Table of Contents

		Page
Ackn	owledgement	iii
Abstr	act (English)	v
Abstr	act (Thai)	vii
Table	of Contents	ix
List o	f Tables	xiii
List o	of Figures	xiv
List o	f Appendices	xix
List o	of Abbreviations	xx
Chap	eter 1: Introduction	
1.1	Emergence of Hue Traditional Garden House and Significance of the Challenge	1
1.2	Objectives	3
1.3	Scope of Research	4
1.4	Research Structure	4
1.5	Term Definitions	7
Chap	ter 2: Literature Review	
2.1	History of Hue	9
	2.1.1 A Review of Hue History	10
	2.1.2 Formation of Hue Citadel	<u>e</u> 12(
	2.1.3 Hue Traditional Garden Houses	16
2.2	The Legal Documents for Conservation and Protection of Hue Heritage	19
2.3	Previous Methodological Approaches	22

		Page
Chap	oter 3: Methodology	
3.1	Documentary Research	24
3.2	Making Base Map	24
3.3	Field Survey	24
3.4	Data Analysis	27
Chap	oter 4: Spatial Formation of Hue Citadel	
4.1	The Origin of Hue Citadel	31
	4.1.1 Hue Citadel during the Period of Nguyen Dynasty (1802-1945)	31
	4.1.2 Hue Citadel – From 1945 to Present	37
4.2	Street Pattern	39
4.3	Distribution of Facilities	42
4.4	Water System	44
Chap Area	oter 5: Spatial Formation and Transformation of HTGHs in the C	Citadel
5.1	Spatial Arrangement of HTGHs	47
	5.1.1 Layout	47
	5.1.2 Spatial Organization	48
5.2	Basic Classification of HTGHs and Their Distribution	51
5.3	Classification of HTGHs Based on Façade Elements and Designs	58 CYSIL
	5.3.1 Type 1 - House with wooden walls/ veranda/ one roof	62
	5.3.2 Type 2 - House with wooden walls/ veranda/ canopy	64
	5.3.3 Type 3 - House with wooden walls/ no veranda/ one roof	66
	5.3.4 Type 4 - House with brick walls/ veranda/ one roof	67
	5.3.5 Type 5 - House with brick wall/ veranda/ canopy	69

		Page
	5.3.6 Type 6 - House with brick walls/ no veranda/ one roof	75
	5.3.7 Type 7 - House with brick walls/ no veranda/ canopy	77
5.4	Lay Out of HTGHs	81
	5.4.1 Land Subdivision of HTGHs	84
	5.4.2 Arrangement between <i>Nha Chinh</i> and <i>Nha Phu</i>	87
	5.4.3 Orientation of <i>Nha Chinh</i>	89
	5.4.4 Gate and Fence	90
	5.4.5 Alley	92
	5.4.6 Symbols of Feng Shui: <i>Binh Phong</i> , <i>Be Can</i> , White Tiger and Green Dragon	92
	5.4.7 Size of the Land	94
	5.4.8 Family Members	95
5.5	Spatial Transformation	98
	5.5.1 House Type A-1 (HTGHs A03, A09, A16, B01, B15, B16, B22, C01, C02, C06, and C12)	109
	5.5.2 House Type A-2 (HTGHs B12 and B14)	114
	5.5.3 House Type B-2 (HTGH C04)	117
	5.5.4 House Type C-2 (HTGHs A06 and C10)	118
	5.5.5 House Type A-3 (HTGHs A01, A15, A17, A21, B05, B06, B07, C09, C14, C15, and C16)	120
	5.5.6 House Type B-3 (HTGHs A11, A14, A18, B04, B18, B20, and C05)	125
	5.5.7 House Type A-4 (HTGHs A08, A12, B09, B10, B11, B19, B21, C03, and C11)	129
	5.5.8 House Type B-4 (HTGHs A02, A19, and B08)	133
	5.5.9 House Type C-4 (HTGHs A04, A05, A07, A10, A13, A20, B02, B03, B13, B17, C07, C08, and C13)	136

	Page
5.6 Conclusion	144
Chapter 6: Preliminary Guidelines For Conservation of HTGE Contemporary Use	Is into
6.1 The Context of Conservation and Protection of Both Hue Heritage and HTGHs	147
6.2 Conflict between the Conservation and Adaptation for Contemporary Use of HTGHs under the Influence of Urbanization	149
6.3 Preliminary Guidelines for Conservation of HTGHs in the Citadel Area and Their Application for Contemporary Use	151
Chapter 7: Conclusions	
7.1 Summary of the Results	166
7.2 Recommendations for further studies	167
Reference	173
Appendices	179
Curriculum vitae	242

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่ Copyright[©] by Chiang Mai University All rights reserved

List of Tables

Table		Page
4-1	Typology of street system in the citadel area	41
4-2	Flooding areas of Hue (Source: Government of the Socialist Republic of Vietnam, 1998)	44
5-1	Basic classification of 91 surveyed HTGHs and their information	52
5-2	Classification of HTGHs in the citadel area based on the facade elements of Nha Chinh and its designs	59
5-3	Types of veranda roof of HTGHs in Type 5	74
5-4	Construction period of seven types of HTGHs	80
5-5	The parameters statistics in HTGHs	81
5-6	The facing orientation of <i>Nha Chinh</i> in surveyed HTGHs	89
5-7	Classification of HTGHs based on the directions and the causes of transformation	109
7-1	The statistics of population in Hue citadel and its four precincts from 2004 to 2006 (Source: Hue annual publication of population statistics)	171

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่ Copyright[©] by Chiang Mai University All rights reserved

List of Figures

Figu	Figure 31819	
2-1	The location of Hue City	10
2-2	The symbols of Feng Shui of Hue citadel	13
2-3	Front gate of the citadel	14
2-4	Location of the eight palaces of Nguyen Lords (1558-1777)	15
2-5	Location of palaces in Phu Xuan periods and Hue Citadel	16
2-6	Classification of Ruong house and Roi house based on the structure	17
	and the number of Gians	
2-7	Distribution of traditional houses in Hue city (After Tinh, 2005)	17
2-8	Nha Chinh and Nha Phu are arranged following Chinese letters	18
2-9	Three typical types of Hue Garden Houses (After Thuy, 1999)	19
2-10	Illustration of Zone 1, Zone 2, and heritage buildings in the citadel	20
	area of Hue	
2-11	Classification of Hoi An traditional houses	22
3-1	Map of Hue Citadel in 2000 and location of surveyed HTGHs	25
3-2	The present condition of a HTGH	26
3-3	Sketch of transformation in a surveyed house	27
3-4	Three main types of HTGHs	28
3-5	Basic information of a surveyed HTGH	30
3-6	Transformation of a surveyed HTGH	30
4-1	Hue Citadel in 1843 (Source: Nguyen's Cabinet)	32
4-2	Hue Citadel in 1885 (Source: Nhung Nguoi Ban Co Do Hue, 1933.	33
	No.12; Drawn by Nguyen Thu)	
4-3	Hue Citadel in 1909	34
4-4	Hue Citadel in the early 20 th century	35
4-5	Transformation of Hue Citadel by periods	36
1-6	Street system of Hue Citadel in 1930 and in 1970 (Source: Satoh 2004)	38

		Page
4-7	Hue Citadel in 1968	38
4-8	Street pattern in the citadel area	40
4-9	Distribution of facilities in the citadel area	43
4-10	Ngu Ha River and pool system in the citadel area	45
5-1	Site plan of a HTGH	48
5-2	Spatial organization of a HTGH	49
5-3	Basic Classification of HTGHs and Their Distribution	50
5-4	Distribution of 91 surveyed HTGHs in the citadel area	55
5-5	Distribution of HTGHs in the first area of Fig. 5-4	56
5-6	Distribution of HTGHs in the second area of Fig. 5-4	57
5-7	Distribution of HTGHs in the third area of Fig. 5-4	58
5-8	Distribution of seven Types of HTGHs in the citadel area	61
5-9	Distribution of HTGHs in Type 1	62
5-10	HTGHs in Type 1	64
5-11	Distribution of HTGHs in Type 2	65
5-12	HTGHs in Type 2	66
5-13	HTGH in Type 3	66
5-14	Distribution of HTGH in Type 3	67
5-15	HTGHs in Type 4	68
5-16	Distribution of HTGHs in Type 4	69
5-17	Distribution of HTGHs in Type 5	70
5-18	HTGHs in Type 5	73
5-19	Distribution of HTGHs in Type 6	76
5-20	HTGHs in type 6 \ Chiang \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	77
5-21	HTGHs of type 7	78
5-22	Distribution of HTGHs in Type 7	⁷⁸
5-23	Family structure of HTGH B09	85
5-24	The subdivision of land plot in HTGH B09	86
5-25	Category of the land subdivision	87
5-26	Arrangement between Nha Chinh and Nha Phy of HTGHs	87

xvi

		Page
5-27	The transformation of arrangement between Nha Chinh and Nha Phu	89
5-28	The choice of facing orientation of HTGHs	90
5-29	Positions of 77 gates of HTGHs in the citadel area	91
5-30	Examples of hedges and fences of HTGHs in the citadel area	92
5-31	Examples of Binh Phong and Be Can in HTGHs	93
5-32	Size of the land of 59 surveyed HTGHs	95
5-33	The family members of 59 surveyed HTGHs	96
5-34	59 surveyed HTGHs in the citadel area	99
5-35	Transformation of spatial organization in HTGH A03	110
5-36	Transformation of spatial organization in HTGH A09	111
5-37	The alley leads to the surgery building in HTGH B16 with <i>Nha</i>	112
	Chinh on the right side	
5-38	Transformation of spatial organization in HTGH B01	113
5-39	Transformation of spatial organization in HTGH B14	114
5-40	The left Nha Phu and right Nha Phu of HTGH B14	115
5-41	Transformation of spatial organization in HTGH B12	116
5-42	Transformation of spatial organization in HTGH C04	118
5-43	Transformation of spatial organization in HTGH A06	119
5-44	HTGH C16	120
5-45	HTGH A17	120
5-46	Transformation of spatial organization in HTGH B07	121
5-47	Transformation of spatial organization in HTGH A01	122
5-48	Transformation of spatial organization in HTGH B06	123
5-49	Phong Khach of HTGH B06	124
5-50	Phong Tho of HTGH B06	124
5-51	HTGH B04 S M U S M E S E M V	125
5-52	Transformation of spatial organization in HTGH A18	126
5-53	Phong Lam Viec of the owner in HTGH A18	127
5-54	Mezzanine in HTGH C05	127

xvii

		Page
5-55	Two-storied Nha Phus in HTGHs A11, A14, B18, and B20	128
5-56	Transformation of spatial organization in HTGH B09	130
5-57	Commercial space in HTGH B09	130
5-58	HTGH A12	131
5-59	HTGH B10	131
5-60	Transformation of spatial organization in HTGH B19	132
5-61	Transformation of spatial organization in HTGH B08	134
5-62	Transformation of spatial organization in HTGH A19	135
5-63	Transformation of spatial organization in HTGH B03	136
5-64	Transformation of spatial organization in HTGH A04	138
5-65	Transformation of spatial organization in HTGH A20	139
5-66	Physical transformation of HTGHs in the citadel area	141
5-67	Transformation process of HTGHs among nine types as in Fig. 5-66	143
6-1	Dwelling house located on the Enclosure Walls of the citadel	149
6-2	The condition of <i>Tron Cot</i> in HTGHs	150
6-3	The newly built enclosed room in a HTGH	150
6-4	Tourist routes in the citadel area	154
6-5	Distribution of HTGHs along Le Thanh Ton St	155
6-6	Green hedge should be maintained in HTGHs	157
6-7	Green hedge created by the combination between Che Tau and grille	158
6-8	Binh Phong and Be Can should be maintained and restored	159
6-9	The use of natural and local materials such as stone, wood, and	160
	greenery should be encouraged in constructions of HTGHs	
6-10	The use of industrial materials such as concrete and iron should be	160
	restricted in construction of HTGHs	
6-11	Roof of HTGHs should be tiled with <i>Liet</i>	161
6-12	Fence of HTGHs should be equipped with natural material (Green	161
	hedge)	
6-13	Recommendation of arrangement in Nha Chinh	161
6-14	Recommendation of arrangement in Nha Chinh for clan worship	161

xviii

		Page
6-15	New two-storied structure for flood protection in HTGH B03 has	163
	broken the emphasis representative of Nha Chinh	
6-16	Newly built two-storied Nha Phu hided by Nha Chinh and greenery	164
	in HTGH A19	
6-17	Business activities in the front space of Nha Chinh should be	164
	restricted	
6-18	Column without Da Tang	165
6-19	Column with Da Tang	165
6-20	Tron Cot in veranda columns	165
7-1	Hue after the flood in 2006 (Source: www.TTVNOL.com)	
7-2	Duckweeds can block the flow of water in Ngu Ha River	
7-3	Touring cars should be restricted to park in the citadel area	
7-4	Hang Ngang Street in Hanoi ancient town	170

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่ Copyright[©] by Chiang Mai University All rights reserved

List of Appendices

	Appendix	Author	Page
1.1	Law on "The protection and Use of Historic and Cultural Vestiges and Scenic Spots" on 31 March	Council of Stage of the Socialist	179
1.2	1984 Decision No. 166/1999/QD-TTg Ratifying the Amendment of the Overall Planning of Hue City	Republic of Vietnam The Prime Minister of Vietnamese	185
1.3	up to 2020 Law on Cultural Heritage – No. 28/2001/QH10	Government The National Assembly of	192
1.4	Decision n. 624/1998/QD/UBND/12 June 1998- Principal features of the provisional regulations	Vietnam The City of Hue Popular Committee	211
1.5	The Venice Charter for Conservation and Restoration of Monuments and Sites (Venice, 1964)	ICOMOS	213
1.6	International Charter on the Built Vernacular Heritage (Mexico, 1999)	ICOMOS	217
1.7	International Cultural Tourism Charter (Mexico, 1999)	ICOMOS	220
1.8	Principles for the Recording of Monuments, Groups of Buildings and Sites (Bulgaria, 1996)	ICOMOS	227
Copyr	Interview Form Data of Traditional Houses in Hue Citadel Area in 1997	An, H. H.	234
A [4]	Genealogy of Nguyen Dynasty		241

Abbreviations

HTGHs = Hue Traditional Garden Houses

HTHs = Hue Traditional Houses

HGHs = Hue Garden Houses

G = Phong Khach (Guest room)

L = Phong Sinh Hoat Chung (Living room)

W = Phong Tho (Worship space)

B = Phong Ngu (Bedroom)

K = Phong Bep (Kitchen)

D = Phong An (Dining room)

Ba/Wc = Phong Tam/Phong Ve Sinh (Bathroom/Toilet)

R = Phong Thu Gian (Recreation space)

Wo = *Phong Lam Viec* (Working/Studying room)

S = Kho (Storage)

T = *Hien* (Terrace/Veranda)

Wa = Washing space

V = Vacant space

C = Space for business purpose

Y = Yard

BP = Binh Phong (Masonry screen)

BC = Be Can (Basin)

BH = White Tiger

TL = Green Dragon