



UNIVERSITI PUTRA MALAYSIA

***REVIEW OF THE ADAPTIVE RE-USE OF THREE COLONIAL BUILDINGS
IN DHAKA, BANGLADESH***

MST NARGIS PARVIN

FRSB 2017 8



**REVIEW OF THE ADAPTIVE RE-USE OF THREE COLONIAL BUILDINGS
IN DHAKA, BANGLADESH**

By

MST NARGIS PARVIN

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

December 2016

COPYRIGHT

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

Copyright © Universiti Putra Malaysia



DEDICATED

Those who have special place in my heart;

My cheering parents - Md. Fazlur Rahman & Mst. Akherun Nessa;

My beloved husband Dr. S.M. Kamruzzaman

for his constant support;

And to my lovely daughters – Samara Zaman and Sehrish Zaman



Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the Degree of Master of Science

**REVIEW OF THE ADAPTIVE RE-USE OF THREE COLONIAL BUILDINGS
IN DHAKA, BANGLADESH**

By

MST NARGIS PARVIN

December 2016

Chairmen : Sumarni Ismail, PhD
Faculty : Design and Architecture

Adaptive reuse is a process of redevelopment and regeneration of historic building that can be reuse for new purposes which provides social, environmental and economic benefits. Bangladesh have experienced long colonial past (1757 to 1947). During colonial period developed many significant buildings with colonial style and character. These buildings had strong impact on society, culture and history. However, many of these colonial buildings are not conserving and well documented for future generation. As a result, several colonial buildings are gradually decaying and abandoned or used by illegal people. Very few buildings are conserving and reusing by the government however, most of these buildings are in critical condition. In this study, we evaluated the current situations of conservation and adaptive reuse of three British colonial buildings (Ahsan Manzil, Curzon Hall and Ruplal House) in Dhaka, Bangladesh. To get the optimum result, three British colonial buildings selected as sample and qualitative methods applied for study. Interview, documents study and observation are the three main techniques for qualitative method, which applied for data collection. In order to identify the challenges or problems between the conservation practice and current condition of adaptive reuse, have analyzed in existing framework or guide lines that provided by the government of Bangladesh and international conservation principles, which delivered by the UNESCO, ICOMOS, ICCOROM and international Charters. Based on the data collections have revealed multiple causes, which severely effects to the longevity and adaptive reuse of British colonial buildings, such as: lack of proper planning and guidelines by the government, insufficient fund, lack of expert technical people, ignorance of implementation, weaken of monitoring system and lack of people's awareness. In such a deplorable condition, it is essential to reform the government framework, which followed by the international guidelines that provided by the international organizations and at the same time can full fill the all aspects and needs of Bangladesh's colonial buildings adaptive reuse. If the government and related authorities initiates these types of actions, the people will get multiple benefits from adaptive reuse of colonial buildings, such as economic, social, cultural, job

opportunity, recreational, environmental and logical connection with the past and future generation.



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

TINJAUAN PENGGUNAAN SEMULA TIGA BANGUNAN KOLONIAL DI DHAKA, BANGLADESH

Oleh

MST NARGIS PARVIN

Disember 2016

Pengerusi : Sumarni Ismail, PhD
Fakulti : Rekabentuk dan Senibina

Penggunaan semula adalah proses pembangunan semula dan penjanaan semula bangunan bersejarah yang boleh digunakan untuk tujuan baru yang memberi manfaat kepada ; sosial, alam sekitar dan ekonomi. Bangladesh telah mengalami era kolonial yang lama iaitu dari 1757 hingga 1947. Semasa zaman penjajahan, banyak bangunan yang penting menunjukkan gaya dan watak kolonial. Bangunan ini mempunyai kesan yang kuat terhadap masyarakat, budaya dan sejarah. Walau bagaimanapun, banyak bangunan kolonial ini tidak dipelihara dan didokumenkan dengan baik untuk generasi akan datang. Akibatnya, beberapa bangunan penjajah secara beransur-ansur rosak dan didiami oleh orang yang menyalahi undang-undang. Sangat sedikit bangunan yang dipelihara dan digunakan semula oleh kerajaan namun kebanyakan bangunan ini berada dalam keadaan kritikal. Kajian ini, menilai keadaan semasa pemuliharaan dan penggunaan semula penyesuaian kepada tiga bangunan kolonial British iaitu Ahsan Monzil, Curzon Hall dan Ruplal House di Dhaka, Bangladesh. Untuk mendapatkan hasil yang optimum, tiga bangunan penjajah British dipilih sebagai sampel dan kaedah kualitatif digunakan untuk kajian. Temubual, kajian dan pemerhatian dokumen adalah tiga teknik utama untuk kaedah kualitatif untuk pengumpulan data. Untuk mengenal pasti cabaran atau masalah di antara amalan pemuliharaan dan keadaan semasa penggunaan semula penyesuaian, telah dianalisis dalam rangka kerja atau garis panduan yang sedia ada yang disediakan oleh kerajaan Bangladesh dan prinsip pemuliharaan antarabangsa, yang digariskan oleh UNESCO, ICOMOS, ICCOROM dan piagam antarabangsa. Berdasarkan koleksi data, terdapat banyak sebab yang memberi kesan ketara kepada jangka hayat dan penggunaan semula bangunan kolonial British, seperti: kurangnya perancangan dan garis panduan yang sesuai oleh kerajaan, dana yang tidak mencukupi, kurang ahli teknikal, dalam pelaksanaan, Ini semua melemahkan sistem pemantauan dan kurangnya kesedaran orang awam. Dalam keadaan yang sangat menyedihkan, adalah penting untuk memperbaharui rangka kerja kerajaan, yang diikuti oleh garis panduan antarabangsa yang disediakan oleh organisasi antarabangsa dan pada masa yang sama dapat mengisi sepenuhnya semua aspek dan keperluan bangunan penyesuaian bangunan kolonial Bangladesh. Sekiranya kerajaan dan pihak berkuasa yang berkaitan memulakan jenis tindakan ini, rakyat akan

mendapat banyak manfaat daripada penggunaan semula bangunan penjajah yang bersesuaian, seperti peluang ekonomi, sosial, kebudayaan, peluang pekerjaan, rekreasi, alam sekitar dan logik dengan generasi masa lalu dan masa depan.



ACKNOWLEDGEMENTS

All praises and gratitude are solely to the Almighty “Allah” whose blessing have enabled me to complete the reserach work followed by the preparation of this thesis for the degree of master of science.

I would like to express my heartfelt respect, deepest grattidue and indebtedness to my supervisor Dr. Sumarni Ismail for her keen interest, scholastic guidance, invaluable suggestions, helpful comments, constructive criticism and constant inspiration throughout the entire period of the reserach work and in preparing manuscript. I also humbly avails the oppurtunity to express my sincere appreciation and gratitude to all member of the supervisory commitee for their valuable advice, active coopration, constructive criticism and also for providing necessary facilities in completion of my reserach work. I am very grateful to all faculty member, faculty of Design and Architecture, UPM, for their constant support and inspiration throughout the entire period of study.

Finally, I express my thanks to Nayeem Asif for his assistance and friendly coopration during my study.

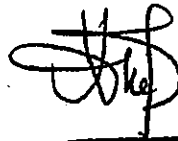
I certify that a Thesis Examination Committee has met on 21 December 2016 to conduct the final examination of Mst Nargis Parvin on her thesis entitled "Review of the Adaptive Re-Use of Three Colonial Buildings in Dhaka, Bangladesh" in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The Committee recommends that the student be awarded the Master of Science.

Members of the Thesis Examination Committee were as follows:

Zalina binti Shari, PhD
Senior Lecturer
Faculty of Design and Architecture
Universiti Putra Malaysia
(Chairman)

Nangkula Utaberta, PhD
Associate Professor Ir.
Faculty of Design and Architecture
Universiti Putra Malaysia
(Internal Examiner)

Julaihi Wahid, PhD
Professor
Universiti Malaysia Sarawak
Malaysia
(External Examiner)



NOR AINI AB. SHUKOR, PhD
Professor and Deputy Dean
School of Graduate Studies
Universiti Putra Malaysia

Date: 2 June 2017

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

Sumarni Ismail, PhD

Lecturer
Fakulti Rekabentuk dan Senibina
Universiti Putra Malaysia
(Chairman)

Nor Atiah binti Ismail, PhD

Senior Lecturer, LAr
Fakulti Rekabentuk dan Senibina
Universiti Putra Malaysia
(Member)

ROBIAH BINTI YUNUS, PhD

Professor and Dean
School of Graduate Studies
Universiti Putra Malaysia

Date:

Declaration by graduate student

I hereby confirm that:

- this thesis is my original work
- quotations, illustrations and citation have been duly referenced
- the thesis has not been submitted previously or concurrently for any other degree at any institutions
- intellectual property from the thesis and copyright of thesis are fully owned by Universiti Putra Malaysia, as according to the Universiti Putra Malaysia (Research) rules 2012;
- written permission must be owned from supervisor and deputy vice chancellor (Research and innovation) before thesis is published (in the form of written, printed or in electronic form) including books, journal, modules, proceedings, popular writings, seminar paper, manuscripts, posters, reports, lecture notes, learning modules or any other material as stated in Universiti Putra Malaysia (Research) rules 2012;
- there is no plagiarism or data falsification/ fabrication in this thesis, and scholarly integrity is upheld as according to Universiti Putra Malaysia (Graduate studies) Rules 2003 (Revision2012-2013) and the Universiti Putra Malaysia (Research) Rules 2012. The thesis has undergone plagiarism detection software

-
Signature:  Date: _____

Name and Metric NO: Mst. Nargis Parvin GS43786

Declaration by Member of Supervisory Committee

This to confirm that:

- the research conducted and the writing of this thesis was under our supervision;
- supervision responsibilities as stated in to Universiti Putra Malaysia (Graduate studies) Rules 2003 (Revision2012-2013) were adhered to.

Signature: _____

Name of Chairman
of Supervisory
Committee:

Dr. Sumarni Ismail

Signature: _____

Name of Member
of Supervisory
Committee:

Dr. Nor Atiah binti Ismail

TABLE OF CONTENTS

	Page
ABSTRACT	i
ABSTRAK	iii
ACKNOWLEDGEMENTS	v
APPROVAL	vi
DECLARATION	viii
LIST OF TABLES	xiii
LIST OF FIGURES	xiv
CHAPTER	
1 INTRODUCTION	1
1.1 Research Background	1
1.2 Problem Statement	2
1.3 Research question	3
1.4 Aims & objectives	4
1.5 Limitation of the research	4
1.6 Outline of the Thesis	5
2 LITERATURE REVIEW	6
2.1 Introduction	6
2.2 Background of Architectural Conservation Concepts	6
2.2.1 The reasons for conserving Architectural Heritage	7
2.2.2 Methods to save Architectural Heritage	7
2.3 Background of Adaptive reuse of Historical buildings	8
2.3.1 Background History of Adaptive Reuse	9
2.3.2 Criteria for adaptive reuse	11
2.3.3 Benefits Obtained From Adaptive Re-use	11
2.4 International Organizations Who Works for Conservation of Heritage Buildings	12
2.4.1 UNESCO	13
2.4.2 ICOMOS	13
2.4.3 ICCROM	14
2.4.4 ICOM	14
2.4.5 TICCIH	15
2.4.6 Heritage Conservation Network	15
2.4.7 Asian Academy for Heritage Management	15
2.5 International Charters for Conservation and Restoration	15
2.5.1 The Venice Charter	16
2.5.2 Burra Charter	19
2.5.3 Athens Charter	21
2.6 Overseas Examples of the Adaptive Reuse	23
2.6.1 PAM Building, Kualalampur, Malaysia	23
2.6.2 Raffles Hotel, Singapore	25
2.6.3 Western Market, Sheung Wan, Hong Kong	28

2.7	British Colonization in the World and Bangladesh	34
2.7.1	Colonial Architecture	34
2.7.2	General Characteristics of Colonial Architecture	35
2.8	Overview of Bangladesh and its British Colonial Period	36
2.8.1	Geography of Bangladesh	36
2.8.2	Architectural Development in Bangladesh before British Colonial Period	37
2.8.3	Architectural Development during British Colonial Period in Bangladesh	38
2.8.4	Architectural Development in Bangladesh after British Colonial Period	38
2.8.5	Historical Development of Dhaka	39
2.9	The Legislation & Government Approaches towards the Heritage Buildings Conservation in Bangladesh	41
2.9.1	Bangladesh National Building Code	41
2.9.1.1	BNBC Guidelines	41
2.9.1.2	Criteria for Protection of a Heritage Building / Monument	43
2.9.1.3	Area Conservation for Historic Districts	48
2.9.2	The Antiquities Act	49
2.9.3	Current Scenario of Adaptive reuse in Bangladesh	52
2.10	Historical Background of Study Cases	52
2.10.1	Historical Background of AhsanMonzil	53
2.10.2	Historical Background of Ruplal House	55
2.10.3	Historical Background of Curzon Hall	57
2.11	Chapter Summary	58
3	RESEARCH METHODOLOGY	59
3.1	Introduction	59
3.2	Research Design	59
3.2.1	The Preference for Qualitative Method of Research	60
3.2.2	Unit of analysis	61
3.3	Selection criteria for cases	62
3.4	Data collection methods	63
3.4.1	Semi-structured interview	63
3.4.2	Qualitative analysis of documents	64
3.4.3	Participant's observation	65
3.5	Analysis of Data	65
3.6	Research technique: Case study research	66
3.7	Chapter Summary	68
4	RESEARCH FINDINGS	69
4.1	Introduction	69
4.2	Data Collection Methods and Techniques	69
4.2.1	Findings from Interview	69
4.2.2	Findings from Document Study	76
4.2.2.1	Findings from Document Study: AhsanMonzil	78
4.2.2.2	Findings from Document Study: Ruplal House	80
4.2.2.3	Findings from Document Study: Curzon Hall	83

4.2.3	Findings from observations	84
4.2.3.1	Findings from focused observations	84
4.2.3.1.1	Findings from focused observations: Ahsan Monzil	85
4.2.3.1.2	Findings from focused observations: Ruplal House	86
4.2.3.1.3	Findings from focused observations: Curzon Hall	87
4.2.4	Findings from explanatory observations	88
4.2.4.1	Findings from explanatory observations: Ahsan Monzil	88
4.2.4.2	Findings from explanatory observations: Ruplal House	90
4.2.4.3	Findings from explanatory observations: Curzon Hall	91
4.3	Chapter Summary	92
5	DATA ANALYSIS & DISCUSSION	95
5.1	Introduction	95
5.2	Data Analysis	95
5.2.1	Data Analysis of Ahsan Monzil	95
5.2.2	Data Analysis of Ruplal House	96
5.2.3	Data Analysis of Curzon Hall	96
5.3	Discussion	97
5.4	Chapter Summary	100
6	CONCLUSION & RECOMMENDATION	101
6.1	Conclusion	101
6.2	Recommendation for the case studies	101
6.2.1	Recommendation for Ahsan Monzil	101
6.2.2	Recommendations for Ruplal House	102
6.2.3	Recommendation for Curzon Hall	103
6.3	Fixtures and materials to be preserved	103
6.4	Recommendations for Further Studies	103
	REFERENCES	105
	BIODATA OF STUDENT	113
	PUBLICATION	114

LIST OF TABLES

Table		Page
2.1	Showing the summary of International Concern of Heritage Building Conservation	22
2.2	Comparative data of three colonial buildings in three other countries	31
4.1	List of some colonial buildings in Dhaka city, which are currently reusing and modified for different purpose	72



LIST OF FIGURES

Figure		Page
2.1	PAM Center Building	24
2.2	Raffles Hotel, Singapore	26
2.3	The existing Western Market. Sheung Wan	29
2.4	Map of India, Bangladesh and Pakistan-including the map of before and after independence	36
2.5	Map of Indian Subcontinent	37
2.6	Figure:2.6 Northern Part	40
2.7	Historical Development of built-up spaces of Dhaka City	40
2.8	Growth Pattern of Dhaka City	41
2.9	Ahsan Manzil View from the River Buriganga and view from google earth.	54
2.10	First Floor Plan of AhsanManzil	54
2.11	Location Map of Ruplal House	55
2.12	Front view of Ruplal House	56
2.13	Plan of Ruplal house	56
2.14	Front elevation of Ruplal House	56
2.15	Riverside elevation of Ruplal House	57
2.16	Curzon Hall	58
3.1	Summary of Research Methodology	67
4.1	Site Plan of Ruplal House	92
4.2	Front view of Ruplal House	93
4.3	Current Views from River Side	93
4.4	Window and Column Detail of Ruplal House	94



CHAPTER 1

INTRODUCTION

1.1 Background of Study

This research focuses on the extent and scope of the adaptive reuse by existing framework for supporting and maintenance of colonial buildings in Dhaka, Bangladesh. Here three prominent colonial buildings have selected as sample for case study. Due to the geographical strategic location, topography and climate, Bengal was the favorable ground for development of its own native architectural character. Notable that Bangladesh has experienced different architectural phases from the beginning of the ancient period and it evoked by some marked architectures of this region. Previously Dhaka was a center for the trade and commerce and many invaders came to this city for business in the colonial era, later they seized the power and settled here. At that time, architectural development have totally influenced by the colonial power along with their essence. Currently Dhaka, the capital city, is congested and hazardous for the unplanned development. Because of unawareness and lack of interest, the historical buildings and their sustainability become deteriorating. Therefore, in this research we evaluate the current situations and prospects of the magnificent colonial buildings and demonstrate the potential adaptive reuse options.

As the case with many other former subjects of the British period, the British legacy in Bangladesh remains a controversial topic. However, almost all can agree that the landmarks built by the British power are valuable assets of our society and can only add to the richness of Bangladeshi heritage. During the colonial period, the colonizer built many infrastructures, road networks and other amenities in their colonized region of the world. Many of these built items are till now existing in these areas as the legacy of the British period. Buildings are the prominent items and some of these buildings are until now standing as a monument and reusing. Any historic building represents the history and culture of a country. Historic buildings are the witness of our past lives and give us the sense of magnificence of our glorious history. It has architectural, stylish, noteworthy, narrative, archeological, financial, social, political and profound or typical qualities; it is an image of our social character and coherence, furthermore a portion of heritage. Sometimes the conservation of historic buildings has neglected for the money and risk. However, adaptive reuse is a process to give a new life of an old building (Jamal et al., 2012). Adaptive reuse involves rethinking existing structures for new uses that means the adjustment of historic buildings starting with one, utilize then onto the next while protecting their heritage value. Sometimes, this might be simply an adjustment of activities and uses, however as a rule structure require changes to suit their new utilization. For this result, reuse permits historic structures to maintain properly and their foundation, origin to be discovered and considered, even where their purpose and capacity have changed.

Adaptive reuse is an essential and suitable component in holding historic structures and places for future eras. In addition, there are significant returns for ecological sustainability. Some, architectural community generally express adaptive reuse (AR), or Reuse, as the method that adjusts structures for new uses while holding their historic character and features.

Nowadays, the basic to prolong the life cycle of a building related with different sustainability goals. In order to get social, economic and environmental benefits adaptive reuse is a best option than the other methods of conservation. Adaptive reuse of historic buildings is an outline of sustainable urban regeneration, which expands the building's existence and avoids destruction waste, supports reuses of the embodied energy and provides considerable social and economic profit. Adaptive reuse bypasses the wasteful process of demolition and reconstruction. Therefore, adaptive reuse is more suitable and beneficial than the other method of conservation and it turns into a way to renew urban life and declining neighborhoods.

1.2 Problem Statement

Throughout the British Colonial period, Bangladesh was British Colonies, experienced many political, economic and social deviation and fluctuations. The British Colonials transported their architectural styles into Bangladesh, some of which are still in presence and displaying the sophistication of their unique architectural characteristics. Although, the colonial period has painful past and unique characteristics in their architectures but these buildings are valuable heritage to us and still now have the potential to contribute to the society in Bangladesh.

There are no strong evidences or documents regarding British Colonial buildings in Bangladesh. Very limited information is available about the British Colonial buildings. A small number of colonial buildings have been conserving but most of them have not documented as a part of heritage conservation. Many of these colonial buildings are abandoned; some are enemy property used by the illegal people. For this disregard and ignorance causes demolition and deformation of these valuable heritage buildings. Rapid urbanization of Dhaka city has ignored to interlink with the core place of this city that is the most historic area in the city named as old Dhaka.

Dhaka is a densely populated city and approximately 16 million people are living in this city. Therefore, the city is always overcrowded and has tremendous traffic congestion in all areas. Unplanned city development makes a chaotic situation and the comparative urban development of basic requirements (residential, commercial and recreational) have shortage and this development has not established any dialog between the old historic area and the new developed area of this city's context. The feasible architectural expression also overlooked. However, this 400 years old city has many historic buildings that remain the potential to contribute for the sustainable development thus the government and local people may get social, economic and environmental advantage.

Nowadays, the ideal picture of conservation process and techniques are ignoring. For adaptive reuse of colonial buildings the guidelines, techniques and principles have ignored which provided by the international organization for heritage conservation and international Charters. Therefore, reuse of colonial buildings turn out to be inactive, unfeasible and unprofitable. Some of colonial buildings are non-conserved and decaying for abused by the illegal inhabitants. This condition shows the lacks and gaps of proper conservation process, which highlights the importance and need for the specific guidelines or framework of the government rules. Proper understanding and implementation of these rules for conservation and adaptive reuse may guide to sustain long time and contribute for social, cultural, economic and environmental benefits.

This study will identify the framework of adaptive reuse in Dhaka, Bangladesh. Many historic buildings has situated in this area, which developed in different period and in different types. To concise and concentrate on this study, only focusing on the British colonial buildings because the people have very bitter experience about the British ruling during British colonization in Bangladesh. Therefore, three colonial historic buildings will be discussed here as a sample of case study, such as Ahsan Manzil, Curzon Hall and Ruplal House. These buildings are famous in this area, which have different types of architectural significance and great influence to the society. Here, Ahsan Manzil and Curzon Hall is currently reusing but Ahsan Manzil still facing many problems to sustain independently. For this reason, it is necessary to pay more attention and essential to monitor the process of adaptive reuse and the transformation overtime for the sustainable development. Therefore, reuse or regeneration of these colonial buildings can make positive impact on society and can generate revenue, job opportunity, recreation and environmental feasibility. Thus, it is a critical issue to raise awareness on the British colonial buildings before demolished. To protect these assets need a long-term planning and proper implementation of the guidelines.

1.3 Research Questions

Key research questions are arising based on research problem. This research will discuss on the point of the following questions:

“What is the framework for the adaptive reuse of the historic buildings in Bangladesh? “What are the key factor that causes the inactiveness and demolition of the colonial buildings in Bangladesh? What would be the framework for the proper utilization of these historic buildings to contribute properly for social sustainable development?”

Thus, the research efforts to find the existing factors that are enabling the colonial buildings to perform as valuable resources. This study also attempts to clarify the significance and remaining values and optimum potentials to use of the three selected colonial buildings in Dhaka, Bangladesh.

1.4 Aims and Objectives

The goal of this research is to find out the complication of adaptive reuse of the British colonial buildings in Bangladesh and analysis to increase the possibilities of adaptive reuse. This study will also explore some ideas of adaptive reuse to investigate the probable outcomes on how it might perform its part for the development, unification and conservation for social, cultural, economic and environmental benefit in Dhaka, Bangladesh. The specific objectives are as follows:

1. To identify the framework of adaptive reuse in general and in Bangladesh.
2. To document and analysis of the adaptive reuse of colonial buildings in, Dhaka, Bangladesh, as sample case study: Ahsan Monzil, Ruplal House and Curzon hall.
3. To identify the main factor that causes the deteriorations of the colonial buildings in Bangladesh.
4. To propose a framework for the colonial buildings adaptive reuse in Bangladesh.

1.5 Scope and Limitation of the research

This research will discuss about the 190 years (1757-1947) colonial history of Bangladesh and the architectural development of this region that will focus on the contemporary problems, significance and the values of three prominent British colonial buildings in Dhaka. In order to get some ideas, this study will analyze the existing framework in Bangladesh and international guidelines for conservation and adaptive reuse of historic buildings. Furthermore, with the qualitative method, this research will investigate the contemporary problems and potential adaptive reuse of the selected cases. These three data collection method proposed by Yin and Flick, which includes the expert's opinion or interview, document study and observation (Yin., 2011 ; Flick., 2015). These methods will guide to identify the factors that are enabling to perform as successful adaptive reuse of these colonial buildings in Dhaka, Bangladesh. It will help to draw a template and evaluate the current scenario of these buildings and context. Finally, a brief outline will be drawn and recommend some new potential adaptive reuse options for the selected cases.

According to Burra Charter, any conservation work will be carried on a place it should be preceded by preliminary studied to understand the place; this however should include drawings, documentaries and physical analysis (ICOMOS, 1999). In these selected study cases, architectural enquiry have done properly and included the architectural drawings (plans and elevations), pictures to relate with the places. Unfortunately, architectural plans and detail drawings of Curzon Hall have not presented because it has not archived or documented. So, it made difficult to collect the necessary drawings. We presented here some drawings of Ahsan Monzil and Ruplal House from the different sources because only few practitioner architects and historians have collected these drawings with their personal interest.

1.6 Outline of the thesis

This thesis is consisting of six (6) sections and a brief layout of the proposal have discussed here. Chapter one (1) have described the summary of the research comprising the research background, problem statement & issues, research question, aims and objectives, scope and limitations, outline of the research. In chapter two (2) contains the review of literatures, relating to the research topics which comprises the theoretical background of historical buildings conservation and adaptive reuse, international organizations and international charters who works for the conservation, history of colonial architecture, three case studies as example in three different colonized countries, colonization in Bangladesh and development of colonial architecture. An overview of conservation guidelines and current scenario of adaptive reuse in Bangladesh have included. In chapter three (3), Research Methodology excessively represents the research technique and incorporates the research plan, data collection strategies and data analysis. In section four (4), view of the selected methodology, an elaborate representation of the research findings have displayed. The research findings have prepared in a realistic way to assume an appropriate method for analyzing the data. In Section five (5) have analyzed the collected data in view of the predefined parameter that was developed from the review of literature. In the section six (6), collected data and data analysis have been answering for recommendation and conclusion. This section have suggested to make an effort of answering the research questions stated before and section six is the last part to the research.

REFERENCES

- Ahmad, Y. (2006). The scope and definitions of heritage: from tangible to intangible. *International journal of heritage studies*, 12(3), 292-300.
- Ahmed, S. U. (1986). *Dacca: a study in urban history and development* (No. 4). RoutledgeCurzon.
- Allman, J., & Larson, K. (2005). Too Good to Throw Away. The Adaptive Reuse of Underused Buildings. North county Cooperative Foundation.
- Andrus, D. C. (2005). The wiki and the blog: Toward a complex adaptive intelligence community.
- Aziz, Q. (2005). *Architectural Transformation of Heritage Buildings Case Study: Folk Art Museum Building Sonargaon, Bangladesh* (Doctoral dissertation, Carleton University Ottawa).
- Basha, B., Soomro, A. R., & Abdullah, F. (2016). Analytical study on the viability of adaptive reuse with social approach. Case study of Asia Heritage Row, Kuala Lumpur.
- Beeton, R. J. S., Buckley, K., Jones, G. J., Morgan, M. D., Reichelt, R. E., Trewin, D., & 2006 Australian State of the Environment Committee. (2006). *Australia State of the Environment 2006. independent report to the Australian Government Minister for the Environment and Heritage* (pp. 1-141). Department of Environment and Heritage.
- BNBC (2015), Bangladesh National Building Code. Available from [https://apscl.com/download/Bangladesh%20National%20Building%20Code-2015%20%20Vol_2_3%20\(Draft\).pdf](https://apscl.com/download/Bangladesh%20National%20Building%20Code-2015%20%20Vol_2_3%20(Draft).pdf)
- Bradshaw, D. (1995). Underlying Principles of Restoration. Department of Environmental and Evolutionary Biology. University of Liverpool. Liverpool L69 3BX – UK.
- Bullen, P. A. (2007). Adaptive reuse and sustainability of commercial buildings. *Facilities*, 25(1/2), 20-31.
- Bullen, P., & Love, P. (2006). Adaptive Reuse of Historic Heritage buildings. Department of Construction management school of Built Environment Curtin University, Perth Australia.
- Burnell, P., Randall, V., & Rakner, L. (Eds.). (2014). *Politics in the Developing World 4e*. Oxford University Press.
- Conejos, S., Langston, C., & Smith, J. (2011). Improving the implementation of adaptive reuse strategies for historic buildings.

- Chan, C. H., & 陳展鴻. (2010). The applied potential of Hong Kong's town planning system in area based heritage conservation. *HKU Theses Online (HKUTO)*.
- Choay, F., & OConnell, L. M. (2001). *The invention of the historic monument*. Cambridge University Press.
- CICOP(2013) Network of International Centers for the Conservation of Architectural Heritage. Available from <http://www.cicop.net/joomla/>
- Davidson, M., & Dolnick, F. (1999). A Glossary of Zoning, Development, and Planning Terms. *American Planning Association, Planning Advisory Service Report*, (491/492).
- DCC. 2004. *Dhaka City Corporation*. Accessed 26 December 2005. retrieve from http://www.dhakacity.org/html/brief_back.html
- Dilke, C., & Bart, D. (1899). *The British Empire*. London: Chatto and Windus.
- Earl, J., & Saint, A. (2015). *Building conservation philosophy*. Routledge.
- Feilden, B. (2007). *Conservation of historic buildings*. Routledge.
- Forster, K. W., & Ghirardo, D. (1982). The modern cult of monuments: its character and origin: On Reigl's 1903 work: Der moderne Denkmalkultus, sein Wesen, seine Entstehung. *Oppositions*, 25, 21-50.
- Flick, U. (2015). *Introducing research methodology: A beginner's guide to doing a research project*. Sage.
- Golmakani, G. (2011). *Re-Functioning Potentials of Industrial Heritage in North Cyprus Case-Study: Zeyko Olive Oil Mill* (Doctoral dissertation, Eastern Mediterranean University (EMU)).
- Gomez, F., & Basu, C. (2011). *Cities of Dreams: Examining the Ideology of Colonial Architecture in India*.
- Haque, A.K.M. Mokammel, (2003), "What ails Tourism in Bangladesh?", *Observer Magazine*, October 6, P. 15
- Hardy, D. (1988). Historical geography and heritage studies. *Area*, 333-338.
- Harun, S. N. (2011). Heritage building conservation in Malaysia: Experience and challenges. *Procedia Engineering*, 20, 41-53.
- Henderson, J. C. (2001). Conserving colonial heritage: Raffles hotel in Singapore. *International Journal of Heritage Studies*, 7(1), 7-24.
- Hewison, R. (1987). *The heritage industry Britain in a climate of decline*.

- Hong, T. T., & Nooi, P. S. (2014). Growth and live ability the Case of Greater Kuala Lumpur, Malaysia. *Malaysia's Socio-Economic Transformation: Ideas for the Next Decade*, 225, 418.
- Hurol, Y., Yüceer, H., & Başarır, H. (2015). Ethical Guidelines for Structural Interventions to Small-Scale Historic Stone Masonry Buildings. *Science and engineering ethics*, 21(6), 1447-1468.
- Hussain, M. A., Yunos, M. Y. M., Utaberta, N., Ismail, N. A., Ariffin, F. M., & Ismail, S. (2015). The Relationship of Art of Weaving and Sense of Place at Historic Waterfront that Affect Visitor Awareness. *RESEARCH JOURNAL OF FISHERIES AND HYDROBIOLOGY*, 10(14), 115-117.
- Icomos (2017) icomos guidance on post trauma recovery and reconstruction for world heritage cultural properties . Available from <http://www.international.icomos.org>
- ICOMOS, A. (1999). The Burra Charter, 1999. A25.
- Imam, S. R., Islam, F., Abdullah, I., Malik, A. M., & Ahmed, Z. N. RUPLAL HOUSE, DHAKA.
- Imam uddin, A. H., Shamim, A. H., & Debashir, S. (1985). Community mosque—A symbol of society. *REGIONALISM IN ARCHITECTURE*. Sem Aga Khan/ed. R. Powell. Singapore.
- Imon, S. S. (2006). Sustainable urban conservation: the role of public participation in the conservation of urban heritage in old Dhaka. *HKU Theses Online (HKUTO)*.
- International Council for Local Environmental Initiatives. (2000). *The local Agenda 21 planning guide: An introduction to sustainable development planning*. International Development Research Centre.
- Islam, N. (1998). *Human settlements and urban development in Bangladesh*. University of Dhaka.
- Islam, N. (2005). *Dhaka now: contemporary urban development*. Bangladesh Geographical Society.
- Ismail, W. H. W., & Hashimah, W. (2012). Sustainability of buildings in historic city of Malacca. *Wan Hashimah Wan Ismail*.
- Jamal, S., Rahman, S., Rahman, S., & Haque, A. (2012) Visitors' Opinion and Preference about AhsanManzil, Old Dhaka: An Exploratory Study. *Journal of Bangladesh Institute of Planners ISSN*, 2075, 9363.

- Jamal, S., Rahman, S., Rahman, S., & Haque, A. Visitors' Opinion and Preference about AhsanManzil, Old Dhaka: An Exploratory Study. *Journal of Bangladesh Institute of Planners ISSN, 2075, 9363.*
- Joseph, G. M., Rosenberg, E. S., & Kramer, P. A. (2003). *The American colonial state in the Philippines: Global perspectives.* J. Go, & A. L. Foster (Eds.). Duke University Press.
- Langston, C. (2011). On archetypes and building adaptive reuse. In *The 17th Annual Pacific Rim Real Estate Society (PRRES) Conference, Gold Coast.*
- Lueg, R. (2011). Houses of God... or not?! Approaches to the Adaptive Reuse of Churches in Germany and the United States.
- Lucas, C. P. (1915). *The British Empire.* Macmillan.
- Luk, W. B., & 陸威彪. (2003). Adaptive reuse for historical buildings in Hong Kong: a case study: the former Marine Police headquarters. *HKU Theses Online (HKUTO).*
- Mamoon, M. (2000). Dhaka Smriti Bisritir Nagari (Dhaka the Memorable and Historical City). *Dhaka: Ananya.*
- Marshall, B., Cardon, P., Poddar, A., & Fontenot, R. (2013). Does sample size matter in qualitative research?: A review of qualitative interviews in IS research. *Journal of Computer Information Systems, 54(1), 11-22.*
- Marquis-Kyle, P., & Walker, M. (2004). *The illustrated Burra Charter: good practice for heritage places.* Australia ICOMOS.
- McLeod, J. (2002). *The history of India.* Westport, CT: Greenwood Press
- Nipa (1992) Report on Ruplal House. Thesis online
- Omar, Y., & Ishak, N. H. (2009). Preventive maintenance management: an approach towards a sustainability of adaptive re-use historical buildings in Kuala Lumpur, Malaysia.
- Orbasli, A. (2008). *Architectural conservation.* Blackwell Science Ltd., Oxford.
- Parkinson, A., Scott, M., & Redmond, D. (2015). Negotiating postcolonial legacies: shifting conservation narratives and residual colonial built heritage in Ireland. *Town Planning Review, 86(2), 203-228.*
- Petzet, M. (2015). International principles of preservation. *Monuments and Sites, 20.*
- Pickard, R. (2002). A comparative review of policy for the protection of the architectural heritage of Europe. *International Journal of Heritage Studies, 8(4), 349-363.*

- Ragin, C. C., & Amoroso, L. M. (2010). *Constructing social research: The unity and diversity of method*. Pine Forge Press.
- Rajasekar, S., Philominathan, P., & Chinnathambi, V. (2006). Research methodology. *arXiv preprint physics/0601009*.
- Rammath, M. (2012). Colonialism. Anarchist studies/ Anarchist studies.org.P&L/ PandlPrinting.com
- Reuse, D. A. (2004). Preserving our Past, Building our Future. *DEPARTMENT OF ENVIRONMENT AND HERITAGE. ACT: Department of Environment and Heritage, Commonwealth of Australia, 17*.
- Robert, C., & Smith JR.(1937). House Form and Culture
- Said, S. Y., Aksah, H., & Ismail, E. D. (2013). Heritage conservation and regeneration of historic areas in Malaysia. *Procedia-Social and Behavioral Sciences, 105*, 418-428.
- Sanjida Ahmed Sinthia (2010) Sustainable revitalization of the traditional old urban mansion: Ruplal house, Conservation & Management of historic building (CMHB), Advanced International Training Programme, 2009/2010, Lund University-Sida
- Smith, R. A. (1999). Urban Redevelopment Authority: tourism and heritage conservation in Singapore'. *Cases in Singapore hospitality and tourism management, Singapore: Prentice Hall*.
- Stake, R. E. (1995). *The art of case study research*. Sage.
- The Daily Star (2009) 93 Heritage Buildings, Sites Listed for Preservation. *The Daily Star*, January 28, 2009.
- Truscott, M. C. (2014). Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance (1999). In *Encyclopedia of Global Archaeology* (pp. 1078-1082). Springer New York.
- Twaesh, Munshi Rahman Ali (1910) *Tawarikhe Dhaka (in Urdu)*. Translated by A. M. M. Sharfudding. Dhaka: Islamic Foundation Bangladesh
- Uda Holdings Berhad (2008). Introduction, Available at: www.udaholdings.com.my
- United Nations Educational, Scientific and Cultural Organisations (UNESCO). (1972). Paper presented at the 7th Session at General Conference, Convention Concerning the Protection of the World Cultural and Natural Heritage. New York: United Nations. Available at: <http://whc.unesco.org/archive/convention-en.pdf> [Accessed on 15 November 2010].
- VanSchendel, W. (2009). *A history of Bangladesh*. Cambridge University Press.

- Varol, G. (2013). *Identification of bungalow houses in north Cyprus* (Doctoral dissertation, Eastern Mediterranean University (EMU)).
- Wolff, S. (2004). Analysis of documents and records. *A companion to qualitative research*, 284-289.
- Yin, R. (2011). *Qualitative Research from Start to Finish*, New York & London.
- Yin, R. K. (2013). *Case study research: Design and methods*. Sage publications.
- Yung, E. H., & Chan, E. H. (2012). Implementation challenges to the adaptive reuse of heritage buildings: Towards the goals of sustainable, low carbon cities. *Habitat International*, 36(3), 352-361.
- Zig, Z. (2003). *Colonialism & Decolonialism. A Manual for indigenous Liberation in the 21st century*