could be similar to being the village leader or *Ketua Kampung*. Though these two responsibilities carry different duties and might not necessarily correlate with each other, their main purpose are to lead and handle any disputes, cultural issues and family issues through democracy and Islam being the main influential base. This ultimately increases the question of who were the people living in these districts other than the aborigines (Winstedt, 1934). This question is further supported by Yaakub (1996) where he questioned the acceptance of the majority of the Minangkabau people being the original settlers of Negeri Sembilan when there are evidences of local indigenous architecture which differed to that of the Minangkabau’s *Rumah Gadang*. Figure 1.1 below illustrates the *Portugese d’Eredia* map in 1613 which located several Negeri Sembilan districts.

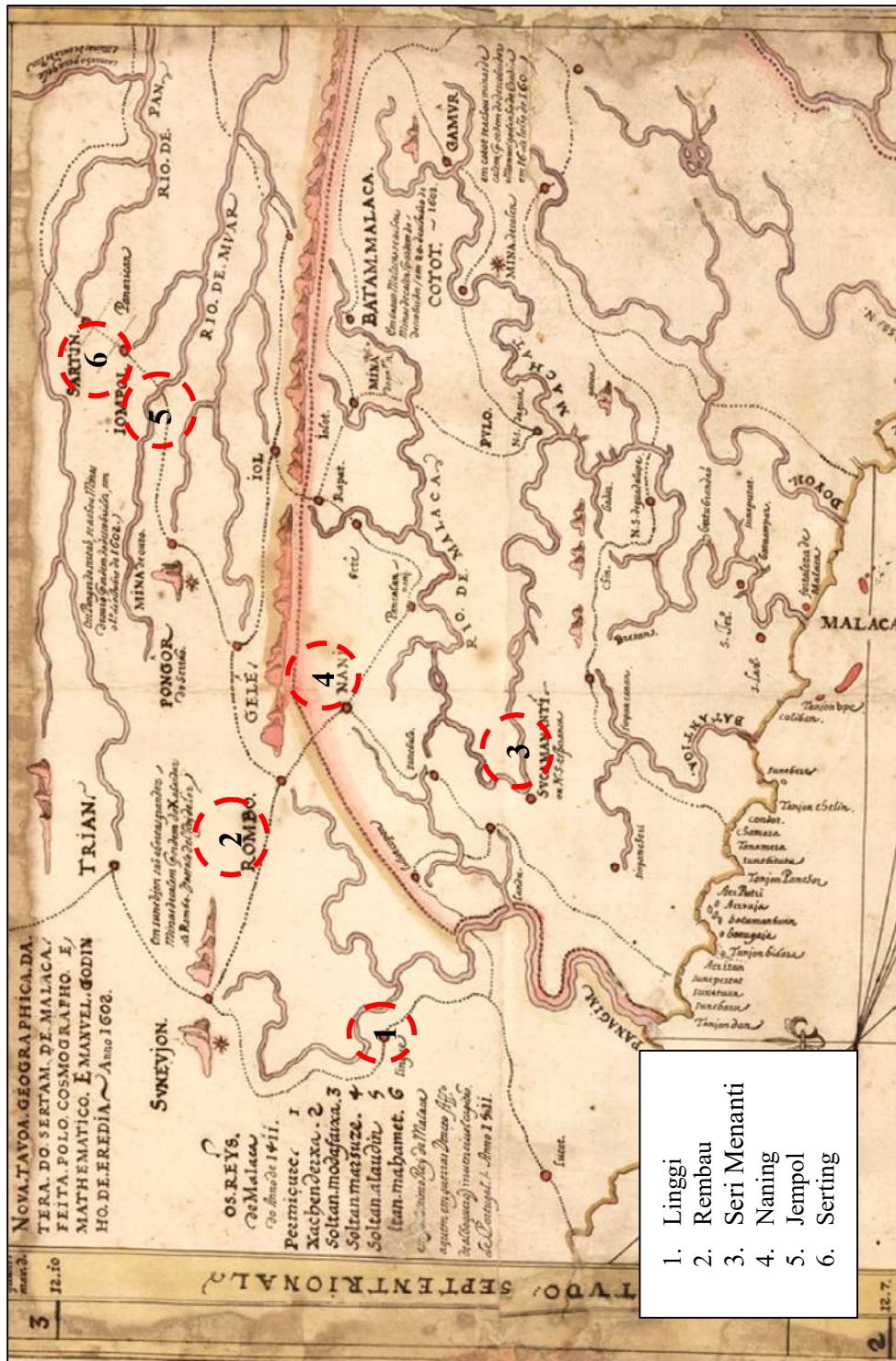


Figure 1.1 Portuguese d'Eredia Map in 1613 (The National Library of Brazil)

Negeri Sembilan was one of the earliest states in Malaysia that accepted a British Resident. Martin Lister, who was appointed as the first British Resident in Negeri Sembilan from 1889 until 1897, was received by the Yam Tuan Besar in order to secure his political stance. This political move was also due to the fact that British troops instigated the Bukit Putus War in 1875 whilst on the pursuit of Yam Tuan Antah on the orders of Dato' Kelana Putera Sungai Ujong. During this time, Istana Pulih, the residence of Yam Tuan Antah was burnt down by British troops and Yam Tuan Antah fled to get the assistance of Sultan of Johor (Sheppard, 1969; Yaakub, 1996). Due to this, the new Ruler was without a palace and without a symbol of power. Since a palace was an important piece of administrative and residential architecture, a Ruler without a palace was seen as incomplete or a lesser of a Ruler. Therefore, it can be regarded that Traditional Malay Royal Palaces are considered as architecture of the Royals and only a royal could implement certain design aspects of a palace. Due to this, a better understanding of the architecture and the need for Astana Seri Menanti is needed through this study.

1.2 Problem Statement

In Malaysia, Traditional Malay Royal Palaces (TMRP) has different architectural identities which tie them to the royals and the states they were built in (Sheppard, 1969). Many timber palaces in the different states of Malaysia still stand today due to the conservation and renovation efforts undertaken by the state governments (e.g. converted into museum for tourists). The location, site selection and availability of local materials were important factors in the consideration of building a palace as were the skills and workmanship of the appointed wood carvers. The availability of local construction materials played an important role in the design and construction of the timber palace. As timber was commonly found and grown locally, wood was the major construction materials used in vernacular architecture namely palaces, mosques and houses. Furthermore, the usage of timber also allowed for unique styles of decorations and ornamentations in the form of woodcarvings that were used to add aesthetics to the buildings. Timber used in the constructions of Traditional Malay Royal Palaces characterized the woodcarvings being used as a

form of ornamentations and decorative elements (Khan, 1983). In the olden times, palaces were built to show power, wealth and were status symbols of the royals (Perbadanan Kemajuan Kraftangan Malaysia, 2009). Hence, the need to have bigger and larger scales of palace buildings and complexes as a form of wealth among the royals became the standard norm during those times.

Furthermore, it is important to understand that before the involvement of the British government in local affairs such as building planning and constructions, the most skilled wood worker was known as the Malay *Tukang*. The *Tukang* built vernacular buildings according to the local measuring system, in accordance to the environmental needs of the surrounding and cultural system of the users. For example, the Traditional Malay Houses built by the *Tukang* in Negeri Sembilan was constructed using local timber and traditional building methods which included design elements such as low entrances into the Rumah Ibu and the inclusion of attics for segregation of female family members when male guests are present. As for the construction of Traditional Malay Royal Palaces, the *Tukang* designed and built palaces based on the local architectural design and cultural elements. After the involvement of the British in local affairs, the construction of palaces was changed to masonry constructions and many western design elements were used in the design. With masonry construction, the people involved in the design and construction process also changed. Now not only was the *Tukang* involved but a British Draftsman was also appointed for project management and documentation and Chinese contractors were hired to provide timber and manpower. This became the widespread norm for construction process across Negeri Sembilan and the rest of Malaysia.

When the need for the construction of a new palace for Yamtuan Muhammad was proposed, the British government was involved in the whole process. A Malay *Tukang* was hired, a British Draftsman was appointed and a Chinese contractor was involved. Astana Seri Menanti is a mid-rise vernacular palace which greatly resembles the architecture of Traditional Malay Houses in Negeri Sembilan (Nurdiyana, Raja Nafida, & Fawazul, 2017). Architecturally, Traditional Malay Royal Palaces are duplicates of Traditional Malay Houses and the local vernacular architecture (Abdul Razak, 1999). However, the architectural influences of Astana

Seri Menanti need further investigation and clarification due to general beliefs of the palace architecture being of Minangkabau influences (Gibbs, 1987). Nevertheless, according to Yaakub (1996), Negeri Sembilan vernacular architecture existed before the assimilation of the Minangkabau people. This study addresses the problem of defining factors influencing the architecture of Astana Seri Menanti in Negeri Sembilan. There is little information on what influenced the architecture of Astana Seri Menanti and it is impeccable that the future generations have a better understanding on this knowledge especially in the architectural heritage field.

1.3 Research Aim

The purpose of this study is to establish the factors involved in the palace architecture and their roles in shaping the design of Astana Seri Menanti.

1.4 Research Objectives

The objectives undertaken are divided into three which are to determine the intention behind the palace architecture, the architectural elements of the palace and factors involved in the design of the palace architecture. These factors will allow investigations into the architecture of Astana Seri Menanti and the objectives are as followed:

- a) To establish the context for the needs of constructing Astana Seri Menanti
- b) To identify the roles and involvements of the individual prominent figures of Astana Seri Menanti
- c) To establish the relationship of the prominent figures in shaping the final architecture of Astana Seri Menanti

1.5 Research Questions

The research questions that were undertaken in this research encompass three questions which are:

- a) What is the circumstance that began the need for the construction of the Astana Seri Menanti to the Yamtuan?
- b) What are the significant responsibilities and contributions of the Tukang, the British draftsman and the Chinese contractor towards the Astana Seri Menanti?
- c) What kind of relationship did the Tukang, the British draftsman and the Chinese contractor have in developing the architecture of Astana Seri Menanti during the early Federated Malay State?

1.6 Research Methodology

The research methodologies undertaken in this research are qualitative methodologies which are important in understanding information gathered through several data collection techniques such as observations, document analysis and on-site data collection (Borden & Ruedi, 2000). A qualitative research is an investigation which is done to explore deeply, comprehend and interpret social occurrences within their natural settings by not only understanding the *what*, *where* and *when* of an event but also the *why* and *how* (Denzin & Lincoln, 1984). The qualitative methodologies approaches undertaken in this study that were done in order to collect and analyze the qualitative data were determined as historical analysis, descriptive research and comparative studies. This triangulation of methods allows for the data collection and analysis to be done systematically.

The methodological approach of conducting a historical analysis is the study on the archival research which encompasses primary sources, secondary sources and

oral history. This form of analysis is also known as Content Analysis and is used when documents and text that are printed or electronic are studied and investigated (Bowen, 2009). For example in this study, documents from the National Archives such as Government Gazettes and reports are investigated to determine information needed. The empirical research's methodological approach is the study prepared during data collection when on the field, through observations and site visits at Seri Menanti and several other palaces. This method allows for direct and real-time observation of palaces and their surrounding environments in order to determine the possible conditions of the areas during the old ages. Further discussions on methodologies will be done in Chapter 3 of the research.

1.7 Research Gap

Based on previous and current scholarly studies done on Traditional Malay Royal Palaces in Malaysia, the research gap was determined and analyzed. Studies on vernacular architecture of the Malays are abundant especially on topics such as designs of typologies of Malay Houses, design of Traditional Malay Houses (Yuan, 1987) and Traditional Malay Mosques design and functions (Utaberta, 2007). Researches on Traditional Malay Royal Palaces however are varied across different topics such as the general image of Malay palaces (Abdul Halim, 1987), socio-structure of royal families and their palaces (Siti Zainon, 1986) and palaces as an administration building (Alwi, 1994). They gave an insight into specific topics of vernacular palaces from selected States in Malaysia as a whole.

A variety of scholarly research on Traditional Malay Architecture focused mainly on topics such as architecture of vernacular buildings, elements of vernacular architecture and construction materials used in timber constructions (Gibbs, 1987). Topics on the vernacular architecture of the Malays can be further elaborated into subtopics such as residential buildings (Traditional Malay Houses), public buildings (religious and administrative buildings) and royal buildings (palaces). Research topics on elements in vernacular architecture can be further separated into subtopics such as woodcarvings and ornamentations which includes typologies, motifs and

placements including influences and functions (Farish & Khoo, 2003). Due to the nature of vernacular architecture having an abundant of ornamentations, there are ample studies on woodcarvings because they are unique features in Traditional Malay architecture (Abdul Halim, 1987). Topics under construction methods encompass a wide range of topics on timber constructions, acoustics and functions which could be further subdivided into the structural elements and aesthetics of the decorations.

Topics that studied the architecture of palaces covered subtopics of functions of palaces, spaces in palaces (Winstedt, 1934), comparisons of palaces (Yaakub, 1996) and typologies of palaces (Shepard, 1969). Many researches were done on the architecture, functions and purpose of palaces and traditional royal palaces in comparison to modern palaces. The study on the influences found in the architecture of the Traditional Malay Royal Palaces however was limited and mainly focused on the influences of the British on the architecture of palaces in Malaysia (Shepard, 1969). Hence the research gap in the scope of Traditional Malay Royal Palaces could be further expanded specifically in the topic of influences on the architecture of palaces.

Influences on the architecture of palaces are an investigation into factors which could affect and influence the design of a palace such as cultural and societal factors and even religious factors. Present researchers have done several studies on influences in palace architecture such as Siti Aisyah (2011) who studied on the roles of women in influencing the spatial layout of Istana Sepahcendera in Kedah and Zulayti (2009) who studied the influences of colonialism on dwellings and palace architecture in Malaysia. Influences on palace architecture can also include effects in the spatial layout, spatial planning, aesthetics, scale, construction and many more factors in constructions. For example, influences in the spatial layout and planning may produce a different typology of palace planning whereas influences on the size and scale of the palace may induce palace architecture that does not communicate their surrounding architecture. Figure 1.2 below illustrates the research gap in this field and the focus of the study in the research.

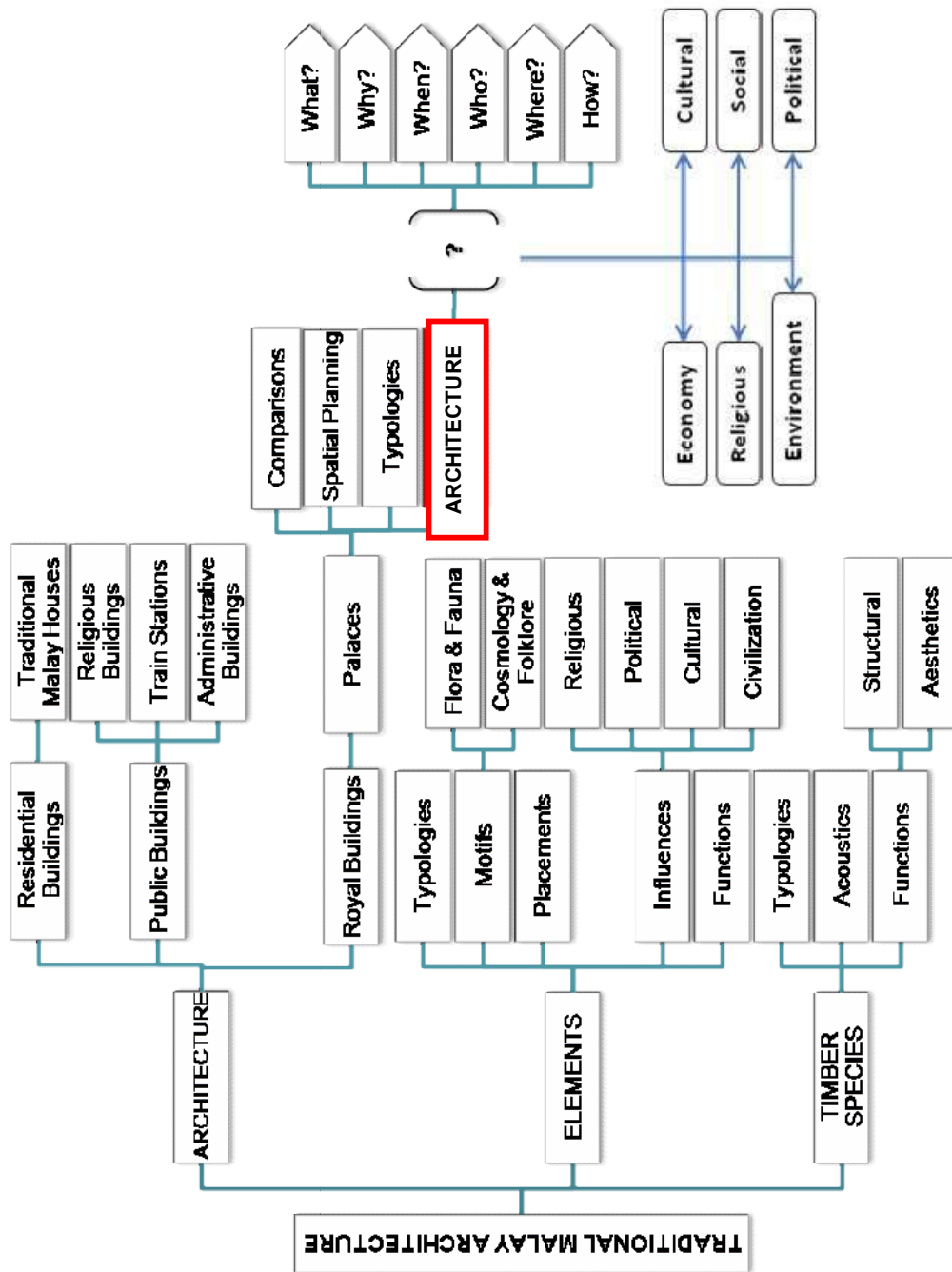


Figure 1.2 Research gap undertaken in this study

1.8 Research Framework

The research framework of the study can be divided into several topics and subtopics based on the main research matter. The development of the problem statement was then used to develop the objectives and questions undertaken in the research as a guideline into the research findings. The objectives as have been mentioned previously are to investigate the intentions behind the palace constructions, to determine the origin of the palace architecture and finally to specify the influences on the architecture of Astana Seri Menanti. The topics encompassing the influences found on the architecture of Astana Seri Menanti and the literature reviews expand further this topic for discussion and investigation specifically on topics such as architecture of vernacular palaces, Traditional Malay Royal Palaces, woodcarvers and experts in timber works and discussions on timber palaces in Malaysia.

Through the guidelines, the methodology of the research was determined to be qualitative as the collective data gathered was used to interpret and understand the phenomenon that of which is the Astana Seri Menanti within its natural context and surroundings. The qualitative data includes historical analysis, empirical research, descriptive research and workshops with experts in the field. Analysis and synthesis of the data collection was then prepared in order to achieve the research objectives and answer the research questions. They were conducted through several stages which were archival analysis, comparative studies and also site visits and observations. Findings conclude the research as the investigation will determine the influences on the architecture of Astana Seri Menanti. Figure 1.3 below illustrates the research framework of this study.

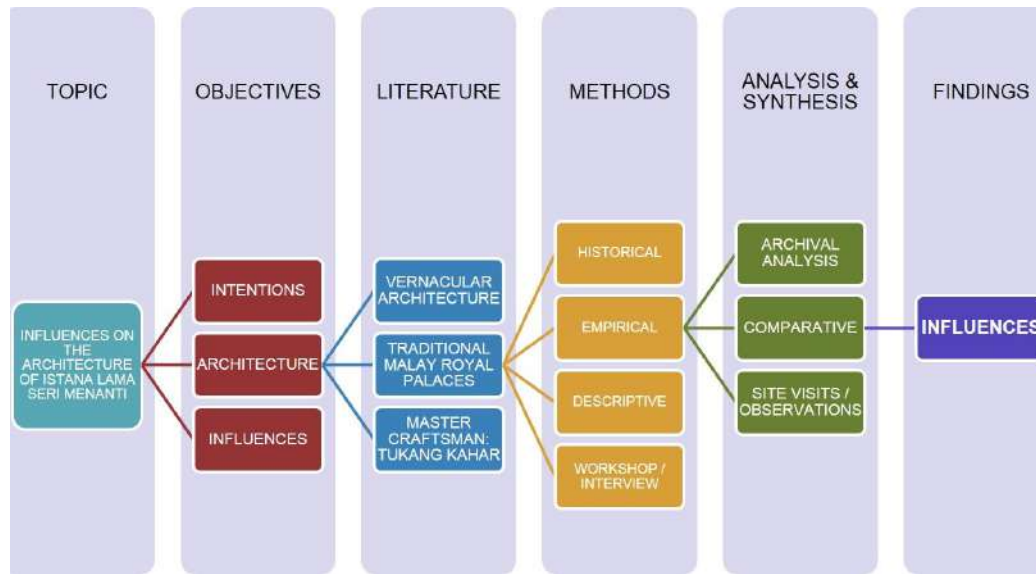


Figure 1.3 Research framework undertaken in this study

1.9 Scope and limitations

The scope of the research focuses on two aspects which are on the the vernacular architecture of Traditional Malay Royal Palaces in Malaysia specifically palaces within the timeframe of late 1800s until early 1900s and secondly on the heritage and conservation aspect of the palace. This is because the main research point is an investigation into Astana Seri Menanti which was built in the early 1900s hence to understand the building better the time period of the study has to correlate with the specific time frame. Whereas the second aspect is due to the building being a heritage icon and a museum hence the conservative aspects of the building is important. An investigation into the builders of these vernacular palaces is also vital as they were one of the key influential people in the traditional Malay towns to have the knowledge and skills needed to build the structures. Hence an assessment of the types of works done by these carvers or *Tukang* is also important especially the *Tukang* for Astana Seri Menanti. The study is limited to vernacular palaces within the specified time frame and the main focus is on Traditional Malay Royal Palaces in Negeri Sembilan specifically on Astana Seri Menanti and also limited to conservative efforts and repairs done after the construction of the Istana Besar was built in 1931. It will be further discuss in the coming chapters on the functions of the

palace after the residence was moved to the new palace hence, this limits the scope to after 1931. Figure 1.4 below highlights the scope and limitations of the research.

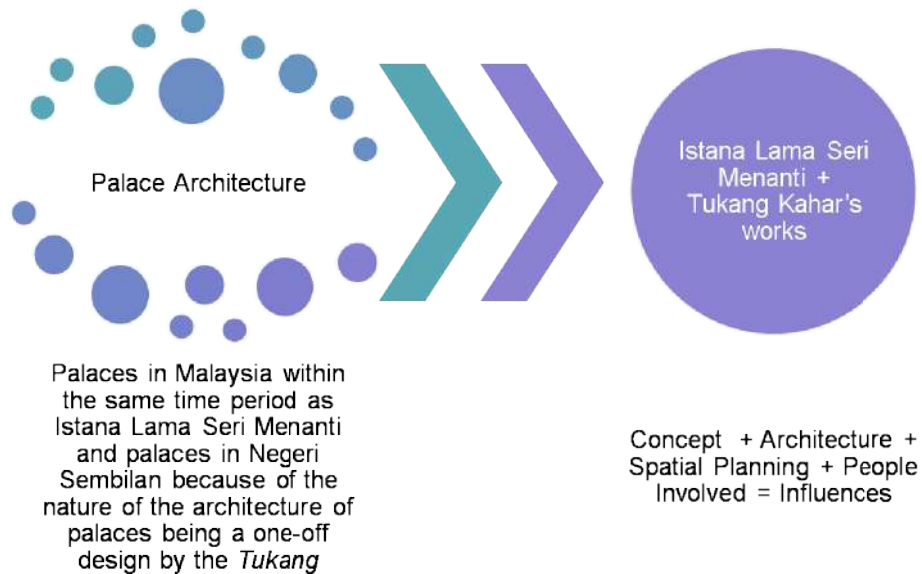


Figure 1.4 Scope and limitations of research

1.10 Significance of Research

The findings of the research will contribute to the benefits of the society in understanding vernacular palace architecture considering the importance of conservation and heritage in today's society. By establishing the background of the palace during which it was built, researchers and students alike will have a clearer perception of the historical facts on the architecture of the palace. From the misunderstandings and misinformation available nowadays, it is imperative that the correct facts and information is delivered through the study. The significance in understanding the intentions behind the construction of Astana Seri Menanti allows for better judgement and perception behind the need and purpose of the palace during those times and for whom it was intended for. Astana Seri Menanti was built by the decree from the ruler which was Yamtuan Tunku Muhammad to replace a burnt down palace as a new residential palace. The significance in investigating the architecture of Astana Seri Menanti is that the identity of the palace was determined

as were the architectural elements and concept. Furthermore, an investigation into the architecture of Astana Seri Menanti uncovered the influences on the architecture of the palace and the factors that influenced these influences. Hence, knowledge on the influences in timber palaces is increased and expanded in the field of vernacular palace architecture.

1.11 Conclusion

This chapter outlines the structure of the study through the aims, objectives, methodologies and the questions of the research. This chapter acts as a guideline throughout the research in order to keep the study within the perimeters of the research. The aim of the research keeps the study in line where as the objectives and research questions keep the study in perspectives. Furthermore, the findings of the research will answer and follow the objectives as stated in this chapter and also provide answers to the questions determined through this study.

In conclusion, it is important to understand that during the early Federated Malay State, Negeri Sembilan had just been united under one government and that the recently adopted system indirectly affected the vernacular architecture one way or another. The political situation and tension during that time was also an influential factor. The need for a royal palace was greater since Yamtuan Muhammad, who was newly elected royal leader was officially inaugurated but was a ‘King without a Palace’. Hence, it is important for this study to investigate the development of the architecture of Astana Seri Menanti during the early Federated Malay State. The following chapter will elaborate further the literature studies of the research as a background study and basis for the investigation.

REFERENCES

- Abdul Halim Nasir (1987). *Traditional Malay Wood Carving*. Kuala Lumpur: Dewan Bahasa dan Pustaka.
- Abdul Razak Abdul Rahman (1999). The Traditional Malay Architectural World View (With Emphasis on the Role of the Tukang). *Jurnal Alam Bina* , 2 (1), 1-12.
- Aishah Bidin (1993). The Historical and Traditional Features of the Malaysian Constitution. *Jebat 21* , 3-20.
- Alwi Sudin (1994). Kota Indera Kayangan. *Jurnal Warisan Indera Kayangan* (6).
- Arkib Negara (23 August, 2013). *Hari Ini dalam Sejarah: Tuanku Antah diakui Yamtuan Sri Menanti*. Retrieved 15 February, 2018, from Arkib Negara Web Site: <http://www2.arkib.gov.my>
- Aun, W. M. (1999). *Public Law in Contemporary Malaysia*. Selangor: Longman.
- Baron, C. (2012). Understanding Historical Thinking at Historic Sites. *Journal of Educational Psychology* , 104 (3), 833-847.
- Borden, I., & Ruedi, K. (2000). *The Dissertation: An Architecture Student's Handbook*. Oxford: Elsevier Ltd.
- Bowen, G. A. (2009). Document Analysis as a Document Analysis Method. *Qualitative Research Journal* , 9 (2), 27-40.
- Brown, R., & Maudlin, D. (2012). Concepts of Vernacular Architecture . In C. G. Crysler, S. Cairns, & H. Heynen, *The SAGE Handbook of Architectural Theory* (pp. 340-368). London: SAGE Publications Ltd .
- Canguillhem, G. (1988). *The Role of Epistimology in Contemporary History of Science*. Massachusettes: The MIT Press.
- Ching, F. D. (2001). *Building Construction Illustrated* (3rd Edition ed.). Canada: Wiley & Sons.
- Daud, N. I., Ezrin Arbi, & Mohammad Faisal (2012). Pengaplikasian Ukiran Kayu Melayu dalam Seni Bina di Malaysia. *Journal of Design and Built Environment* , 11.
- Denzin, N. K., & Lincoln, Y. S. (1984). *Handbook of Qualitative Research*. Newbury Park: Sage Publications.

- Emerson, R. (1937). *Malaysia, A Study in Direct and Indirect Rule*. (B. o. College, Ed.) New York: The Macmillan Company.
- Farish Noor & Khoo (2003). *Spirit of Wood: The Art of Malay Woodcarving*. Singapore: Periplus.
- Fee, C. V. (1998). *The encyclopedia of malaysia:architecture* (Vol. 5). Singapore: Archipelago Press.
- Fullerton, A. &. (1872). *British Settlements in the Malay Peninsular and Coast of Borneo*. London.
- Gerad, R., & Barber, D. (2013). *Fire Safety Challenges of Tall Wood Buildings: Final Report*. Massachusetts, U.S.A.: Fire Protection Research Foundation.
- Gibbs, P. (1987). *Building a Malay House*. Singapore: Oxford University Press.
- Groat, L., & Wang, D. (2013). *Architectural Research Methods*. New Jersey: John Wiley & Sons Inc.
- Gullick, J. M. (1958). *Indigenous political systems of western Malaya*. London: Athlone Press.
- Hairuddin Megat Latif, & Che Aisah Abdullah (2008). Islam dalam Perlembagaan Malaysia: Kewajarannya berdasarkan Faktor Kesultanan Melayu. *Journal of Ethics, Legal and Governance (REKAYASA)* , 4, 1-12.
- Haziyah Hussin, Zawiyah Baba, Aminuddin Hassan, et. al. (2012). The Philosophy in the Creation of Traditional Malay Carving Motifs in Peninsular Malaysia. *Malaysia Journal of Society and Space (GEOGRAFIA Online)* , 8 (7), 88-95.
- Hazrina Haja Bava Mohidin, Alice Sabrina Ismail, & Aminatuhzuhariah Megat Abdullah (2012). A Study of Styles Classification and Influences on Administration Buildings in Malaysia (15th-21st Century). *Seminar of International Convention: Bridging Between Old & New 2012*. Johor Bahru: KALAM, UTM.
- Hazrina Haja Bava Mohidin, Farhana Mohd. Razif, & Sulaiman Kadikon (2012). Pengaruh Islam dalam Politik dan Senibina Pentadbiran pada Zaman Kesultanan Melayu Melaka. *Jurnal Teknologi (Sciences & Engineering)* (58), 85-88.
- Heath, K. (2007). *Exploring the Vernacular in Contemporary Regional Design: Cultural Process and Environmental Response*. Oxford: Architectural Press.
- Hill, G. (2015, September). *A01: Typical Building System Study*. Retrieved August 2, 2016, from Architecture Faculty Assignments Web site:

- http://www.arch.ttu.edu/Architecture/Faculty/Hill_G/Arch5901_Hill_FA2015/Assignments/A01_TypicalBuildingSystemsStudy_FA15.pdf
- Hitchcock, H.-R. (1958). *Architecture: Nineteenth and Twentieth Centuries*. Middlesex: Penguin Books Ltd.
- Hitchcock, H.-R. (1946). The Study of Architecture in the Liberal Arts College. *College Art Journal* , 5 (3), 155-161.
- Idrus Yaakub (1996). *Rumah Tradisional Negeri Sembilan*. Shah Alam: Penerbit Fajar Bakti Sdn. Bhd.
- Kent, S. (1990). *Domestic Architecture and the use of Space: An Interdisciplinary Cross-cultural Study*. Cambridge: Cambridge University Press.
- Khan, H.-U. (1983). Small-Scale Renovation Projects in Indonesia, Singapore and Malaysia. (M. B. Sevcenko, Ed.) *Adaptive Reuse: Integrating Traditional Areas into the Modern Urban Fabric* , 22-30.
- Lee, P. Y. (1998). Modern Architecture and the Ideology of Influence. *Assemblage* (34), 6-29.
- Mawar Masri (2013). Towards Prevalence of Negeri Sembilan Malay Traditional Architecture for Future Communities: Misconceptions. *ASIAN JOURNAL OF ENVIRONMENT-BEHAVIOUR STUDIES* , 4 (13), 111-132.
- Md. Mizanur Rashid, Nurul Haminuddin, & Nik Abdul Aziz Nik Din (2013). The Concept of 4D Capturing: Digitizing the History of Istana Jahar, Kota Bharu, Kelantan. *The 8th International Symposium on Digital Earth: Transforming Knowledge into Sustainable Practice* (pp. 1-8). Kuching: 8th ISDE 2013.
- Md Nazuan Md Nasir (2005). *Istana Baroh, Negeri Sembilan*. Skudai: Universiti Teknologi Malaysia.
- Moore, W. K. (2004). *Malaysia: a pictorial history 1400-2004*. (D. Buerder, & S. Ham, Eds.) Kuala Lumpur: Editions Didier Miller.
- Negeri Sembilan Authority. (1901). *Negeri Sembilan Gazette*. Kuala Lumpur: Selangor Government Printing Office.
- Norazmawati Md Sani (2012). Modern Houses Design for Malaysian. *Advances in applied Science Research* , 3 (6), 3810-3813.
- Nor Zalina Harun, & Ismail Said (2009). The Changing Roles of Public Spaces in Malaysia. *National Landscape Seminar 2009 (UMRAN09) - Healing the World*. Selangor: International Islamic University Malaysia.

- Nurdiyana Zainal Abidin (2017). Architectural Influences of Istana Lama Seri Menanti, Negeri Sembilan. *Planning Malaysia* , 15 (1), 151-162.
- Nurdiyana Zainal Abidin (2017). Factors Impacting Woodcarving Influences in Traditional Malay Houses of Negeri Sembilan, Malaysia: Understanding the Technology of Architectural Heritage. *Medwell Journals* , 3 (The Social Sciences 12), 383-392.
- Nurdiyana Zainal Abidin, Raja Nafida Raja Shahminan, & Fawazul Khair Ibrahim (2017). Sustainable Mid-rise Vernacular Palace Architecture of Istana Lama Seri Menanti, Negeri Sembilan. *Pertanika Journal Science & Technology* , 25 (S), 29-36.
- Oliver, P. (1997). *Encyclopedia of Vernacular Architecture of the World* . Cambridge: Cambridge University Press.
- Ossen, D. R., Zul Azri Abdul Aziz, & Syed Zainol Abidin Idid (2010). The Islamic Malay Traditional Towns: Learning Through the Attributes - Special Emphasis on Johor Bahru, Malaysia. *First International Conference for Urban & Architecture Heritage in Islamic Countries: Its Role in Cultural & Economic Development*. Saudi Arabia: Saudi Commission for Tourism and Antiquities.
- Paris: Centre National de la Recherche Scientifique. (1983). *Tresor de la langue Francais*. Nancy: Institute de langue Francais.
- Perbadanan Kemajuan Kraftangan Malaysia (2009). *Ukiran Kayu*. Kuala Lumpur: Perbadanan Kemajuan Kraftangan Malaysia.
- Raja Nur Alaini Raja Omar (2012). A Historical Perspective of Federalism in Malaysia and Its Effects on The Current System of Federalism. *International Journal of Business, Economics and Law* , 1, 125-129.
- Rapoport, A. (2005). *Culture, Architecture, and Design*. (A. D. Seidel, Ed.) Chicago: Locke Science Publishing Company, Inc.
- Rudofsky, B. (1977). *The Prodigious Builders: Notes Toward a Natural History of Architecture with Special Regard to Those Species That Are Traditionally Neglected Or Downright Ignored*. New York: New York: Harcourt Brace Jovanovich.
- Rudner, M. (1976). The Structure of Government in the Colonial Government of Federated Malaya. *South East Asian Studies* , 13 (4), 495-512.

- Saw, L. G. & Raja Barizan Raja Sulaiman (1991) Directory of plant genetic resources in Malaysia. *Research Pamphlet* 109. 1-161.
- Shepard, M. (1969). Malay Palaces of the Past: Part One. Malaya in History. In M. H. Society, *Malaysia in History* (pp. 20-25). Kuala Lumpur: Malaysian Historical Society.
- Sheppard, M. (4 December, 1969). Malay Palaces of the Past: Part One. *Malaya in History* , 8 (1), pp. 21-25.
- Sheppard, M., & Abdul Halim Nasir (1974). *Seni Ukir Kayu Tradisional Semenanjung Malaysia*. Kuala Lumpur: Jabatan Muzium Malaysia.
- Sherwin, M. D. (1981). A New Reconstruction of the Palace of Sultan Mansur Shah. *Journal of the Malaysian Branch of the Royal Asiatic Society* , 54 (1(239)), 1-6.
- Siti Zainon Ismail (1986). *Rekabentuk Kraftangan Melayu Tradisi*. Kuala Lumpur: Dewan Bahasa dan Pustaka.
- Siti Aisyah Muhammad (2011). The Relationship Between the Socio-culture of Royalty and the Architecture of Istana Sepahchendera. *Warisan Nusantara dan Bicara Kraf Warisan*
- Syed Zulfida S. M. Noor (2006). *Pentadbiran Kesultanan Melayu Melaka: Kemunculan dan Kegemilangan*. Selangor: Arkib Negara Malaysia.
- Tun Ahmad Sarji Abdul Hamid (2011). *The Encyclopedia of Malaysia: The Rulers of Malaysia* (Vol. 16). Singapore: Editions didier miller.
- Upton, D., & Vlach, J. M. (1986). *Common Places: Readings in American Vernacular Architecture*. Athens: University of Georgia Press.
- Utaberta, N. (2007). Mosque Architecture in Malaysia: Classification of Styles and Possible Influence. *NUS: Paper for Journal of Southeast Asia* , 1-25.
- Wan Hashim & Abdul Halim Nasir (2011). The Traditional Malay House. *Institut Terjemahan Negara Malaysia*. Kuala Lumpur.
- Widodo, J. (1996, February 6). *Institute of Industrial Science, University of Tokyo*. Retrieved April 8, 2015, from The Urban History of the Southeast Asian Coastal Cities: <http://www.iis.u-tokyo.ac.jp/~fujimori/myhomepage/phd.html>
- Widodo, J. (2011). Wisdoms in Human Settlements: Learning from Southeast Asian Cultural & Environmental Holistic Sustainability. *International Conference Local Wisdom in Global Era: Enhancing the Locality in Architecture Housing and Urban Development* (pp. 22-28). Yogyakarta: UKDW.

- Winstedt, R. O. (1909). *Papers on Malay Subjects: Malay Industries (Part 1) - Arts and Craft*. (R. J. Wilkinson, Ed.) Kuala Lumpur: Government of the Federated Malay States.
- Winstedt, R. O. (October, 1934). The History, Polity and Beliefs of the Nine States. *Journal of the Malaysian Branch, Royal Asiatic Society* , 12 (3), pp. 41-110.
- Wiriyomartono, B. (2011). Urbanism in the Malay World: The Origin and Evolution of the Idea, Function and Institution of Pre-Colonial Bandar. *The 5th International Conference of the International Forum on Urbanism (IFoU)*. Singapore: National University of Singapore.
- Wiriyomartono, B. (2012). Historical Notes, Concepts and Evolution of Urbanism in the Malay World. *Jati* , 17, 115-131.
- Yaakub Idrus (1996). *Rumah Tradisional Negeri Sembilan*. Shah Alam: Penerbit Fajar Bakti Sdn. Bhd.
- Yin, R. K. (1984). *Case Study Research: Design and Methods*. London: SAGE Publications.
- Yin, R. K. (2004). Case Study Methods. In *Complementary Methods for Research in Education* (pp. 1-25). Washington D. C.: American Educational Research Association.
- Yuan, L. J. (1987). *The Malay House : Principles to Building Simple and Beautiful Homes for Comfort and Community*. Kuala Lumpur: Institut Masyarakat.
- Zulayti Zakaria (2009). Seni Bina Melayu Semenanjung: Mencari Asas Seni Bina National. (H. M. Noordin, Ed.) *ASWARA* , 63-80.
- Zulkifli Hanafi (1996). *Pembinaan Bangunan Tradisional Melayu*. Kedah: Amber Solara Publication.
- Zulkifli Hanafi (2000). *Pola-pola Hiasan di dalam Bangunan Tradisional Melayu*. Selangor: Dewan Bahasa dan Pustaka.