

ARCHITECTURE AT THE ENDS OF THE WORLD: KOREAN AND
WESTERN ARCHITECTURAL TRADITIONS IN COMPARISON

A THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF SOCIAL SCIENCES OF
MIDDLE EAST TECHNICAL UNIVERSITY



BY
JI SUK JUNG

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF MASTER OF ARTS
IN
THE DEPARTMENT OF ARCHITECTURAL HISTORY

APRIL 2019

Approval of the Graduate School of Social Sciences

Prof. Dr. Tülin Gençöz
Director

I certify that this thesis satisfies all the requirements as a thesis for the degree of Master of Science/Arts / Doctor of Philosophy.

Prof. Dr. Ali Uzay Peker
Head of Department

This is to certify that we have read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Arts.

Prof. Dr. Ali Uzay Peker
Supervisor

Examining Committee Members

Prof. Dr. Suna Güven (METU, AH) _____

Prof. Dr. Ali Uzay Peker (METU, AH) _____

Prof. Dr. Neşe Gürallar (Gazi Uni., MİM) _____



I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Name, Last Name : JI SUK JUNG

Signature :

ABSTRACT

ARCHITECTURE AT THE ENDS OF THE WORLD: KOREAN AND WESTERN ARCHITECTURAL TRADITIONS IN COMPARISON

JUNG, Ji Suk

M.A., Department of Architectural History

Supervisor : Prof. Dr. Ali Uzay PEKER

April 2019, 281 pages

Architecture is not simply building. It has been an intellectual effort from the ancient period onwards. Western architecture is defined by a variety of knowledge systems and disciplines. The architectural approach in Korea and on the whole in South Eastern Asia is totally different. The principles of building became accumulated, but they have not been subject to independent studies. Architecture was a part of the practices of the belief and philosophical systems and their manners and customs. In Korea, there were nobles and monks who were well-versed in the ideas and theories of domestic architecture, but their intellectual tradition have not been institutionalized in specialized areas such as done in the West. At the same time, Western architecture tends to be based on ideals of form in relation to changing materials, construction technologies, mechanic production and industrialization. In order to examine the principles of Korean traditional architecture, there needs to be known how Confucianism, Taoism and Buddhists thoughts are reflected in architecture since these philosophical systems shaped architectural approaches. This thesis aims to survey Korean Architecture from the perspective of local traditions of building and conceptualization.

Keywords: Principle, Tradition, Conceptualization, Korean Architecture

ÖZ

DÜNYANIN İKİ UCUNDA: BATI MİMARLIK GELENEĞİ İLE KARŞILAŞTIRMALI OLARAK GELENEKSEL KORE MİMARLIĞI

JUNG, Ji Suk

Yüksek Lisans, Mimarlık Tarihi Bölümü
Tez Yöneticisi : Prof. Dr. Ali Uzay PEKER

Nisan 2019, 281 sayfa

Mimarlık sadece inşa etme sanatı olarak görülemez. Antik dönemden itibaren asıl olarak düşünsel bir çabanın ürünü olmuştur. Batı mimarisi, çeşitli bilgi sistemleri ve disiplinler tarafından tanımlanır. Kore ve genelde Güney Doğu Asya'da mimari yaklaşım tamamen farklıdır. İnşaat ilkeleri zamanla birikim göstermiş, ancak bağımsız çalışmalara konu olmamıştır. Mimarlık inanç ve felsefe sistemlerinin uygulamaları ile örf ve geleneklerinin bir parçasıydı. Kore'de konut mimarisi hakkındaki fikir ve kuramlara hakim soylular ve din adamları bulunuyordu. Ancak onların düşün geleneği Batı'da olduğu gibi uzmanlık alanları içinde kurumsallaştırılmamıştı. Aynı zamanda, Batı mimarisi, değişen malzemeler, inşaat teknolojileri, mekanik üretim ve sanayileşme ile ilişki içindeki biçim ideallerine dayanır. Kore geleneksel mimarisinin ilkelerini incelemek için ise Konfüçyüsçülük, Taoizm ve Budist düşüncelerinin mimarlığa nasıl yansıdığına anlaşılması gerekir, çünkü bu felsefi istemler mimari yaklaşımları şekillendirmiştir. Bu tez, Kore Mimarisini yerel yapı gelenekleri ve kavramsallaştırma perspektifinden incelemeyi amaçlamaktadır.

Anahtar Kelimeler: İlke, Gelenek, Kavramsallaştırma, Kore Mimarisi

To My Parents

ACKNOWLEDGMENTS

I would like to express my deepest gratitude to my supervisor Prof. Dr. Ali Uzay Peker, for his guidance and encouragement during my study.

I would like to express my gratitude to the dear members of the examining committee; Prof. Dr. Suna Güven, Prof. Dr. Ali Uzay Peker and Prof. Dr. Neşe Gürallar for their precious comments and enlightenment.

I am grateful to my parents in Korea for their love and incessant support for this study.

I am indebted to my dear friends who I met mostly in Ankara and colleagues from the Embassy of the Republic of Korea in Turkey for their valuable moral support.

TABLE OF CONTENTS

PLAGIARISM.....	iii
ABSTRACT	iv
ÖZ.....	v
ACKNOWLEDGMENTS.....	vii
TABLE OF CONTENTS	viii
LIST OF FIGURES.....	xii
CHAPTER	
1. INTRODUCTION.....	1
1.1 Literary Survey	2
1.2 Contrasting Concepts of Architecture in East and West.....	6
1.2.1 The Difference Between Architecture and Construction.....	6
1.2.2 Academic Knowledge Versus Empirical Wisdom	10
1.2.3 Monism Versus Dualism.....	14
1.2.4 Artistic Objects versus Tools of Living.....	17
1.2.5 Visual Perception versus Aesthetic Wholeness.....	21
2. EXPERIENCE AND AWARENESS.....	25
2.1 Sight Versus Body Sense.....	25
2.2 Form Versus Material.....	32
2.3 Illumination and Sunlight.....	36
2.4 The Sky and Land	40
2.5 Geometry of Life.....	45
2.6 The Vertical Architecture versus Horizontal Architecture	47
2.7 Walls and Floors.....	52
2.8 Fireplace and Ondol.....	57
2.9 Light and Shadow	61

3. HUMAN AND ARCHITECTURE	64
3.1 Location of Experience	64
3.2 Relationship Between Painting and Architecture	69
3.3 Façade of Korean Architecture	73
3.4 Central Subject and Fluid Subject.....	77
3.5 Picturesque and Sequence of Scenery.....	79
3.6 No Human in Korean Architecture	85
4. CONCEPT OF SPACE	87
4.1 Concept of Space in West and East.....	87
4.2 Site and Teo.....	89
4.3 Poché and Kan	92
4.4 Madang	96
4.5 Void Versus Yeobeak	98
4.6 Oil Painting and Ink-and-Wash Painting	103
5. INSIDE AND OUTSIDE	106
5.1 Difference of Inside and Outside	106
5.2 Overlapping of Inside and Outside	107
5.3 Public Space and Private Space	109
5.4 Interior.....	112
5.5 Courtyard and Madang	117
5.6 Madang and Maru	121
5.7 Shelter and <i>Jeongja</i>	124
5.8 Picture Frame and Chagyeong	128
5.9 Window and Changmoon.....	134
6. SENSE OF BOUNDARY	137
6.1 Ambiguity of Boundary	137
6.2 Boundary and Area	141
6.3 Gestalt and Yin & Yang.....	143
6.4 Transparency and Interpenetration of Space.....	145
6.5 Threshold and Munjibang.....	148
6.6 Boundary Components and Boundary Space	150
6.7 Eave and Choema	153

6.8 Corridor and Toenmaru	155
6.9 Livingroom and Maru	158
6.10 Wall and Dam.....	160
6.11 Temple's Toran	163
7. UNIT AND GROUP.....	166
7.1 Specialization of Architectural Space	166
7.2 Part and Whole.....	170
7.3 Alphabet and Chinese Character	172
7.4 Room and Bang.....	174
7.5 Composition and Weaving	179
7.6 Chess and (the game of) Go.....	184
7.7 Type and Process.....	185
7.8 Symmetry and Asymmetry.....	189
7.9 Longer Side and Shorter Side	191
7.10 Depth and Kyeo	197
7.11 Axis of Sight and Mind	200
7.12 Relation between Architecture and City	203
8. ARCHITECTURE AND NATURE.....	207
8.1 Difference in Concept of Nature	207
8.2 Relationship between Korean Architecture and Nature	212
8.3 Versailles and Changdeokgung Palace.....	215
8.4 Korean Traditional Mountain Temples	217
8.5 Ideal Order and Nature.....	219
8.6 Beauty of Nature	222
8.7 Roofline of Korean Architecture.....	224
8.8 Landscape and Scenery.....	225
8.9 Difference Between Korean, Chinese and Japanese Garden	231
8.10 Imitation of Nature.....	234
9. SYMBOL AND COMMUNICATION.....	239
9.1 Monument and Background.....	239
9.2 Eternity and Circularity.....	243
9.3 Visual Symbol and Temporal Symbol.....	246

9.4 Appropriateness and Example.....	248
9.5 Character and Signboard.....	251
10. CONCLUSION	256
10.1 The Product of Different Recognition Systems	256
BIBLIOGRAPHY	258
APPENDICES	
APPENDIX A: TURKISH SUMMARY / TÜRKÇE ÖZET	266
APPENDIX B: TEZ İZİN FORMU/THESIS PERMISSION FORM.....	281



LIST OF FIGURES

Figure 1 Kim Hong Do, Kiwaigi (building the roof)	8
Figure 2 Stairway of Byeongsan Seowon in Pungchun-Myeon, Andong City.....	13
Figure 3 A General View of Mukgye Seowon with its Natural Background, Andong City	19
Figure 4 Dosan Seodang with its Pond	24
Figure 5 Plato’s Allegory of the Cave, Painted by Cornelis Corneliszoon Van Haarlem.....	26
Figure 6 Dokseoyegado.....	27
Figure 7 A trip to Soswewon in Damyang	29
Figure 8 Staircase of Laurentian Library in Florence.....	31
Figure 9 Stairway of Byeongsan Seowon in Pungchun-Myeon, Andong City.....	32
Figure 10 Villa Badoer by Palladio Front View.....	35
Figure 11 Bongjeongsa Temple Side View	36
Figure 12 Pantheon’s Ceiling.....	37
Figure 13 Interior de la Capilla de Ronchamp by Le Corbusier	38
Figure 14 Madang and Deachung of Seobeakdang in Yangdong	39
Figure 15 Pyramids in Egypt, Accessed 6 Aug 2018	41
Figure 16 Parthenon on the Acropolis	43
Figure 17 Korean Traditional Agricultural Village in Suncheon.....	44
Figure 18 Gyeongbokgung Palace in Seoul	48
Figure 19 A place for Studying and Resting are Horizontally Connected in Hakguje (학구제) in Yugok Town.....	49
Figure 20 Barcelona Pavilion by Mies Van der Rohe	51
Figure 21 Columns of Temple of Olympia Zeus in Athens.....	53
Figure 22 Short and White Columns Being Used in the Beomesa Temple in Busan	54
Figure 23 Nu-maru of Buseoksa Temple in Yeongju.....	56

Figure 24 Ondol of Lee Hwa Jung’s Residence in Chungbuk.....	57
Figure 25 Schematic Drawing of Ondol System.....	59
Figure 26 Adolf Loos’s Villa Muller in Prague	60
Figure 27 Shadows in Madang of Bongjeongsa Temple in Youngsan-myeon	61
Figure 28 Primitive Hut in the History of art and Architecture.....	65
Figure 29 Two Subjects of Experience in Jukseoru (1738) Painted by Jeongseon	68
Figure 30 Villa Rotunda by Palladio	69
Figure 31 Boullée’s National Library (1785) Perspective Drawing.....	70
Figure 32 Junghwajeon in Deoksugun Palace Built in Joseon Dynasty in Multiple Perspectives	72
Figure 33 Palazzo Medici Riccardi by Michelozzo di Bartolommeo in 15 th Century...	74
Figure 34 Irregular Shape of Wooden Columns of Gesimsa Yosache Temple Built in 1350.....	75
Figure 35 Façade of Jeongyodang Lecture hall of Dosan Seodang Built in 1575	77
Figure 36 Palazzo Piccolomini Garden in Pienza in 1459	78
Figure 37 Lion Grove Garden in Suzhou in China, Built in 1342	79
Figure 38 The Garden at Stourhead, Built in 1780.....	81
Figure 39 From the Staircase of Buseoksa to Murangsujeon, Built in 14 th Century	83
Figure 40 Plan of Buseoksa, Built in 14 th Century	84
Figure 41 Kepler’s Analogy of the Five Solids and the Five Worlds.....	87
Figure 42 Map of the Sky and Earth, Created in 1851.....	88
Figure 43 Confucian Hall in Yandong Village, Created in 1851.....	91
Figure 44 Plan of Palais D’Etudes as an Example of Ecole de Beaux Arts Architecture	93
Figure 45 Sebyeongwan in Tongyong	95
Figure 46 Viewpoint of Maru Toward Madang in Hanok.....	97
Figure 47 Beauty of Korean Void Exhibition.....	100
Figure 48 Beauty of Korean Void Exhibition 1	100
Figure 49 Abstract Art of Beauty of Korean Void Exhibition.....	102
Figure 50 Cheongpunggye Painted by Jeongseon in 17 th Century	103
Figure 51 Mona Lisa Painted by Leonardo Da Vinci in 15 th Century.....	105
Figure 52 Yeongyeongdang from Changdeokgung Palace, Built in 15 th Century.....	108

Figure 53 Place de la Concorde, Built in 18 th Century	110
Figure 54 Byeongsan Sewon, Built in 16 th Century.....	111
Figure 55 Patio de los Arrayanes, Built in 13 th Century	113
Figure 56 Villa Muller in Czech Republic by Adolf Loos, Built in 1930	115
Figure 57 Chunhyodang, a Traditional Korean House, Built in 17 th Century	116
Figure 58 The Layout of a Chinese Siheyuan (Quadrangle), Built in During the Yuan Dynasty	118
Figure 59 The Layout of a Japanese Matchiya House (Traditional Japanese Residence), Built in 16 th -17 th Century.....	119
Figure 60 Inner Madang of Sarangche of Yangdong Village's Hanok, Built in the 16 th Century.....	121
Figure 61 Daechungmaru in Hanok	122
Figure 62 L'Abri du Pauvre Painted by Claude-Nicolas Ledox, 19 th Century.....	125
Figure 63 Myeonyangjeon Jungja in Damyang, Built in 1533	126
Figure 64 Gyeong Jungja in Dokrakdang Complex, Built in 16 th Century.....	127
Figure 65 Picture Frame of Villa Savoye, Built in 1929	128
Figure 66 Lingering Garden in Suzhou in China, Built in 18 th Century.....	130
Figure 67 View from Manderu of Byeongsan Seowon Lecture Hall, Built in 16 th Century	131
Figure 68 No Distinction Between Windows and Doors in Asan Mang's Residence, Built in 14 th Century.....	135
Figure 69 Ringstrasse of Vienna, Austria in 1860.....	138
Figure 70 Ambiguity of Boundary in Tongdosa Temple Complex in Namyang, Built in 17 th Century.....	139
Figure 71 Dam (walled boundary) of Changdeokgung Palace in Nakseonjae.....	142
Figure 72 Yin and Yang Diagram by the ShouyuLiang Studies.....	144
Figure 73 Transparency: Literal and Phenomenal, Bauhaus	146
Figure 74 Transparency in Yeongyeongdang, Changdeokgung Palace.....	147
Figure 75 Munjibang (Threshold) at Changdeokgung Palace	149
Figure 76 Courtyard Ceremony at Seongeup Traditional Village in Jeju Island	152
Figure 77 The Fall of Fouquet, This is Versailles	153
Figure 78 Traditional Cheoma in Hanok Village in Seoul.....	154

Figure 79 Robie House by Frank Lloyd Wright.....	155
Figure 80 Toenmaru of Buddhist Temple in Daegu.....	157
Figure 81 The Hallway of the Stata Centre at MIT	158
Figure 82 Yeongeongdang Lecture Hall in Nakseonjae.....	160
Figure 83 Low Dam of Inner Room of Yunjung House in Nonsan of Chungnam.....	161
Figure 84 Cut Dam of Sosewon in Yehang of Jeonnam	163
Figure 85 Iljumun Gate of Seonamsa in Suncheon	164
Figure 86 Plan of Louvre in Paris.....	167
Figure 87 Plan of the Forbidden City in China.....	168
Figure 88 Plan of Gyeongbokgung Palace in Korea.....	169
Figure 89 Façade of Santa Maria Novella in Florence by Alberti.....	171
Figure 90 Dosan Seodang (lecture hall) complex in Andong.....	172
Figure 91 Traditional Chinese Living Room (Wasil) in Beijing.....	175
Figure 92 Schematic Drawing of Hanok’s Munbang	176
Figure 93 Madang of Space Residence (공간사옥) by Kim Su Geun.....	178
Figure 94 Variations in Space Created by Kan in Simsujeong Pavilion in the Yangdong Village.....	179
Figure 95 Marche by Jean Nicolas Nicolas Durand in 1813	180
Figure 96 Plan of Seongyojang Pavilion in Gangreung, Korea in 17 th Century	183
Figure 97 Exterior of Orsay Museum.....	187
Figure 98 Interior Which is Different From its Exterior, Orsay Museum	188
Figure 99 A Primitive Temple by Le Corbusier.....	192
Figure 100 Buseoksa Temple’s Beom Jong Ru Bell Tower in Yeongju.....	193
Figure 101 Museum of Royal Lee Family of Joseon Dynasty	196
Figure 102 A Sense of Depth in Gothic Cathedral, Notre Dame in France	198
Figure 103 A Sense of Depth in Seongyojang Pavilion in Gangwondo Province in Korea.....	199
Figure 104 Vista of the Ancient Rome’s Forum	201
Figure 105 Stairs of Youngmunsa Temple in Yang Pyeong	203
Figure 106 An Example of Building Complex as a Small Urban, Sukcheonjeado by Pil Gyo Han in 18 th Century.....	204

Figure 107 An Example of Korean Map After Modernizationn, The Great South Gate Market (남대문시장) in 20 th Century, Seoul.....	206
Figure 108 Wanderer Uber dem Nebelmeer by Caspar David Friedrich in 1818	209
Figure 109 Ingokyugeo (인곡유거), Human in the Nature in the East, Painted by Jung Sun in 17 th Century.....	211
Figure 110 The Jeongja in the Nature, Choganjeong Pavilion (초간정) in Yecheon, Built in 1582 by Muh Hea Kwon.....	214
Figure 111 The Garden of Versailles Built in 17 th Century.....	215
Figure 112 Back Garden of Changdeokgung Palace Rebuilt in 17 th Century.....	216
Figure 113 Seonamsa Temple in Suncheon, Built in 6 th by King Hyunggang Century then Rebuilt in 17 th Century by King Hyunjong	218
Figure 114 Plan of Jongmyo Shrine, Built in 14 th Century by King Sung Gye Lee....	220
Figure 115 Plan of Sosewon, Built in 16 th Century by San Bo Yang	222
Figure 116 Natural Wodden Beams and Columns are Used in Gesimsa Temple, Built in 14 th Century by Chungsook.....	223
Figure 117 Gyeongbokgung Palace With Mountainous Background, Built in 1395 by King TAEJO.....	225
Figure 118 Garden of the Villa d’Este in Tivoli, Built in 1550 by the Mannerist Architect Pirro Ligorio for the Governor Cardinal Ippolito II d’Este	229
Figure 119 Juhapnu of Changdeokgung Palace’s Back Garden, Built in 1776 by King Jungjo.....	230
Figure 120 Chinese Traditional Garden in Suhang.....	231
Figure 121 Japanese Traditional Garden of Ryoyanji Temple in Kyoto.....	232
Figure 122 Korean Traditional Garden of Changdeokgung Palace in Seoul	233
Figure 123 Pencil and Wash Sketch of St. Sauveur, Cean by John Ruskin in 1848	236
Figure 124 Ingokyugeo (인곡유거), Human in the Nature in the East, Painted by Jung Sun in 17 th Century.....	237
Figure 125 Ancient Korean Royal Tomb, Samreung in Gyeongju, approximately Built in 13 th Century During Shirla Period.....	241

Figure 126 Coronation Ceremony at Geunjeongjung Madang of Gyeongbokgung Palace in Seoul	242
Figure 127 Parthenon on the Acropolis	244
Figure 128 Jongmyo Shrine.....	245
Figure 129 The Process and Rituals Explained in Jongmyo Shrine (종묘친제규제도설병풍)	249
Figure 130 The Signature of Architecture: Compositional Ideas in the Theory of Profiles	252
Figure 131 The Signboard of Juhapru of Changdeokgung Palace.....	254



CHAPTER 1

INTRODUCTION

In recent years, criticisms have been directed to megalithic modern architecture. Italian philosopher, Gianni Vattimo asserted in *'The End of Modernity'* that modernism is an axis of nihilism that has lost its focus and that it is a weak ontology. He identifies that architecture is now a peripheral background, and presents it as a model of ineffective thinking and weakness in the times of nihilism.¹

Poetically inhabited is the created space, and what truly exists is not the center of opposition to the surroundings, but its existence is in the background of inconspicuous marginal backgrounds.²

Vattimo says that architecture is a weak entity which is not made to stand on its own but exists only as a memory. It is not a monument itself but a background of experience.³ Spanish architect, Ignasi de Sola-Morales Rubio recognizes Vattimo's ontological insight as an aesthetic situation facing modern culture and architecture. In the times of nihilism, architecture has lost its centre, so we have no choice but to build houses in the sky.⁴ In this situation, he conceives architecture as a "decoration" that transforms

¹ Neil Leach, "Hans-Georg Gadamer's The Ontological Foundation of the Occasional and the Decorative", *Rethinking Architecture: A Reader in Cultural Theory*, London, Routledge, 1997, 133-135.

² Gianni Vattimo, "Ornament/Monument", *The End of Modernity*, Baltimore, The Johns Hopkins University Press, 1991, 81-82.

³ Vattimo, "Ornament...", 86.

⁴ Ignasi de Sola-Morales Rubio, *Differences*, Cambridge, The MIT Press, 1996, 57-59.

aesthetic experiences into momentary events.⁵ These recent remarks on Western architecture lead us to compare millennia old Korean and Western architectural traditions with the aim to create an awareness of the lost values of pre-modern built environment which are still either this or that way extant in Korea.

There are scholarly studies about tradition of both Korean and Western architecture. However, it is difficult to find a comparative study on Korean and Western architectural traditions. The reason why it is difficult to compare Korean traditional architecture with Western architecture is that it is difficult for scholars to be fluent in both of the subjects. Furthermore, it is also challenging to have profound understanding of both beyond superficial knowledge. Our aim is to build a fresh values platform that may contribute to answering the present architectural predicaments rather than to build a dichotomized scholarly view point and exclusiveness.

1.1 Literary Survey

Professor Kim Yong-ok is a philosopher, doctor and artist, who extensively published on the consciousness problematic of our times. From his youth, his study had been insisting that the East and the West were inevitably tied. In his book, *How to do Oriental Studies* (*동양학 어떻게 할 것인가*), he redefined the principles of Korean classics. It is a study on the direction of Oriental studies and on the concepts of space and time in translation and conversion.

Beauty and Ugliness (*아름다움과 추함*), another book of Kim Yong-ok is accompanied by a subtitle: “*My Philosophy Theater Theory, as a Chief of the Extreme Semiotic Movement* (나의 기철학적 연극론, 극단 미추운동의 서장으로)”. As for the title and subtitle, this book can be regarded as a book related to aesthetics in which his artistic theory is expressed. Obviously, this book is not just a book on aesthetics. It conveys his in-depth perspective on art. But before that, this book is

⁵ Rubio, *Differences*, 70-71.

attempting a more theoretical inquiry to reveal the anthropological meaning of art. Rather than a study on the theory of aesthetics it is an epistemological book about what we regard as beauty.

What is woman (여자란 무엇인가), a book of Kim Yong-ok used the word woman in order to examine the Oriental and Western views of femininity, and calls for criticism and revision of the concept of women and men according to universal Western standards that we generally know. This book has influenced many readers of Korean society up to now, after 30 years of its first publication, and the reason why the book's vitality has been maintained up to now is that a fundamental approach to gender equality was possible. The key to its fundamental approach is the biological approach like in the book of Richard Dawkins. This fundamental approach is also used for comparing and contrasting Oriental and Western philosophy and the way of thinking.

Yunhe Lee's *Principles of Chinese Classical Architecture (중국 고전건축의 원리)*, deals with the historical causes of development of wooden structures in Far East and the tradition and culture of Chinese architecture. It presents a range of data explaining the character and philosophy of the Far Eastern architecture through the design theory of Chinese classical architecture. It is a new analysis on Chinese architecture within modern architectural theory. Yunhe Lee (1930-1995), who has professed in both Eastern and Western architectural theory and practice, wrote the principles and characteristics of Chinese classical architecture from the standpoint of a practicing architect. Also Zhangpa's *The Orient, West and Beauty (동양과 서양, 그리고 미학)* convincingly suggests the hope that the difference of the aesthetics of the East and the West can be settled from a comparative cultural viewpoint, and the clue for convergence can be found in the right perception of the differences.

Yu Sup Go is a scholar who has mastered Korean history of art and architecture and who is highly regarded as a scholar who pioneered Korean history of art and architecture for the first time. Yu Sup Go's *Korean History of Architecture and Art (한국 건축 미술사 초고)*, talks about Korean traditional architecture of Gorye and

Joseon period which were the periods of original Korean architecture sprung after fully adapting Confucianism in Korean social systems. Yanagi Muneyoshi (1889-1961) is a Japanese scholar who examined the beauty of the overall art of the Joseon Period and characteristics of each genre. His book *Art of Joseon (조선의 미술)*, was translated by Yu Sup Go is his 9th book of the 22 volumes of Yanagi Muneyoshi collection. It is meaningful in that it is a record of the Japanese scholar who made the most conscientious statement about Korea in the past days. It contains most of the articles related to the Joseon period, providing useful information for understanding the Joseon dynasty and the art of Yanagi's Joseon view.

Hyun Jun Yu (유현준), *Modernism: Hybrid of Eastern and Western Culture (모더니즘: 동서양 문화의 하이브리드)* illuminates the modernism by comparing the Eastern and the Western architectural history. Analyzing the architectural culture and history, the book examines the nature of East and West and explains the cultural and intellectual exchanges between them. This book deals with the process of evolution of culture from the beginning to the era of modernism, viewing the works of Le Corbusier and Mies van der Rohe as hybrid creations under the influence of Far East Asian culture.

Young Geol Kwon's *Creating Space in Korea, China and Japan (한중일의 공간 조영)* clarifies the commonality and differentiation in the spatial mentality ('spirit' and 'method') through the mutual comparison of the traditional spaces of Korea, China and Japan. The selected representative architectural examples of Korea, China and Japan for comparative analysis is formed by a combination of natural/human environment, social system and technology. Comparisons of culture of Korea, China, and Japan are conducted through religion, philosophy, arts, music and shelter. It is based on architecture, aesthetics, literature and arts to investigate the cultural differences of these three countries. Korea, China and Japan have differences in the formative principles of traditional spaces.

Tanajaki Junichiro is called the national writer of Japan. In *Praise of Sacred Space* (음예공간예찬), he explains that the space in which the layman is stuck is as if Japanese traditional miso soup. He says that the Japanese tradition is not an object but a pattern and contrast of the objects created by another object. His work explains well especially the architecture and landscape of the city of Kyoto with the precise philosophy behind it.

The book named *Architecture of Soo Geun Kim: a New ideology of Korean Architecture* (김수근 건축론: 한국 건축의 새로운 이념형) written by In Ha Jung, analyses Korean architecture with the original history and philosophy of Korea in its natural environment. Bong Yeol Kim (김봉렬), in his book of *Place Where I Want to Go and Stay 2* (가보고 싶은 곳 머물고 싶은 곳 2) claims that there are architectural masterpieces in Korea as beautiful as Tower of Pisa or Palace of Versailles. This book is an 'old-fashioned explorer' of Prof. Dr. Bong Yeol Kim. Looking back at the geographical, doctrinal, and general meanings hidden in the beauty of the old Korean temple, the book reaffirms the true values of Korean architecture. The book contains intellectual information to fulfil the history and spirit of Korean traditional temple architecture. Similarly, Sun Woo Choi (최순우), in his book of *Standing beside the Murangsujeon Column* (무량수전 배흘림 기둥에 기대서서), compiles over 120 chapters which depict the beauty of paintings, sculptures, architecture and other aspects of Korean art. Since its release in 1994, more than 500,000 copies haven been published and have become a steady seller. In *Buseoksa Temple* (부석사), Bo Hyun Kim, Byung sun Bea and Do Hwa Park explain detailed information about the Korean traditional Buddhist temples through the example of Buseoksa Temple.

One of the best experiential theories about architectural aesthetics is written by Gyeong Su Kim in his book *A Walk of Architectural Aesthetics* (건축 미학 산책). This enhances understanding and broadens the scope of architectural thinking by combining

themes such as East and West, past and present, architecture and other disciplines, academic themes and everyday themes, advanced architecture and everyday environments in cross-sections.

This thesis is based on a comprehensive reading of the sources outlined up to here. Our understanding of Korean architecture is mainly based on them and on our personal encounters with Korean architecture in situ. I also became acquainted with Western architectural tradition during my undergraduate and graduate education in architecture and architectural history at METU. This thesis is an attempt to reconcile both and develop reflections that would be useful to understand Eastern and Western architectural traditions more profoundly.

1.2 Contrasting Concepts of Architecture in East and West

1.2.1 The Difference Between Architecture and Construction

Western architecture is defined by a variety of knowledge systems and disciplines.⁶ Architecture is not a simply building. It is an intellectual work starting from ancient period, a Roman architect, Vitruvius describes that architects must be fluent in various disciplines such as mathematics, humanities, astronomy and medicine.⁷

The architectural approach in the East is totally different. Reyner Banham, an English architectural historian and critic says, “Architecture is one of many ways to approach the design of building. Only the present Western civilization is holding cultural hegemony.”⁸

⁶ Christian Norberg-Schulz, *Intentions in Architecture*, MIT Press, 1966, 209-213.

⁷ Vitruvius Pollio, *Vitruvius: the ten books on architecture*. Dover publication (translated by M.H. Morgan, 1960), 5-13.

⁸ Reyner Banham, *The Architecture of the Well-Tempered Environment*, London: Architectural Press & The University of Chicago press, 1969, 265-270.

Alfred North Whitehead says “There was no Western philosophy in the East but there is something similar.”⁹

The deep wisdom and principles of building houses in the East have accumulated, but they have not been developed into independent studies like in the West.¹⁰ In Asia, architecture was a part of practices of the Confucian political system which included manners and customs.¹¹ In Korea, there were nobles and monks who were well-versed in the ideas and theories of domestic architecture, but their intellectual tradition have not been institutionalized as specialized areas such as done in West.¹²

Yeongjo (營造) and *yeonggeon* (營建) mean the acts of building or construction and management of it. Therefore, *yeongjo* and *yeonggeon* emphasize not only the object of architecture but the management and operation of residing within. *Yeongjo* and *yeonggeon* refer to a complete cycle of life conforming to the order of the universe, reflecting Confucianism and Taoist tradition of Korea.¹³

In Korean, the word ‘home (집)’ not only refers to the physical structures of house but also refers to people through the words ‘household (집안)’ or ‘getting married (시집)’, suggesting that Koreans put more emphasis on the life inside home.

⁹ Martin Pawley, preface, *Theory and Design in the Second Machine Age*, Hoboken: Wiley-Blackwell, 1990, x.

¹⁰ Toshiro Inaji, *The Garden as Architecture, Form and Spirit in the Gardens of Japan, China and Korea*, trans by Pamela Virgilio, Tokyo: Sankaido, 1990, 93.

¹¹ Inaji, *The Garden...*, 120-128.

¹² Inaji, *The Garden...*, 131-136.

¹³ Young Geol Kwon (권영걸), *Creating Space in Korea, China and Japan (한중일의 공간 조영)*, Seoul: Kukje, 2005, 31-32.



Figure 1 Kim Hong Do, Kiwaigi (building the roof)

The word ‘architecture’ came to Korea in the late 19th century when Japan translated ‘architecture’ into Japanese.¹⁴ When the western word ‘architecture’ came to Korea through Japan, the Korean society did not have a chance to digest its original meaning but adopted it as a new technology.¹⁵ In this process, the concept of traditional ‘*yeongjo*’ has been lost. At present, architecture in Korea is recognized as simple construction technology, commodity and real estate based on the principles of capital not following the concept of the order of nature that it used to back then.¹⁶ Korean architecture is not an artistic object but a space and a venue for life, organized by

¹⁴ Yu Sup Go (고유섭), *Korean History of Architecture and Art (한국 건축 미술사 초고)*, Seoul: Deawonsa, 1999, 8.

¹⁵ Go (고유섭), *Korean...*, 8-9.

¹⁶ Chang Mo Ahn (안창모), *Concept of Architecture and Attitude to the Western Architecture in Early Modern Korea (한말 건축에 대한 인식과 건축 개념)*, *The Journal of Aesthetics and Science of Art* 20th edition, 2004, 63

necessities for living.¹⁷ From a Confucian point of view, house is not a complete object but it coexists with the surroundings, where the Confucian proprieties are practiced.¹⁸

Adolf Loos made progressive claims rejecting the early 20th eclecticism and aimed to build a new architecture accommodating modern life, insisting “*raumplan*”, which is basically a stage for life that is easily to be seen in the Korean architecture with its delicate space organization.¹⁹

However it is difficult to explain the Korean architecture through the terminologies and philosophies of West, but there is no other way since we are no longer in the traditional world.²⁰ Just as Western music notes are used to systematize the Korean traditional music,²¹ Korean architecture can be explained through the theoretical frameworks and languages of Western architecture. Korean architecture is created and experienced in a different cognitive system in comparison to the Western architecture. It is difficult to fully explain the essential contents of Korean architecture in the tradition of the Western architecture.

Western architecture tends to be based on ideals of form in relation to changing materials, construction technologies, mechanic production and industrialization.²² For

¹⁷ Sang Hae Lee, Continuity and Consistency of the Traditional Courtyard House Plan in Modern Korean Dwellings, Seoul: TDSR Vol. III no, 1991, 72.

¹⁸ Inaji, The Garden..., 131-132.

¹⁹ Max Risselada, *Raumplan Versus Plan Libre*, Rizzoli, New York, 1989, 6-8.

²⁰ Go (고유섭), *Korean...*, 11-18.

²¹ Zhangpa (장파), *The Orient, West and Beauty (동양과 서양, 그리고 미학)*, trans by Yu Jung Ha (유중하), Seoul: Paju Pureunsup, 1999, 92-95.

²² Richard E. Nisbett, *The Geography of Thought, How Asians and Westerners Think Differently and Why*, The Free Press, New York, 2003, 211

instance, Le Corbusier's machine aesthetics refers to the aesthetic form of a machine rather than the aesthetics of the machine itself.²³

In order to examine the principles of Korean traditional architecture, there needs to be known how Confucianism, Taoism and Buddhists thoughts are reflected in architecture and the approaches should be explained with the concept of Eastern thoughts.²⁴

1.2.2 Academic Knowledge Versus Empirical Wisdom

In fact, there is an etymological similarity between the meaning of 'building (짓다)' in Korean and in the Western tradition. In Korean, 'building (짓다)' can be said when writing poeties and weaving clothes.²⁵ In other words, it means to make things with morphological and qualitative changes by using knowledge and emotion.²⁶ The etymology of architecture in the west comes from the word 'techne'. *Techne* means production in Greek, which means that some ideas or knowledge intervene in the production process; it is not merely application of technology²⁷.

This knowledge of production was developed into a discipline, and the principles of making buildings and making things became systematic knowledge.²⁸ The Greek philosopher Aristotle distinguished knowledge into technical knowledge and ethical

²³ Banham, *The Architecture...*, 97.

²⁴ Yim Seock Jae, *The Traditional Space: A Study of Korean Architecture*, Seoul: Ewah Womans University Press, 2005 13-15.

²⁵ Kwon (권영걸), *Creating...*, 64.

²⁶ Kwon (권영걸), *Creating...*, 67-69.

²⁷ Kim Yong-ok (김용옥), *How to do Oriental studies (동양학 어떻게 할 것인가)*, Tongnamu, Seoul: Tongnamu Books 1997, 236.

²⁸ Kwon (권영걸), *Creating...*, 45.

norms, of which only technical knowledge could be taught and ethical norms could only be learned through experience.²⁹ The knowledge required to build a building included both technical knowledge and ethical norms, therefore architecture could not be systematically taught.³⁰ However the ethical norms of architecture have gradually been systematized into knowledge in Western world.³¹

The ‘*Ten Books on Architecture*’ written by Vitruvius in the first century BC is the oldest existing theorem that summarizes these topics.³² About a thousand years later, Alberti, the Renaissance architect, reconstructed the theory of classical architecture and developed it into a systematic discipline. The architecture of the modern concept has begun. The West has long developed architecture into a knowledge system based on various disciplines such as mathematics, geometry, humanities, and astronomy. The theorizing tendency of Western architecture has continued its tradition to this day, and the tradition of modern architects making theories to design buildings or to explain the architecture they designed is rooted in it.

Architecture in the East has not been theorized. The process of building a house in the Eastern world clearly has intervened by knowledge and emotion beyond the mere application of simple technology. The ancient Chinese thinker Zhuangzi said that “ultimately the work of human beings is to make things necessary for life beyond technology.”³³ In Taoism, Tao is the principles of nature and universe, the act of production by humans ultimately means ‘to go beyond technology and to become conformity with nature’. This is similar to the concept of *Techne* as a technology however, this Chinese thinking system is not something that can be targeted and

²⁹ Zhangpa (장파), *The Orient...*, 53.

³⁰ Zhangpa (장파), *The Orient...*, 88.

³¹ Zhangpa (장파), *The Orient...*, 91.

³² Zhangpa (장파), *The Orient...*, 94-100.

³³ Kim(김용옥), *How to...*, 220.

theorized. According to Lao Tzu, “if you can express the Tao in words, it is not an eternal degree.”³⁴

Thus, East did not see the theorization through words that could be an explanation of the phenomenon.³⁵ Words or language is rather a constrained medium in the thinking system in the East.³⁶ Although there were many art pieces of living such as gunpowder, paper, and metal types but the principle was not theorized or systematized into a single scientific knowledge.³⁷ In this way, the knowledge and principles which applied to building houses in the East were not explained as an axiomatic theory.³⁸ Knowledge does not define an explanation of the nature of an object. It is because the principle of the universe is revealed through practices, not by knowledge of the object.³⁹ Wang Yangming(王陽明), an ancient Chinese thinker explains that;

All knowledge cannot be separated from action and knowledge. It is not guaranteed to be absolutely certain, but only in the process of securing its usefulness in solidarity with action.⁴⁰

Ultimately, what is real cannot be discussed or proven by the mathematics of the phenomenal world, but can only be revealed by direct experience.⁴¹ To reach the ultimate truth, life and practice are important, not an accident. The ideas and

³⁴ Yunhe LEE (리원허), *Design Theory of Chinese Classical Architecture (중국 고전 건축의 원리)*, trans by Sanghee LEE, Seoul: Sigongsa, translated in 2000, 33.

³⁵ Zhangpa (장파), *The Orient...*, 370.

³⁶ Zhangpa (장파), *The Orient...*, 380-385.

³⁷ Zhangpa (장파), *The Orient...*, 295-300.

³⁸ Zhangpa (장파), *The Orient...*, 293.

³⁹ Zhangpa (장파), *The Orient...*, 94-100.

⁴⁰ LEE (리원허), *Design...*, 55.

⁴¹ Zhangpa (장파), *The Orient...*, 100-102.

philosophies of the East have developed into the ethics of life.⁴² The knowledge based on the intuition developed in the East is not objective and scientific based truth but subjective truth that can be found personally which is the validity of the truth with the consensus of the community in which it belongs.⁴³



Figure 2 Stairway of Byeongsan Seowon in Pungchun-Myeon, Andong City

In Confucianism, it is called “Do” (道, the way of life)(禮). “Do” integrate beauty, ethics and social orders.⁴⁴ The norms of architecture are not related to independent disciplines, but to the ethics of life.⁴⁵ The norms of Western architecture were expressed in terms of mathematical proportions and geometric principles, but in the East it was determined empirically.⁴⁶ The principles of architecture in the East passed through

⁴² Zhangpa (장파), *The Orient...*, 104-105.

⁴³ Zhangpa (장파), *The Orient...*, 108-111.

⁴⁴ LEE (리원허), *Design...*, 55 & 71.

⁴⁵ Kwon (권영길), *Creating...*, 29.

⁴⁶ Zhangpa (장파), *The Orient...*, 86-87.

intuitive perception and enlightenment, not by theorization by words. Eastern architecture was empirically approached rather than academic knowledge.⁴⁷ What applied for building houses in the East is not objective knowledge, but experiential wisdom and enlightenment.⁴⁸

Among Far East nations, Korean architecture depended on experience and sense rather than quantification and theorization.⁴⁹ China published the Great Law in the early twelfth century, and Japan systematically compiled the norms of building technologies of various craftsmen in the 16th century.⁵⁰ These books were not the pure norms of architecture, but the design norms. In Korea, these have not been developed even the methods of architecture such as planks used by carpenters is only a few.⁵¹ It is because experience, intuition, and feeling are more important than systematization and quantification of mechanical thinking. The form of Korean architecture used the natural form of curves and materials that are difficult to be quantified. The curves of the natural roof eave appearing only in the Korean architecture, especially the three-dimensional curve, were difficult to be quantified.

1.2.3 Monism Versus Dualism

Why the architecture in East did not develop as an independent study like in the West? The reason can be found in the unique and different thinking system of the East and the West. It is the so-called East monism and West dualism. In the West, from ancient Greek times, there was a tendency to distinguish between subject and object, phenomenon and

⁴⁷ LEE (리원허), *Design...*, 58-59.

⁴⁸ Kwon (권영걸), *Creating...*, 63-64.

⁴⁹ Kwon (권영걸), *Creating...*, 59-60.

⁵⁰ LEE (리원허), *Design...*, 59.

⁵¹ Go (고유섭), *Korean...*, 25-27

essence, material and spirit in recognizing things in the world.⁵² This is called the dualist approach.⁵³ As an independent entity, humans observe objects and discover certain principles hidden in objects. The Greeks attempted to reveal the rules and orders inherent in objects through the conceptual thought and expressed it in a visual form that depended on mathematics and geometry are tied to a single building.⁵⁴ As a matter of fact, the phenomenal world is virtual and the real thing is the ideal.

The standpoint of dualism, the essence of things was considered to be an ideal order that existed irrespective of sensory characteristics.⁵⁵ The difference between the two is whether the material is a shadow of an ideological form or an ideological form itself, and the dualist position to distinguish between matter and reality is the same.⁵⁶ There is only disagreement about the aspect of the essence of objects in the framework of dualism.⁵⁷ The concept of art in the West developed on the basis of this dualism. For a long time, Western art represented an immutable aesthetic principle such as geometry, proportion, symmetry, harmony of whole and unity of art.⁵⁸ In the West, the genre of art is distinguished according to the medium of expressing aesthetic essence.⁵⁹ Music is a performing art, painting and sculpture are visual arts. Architecture is classified as a

⁵² Nisbett, *The Geography...*, 69.

⁵³ Nisbett, *The Geography...*, 35.

⁵⁴ Norberg-Schulz, *Intentions...*, 146.

⁵⁵ Kim(김용옥), *How to...*, 267.

⁵⁶ Kim(김용옥), *How to...*, 269-277.

⁵⁷ Nisbett, *The Geography...*, 69.

⁵⁸ Zhangpa (장파), *The Orient...*, 92.

⁵⁹ Zhangpa (장파), *The Orient...*, 94-97.

visual art in that it is distinguished from painting or sculpture, since it covers a three-dimensional space and serves functions.⁶⁰

In the East, there is no art as a conceptual world that is the representation of the ideal essence.⁶¹ It does not recognize the separation of phenomena and reality, material and spirit. The Eastern ideology is dominated by monism, regardless of whether it is Taoism or Buddhism.⁶² In the East, there is no art as a conceptual world that is the representation of the ideal essence. It does not recognize the separation of phenomena and reality, material and spirit. In Buddhism, matter is an idea and idea is a matter.⁶³ In the view of monism, is ultimately one.⁶⁴ This is the principle of the universe that is fluid, varied and orderly.⁶⁵ It is an example of formalizing the order of the universal nature. In the East, it is understood that the example is not absolute but relative to time and space.⁶⁶

It should not be distinguished between physics and ethics. For example, in the East, anatomy could not be developed because the whole organs were regarded as an organism and the organs that were dissected were already considered to have lost their meaning.⁶⁷ The Chinese Philosopher Zhang Pa explained the characteristics of Eastern epistemology with the static function.⁶⁸ The Western art is divided into genres

⁶⁰ Norberg-Schulz, *Intentions...*, 145-146.

⁶¹ Zhangpa (장파), *The Orient...*, 100.

⁶² Kim(김용옥), *How to...*, 267-269.

⁶³ LEE (리원허), *Design...*, 137.

⁶⁴ Kim(김용옥), *How to...*, 272.

⁶⁵ Kim(김용옥), *How to...*, 271.

⁶⁶ Kwon (권영걸), *Creating...*, 32-34.

⁶⁷ Zhangpa (장파), *The Orient...*, 57.

⁶⁸ Zhangpa (장파), *The Orient...*, 58-59.

according to sensory medium expressing aesthetic essence, but genre is not separated according to sensory medium in the Chinese art. In the East, the poetry, painting, and literature are expressed in one.⁶⁹ The paintings in the East, are not expressed as they are shown, but they contain expressions of mind and spirit, and the unity of mind and body which are the essences of art.⁷⁰ Being capable of creating poetry, literature and painting is expression of inner personality, and therefore a means of fostering, not an external visual representation of the Western art.⁷¹ The meaning of architecture is not any aesthetic visual representation of architecture, but only resulted as an experience when the architecture is combined with human action.⁷² In this way, Korean architecture is neither a genre of art nor visual art.

1.2.4 Artistic Objects versus Tools of Living

In the West, architecture has been defined as an object of visual appreciation that reflects a constant aesthetic principle.⁷³ Especially after the Renaissance, Western classical architecture was regarded as an artistic object representing universal beauty.⁷⁴ After the modern era, the essence of beauty has changed from imitating the universal order to appealing directly to the human senses, evoking aesthetic inspiration, which has arisen from the Romanticism in the late 18th century.⁷⁵ From this time on, the architecture has expressed the aesthetic order by the genius architect.

⁶⁹ Zhangpa (장파), *The Orient...*, 92-93.

⁷⁰ Zhangpa (장파), *The Orient...*, 100.

⁷¹ Zhangpa (장파), *The Orient...*, 105-111.

⁷² Kwon (권영걸), *Creating...*, 56-60.

⁷³ LEE (리원허), *Design...*, 44.

⁷⁴ Norberg-Schulz, *Intentions...*, 91 & 95.

⁷⁵ LEE (리원허), *Design...*, 47-48.

In Korea, the building itself was not regarded as an object of visual appreciation. Since there was no recognition of architecture as visual art, the theory and norm of visual form did not develop either.⁷⁶ Korean architecture was not built as an art object, but a device and a stage for living.⁷⁷ In other words, Korean architecture does not represent any aesthetic principle but a space or place organized by the necessity of life.⁷⁸ From a Confucian point of view, architecture has the character of a tool to practice the Confucian *do* (道, the way of life).⁷⁹ Houses were also considered as a place to practice the Confucian *do* (道, the way of life).⁸⁰ Korean architecture is not a self-contained object but exists in the context of the surroundings.⁸¹ For example, you cannot imagine the *mukgye seowon* (a lecture hall) without its natural surroundings.⁸² Korean architecture is not just a building itself, but an order of identity that includes the relationship with the *madang* (Korean traditional outdoor yard), outside space, and the surrounding.⁸³

⁷⁶ Kwon (권영걸), *Creating...*, 59.

⁷⁷ In Cheol Kim (김인철), *Opening Space (공간열기)*, Seoul: Paju DongNyeok, 2011, 260.

⁷⁸ Kwon (권영걸), *Creating...*, 62.

⁷⁹ Nisbett, *The Geography...*, 7.

⁸⁰ Kwon (권영걸), *Creating...*, 29-31.

⁸¹ Kwon (권영걸), *Creating...*, 17.

⁸² Kwon (권영걸), *Creating...*, 17-18.

⁸³ Kim (김인철), *Opening...*, 261.



Figure 3 A General View of Mukgye Seowon with its Natural Background, Andong City

While West recognizes architecture as an object, Korea recognizes architecture as a complete production encompassing the surrounding world.⁸⁴ Western architecture is ‘to see trees’, whilst Korean architecture is ‘to recognize forests’.⁸⁵ You cannot experience the forest visually from outside. Korean architecture is also a device that reacts with the surrounding nature.⁸⁶ According to Heidegger, in the natural state, humans reside in the world by using tools to organize the universal nature and network⁸⁷. In this regard, building a house is a means of enabling habitation.⁸⁸ The house is not an empty coordinate space or object, but a place of experience where human beings are connected

⁸⁴ LEE (리원허), *Design...*, 44.

⁸⁵ Kwon (권영걸), *Creating...*, 45.

⁸⁶ Kwon (권영걸), *Creating...*, 65.

⁸⁷ Martin Heidegger, *Building Dwelling Thinking in Poetry, Language, Thought*, trans by Albert Hofstadter, New York: Harper Colophon Books, 1972, 5.

⁸⁸ Kwon (권영걸), *Creating...*, 44.

to the universe on the earth.⁸⁹ In this way, Korean architecture is not a completion of itself, but a tool for practicing the ultimate principles of the universe, which complete the place.⁹⁰ Korean architecture is not a subject of visual appreciation but rather a device of life. It is a device in which life is filled and works by making a relationship with the surrounding environment.⁹¹ However tools here are not tools that are typified. It is not a tool of simple technical means but an extension of one's body and mind.⁹² Korean architecture is a tool that is one with the body of the Korean people. A house is an extension of the body. However, the East did not give importance to the tool itself because there is no law that a tool should be used for one purpose, and in some respects, a useless object is useful in another.⁹³ More important than tools is the practice of *do* (道, the way of life).⁹⁴ Korean architecture did not try to give a special meaning by deeply analyzing or theorizing the building itself as a tool. The traditional Korean architecture was regarded as an object by the Western architectural principles from the Japanese colonial period.⁹⁵ However, observing and analyzing architecture as a visual sculpture and examining its formative beauty is a modern idea that is not related to the essence of Korean traditional architecture.

There was no concept of the formality in Korean architecture. Yanagi Muneyoshi, a Japanese scholar explained the beauty of Korean architecture by devising new concepts such as the artless art and the beauty of simplicity which was not well explained by the

⁸⁹ Kwon (권영걸), *Creating...*, 44-45.

⁹⁰ Kwon (권영걸), *Creating...*, 93.

⁹¹ Kwon (권영걸), *Creating...*, 94.

⁹² Kwon (권영걸), *Creating...*, 94 & 99.

⁹³ Kwon (권영걸), *Creating...*, 94-95.

⁹⁴ Kwon (권영걸), *Creating...*, 120-122.

⁹⁵ Go (고유섭), *Korean...*, 17-18

principles of Western aesthetics⁹⁶. In the early 20th century, Adolf Loos was a progressive architect who claimed to reject eclecticism, which depended on the historical style of the past.⁹⁷ He created a new architecture as a stage device to accommodate modern life. He claimed that *raumplan* is a meticulous organization of space as a stage for life, which can be easily seen in Korean architecture.⁹⁸ The modern architecture in West denied the old formative tradition, and this value of the new attention was already in Korean traditional architecture.⁹⁹ Paradoxically, after liberation of Korea, Korean architects paid attention to the form of traditional architecture in order to create Korean modern architecture.¹⁰⁰ They attempted to create Korean modern architecture by abstracting and expressing the form of traditional architecture with modern materials such as concrete. However this formative approach must be unfamiliar in the framework of the understanding of architecture that our ancestors had in the past.

1.2.5 Visual Perception versus Aesthetic Wholeness

Should Korean architecture be defined as an impossible object of aesthetic experience itself? The answer is “No!” since the aesthetic experience of Korean architecture is different from Western architecture.¹⁰¹ Western architecture was understood as a visual object, so it was described in similar principles that of painting and sculpture, and the

⁹⁶ Yanagi Muneyosi (야나기 무네요시), *Art of Joseon (조선의 미술)*, trans Yu Sup Go (고유섭), Seoul: Tongmungan, 1963, 5.

⁹⁷ Janet Stewart, *Fashioning Vienna Adolf Loos's Cultural Criticism*, London & New York, Routledge, 2000, 47-50

⁹⁸ Nisbett, *The Geography...*, 7.

⁹⁹ LEE (리원허), *Design...*, 47-49.

¹⁰⁰ Lee, *Continuity...*, 64-70.

¹⁰¹ Zhangpa (장파), *The Orient...*, 115-117.

essence of the aesthetic experience was defined as visual pleasure.¹⁰² But the beauty of Korean architecture should not be found in form. Korean architecture is not an object that reflects any form of aesthetics or evokes visual pleasure.¹⁰³ If the Korean architecture conveys such beauty, the reason is different. As described above, Korean architecture is a device for organizing the relationship between life and environment.¹⁰⁴ Korean architecture is not an object under awareness but a place of life, and it places the universal force in relationship with the surrounding environment and nature.¹⁰⁵ The building itself expands into a universal environment, in which the form is annihilated.

It is as if the personal self is not separated from the universe in the Eastern thought.¹⁰⁶ The becoming universe from the aspect of aesthetic communication of self is different from the concept of beauty that Western aesthetics pursue.¹⁰⁷ The comfort that comes from being unified with the universe and the flow of nature is the same kind of aesthetics of Korean architecture.¹⁰⁸ This aesthetic experience is not a logical one based on mediocre peculiarity, but rather an aesthetic awareness of human nature surrounding humanity through intuition and mediocratic communication.¹⁰⁹ This method of aesthetic communication is not concrete to be represented in the form of objects or approached epistemologically, but is an everyday concept.¹¹⁰ This kind of mediating

¹⁰² Kwon (권영걸), *Creating...*, 48-49.

¹⁰³ Kwon (권영걸), *Creating...*, 49.

¹⁰⁴ Kwon (권영걸), *Creating...*, 93.

¹⁰⁵ Kwon (권영걸), *Creating...*, 69.

¹⁰⁶ Kwon (권영걸), *Creating...*, 31-32.

¹⁰⁷ Kwon (권영걸), *Creating...*, 32-33.

¹⁰⁸ Kwon (권영걸), *Creating...*, 76-77.

¹⁰⁹ Zhangpa (장파), *The Orient...*, 370-372.

¹¹⁰ Kwon (권영걸), *Creating...*, 46-49.

communication depends on intuition, not reason and logic. It is close to enlightenment beyond visual communication.

In the Eastern tradition, cosmic principles are *do* (道, the way of life) and *do* is ultimately beautiful.¹¹¹ The beauty of the state is that the principle of life system is revealed.¹¹² The effect of beauty is not merely a visual pleasure, but a process of enlightenment that leads to unity with nature.¹¹³ Architecture is a means of realization of the *do*(道, the way of life) view.¹¹⁴ The facilities such as a pond or a fence in front yard of *dosan seodang*, built by Yi Hwang, were not for visual pleasure but for self-reflection.¹¹⁵ The aesthetics of Korean architecture is based on life and practice, and is more ontological rather than epistemological.¹¹⁶ The process of realization of true beauty in the East, cannot be objectified or analyzed, but can only be integrated through our bodies and practices.¹¹⁷ The Eastern aesthetics aims at the completion of humanity, not estheticism.¹¹⁸ So drawing and calligraphy were tools of practice for the nobility. The function of art was to pursue through visual appreciation in the West but was achieved through action and practice in the East.¹¹⁹ Therefore, the distinction between art and practicality is not clear in the East and there is no distinction between art and practical items as objects of appreciation.

¹¹¹ Zhangpa (장파), *The Orient...*, 371-372.

¹¹² Zhangpa (장파), *The Orient...*, 372.

¹¹³ Zhangpa (장파), *The Orient...*, 374.

¹¹⁴ Kwon (권영걸), *Creating...*, 43-44.

¹¹⁵ Kwon (권영걸), *Creating...*, 17.

¹¹⁶ Kwon (권영걸), *Creating...*, 61-62.

¹¹⁷ Kwon (권영걸), *Creating...*, 56-60.

¹¹⁸ Kwon (권영걸), *Creating...*, 57.

¹¹⁹ Kwon (권영걸), *Creating...*, 46-47.



Figure 4 Dosan Seodang with its Pond

If we compare the aesthetic principles of Korean architecture to other art genres, it seems closer to music than painting.¹²⁰ The visual has directionality and separates the object, but the sound spreads and integrates.¹²¹ Sound is internalized and the space expands.¹²² Sound is the medium that forms the consciousness of the community, the accompaniment. In this respect, the music in the East is different from the music in the West.¹²³ The Eastern music is similar to the music of shaman that it relies on the body and pursues the unity of man with the universe in space and time.¹²⁴

¹²⁰ Kwon (권영걸), *Creating...*, 89-91.

¹²¹ Zhangpa (장파), *The Orient...*, 123.

¹²² Zhangpa (장파), *The Orient...*, 127.

¹²³ Norberg-Schulz, *Intentions...*, 1966, 91.

¹²⁴ Kim Yong Ok (김용옥), *Beauty and Ugliness (아름다움과 추함)*, Seoul: Tongmunguan, 1996, 61.

CHAPTER 2

EXPERIENCE AND AWARENESS

2.1 Sight Versus Body Sense

East and West differed in how people responded to architecture.¹²⁵ The value of architecture in the West has largely depended on the perspective of vision. Especially, through the Renaissance and Baroque period, vision acquired a unique position, and visual pleasure was regarded as the essence of the beauty of architecture.¹²⁶

Of course, vision is not merely an independent act of sight but a synthesis of various senses. In the West, the vision was highest among the various senses of human. Since the mid-20th century, the understanding of architecture has been perceived as a sensation that depends on various senses such as hearing and tactile sensation, but at least until that time, Western architecture has been perceived and experienced by vision.¹²⁷

Western culture has regarded vision as the most important sense for a long time.¹²⁸ In Greece, vision was thought of a visual ray of light from the eyes. The Greek thinkers viewed the vision as an important mediator of knowledge rather than as one of the

¹²⁵ LEE (리원하), *Design...*, 44.

¹²⁶ Kwon (권영걸), *Creating...*, 47.

¹²⁷ Juhani Pallasmaa, *The Eyes of the Skin*, Hoboken: Wiley Academy, 2005, 15-21.

¹²⁸ Pallasmaa, *The Eyes...*, 11.

sensory organs. Plato and Aristotle also believed vision as the most important sense.¹²⁹ In the analogy of Plato's cave, light from the world of ideology, the vision is the mediator of truth.¹³⁰ Aristotle defines human as rational animal and emphasizes rationality among human abilities.



Figure 5 Plato's Allegory of the Cave, Painted by Cornelis Corneliszoon Van Haarlem

The Eastern wisdom did not place vision over other human senses. The phenomenon of the outside world that we see with eyes is not the essence of universe.¹³¹ The essence is not directly exposed in front of our eyes.¹³² Lao Tzu said that nature is eternal because it does not reveal itself.¹³³ The vision is not absolute. In the East, the vision was considered inferior and unreliable sense because it was the most direct among the various senses.¹³⁴ So when we meditate or think deeply, we close our eyes. It is said to

¹²⁹ Pallasmaa, *The Eyes...*, 18.

¹³⁰ James Turrell, Plato's Cave and Light Within, *Elephant and Change in Architecture*, 9th Alvar Aalto Symposium, 2003, 144.

¹³¹ Kwon (권영걸), *Creating...*, 45-46.

¹³² Kwon (권영걸), *Creating...*, 46.

¹³³ Zhangpa (장파), *The Orient...*, 350-353.

¹³⁴ Kwon (권영걸), *Creating...*, 48-49.

see with heart in order to integrate the experience and memory with what is visible and invisible.¹³⁵



Figure 6 Dokseoyegado (독서여가도)

¹³⁵ Kwon (권영걸), *Creating...*, 49-50.

The beauty of Taoism is not a visual beauty. In Taoism, nature's beauty is called *deami* (大尾), which means the great beauty of nature is impossible to be appreciated by human peripheral senses such as sight and hearing.¹³⁶ In the 16th century, a Confucian scholar Seo Gyeong Deok said "Listening through the sound is not as good as listening in the absence of sound and enjoying the form is not as much enjoyment as it is without form."¹³⁷ *Deami*(大尾) can only feel through the experience of becoming one with nature.¹³⁸ It is the beauty that one realizes in the ground of enlightenment. Korean architecture is to experience not only visually but also auditory, olfactory, tactile and all senses and minds of the whole body.¹³⁹ Kim In Hoo, a Confucian scholar who sang the beauty of *sosewon* in *Damyang* as "sound, scent and taste are integrated here as the pleasure of becoming one with nature."¹⁴⁰ Kim Yong Ok defines this sense of Korean architecture as 'body sense'.¹⁴¹ Vision is informational, but experience of body is connected to a being. In Korean architecture, architecture is not material, form, space but the human experience itself.¹⁴² The impression of Korean architecture is not the building but the internalized impression of people who experience it with their body sense.¹⁴³

¹³⁶ Kwon (권영걸), *Creating...*, 31.

¹³⁷ Kim Dong Uk (김동욱), *Korean Architecture-Chinese Architecture-Japanese Architecture (한국 건축 중국 건축 일본 건축)*, Paju: Kimyongsa, 2015, 340.

¹³⁸ Kwon (권영걸), *Creating...*, 31-32.

¹³⁹ Kwon (권영걸), *Creating...*, 44-46.

¹⁴⁰ Kwon (권영걸), *Creating...*, 90.

¹⁴¹ Kim (김용옥), *Beauty...*, 1996, 59.

¹⁴² Kwon (권영걸), *Creating...*, 52

¹⁴³ Kwon (권영걸), *Creating...*, 52-54.



Figure 7 A trip to Soswewon in Damyang

To experience the rain that falls in *madang*, sitting on *maru* (extended wooden floor of a room) of Korean architecture, is not merely a visual sight but an experience of being integrated with all senses.¹⁴⁴ Enjoying the various sounds such as rainwater falling from the eaves is a special experience of Korean architecture. Kim Soo Geun, an architectural critic focused on the aesthetic experience of Korean architecture.¹⁴⁵ He explains the characteristic of Korean traditional architecture with the design of *munbang* (study). The design of *munbang* includes temporality, auditory sense, and tactile sense in the space where the sound of rainwater, birds, winds naturally come through the *changhoji* (traditional paper cover for doors and windows) and the smell of boiling tea and nature being pleased.¹⁴⁶

¹⁴⁴ Yim, *The Traditional...*, 28-31.

¹⁴⁵ Kim Su Geun (김수근), *Ultimate Space (궁극 공간)*, Seoul: Gonggansa, 2006, 294.

¹⁴⁶ Kim (김수근), *Ultimate...*, 290-295.

In fact, Korean architecture is consisted of many body sense devices. It was not that Korean architecture did not have the skill to polish the stone that makes rough arch-stone floor in *Gyeongbokgung* (경복궁) palace. Rough textured floor causes people become careful about their body motions in front of the presence of royal family. Stairs and floors of *seowon* (lecture hall) have the same character to make people to be careful for body actions.¹⁴⁷ The doorway of the main gate is high that it is hard to go over and the dimension of door intentionally tilts the head to lower when one enters. These architectural devices awaken the body to feel the movement of the body, in this case respectful body.¹⁴⁸ The foundation and the floor height of the *hanok* (Korean traditional house), the location and height of the walls are all considered to correspond to the movement of the body. All architectural devices react with the body. Korean architecture can be called “architecture of the body”.¹⁴⁹

For example, the stairs of *Byeongsan seowon* were made with the slightest deformation of the logs, and climbing this raw stairs is a process of moral training in Confucianism with the intention of being careful in action.¹⁵⁰ However, it is difficult to see such stairs in an ordinary house or building.¹⁵¹ There is a philosophy that goes beyond the simple functional elements.¹⁵² The staircase of the Laurentian library in Florence, designed by Michelangelo, is famous for its dynamic shape flowing out from a narrow space that fills the room.¹⁵³ It is close to a visual sculpture. The stairs of Korean traditional architecture are not the visual sculptures but the devices that move and respond to the

¹⁴⁷ Kwon (권영걸), *Creating...*, 177

¹⁴⁸ Kwon (권영걸), *Creating...*, 196

¹⁴⁹ Kim (김수근), *Ultimate...*, 294.

¹⁵⁰ Kwon (권영걸), *Creating...*, 86-87

¹⁵¹ Kwon (권영걸), *Creating...*, 194

¹⁵² Kwon (권영걸), *Creating...*, 195-197

¹⁵³ James S. Ackerman, *Architecture of Michelangelo*, New York: The Viking Press, 1961, 42-44.

body. Therefore, it is limited to explain the form or space of Korean architecture based on the perspectives.¹⁵⁴ The experience of Korean architecture is based on the total sense of body and memory, not the spatial scene composed of a rationalized perspective like the perspective view of the Renaissance.¹⁵⁵ Vision is not the dominant sense that connects us with Korean architecture.¹⁵⁶ In fact, human senses are culturally awakened, educated, and transmitted through generations. Western architecture has long been developed to experience a detailed sense of visual form, but Korean architecture was not subject to a detailed sense of experience.¹⁵⁷ Instead, it pursued and developed a greater sense of being integrated into the order of space and nature through architecture.¹⁵⁸ This is why Korean architecture is awkward to be explained with sensory vocabulary expressing the feeling of Western architecture.



Figure 8 Staircase of Laurentian Library in Florence

¹⁵⁴ Kwon (권영걸), *Creating...*, 66-67

¹⁵⁵ Kwon (권영걸), *Creating...*, 64

¹⁵⁶ Kwon (권영걸), *Creating...*, 45-46

¹⁵⁷ Kwon (권영걸), *Creating...*, 44-48

¹⁵⁸ Kwon (권영걸), *Creating...*, 67-71



Figure 9 Stairway of Byeongsan Seowon in Pungchun-Myeon, Andong City

2.2 Form Versus Material

The West recognizes the beauty of an object separated from itself by reason or sensation, but the East has an integrated aesthetic experience based on the sense of supernatural consciousness that encompasses it in a state where the subject and self are not separated.¹⁵⁹ The difference between these aesthetic perceptions and experiences comes from the difference of the perceptual system that is explained by Western dualism and Eastern monism.¹⁶⁰ In the West, architecture was recognized through the concept of forms, pillars, beams, and pediments which are components of classical architecture.¹⁶¹ Those elements were considered as forms rather than materials. The form of the Greek temple was originally wooden structure but later it replaced by stone structure, which was possible with the idea that the form stays even if the material is changed. In Roman times, pillars were built up of bricks then plastered to make them look like stone-made. Palladio, a Renaissance architect made the pediment of his architecture made of bricks

¹⁵⁹ Zhangpa (장파), *The Orient...*, 370-375.

¹⁶⁰ Nisbett, *The Geography...*, 69.

¹⁶¹ Norberg-Schulz, *Intentions...*, 94.

and woods, and finished with a plastered wall, because the architecture was dominated by the form, not the material.¹⁶² The ideological form of order with ideal proportion and harmony was theorized by Alberti in the Renaissance period.¹⁶³

Even after the modern era the belief in idealistic forms continued. Kant, a philosopher continued the dualistic tradition of form and material by explaining that aesthetic forms are a priori that exist in our minds regardless of the nature. Kant's pure formalism influenced the development of modern abstract art and architecture. Western architecture has been evolved into a theory of form. It is important that the impressive design should outstand regardless of its materials.¹⁶⁴ Western architecture's idealistic form has become a mainstream theme in its ideal form itself, apart from changes in materials and construction methods. The tradition of dominating forms continues until the 20th century, until the industrialization era when steel and concrete became main modern architectural materials. Machine aesthetics, as claimed by a modern architectural master Le Corbusier, does not refer to aesthetic of machine itself, but the aesthetic form that the machine represents.¹⁶⁵

It did not give any substance to any transcendental essence in recognizing objects in East.¹⁶⁶ The phenomenon and reality, material and form are ultimately indivisible.¹⁶⁷ The phenomenon we see is the way it is, and it is not a fixed reality since we perceive it from a specific point of view in East. Reality is always fluid and variable, and this is

¹⁶² Pallasmaa, *The Eyes...*, 18.

¹⁶³ Norberg-Schulz, *Intentions...*, 186.

¹⁶⁴ Jo Seung Gu (조승구), Towards the Sublime Represented in the Contemporary Architecture Based on the Reinterpretation of Kant's Sublime, Korean Architectural Scholar Association (대한건축학회지회연합회), (Seoul: Korean Architectural Scholar Association v.11 n.01, 2009), 1-10.

¹⁶⁵ Banham, *The Architecture...*, 97.

¹⁶⁶ Zhangpa (장파), *The Orient...*, 370-374.

¹⁶⁷ Zhangpa (장파), *The Orient...*, 375.

the orderly principle of the universe.¹⁶⁸ Therefore, there is no form as an ideology that distinguishes it from matter.¹⁶⁹ The architecture does not have the same concept as Western architecture of form. The difference in perception is closely related to the unique building materials and methods of the East and West.¹⁷⁰ The architectural structure of Western architecture makes new forms beyond the limits of materials.¹⁷¹ In Roman architecture, bricks made arches and vaults. In the medieval churches, stones lost their unique properties and became a symbolic form expressing divinity.¹⁷² On the other hand, the form of architecture in the East, was the result of the process of building wooden structure, not the dominant ideological form.¹⁷³ Unlike Western architecture, forms and ornaments are not separated from materials and structures.¹⁷⁴ There is no such element that is added as decorative structure, but the structure itself is ornamented in East.¹⁷⁵

Korean architecture has not changed form in a long time because the material and construction methods have not fundamentally changed.¹⁷⁶ The only example of ideological form separated from the material properties is the stone pagoda.¹⁷⁷ The shape of the wooden pagoda is maintained in the stone pagoda with its original shape

¹⁶⁸ Zhangpa (장파), *The Orient...*, 371.

¹⁶⁹ Kwon (권영걸), *Creating...*, 52-54

¹⁷⁰ Kwon (권영걸), *Creating...*, 53

¹⁷¹ Kwon (권영걸), *Creating...*, 54

¹⁷² LEE (리원허), *Design...*, 46-47.

¹⁷³ LEE (리원허), *Design...*, 44-46.

¹⁷⁴ LEE (리원허), *Design...*, 47-49.

¹⁷⁵ LEE (리원허), *Design...*, 49-54.

¹⁷⁶ Go (고유섭), *Korean...*, 25-37.

¹⁷⁷ Go (고유섭), *Korean...*, 33-35.

since it was not a daily structure but a monumental symbol in Buddhist temple.¹⁷⁸ Over time, the stone pagoda gradually changed to a simplified stone pagoda model reflecting the physical properties of the stone, which can be inferred from the fact that the concept of shape as an ideology is not clear like the one in the West.¹⁷⁹ Of course, there are typical examples of Korean architecture that has been formed for a long time. However, there was no concept and recognition of the ideological form as an essence.¹⁸⁰



Figure 10 Villa Badoer by Palladio Front View

¹⁷⁸ Go (고유섭), *Korean...*, 167-169.

¹⁷⁹ Kwon (권영걸), *Creating...*, 49-52

¹⁸⁰ Kwon (권영걸), *Creating...*, 53-54



Figure 11 Bongjeongsa Temple Side View

2.3 Illumination and Sunlight

Light is an indispensable element in the recognition and experience of architecture. It was important for Western architecture to draw light because it was wall-based structure of bricks and stones.¹⁸¹ Without light, it was hard to live inside, and because of wall-based structure of bricks and stones, moisture needed to be dried out by light for disinfection.¹⁸² Vitruvius said that architects need to know mathematics in order to figure out where to draw lights in a building.¹⁸³ In Western architecture, light comes through a window or an opening in a ceiling. The clearstory of the Egyptian temple and the oculus on top of the Roman pantheon dome were devices that let light in the walled interior space.¹⁸⁴ In the Gothic cathedral, light came through a large stained-glass

¹⁸¹ Pallasmaa, *The Eyes...*, 50.

¹⁸² Kwon (권영걸), *Creating...*, 18-24

¹⁸³ Norberg-Schulz, *Intentions...*, 91-93.

¹⁸⁴ Norberg-Schulz, *Intentions...*, 147-155.

wall.¹⁸⁵ The light entering temple or cathedral has a symbolism in Western architecture.¹⁸⁶ The light that enters the interior of a cathedral symbolizes God. It is a sacred element that reveals its existence by encountering statues made of stone. The light diffused inside the Gothic cathedral by way of the stained glass windows, represents a heavenly world on the ground.¹⁸⁷ The Baroque cathedral emphasized the symbolism of light so that lights coming through the ceiling and windows gather at the centre.



Figure 12 Pantheon's Ceiling

In modern days, light has become a sensory element to experience architecture an aesthetic object as Le Corbusier said.¹⁸⁸ It has been noted that depending on the ways that light enters interior, the interior space may have a completely different atmosphere,

¹⁸⁵ Hyun Jun Yu (유현준), *Modernism: Hybrid of Eastern and Western Culture* (모더니즘: 동서양 문화의 하이브리드), Seoul: Miseum, 2008, 16-18.

¹⁸⁶ Yu (유현준), *Modernism...*, 18.

¹⁸⁷ Yu (유현준), *Modernism...*, 16-19.

¹⁸⁸ Pallasmaa, *The Eyes...*, 30.

shape, and wall texture of the wall. This effect is mainly on walls and pillars, masses and forms of crust in Western architecture.¹⁸⁹ Light is the element that reveals the physical properties, or texture of the architectural components.¹⁹⁰ The effect of light is concentrated on the vertical walls. Louis Kahn noted the effect of light on the wall between pillars in a Greek temple, so its architecture is a wise, accurate and grand amusement of the volumes under the light.¹⁹¹ Light and shadow reveal form. The architectural arrangement of wavy walls and rhythmic decorations of Baroque architecture reveal its shape through the depth of mass and wall. Even in modern architecture where decorations on the walls are removed, the light still maintains its status as a medium of sensation that represents physical properties.¹⁹²



Figure 13 Interior de la Capilla de Ronchamp by Le Corbusier

¹⁸⁹ Norberg-Schulz, *Intentions...*, 163-169.

¹⁹⁰ Yu (유현준), *Modernism...*, 16.

¹⁹¹ David B. Brownlee & David G. De Long, *Louis I. Kahn: In the Realm of Architecture*, trans by Hee Jin Kim, Paju: Mimesis, 2010, 42.

¹⁹² Kwon (권영걸), *Creating...*, 52-56

Korean traditional architecture was built with post and lintel structure, and it was able to install a number of windows.¹⁹³ Korean architecture rather has the eaves longer in order to block the direct sunlight.¹⁹⁴ Direct sunlight is poured into the *madang* (Korean traditional outdoor yard), and the reflected sunlight from *madang* flows inside the interior as gentle light.¹⁹⁵ Therefore, Korean architecture does not have the concentration on the effect of light on walls.¹⁹⁶ Lights and shadows are placed on the floor like *madang* and garden in Korean architecture.¹⁹⁷ When the light comes on the floor, the walls and pillars disappear in shade.¹⁹⁸ It is fundamentally different from the light on walls in Western architecture.

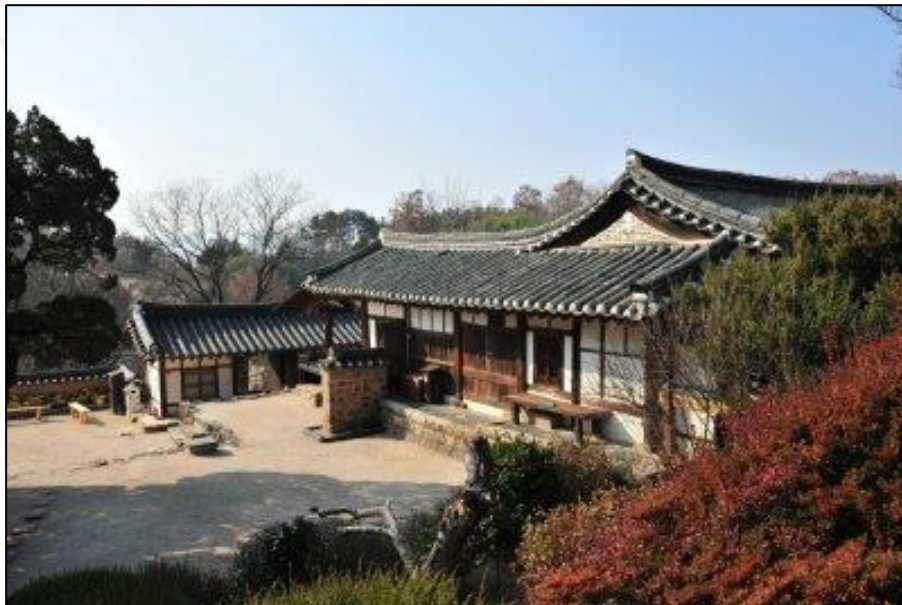


Figure 14 Madang and Deachung of Seobeakdang in Yangdong

¹⁹³ Kwon (권영걸), *Creating...*, 84-89

¹⁹⁴ Kwon (권영걸), *Creating...*, 188-189

¹⁹⁵ Yim, *The Traditional...*, 13-31.

¹⁹⁶ Yim, *The Traditional...*, 33-34.

¹⁹⁷ Yim, *The Traditional...*, 34.

¹⁹⁸ Yim, *The Traditional...*, 34-38.

The light that illuminates the walls of Western architecture symbolizes transcendental sanctity or visual pleasure, but the light of the *hanok* illuminates the floor kindly and awakens comfort.¹⁹⁹ In Western architecture, light is a formative and aesthetic object, but in Korean architecture, light is a component of the natural environment in which it reacts with the human body.²⁰⁰ We call it ‘sunlight’, not ‘light’. Sunlight stabilizes emotions as well as heat of sunlight has a germicidal effect. The warmth of sunshine that can be felt in Korean architecture is different from the light to recognize the shape of an object.²⁰¹ Sunlight is not visual but it is felt through total sense of body. In *hanok*, the sunlight coming from the south is important. The warm sunlight coming from the south to the *daechung* (the main floored room or hall in *hanok*) of *hanok* in winter is not only visual but also a sensation felt by the whole body.²⁰² During the summer, sunlight from the south makes shade of garden cool *daechung*.²⁰³ This illustrates the difference in the way that Korean architecture and Western architecture perceive and experience light.

2.4 The Sky and Land

Land and sky are the primary experiential spaces that human beings perceive. If architecture is to construct the environment surrounding human beings in a meaningful order, the perception of the land and sky becomes the fundamental condition of architecture.²⁰⁴ Vincent Sully says that :

¹⁹⁹ Yim, *The Traditional...*, 38-40.

²⁰⁰ Yim, *The Traditional...*, 41-44.

²⁰¹ Yim, *The Traditional...*, 42-55.

²⁰² Inaji, *The Garden...*, 156-159.

²⁰³ Kwon (권영걸), *Creating...*, 125

²⁰⁴ Kwon (권영걸), *Creating...*, 18-24

“The form of the earth transformed into a symbolic structure of human to communicate with the sky at distance.”²⁰⁵

Mankind had lived in caves surviving through hunting, gathering then settled down.²⁰⁶ The sky became a subject of reverence. Through farming and nomadism, mankind came to realize that there was some order in the change of nature, and it became clear that the movement of the Sun and the Moon was important.²⁰⁷ For mankind, the earth gave rise to transforming natural phenomena and death, but heaven meant an unchanging world of eternity.²⁰⁸ The megalithic culture of the Neolithic era came from the worship of the Sun and the Moon.²⁰⁹ The megalithic structure and stone pillars represent the desire of mankind to communicate with the sky.



Figure 15 Pyramids in Egypt

Ancient kingdoms worshiped the absolute power, a king as god and communicated with the sky, the eternal world. In the ancient kingdom, a monumental building was built in

²⁰⁵ Vincent Scully, *Architecture: The Nature and the Manmade*, New York: St. Martin's Press, 1991, 27.

²⁰⁶ Zhangpa (장파), *The Orient...*, 40-46.

²⁰⁷ Zhangpa (장파), *The Orient...*, 47-51.

²⁰⁸ Zhangpa (장파), *The Orient...*, 202-205.

²⁰⁹ Zhangpa (장파), *The Orient...*, 205-209.

order to connect the king with the sky.²¹⁰ Ziggurat in the Middle East served as a launching platform for the soul of the worshiped king's carcass to rise to the sky, the stairway to heaven. The pyramids of Egypt also seem to have evolved from the Neolithic megaliths to the pyramid to make the king's soul rise up to the sky.²¹¹ The ancient Greeks began to understand the sky as a rational and abstract order.²¹² They understood the world as in a mathematical and geometric order and so recognized space. Pythagoras regarded the essence of the world as a numerical order, and Plato explained it as three-dimensional, absolute and conceptual geometric forms.²¹³ The Greek gods came down to the human world and were expressed in human form. The ancient Greeks built temples on the earth to communicate with gods.²¹⁴ The pillars of the Greek temple are from the megalithic tradition, but they represent man's ability to struggle with god rather than to express man's vertical goal to reach the sky.²¹⁵ The Greeks thus used the metaphor upright human body intended for the pillars of the temple and created myths about this.²¹⁶ In the Gothic cathedral, a desire for the absolute heaven was directly expressed.²¹⁷ Christianity believes in an absolute single God and afterlife. Gothic cathedral is a vertically oriented architecture that aspires a relationship between God and man. Western architecture thus has the character of a vertical monument expressing the

²¹⁰ Kwon (권영걸), *Creating...*, 45-49

²¹¹ LEE (리원허), *Design...*, 44-45.

²¹² Kwon (권영걸), *Creating...*, 52-53

²¹³ Yu (유현준), *Modernism...*, 26-27.

²¹⁴ Kwon (권영걸), *Creating...*, 52-53

²¹⁵ Zhangpa (장파), *The Orient...*, 416-420.

²¹⁶ Zhangpa (장파), *The Orient...*, 326-331.

²¹⁷ Norberg-Schulz, *Intentions...*, 124 & 135.

desire for heaven.²¹⁸ The vertical orientation of Western architecture is also contained in the symbol of present architecture, the Eiffel tower and the sky-scraper.²¹⁹



Figure 16 Parthenon on the Acropolis

The East was different from the Western way of perceiving the sky and the land. According to Yin and Yang theory developed in ancient china, the sky and the land are separated, but they are interconnected and circulated as the *Taegeuk* (The Korean form of the Chinese Taiji, meaning supreme ultimate, symbolizes.²²⁰ The sky is not separated from the land and is not an entity up above, but is in contact with and intertwined with the land with each other like Yin and Yang.²²¹ There is a human being between the sky and the earth, the *Songmyung* (Song Dynasty Period in China, 960-1279) Confucianism calls the sky the father and the land the mother.²²² Human have sprung up between

²¹⁸ Norberg-Schulz, *Intentions...*, 124.

²¹⁹ LEE (리원허), *Design...*, 48-49.

²²⁰ Kwon (권영걸), *Creating...*, 79-84

²²¹ Zhangpa (장파), *The Orient...*, 187-191.

²²² LEE (리원허), *Design...*, 38-44.

them, and human is in harmony with them. Therefore, the human body is filled of the sky and the land, and it has the nature to have heavenly and earthly operations.²²³

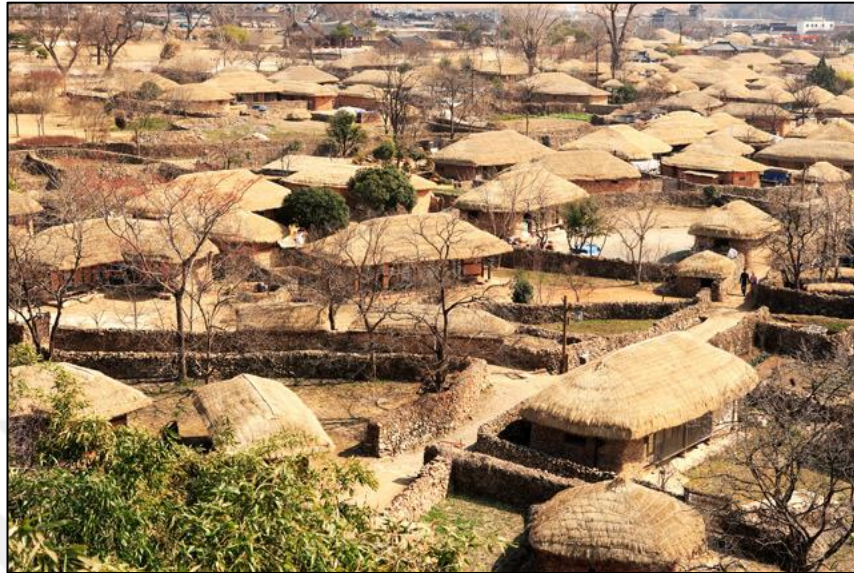


Figure 17 Korean Traditional Agricultural Village in Suncheon

The difference in the recognition of the sky and the land between the East and the West can be explained by the difference between nomadic and agricultural cultures. In nomadic culture, heavenly worship develops, and in agricultural culture worship of land is emphasized. The sky is a symbol of abstraction, universality, and absoluteness in nomadic culture. The earth is a symbol of the concrete, local, and relativity in agricultural culture. To nomadic people, land is not the source of ultimate energy, and there is no standard of land. Thus, transcendence is emphasized in the structure of nomadic life. In the transcendental worship of nomadic culture, the sky and the land are completely segregated. However, in the structure of agricultural life in East, the two are not segregated because the sky and the land are understood as the intrinsic whole.²²⁴

²²³ Kim (김용옥), *How to...*, 236.

²²⁴ Kim Yong-ok (김용옥), *What is woman (여자란 무엇인가)*, Seoul, Tongnamu Books, 1986, 180.

2.5 Geometry of Life

In the West, the anxiety and fear that human felt from the unstable phenomena in nature are settled by giving them an ideal and unchanging order, through mathematics and geometry. Le Corbusier, the master of modern architecture, said that “We elevated geometry from nature. Nature is chaotic from the outside, but it is a world of strict order.”²²⁵ After the Greek civilization, Euclidean geometry became the standard of perception of the Western world. Horizontality and verticality became the basis of all spatial perception and construction. It became the standard of recognition of beauty. Christopher Wren, a 17th century architect said, “The geometric form is more beautiful than irregular form. When two lines meet, there are only two things that are beautiful. One has to inline vertically and the other to be parallel.”²²⁶

Ideal nature in the East is not an entity composed entirely of shapes and laws based on mathematics and geometry, but a fluid, unshaped energy flow. In the East, the world was recognized empirically and intuitively, not through abstract geometry. Lao Tzu said “The greatest straight line looks like a curve, and the greatest rectangle has no corners, and the greatest image has no shape.”²²⁷ There is no word for a straight line in Korea, but instead it is called *Gokjik* (곡직) which is not a geometric straight line but looking curvilinear but straight. There is no straight line in empirical nature. These characteristics were reflected in the form of Korean architecture. In Korean architecture, the eaves of a roof are natural curves as if they were drawn by a rope rather than a geometric straight line. Bong Yeol Kim, a Korean architectural historian explains the curve of Korean eaves as such “The eaves of the *hanok* are sagging with time, but they

²²⁵ Le Corbusier (르코르뷔지에), *Une Maison – Un Palais* (집-궁전), trans by Gwan Seok Lee(Seoul: Yeolhwadang, 2012, 20-32.

²²⁶ Christopher Wren, *Parentalia* (파렌탈리아), trans by Hyun Jun Yu, Seoul: Miseum, 2008, 60.

²²⁷ Yu (유현준), *Modernism...*, 82.

do not form a horizon forever.”²²⁸ Since the horizon was abandoned and bent upward. There is one straight line connecting two points, but there are many curves.

The wooden structure used in Korean architecture deforms and is difficult to adjust the vertical or horizontal position accurately due to the nature of it. Even if it does match, it becomes deformed. So the visual stability of Korean architecture goes through natural curves instead of straight lines. The rafter structure that makes the eaves of Korean architecture made this natural curve possible. The natural beauty of the Korean architecture is a strategy for the perceptual order. The eaves of Korean architecture are different from Chinese or Japanese architecture. Yanagi Muneyoshi regarded the natural roofing line of the Korean architecture as an essence expressing the curves characteristic of the Joseon dynasty. He explained roof curves of Korean architecture as a wave of infinite curves appearing on the roof of a house. He said that “If you see a straight-line roof, it can be asserted that it is Japanese or Western architecture. The wave of the curve is a symbol of moving mind.”²²⁹ These non-geometric curves are very characteristic in Korean architecture. Yu Sup Go, a Korean art and architectural historian (1905-1944), said that “The life on the roof of the Joseon Dynasty is in its curvaceous form, not the radical curvilinear roof of the Chinese as it is to penetrate the sky, nor is it a straight roof of the Japanese as it is fortress wall like. It is a curve of a flexible and good feeling.”²³⁰

Western geometry was criticized by the phenomenology of the 20th century. The founder of phenomenology Edmund Husserl, said that the concept of pure geometry, straight line, circle, or horizontality and verticality was already philosophical in the book of *Origin of Geometry*.²³¹ He pointed out that the difference between the real world and

²²⁸ Bong Yeol Kim (김봉렬), *Rediscovery of Korean Architecture (한국 건축의 재발견)*, Seoul: Yisang Architecture, 1999, 180-200.

²²⁹ Yanagi Muneyosi (야나기 무네요시), *Thinking of Joseon (조선을 생각한다)*, trans U Sung Sim (심우성), Seoul: Hakgoje, 1996, 183.

²³⁰ Go (고유섭), *Korean...*, 16.

²³¹ Edmund Husserl, *Origin of Geometry*, trans by John P. Leavery, Lincoln: University of Nebraskas Press, 1989, 15-30.

the ideal geometry arises in the process of abstracting the round shape as a circle. Husserl sees the empirical horizon and sky as a source of human perception instead of pure geometry. It is only in modern times that Western architecture began to perceive space and form outside of the Euclidean geometry. Paradoxically, as computer technology evolved, modern architecture began to create non-Euclidean, organic lines and forms and began to speak of other geometries. John Rajchman, a philosopher and critic, explains that geometries of living and geometries of becoming against Euclidean and Descartes geometry.²³² This requires an intuitive attitude to understand geometry in terms of touch, movement, or behavior, but not visual.²³³

In this sense, Korean architecture is already dependent on the geometry of life and the geometry of creation. The Korean ancient architecture was built according to strong geometrical order, but over time, geometry was gradually dismantled. As a result, Korean architecture has a looser geometry that allows free and less organized compositions, which do not impose composed movements and actions of given order.

2.6 The Vertical Architecture versus Horizontal Architecture

While Western architecture pursued direction toward the sky from the earth, the relationship between the sky and the earth in East can be said to be interactive. If religion in the West pursues the relationship between man and God, Eastern tradition focuses on the relationship between man and man. Confucianism is focused on the life of the reality not after life. Buddhist teachings are to liberate humans with the realization of their true existences in their own minds. In particular, Confucianism emphasizes the horizontal connection and horizontal hierarchy among humans, not the transcendental one in relation to the sky.²³⁴ Architecture in East, reflecting the Confucian belief, has

²³² John Rajchman, *Constructions*, Cambridge: The MIT press, 2000, 90-100.

²³³ Jong Gun Lee (이중건), *Problems: Architectural Criticism* (문제들: 건축 비평집), Seoul: Sigongmunhawsa, 2014, 174.

²³⁴ Kwon (권영걸), *Creating...*, 84-89

developed into a horizontal relationship.²³⁵ This contrasts with the vertical orientation of Western architecture toward the sky.²³⁶ If it has to be generalized, Western architecture is vertically oriented and Eastern architecture is horizontally expanded. In other words, Western architecture set up vertical monuments, Eastern architecture horizontal ones.



Figure 18 Gyeongbokgung Palace in Seoul

A Japanese critic of art, architecture and culture, Yanagi Muneyoshi, explained that architecture is determined by nature and history, and that the difference between Chinese architecture and Western architecture is explained by means of the definitions land architecture and sky architecture. “Chinese architecture is enormous and flat, and how well contrasts with the medieval Christian architecture that has sprung up to its steeple, one sitting on the earth and one leading to the sky, Confucianism is a teaching of temporality and Christianity is a teaching of afterlife.”²³⁷ The principle of Korean architecture lies in the horizontal connection and organization of space. Soo Geun Kim (1931-1986), a Korean modern architect has analyzed the character of Korean architecture and mentioned in the hymn of *gan* (gap or in between space). “Human beings, space, and time are all *gan*, and Korean architecture is to organize *gan* between the sky and the earth.”²³⁸ A French philosopher, Gaston Baschelard described that the

²³⁵ Kwon (권영걸), *Creating...*, 49-60

²³⁶ LEE (리원허), *Design...*, 44-49.

²³⁷ Muneyosi (야나기 무네요시), *Thinking...*, 176.

²³⁸ Kim Su Geun (김수근), *Hymn of gan (간의 찬가)*, Seoul: Gonggansa, 2006, 176.

house in a vertical orientation connecting the sky and the land. In the Poetics of Space, he understood the attic as a primitive space for thinking his identity and spreading his own dreams in a uniquely mysterious relationship with the universe, and the basement as a secret space. This in between space is for habitation.²³⁹ On the other hand, the Joseon Dynasty scholars emphasized two attitudes of studying which are studying (장수) and resting to relax tension and fatigue (유식). The closed space of *ondol* (floor heating system) for studying and open-air *maru* (elevated wooden floor) was suitable space for resting.²⁴⁰ The architecture of the Joseon Dynasty scholars' lecture hall (서당) is organized horizontally with studying and resting functions.



Figure 19 A place for Studying and Resting are Horizontally Connected in Hakguje (학구제) in Yugok Town

²³⁹ Gaston Bachelard, *The Poetics of Space*, trans by Maria Jolas, John R. Stilgoe, Boston: Beacon press, 1964, 17.

²⁴⁰ Kim(김동욱), *Korean Architecture...*, 231.

It is only the Buddhist architecture that emphasizes verticality in Korean traditional architecture.²⁴¹ There was a tradition of high-rise pagoda in ancient Buddhist temples in Korea.²⁴² The Hwangryongsa pagoda (황룡사탑) in Gyeongju was the nine floor wooden pagoda, and the buildings which emphasized the verticality as Mytilusa temple of Geumsansa (금산사 미륵전) and Palsan temple of Beopjusa can be still founded.²⁴³ Before the Goryeo period, when Buddhism was prosperous in Korea, it can be assumed that the architecture was more vertical.²⁴⁴ The high-rise pagoda in Korea originates from the verticality of the Indian *stupa*.²⁴⁵ However, the verticality has become much lighter as it has spread to China and Korea. The tower was transformed into a Buddhist pagoda in China's high-rise palace.²⁴⁶ The high-rise palace originally developed in China was not a vertically oriented monument but a watchtower.²⁴⁷ In other words, the Indian stupa combined with China's high-rise palace made the tower of Far East.²⁴⁸ The tower of China is a networking architecture for people to climb and actually watch, not a symbolic building. The pagoda in Korea is not to watch but a symbolic building.²⁴⁹ However, the verticality of Korean pagoda is due to the lamination of horizontal elements, and does not express the vertical orientation as vertical lines of oblique

²⁴¹ Go (고유섭), *Korean...*, 120-127.

²⁴² Go (고유섭), *Korean...*, 128.

²⁴³ Go (고유섭), *Korean...*, 70-77.

²⁴⁴ Go (고유섭), *Korean...*, 92.

²⁴⁵ Go (고유섭), *Korean...*, 126-128.

²⁴⁶ Go (고유섭), *Korean...*, 92-98.

²⁴⁷ Go (고유섭), *Korean...*, 86-90.

²⁴⁸ Go (고유섭), *Korean...*, 124-128.

²⁴⁹ Go (고유섭), *Korean...*, 126.

lines.²⁵⁰ Furthermore, the verticality of Buddhist architecture was limited because of the Confucianism of Joseon Dynasty became the ruling ideology.²⁵¹ The horizontal architecture in the West first appeared in modern times; Frank Lloyd Wright and Mies Van der Rohe were first architects to emphasize the horizontality of architecture in West.²⁵² It is well-known that they were influenced by the architecture in East. In particular, Wright was influenced by Japanese architecture and designed prairie-styled houses that suit the vast environment of Central America. In Wright's architecture, the horizontal plane parallel to the ground looks like a floor and makes it feel as if the building belongs to the ground.²⁵³ He saw the endless unfolding plains and horizontal architecture of Central America as a symbol of freedom and democracy.²⁵⁴

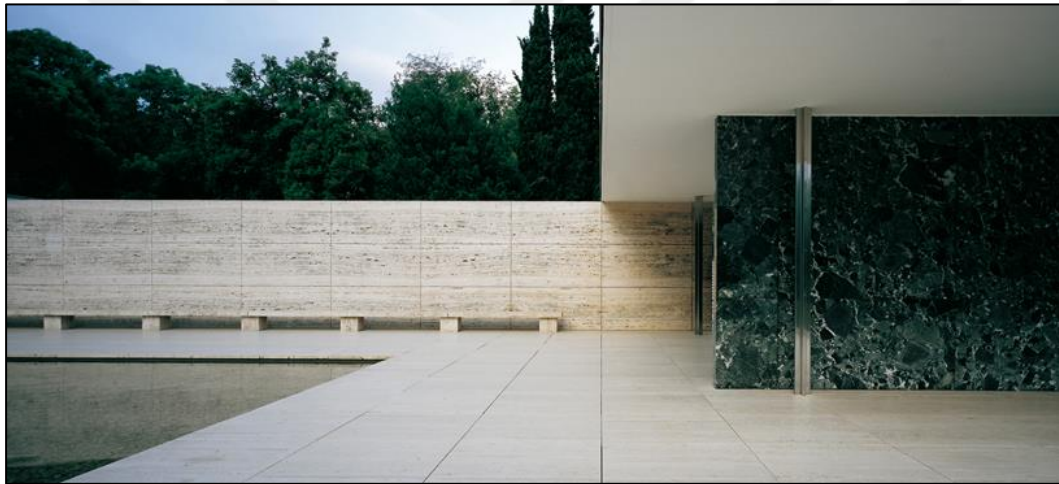


Figure 20 Barcelona Pavilion by Mies Van der Rohe(1929)

²⁵⁰ Go (고유섭), *Korean...*, 126-128.

²⁵¹ Kim(김동욱), *Korean Architecture...*, 48-53.

²⁵² Yu (유현준), *Modernism...*, 92-96.

²⁵³ Yu (유현준), *Modernism...*, 92-95.

²⁵⁴ Frank Lloyd Wright, *The National House*, New York: Horizon Press, 1954, 15.

2.7 Walls and Floors

Western architecture has long been an important challenge in vertical shaping.²⁵⁵ The norm and orders of the pillars standing perpendicular temple was the absolute standard of all architecture.²⁵⁶ After the Greek era, the columns gradually extended to the wall.²⁵⁷ In Roman architecture, columns were attached to the walls. Alberti, a Renaissance architect, regarded the columns as walls. The roof structure of the Greek temple was wooden, but the triangular pediment on the front was made of stone like pillars. If the pediment symbolizes the roof, it forms a façade with the column supporting it strictly speaking.²⁵⁸ In the Renaissance architecture, the design of the façade by order and alignment is a perfect match between the part of the decorative elements that make up the wall and the whole. The façade, created by vertical walls, was the most important element in the design of Western architecture.²⁵⁹ Therefore, the classical architecture of West can be called the architecture of façade. In Western architecture, the special perception of vertical walls, or elevations, can be seen as coming from the symbolism of the megaliths, and this tradition appears consistently throughout the history of Western architecture.²⁶⁰ In the West, when new buildings are added or changed, new walls are often placed on existing buildings.²⁶¹ Medieval cathedrals are often over hundreds of years, usually by building walls in addition to

²⁵⁵ Norberg-Schulz, *Intentions...*, 124-125.

²⁵⁶ Norberg-Schulz, *Intentions...*, 124.

²⁵⁷ Norberg-Schulz, *Intentions...*, 125.

²⁵⁸ Allan Marquand, *Greek Architecture*, New York: The Macmillan Company & Princeton University, 1909, 5-48.

²⁵⁹ LEE (리원하), *Design...*, 46-49.

²⁶⁰ LEE (리원하), *Design...*, 44-45.

²⁶¹ Yu (유현준), *Modernism...*, 52.

existing buildings, or by expanding the space.²⁶² During the Renaissance period, only the façade of the existing building was newly designed²⁶³. Alberti, Michelangelo, and Da Vinci also did much to rebuild the façade of an existing building and it was possible since it was a wall-based masonry structure, but it was impossible in Korean architecture, which was wood based.²⁶⁴



Figure 21 Columns of Temple of Olympia Zeus in Athens

In Korean architecture, the walls are not dealt with importance. There was no norm for the construction of vertical elements such as the proportions and decorations of pillars. When we see the pillars of Beomesa (범어사) Temple, they are extraordinarily short in proportion or white wood pillars are used though rarely.²⁶⁵ If the formal aesthetics of the vertical façade were important, this kind of freedom would be unacceptable.²⁶⁶ There was no theory about the unity and harmony of the part and the whole in the

²⁶² Norberg-Schulz, *Intentions...*, 113-118.

²⁶³ Yu (유현준), *Modernism...*, 60-62.

²⁶⁴ Go (고유섭), *Korean...*, 20-32.

²⁶⁵ Go (고유섭), *Korean...*, 94 & 158.

²⁶⁶ Go (고유섭), *Korean...*, 28-35.

composition of the Korean architecture. Korean architecture was not regarded as a formative art not the view of façade a painting composition.²⁶⁷ It is true that the elevation of Korean architecture has an abstract composition and it has aesthetic order by repetition of elements to give its beauty and impression. However, the façade composition of Korean architecture is a division of elements by structural and functional considerations, and the abstract composition itself has no aesthetic intent²⁶⁸. As described earlier, the Eastern architecture, builds a space for human life between the sky and the land.²⁶⁹ It is not the vertical walls but the horizontal floor that is important in the house for living. The wall is the object of perception, and the floor is the place of life. When Westerners observed the Chinese architecture, said that “while we occupied space, they occupied the ground.”²⁷⁰ It was the floor where the sacrifice ritual was practiced. Western architecture is erected whereas Eastern architecture is laid.



Figure 22 Short and White Columns Being Used in the Beomesa Temple in Busan

²⁶⁷ Kwon (권영걸), Creating..., 94

²⁶⁸ Kwon (권영걸), Creating..., 172-179

²⁶⁹ Kwon (권영걸), Creating..., 74-79

²⁷⁰ LEE (리원하), Design..., 95.

The wall surrounds the space in Western architecture; Korean architecture creates space on the floor.²⁷¹ Korean architecture is built on top of the stylobate, which is not only for protection from moisture but also a space for rituals, ceremonies, and living.²⁷² For example, the stone pavement at a palace becomes a space where the central part is higher than both sides, where only king walks on.²⁷³ Sometimes the floor itself is a symbolic space like the path of shrine in palace. The *Jongmyo Shrine*(종묘, Royal Ancestral Shrine) is divided into upper and lower halves with steps of the height of a person, which differentiate the space and create borders.²⁷⁴ The floor of *Jongmyo Shrine* is not a floor, but is already a space. If you look at Korean architecture, you cannot help but feel that the land is designed first in architecture. Trimming the slope for floor of a building was the beginning of house construction. The path leading to *numaru* (elevated-*maru*) on slope is various, and shows that Korean architecture first designed the land and laid building with minimal deformation of land. Therefore, when appreciating the Korean traditional architecture, it is necessary to take a close look at the change of the ground, the masonry and the stylobate.²⁷⁵

²⁷¹ Kwon (권영걸), *Creating...*, 93-95

²⁷² Kwon (권영걸), *Creating...*, 118

²⁷³ Go (고유섭), *Korean...*, 133-150.

²⁷⁴ Kwon (권영걸), *Creating...*, 113-118

²⁷⁵ Kwon (권영걸), *Creating...*, 176-179.



Figure 23 Nu-maru of Buseoksa Temple in Yeongju

Louis Kahn explained that the spirit of *techne* survives when architecture becomes ruins.²⁷⁶ Khan tried to find the *arche*, the source of architecture in the ruins and he saw it in pillars, arches and beams.²⁷⁷ The ruins of Korean architecture remain in the site of a building. The floor of Korean architecture could remain thousands years since the site of slope was changed at minimum. The ruin of Korean architecture is the floor. In other words, *arche* of Korean architecture can be found in the floor.²⁷⁸

²⁷⁶ Yu (유현준), *Modernism...*, 133-134.

²⁷⁷ LEE (리원하), *Design...*, 37.

²⁷⁸ Brownlee & De Long, *Louis I...*, 44.

2.8 Fireplace and Ondol (Floor Heating System)



Figure 24 Ondol of Lee Hwa Jung's Residence in Chungbuk

The differences between architecture of wall and floor are shown-well in the heating system. The method of heating started as the furnace of the primitive house, evolved into a fireplace in Western architecture and *gudeol* (구들) or *ondol* (온돌) (hypocaust or Korean floor heating system) in Korean architecture, which shows the characteristics of the architecture of wall and the architecture of floor.²⁷⁹ In East Asia, Korean architecture particularly forms a complex floor, which is closely related to the use of *ondol*. One of the greatest features of Korean architecture is the combination of *ondol* and *maru* (마루).²⁸⁰

Since a *hanok* (Korean traditional house) is sitting-based architectural style, the floor is separated from the ground and the floor is not continuous as it is divided into *ondol* and *maru*.²⁸¹ The stylobate, *madang* and kitchen floors have a lot of different levels due to

²⁷⁹ Inaji, *The Garden...*, 143-144.

²⁸⁰ Go (고유섭), *Korean...*, 34-35.

²⁸¹ Inaji, *The Garden...*, 144.

the coexistence of different spaces under one roof.²⁸² There is even a loft on the middle floor. Not to mention the Western architecture, it is difficult to see such a complicated floor change either in Chinese architecture or Japanese architecture which share a sitting-based life style.²⁸³ Floor heating system did not develop in China or Japan. Korean architecture thus resolved the division of space and area by the change of floor.²⁸⁴ Even if you build a house with a flat floor, you can change the bottom of the house by raising the base of the house. This is a characteristic of Korean architecture, which is difficult to see in Chinese or Japanese architecture. Lowering the floor of the entrance hall and W.C in modern Korean apartments is evidence that the architectural tradition of this floor has been maintained up to now.²⁸⁵ It is no exaggeration to say that the various spaces of Korean architecture are formed by floor.²⁸⁶ The space where an act is performed is called '*pan* (meaning state of situation)' in Korean. The *pan* when it is called dance *pan*, mess *pan* that *pan* takes place in *madang* or floor.²⁸⁷ The construction of floor is the construction of *pan* and the space of the event where various actions take place. In Korea, the floor is important, and the wall is just a device for opening or closing the space.²⁸⁸

²⁸² Inaji, *The Garden...*, 144-145.

²⁸³ Inaji, *The Garden...*, 144.

²⁸⁴ Inaji, *The Garden...*, 143-145.

²⁸⁵ Inaji, *The Garden...*, 145-146.

²⁸⁶ Inaji, *The Garden...*, 147-149.

²⁸⁷ Inaji, *The Garden...*, 149.

²⁸⁸ Inaji, *The Garden...*, 148-149.

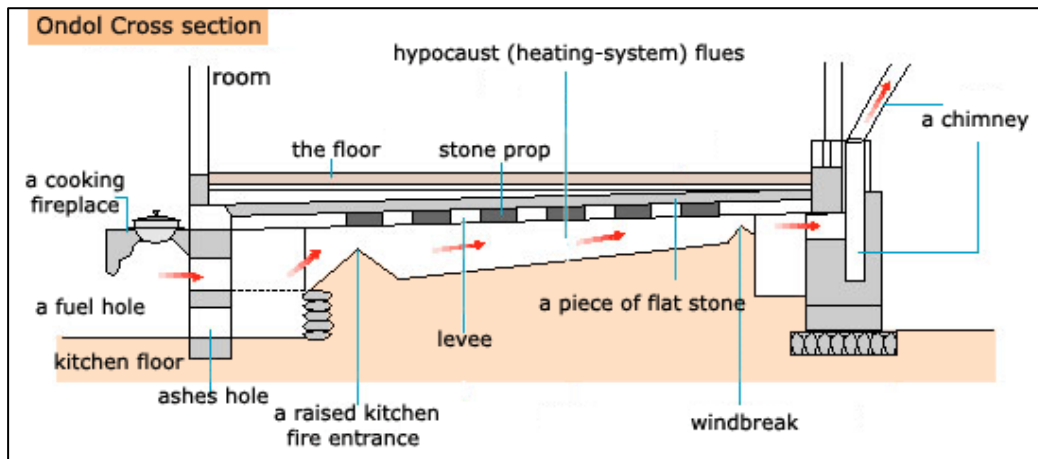


Figure 25 Schematic Drawing of Ondol System

After the modernization, it was once popular to install a fireplace in *maru* of Korean houses while being influenced by Western architecture.²⁸⁹ However, since the 1990s, economic efficiency and convenience of construction have been reflected, and overall floor heating has gradually become common.²⁹⁰ In Korean architecture, the floor tradition is deeply rooted. In Western architecture, there is only a layer change that is constantly repeated without changing the floor.²⁹¹ The division of space according to the function is solved by setting the wall and dividing the space.²⁹² The wall separates the inside and the outside, internal and external and the room from the room.²⁹³ The floor, on the other hand, is small and continuous. Therefore, Western architecture lives inside and outside both with shoes on. The first architect to notice the importance of floors in the West was Adolf Loos²⁹⁴. At the beginning of the 20th century, Loos declared that architecture is not art, but that a space is for living. Instead, he focused on designing

²⁸⁹ Lee, *Continuity...*, 66-68.

²⁹⁰ Lee, *Continuity...*, 71-72.

²⁹¹ Kwon (권영걸), *Creating...*, 172-173.

²⁹² Kwon (권영걸), *Creating...*, 173-176.

²⁹³ Kwon (권영걸), *Creating...*, 192-197.

²⁹⁴ Stewart, *Fashioning...*, 127-140.

the floor of interior space. Loos criticized the fact that Western architecture had the same floor and ceiling height as a small restroom, a large hall, or both, and created a complex interior space with various floor changes that organized the occupants' lives.²⁹⁵ In this regard, Loos is an architect who has transformed the paradigm of Western architecture from Western to Eastern.



Figure 26 Adolf Loos's Villa Muller in Prague

²⁹⁵ Adolf Loos, Joseph Veilich, *The architecture of Adolf Loos: An Arts Council Exhibition*, London: The Council, 1985. 80.

2.9 Light and Shadow

Western architecture's light illuminates the wall which has a direct effect on the interior.²⁹⁶ In Korean architecture, the shadow on the floor creates space. Japanese architecture has a deep dark space that inevitably gets light owing to the stratified organization in which the building expands without a courtyard.²⁹⁷ However, Korean architecture is generally composed of a single building which has a *madang* (courtyard) in the front, so the sunlight in *madang* creates both reflected rays and shadows in the whole complex.²⁹⁸ In Korean architecture, the light creates shadows on the floor and the shade creates shelter to avoid direct sunlight.²⁹⁹



Figure 27 Shadows in Madang of Bongjeongsa Temple in Youngsan-myeon

²⁹⁶ Yu (유현준), *Modernism...*, 16.

²⁹⁷ Tanajaki Junichiro (타나자키 준이찌로), *Praise of Sacred Space (음예공간예찬)*, trans by Ji Gyeon Kim (김지건), Seoul: Balon, 1997, 63-68.

²⁹⁸ Yim, *The Traditional...*, 13-16.

²⁹⁹ Yim, *The Traditional...*, 15-17.

The Korean traditional architecture is a construction of floor. Korean architecture does not praise dark space. The aesthetics of Korean architecture is not the aesthetics of darkness but the aesthetics of the shade.³⁰⁰ A shade is only meaningful when it is with light.³⁰¹ The effects of the shadow of the *hanok*'s eaves on the walls and the floor are the charms of the *hanok*.³⁰² It is *hanok* that you can feel peace if you look at the scenes where the light and shadow are directed while you sit in the *toenmaru* (narrow wooden porch running along the outside of a room) or lay in the *deachung* (the main floored room).³⁰³ It is not an exaggeration to say that the atmosphere that changes every moment is a feast of light and shadow on *madang* and walls.³⁰⁴ *Hanok* is more like the architecture of shadow. *Hanok*'s *madang* is a canvas on which shadows are drawn. If there is a single tree in the corner of a *madang*, the picture made by light and shadow is wonderful.³⁰⁵ *Bongjeongsa* Temple of *Youngsan-myeon* displays the extremity of space created by light and shadows falling on *madang*.³⁰⁶ As Bong Yeol Kim observes the pine tree planted in the middle of *madang* plays an important role here is:

When you look at this pine tree, you should pay attention to the shadows that it creates, the shadows that make up the shadows of the exquisite part, connecting the bigger *madang* and smaller *madang*, and that shade gives the independence as if the two *madangs* are separated.³⁰⁷

³⁰⁰ Yim, *The Traditional...*, 20-31.

³⁰¹ Yu (유현준), *Modernism...*, 16-17.

³⁰² Kwon (권영걸), *Creating...*, 113-119.

³⁰³ Inaji, *The Garden...*, 164-184.

³⁰⁴ Yim, *The Traditional...*, 20-36.

³⁰⁵ Yim, *The Traditional...*, 36-48.

³⁰⁶ Yim, *The Traditional...*, 24-49.

³⁰⁷ Bong Yeol Kim (김봉렬), *Place Where I Want to Go and Stay 2 (가보고 싶은 곳 머물고 싶은 곳 2)*, Seoul: Culture Graphy, 2013, 184.

Because of the pine tree, the shadow creates a vague fluid space in which the separation and integration both exist and co-exist.

If architecture is compared to painting, the canvas of Western architecture drawn by light and shadow is the wall, but the canvas of Korean architecture is the floor. These differences are caused by the viewpoint of the experiencing subjects. Light is the gaze that human beings exhale, and the role of light and shadow is to create shape and space that they perceive with eyes. Our eyes allow us to perceive forms in light, said by Le Corbusier. The experiencing subject of Western architecture is a human being standing in front of the building at the centre.³⁰⁸ On the other hand, experiencing subject of Korean architecture is dispersed and floats inside and outside.



³⁰⁸ Yu (유현준), *Modernism...*, 114-132.

CHAPTER 3

HUMAN AND ARCHITECTURE

3.1 Location of Experience

Architecture is not an object that exists by itself. As soon as, meanings and values are given to a building after responses from human, its architecture becomes a reality. If architecture is a cultural product that exists in this relationship with human beings, architecture must reflect the relative position and viewpoint of those who use and experience it.³⁰⁹ That is the subject of experience. For example, it is easy to see that the Greek temple is a house of god intended to be viewed from outside.³¹⁰ It was not allowed to enter the temple except few priests. The façade of a Greek temple, made of pillars and ornaments is visible from the outside. The temple stands in front of people like a huge piece of status with grand space inside. It presupposes an experiential subject who maintains this visual distance and stands outside the subject. So from the Greek architecture, Western architecture has long been treated as a visual object such as art or sculpture. The theory of architecture was mainly about the meaning or impression that the form of architecture conveys from the outside. The Western classical architecture was modeled on the Greek architecture then was theorized mainly on the order and decoration of pillars at the front.³¹¹ After the Renaissance, the systematic proportions of the elevation and the decoration, and the construction theories all presuppose the viewer

³⁰⁹ Norberg-Schulz, *Intentions...*, 23.

³¹⁰ Pallasmaa, *The Eyes...*, 33.

³¹¹ Pallasmaa, *The Eyes...*, 48.

standing in front of the building maintaining a visual distance.³¹² In Western architecture, space was treated as a visual object with a certain distance from the subject of experience. The perspective of the Renaissance shows the concept of space rationalized by the visual subject, where the visual subject is outside the space placed in by perspective. The humanistic tradition which subjugates natural phenomena to the centrality of the human being became clearer after the Renaissance, since it inherited the epistemological tradition which separates the subject and the object ever since the Greek period fashioning the visual object in Western architecture.³¹³



Figure 28 Primitive Hut in the History of art and Architecture

³¹² Norberg-Schulz, *Intentions...*, 140.

³¹³ Pallasmaa, *The Eyes...*, 33.

The subject of experience in Korean architecture is quite different from the Western architecture. The long tradition of Eastern thinking does not separate the subject from the object, among other things³¹⁴. There is no concept of a self or a rational subject with a fixed attribute or identity.³¹⁵ The self is fluid and unchanging in nature. Confucianism and Taoism define self as part of nature and in nature.³¹⁶ Man itself is only part of the cosmic flow. Confucianism emphasizes the discipline of the mind, which means the realization of the order of things.³¹⁷ In Confucianism, the subject of philosophy is not human but nature. Human reason is not the subject, but nature's reason is the subject.³¹⁸ The characteristic of Korean thought is not to place a cognitive distance among man, nature and the universe.³¹⁹ The subject is unified without being separated from the object. The situation of this subject of recognition is well reflected in Korean architecture. In Korea, architecture is not regarded as an object with a visual distance from the subject of experience. In the cognitive system of architecture, the position of human is not outside of the building but rather inside.³²⁰

In Feng-Shui, the standard principle of the layout is the direction when looking out from inside of a building, not from outside.³²¹ Thus, the subject of experience of *hanok* exists in the house, and the building is placed in the position of the person who resides in it. There is a symbolic image that shows the relative position of the subjects of Korean and Western architecture. The *primitive hut* is drawn to illustrate the origins of Western

³¹⁴ LEE (리원허), *Design...*, 12-16.

³¹⁵ LEE (리원허), *Design...*, 16.

³¹⁶ Kwon (권영걸), *Creating...*, 29-31.

³¹⁷ Kwon (권영걸), *Creating...*, 29.

³¹⁸ Kwon (권영걸), *Creating...*, 29-30.

³¹⁹ Kwon (권영걸), *Creating...*, 59-60.

³²⁰ Kwon (권영걸), *Creating...*, 62-63.

³²¹ Kwon (권영걸), *Creating...*, 79-80.

classical architecture where a person stands outside of building and points to a building.³²² On the other hand, a person is looking out from inside of building at *Samsugongyoungjeong* in Korean architecture. Architecture is not an object for visual appreciation for people outside in Korean architecture.³²³ More precisely, in Korean architecture, the subject of experience is both inside and outside. Sun Woo Choi, a Korean art historian said that “one of the beauties of Korean architecture is the charm of looking at from afar and the pleasure of feeling and embracing one in it.”³²⁴ There are certainly two perspectives of subject of experience in Korean architecture. *Jeongja* (pavilion) is such a representative of architecture which has two perspectives.³²⁵ In paintings of *Jeongja*, there are two subjects of experience inside and outside. In Korean architecture, the subject of experience exists both inside and outside, is not an object occupying a fixed position in an objectified three-dimensional space, but it is recognized and experienced in a space and time of a four-dimensional space.³²⁶ If Korean architecture reflects the system of experience and recognition, it is wrong to interpret and approach to Korean architecture from the perspective of Western architecture.³²⁷

³²² Pallasmaa, *The Eyes...*, 33.

³²³ Kwon (권영걸), *Creating...*, 149-151.

³²⁴ Sun Woo Choi (최순우), *Standing beside the Murangsujeon Column (무량수전 배흘림 기둥에 기대서서)*, Seoul: Hakgoje, 2008, 89.

³²⁵ Kwon (권영걸), *Creating...*, 150.

³²⁶ Kwon (권영걸), *Creating...*, 150-151.

³²⁷ Gyeong Su Kim (김경수), *A Walk of Architectural Aesthetics (건축 미학 산책)*, Seoul: Balon, 2000, 171.



Figure 29 Two Subjects of Experience in Jukseoru (1738) Painted by Jeongseon

In Western architecture, human symbolic position is located inside of a building. Villa Rotonda, designed by Palladio, reflects the symbolic position of human in the centre of the hall, representing the anthropocentrism of the late Renaissance.³²⁸ The position of the subject in Villa Rotonda is more precisely on the plane than in the architecture. It is similar to turning the elevation 90 degrees.³²⁹ There basically is the cognitive distance of experiencing subject in a building.³³⁰ On the other hand, the position of the subject of experience in Korean architecture is not in a plane but is dispersed in the totality of architecture; therefore there is no cognitive distance between the subject and object.³³¹

³²⁸ Norberg-Schulz, *Intentions...*, 98.

³²⁹ Yu (유현준), *Modernism...*, 42.

³³⁰ Yu (유현준), *Modernism...*, 42-46.

³³¹ Kwon (권영걸), *Creating...*, 164-166.

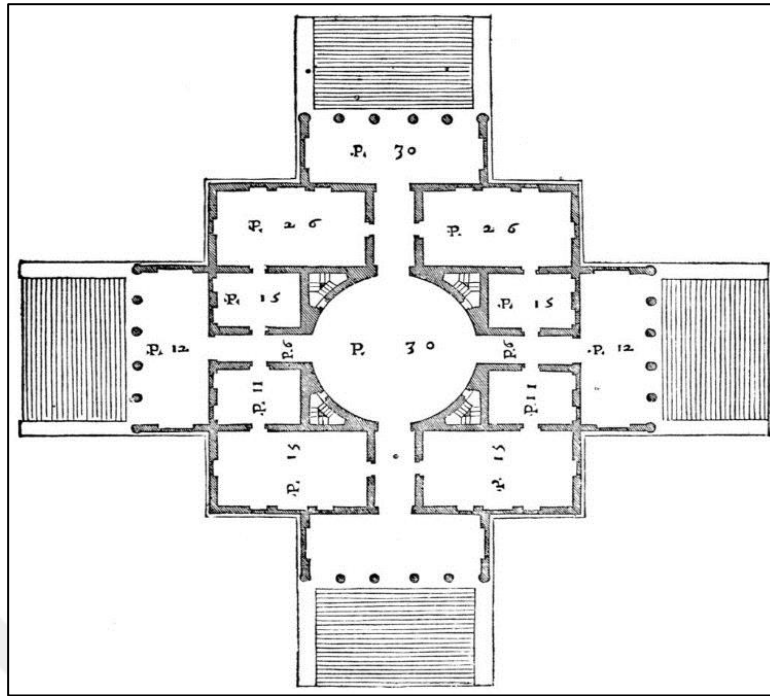


Figure 30 Villa Rotunda by Palladio (1567)

3.2 Relationship between Painting and Architecture

Painting is drawing things, but it is also drawing the thoughts of perceiving things. So if you analyze the painting well, you can deduce the principles of spatial recognition of the culture.³³² The subject of experience in Western tradition perceives and recognizes architecture with visual distance, which is closely related to the development of the relationship between architecture and painting in the West.³³³ It is a long tradition of mankind to draw a picture when building a house. But paintings were not a means of visual reproduction of the house as it is seen.³³⁴ This can be seen in the medieval architectural pictures.³³⁵ In the Renaissance era, painting became a medium for visual reproduction of architecture. Perspective drawing is a technique in which a visual

³³² Pallasmaa, *The Eyes...*, 87.

³³³ Ackerman, *Architecture...*, 126.

³³⁴ Ackerman, *Architecture...*, 129-134.

³³⁵ Zhangpa (장파), *The Orient...*, 94-95.

subject at a fixed position accurately reproduces a three-dimensional shape in a rationalized space of a two-dimensional pictorial plane.³³⁶ The way to design architecture through drawing became a unique tradition of the West as it was able to visually reproduce the buildings in a rationalized space of perspective. This works the same when perspective drawing reproduces the inner space of architecture. Since the 18th century, the shaded beautiful facades, elevations and plan drawings developed at the Ecole des Beaux-Arts in France were based on the principles of planar vision that the subject of experience on the outside of drawing, recognizing architecture.³³⁷

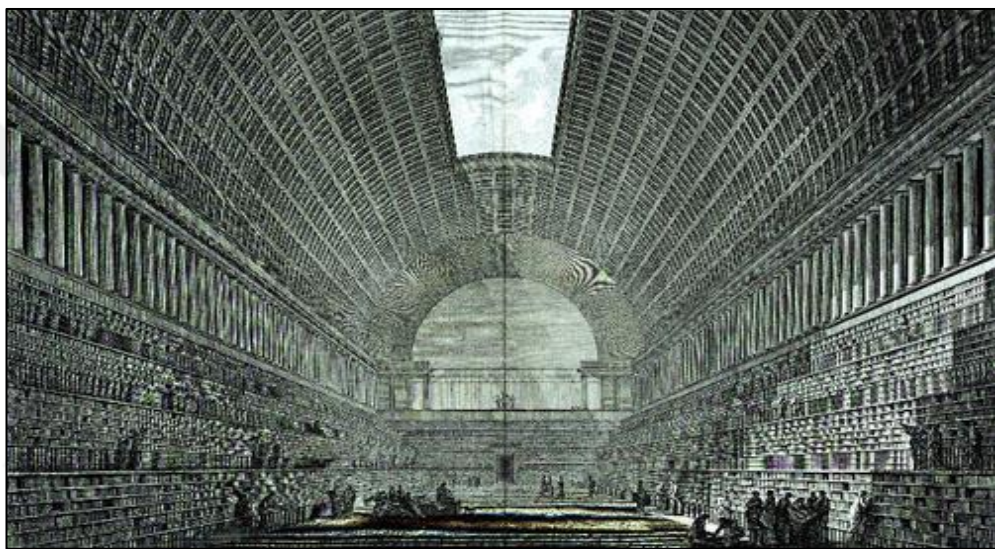


Figure 31 Boullée's National Library (1785) Perspective Drawing

Although it is not still formulated, it seems that the designers sketched a certain type of picture when building a palace or government office in the Joseon Dynasty.³³⁸ However, this is not a simple visual representation of the shape of the building with a simple plan diagram showing the extent of the column spacing.³³⁹ All the architectural drawings

³³⁶ Zhangpa (장파), *The Orient...*, 95-100.

³³⁷ Eugene Emmanuel Viollet-le-Duc, *Lectures on Architecture 2 (건축강의 2)*, trans by Yu Gyeong Jung, Seoul, Arcanet, 2015, 42.

³³⁸ Go (고유섭), *Korean...*, 146-152.

³³⁹ Go (고유섭), *Korean...*, 217-218.

that are left are not drawn to build houses but are painted by as if the building constructed. Korean architectural drawings including plans, elevations and facades are drawn simultaneously on a single plane. In other words, rather than visualizing the architecture in a rationalized space based on the fixed viewpoint and location of the subject, such as perspective and elevation, multiple viewpoints and locations coexist in a single architectural drawing.³⁴⁰ Korean architectural drawings and paintings reflect not only the rationalized architectural space but also the characteristics to reveal the experiential living space.³⁴¹ In Korean painting, the position of the painter is not out of the painting like in Western painting, but in the painting. In other words, it draws the picture from the position of the person in the painting. This is a technique in which the painter himself enters the painting and paints in the mind of the person in the painting.³⁴² To express shades in paintings, the shade follows along the objects rather than following the direction of light in Western painting.³⁴³ It does not matter where light comes in and where shadows emerge. Korean paintings are not drawn for visible phenomenon but drawn to portrait the inner spirit.

³⁴⁰ Kwon (권영걸), *Creating...*, 143-146.

³⁴¹ Bong Yeol Kim (김봉렬), *Rediscovery of Korean Architecture 3 (한국 건축의 재발견 3)*, Seoul, Lee Sang Architecture, 1999, 182-200.

³⁴² Yu (유현준), *Modernism...*, 70.

³⁴³ Yu (유현준), *Modernism...*, 68-71.



Figure 32 Junghwajeon in Deoksugun Palace Built in Joseon Dynasty in Multiple Perspectives

The visual representation of architecture in a rationalized space of two-dimensional paintings was unusual to the spatial recognition systems in Korea.³⁴⁴ The introduction of Western architectural drawing had a huge impact in East. When students from Far East went to study architecture in West for the first time, the most unusual for them was that architect designed the architecture through two-dimensional drawings.³⁴⁵ The first thing they did when they came back home was to visualize the architecture of homeland through architectural drawings. The painting and architecture of a culture have similarity

³⁴⁴ Yu (유현준), *Modernism...*, 50 & 68-73.

³⁴⁵ LEE (리원하), *Design...*, 44-45.

in the recognition system of space.³⁴⁶ Korean architecture, like space in Korean paintings, is not an object that can be visually reproduced in a fixed point. So if you draw *hanok* with a perspective drawing, it is awkward. At a fixed point, Korean architecture never reveals the whole. From the outside, it is impossible to recognize the whole of Korean architecture. You can experience Korean architecture properly when you move around and look at various locations and viewpoints at the same time.³⁴⁷ That is, a fluid and distributed viewpoint is required.

3.3 Façade of Korean Architecture

Western architecture has emphasized the composition principle of façade since the subject of impression is outside of building. The windows of the Renaissance palazzo are arranged according to their autonomous order irrespective of the function of the interior space.³⁴⁸ The order of proportions, unity, balance and symmetry of the façade elements and decorations has long been a central theme in architectural design³⁴⁹. However, when you look at the façade of a *hanok*, it is often the case that the size of windows and doors are slightly different, breaking the uniformity and regularity of the whole.³⁵⁰ Why does this kind of irregularity take place in the façade of *hanok*? Some explain that there is an intention like the abstract art in West. But this is only an interpretation from the perspective of modern architecture, rather than the intention of the carpenter or the owner when building.³⁵¹ The change seen from the façade of *hanok* is actually caused by the height and size of window and door according to the needs of

³⁴⁶ Yu (유현준), *Modernism...*, 70.

³⁴⁷ Kwon (권영걸), *Creating...*, 164-165.

³⁴⁸ Pallasmaa, *The Eyes...*, 198.

³⁴⁹ Norberg-Schulz, *Intentions...*, 92.

³⁵⁰ Inaji, *The Garden...*, 137.

³⁵¹ Go (고유섭), *Korean...*, 25-32.

the interior space in each room or space. We can clearly see that the subject of experience in Korean architecture is not located outside of the building but inside.³⁵²



Figure 33 Palazzo Medici Riccardi by Michelozzo di Bartolommeo in 15th Century

The order of façade composition which is irrelevant to the internal function does not apply to the Korean architecture.³⁵³ The visual order given from exterior is not an absolute standard in Korean architecture. The windows and doors of Korean architecture are expressions of internal functions and are devices that communicate with the outside in the room.³⁵⁴ However, Korean architecture does not mean extreme functionalism that simply ignores the order of the façade and simply creates windows and doors according to the function and structural needs of interior space. There is an order in the façade of Korean architecture. However, it is a weak order that regulated and compromises with the whole relationship, taking precedence of function and structure, not from the exterior as absolute norms in Renaissance architecture.³⁵⁵ Even white wood in its natural state is often used as a structural member when there is a lack of materials.³⁵⁶ Some argue that Korean architecture preoccupied with

³⁵² Kwon (권영걸), *Creating...*, 195-198.

³⁵³ Yu (유현준), *Modernism...*, 48-60.

³⁵⁴ Kwon (권영걸), *Creating...*, 173-176.

³⁵⁵ Kwon (권영걸), *Creating...*, 52-56.

³⁵⁶ Kwon (권영걸), *Creating...*, 197.

Deconstructionism, but this is an overstatement.³⁵⁷ During the Joseon Dynasty, scholars said that they should not use the curved tree for pillars. It is true that using a bent tree is structurally disadvantageous. In the late Joseon Dynasty, there was a lack of straight trees, so they had to use bent trees. However, this was possible since it was not the absolute norm of aesthetic order of appearance in the first place. For the columns of the Forbidden City in China, it was difficult to find a large straight tree, so they bundled several trees together, made thick and clayed them into straight and smooth circular columns. In this regard, Korean architecture differs from Chinese architecture. The façade of Korean architecture is not governed by the strong order given from exteriors. It proves that there is no room for Deconstructivist aesthetics to be applied in Korean architecture.³⁵⁸



Figure 34 Irregular Shape of Wooden Columns of Gesimsa Yosache Temple Built in 1350

³⁵⁷ Pallasmaa, *The Eyes...*, 99.

³⁵⁸ Pallasmaa, *The Eyes...*, 98-99.

Jeongyodang, a lecture hall of *Dosan seodang* (scholars' house) is a building with an interesting façade in terms of location of the subject of experience.³⁵⁹ The façade is composed of 4 *kan* (unit) having a single-*kan* room on the right side, and the other side is three-*kan maru* (floor).³⁶⁰ From the point of entry, the whole is not symmetrical.³⁶¹ This contrasts with the fact that the *Jeongyodang* lecture hall was built around the 17th century. The lecture hall in 17th century Joseon Dynasty usually has five-*kan*, which makes up the whole symmetry. The actual centre of *Jeongyodang* lecture hall is on the right side.³⁶² *Maru* is emphasized as centrality in a ritual space of lecture hall architecture.³⁶³ So the whole is a four-*kan* building, but actually it looks like three-*kan*. Here, the symbolic position of the subject of experience is at the centre of *Jeongyodang* lecture hall *maru*, glancing outside. On the other hand, the entrance stairs of the building are symmetrically separated into two. The arrangement of stairs depends on the direction of the entry. Therefore, when viewed from the centre of *maru*, the stairs are biased toward one direction.³⁶⁴ The building is not symmetrical, but the stairs are symmetrical which is awkward. This composition of façade shows the characteristic of Korean architecture where the subject of experience is located both inside and outside.³⁶⁵ One can truly feel Korean architecture when one sits on *maru*, stretch legs while looking outside.³⁶⁶

³⁵⁹ Kwon (권영걸), *Creating...*, 118.

³⁶⁰ Inaji, *The Garden...*, 179-182.

³⁶¹ Kwon (권영걸), *Creating...*, 145.

³⁶² Kim (김봉렬), *Rediscovery...*, 202.

³⁶³ Inaji, *The Garden...*, 158.

³⁶⁴ Kwon (권영걸), *Creating...*, 150.

³⁶⁵ Kwon (권영걸), *Creating...*, 147-150.

³⁶⁶ Inaji, *The Garden...*, 164-165.



Figure 35 Façade of Jeongyodang Lecture hall of Dosan Seodang Built in 1575

3.4 Central Subject and Fluid Subject

Space around human beings was controlled by visual rationality in West.³⁶⁷ Just as the point of view is symbolized, the anthropocentrism of the Western Renaissance has fixed the viewpoint of human looking at architecture.³⁶⁸ Since the Baroque period, the position of the visual subject began to move, but the object was still represented in a rationalized space as the visual subject.³⁶⁹ Asians contemplate an object by walking around and grasping the whole of the object, not anchored at a fixed point. There are various ways to borrow landscape when designing Chinese garden, such as *woncha* (borrowing landscape from a great distance), *incha* (borrowing landscape from a close distance), *yangcha* (borrowing landscape from a higher point), *bucha* (borrowing landscape from a lower point) and *eungsiyicha* (borrowing landscape from different

³⁶⁷ Yu (유현준), *Modernism...*, 46-48.

³⁶⁸ Pallasmaa, *The Eyes...*, 18.

³⁶⁹ LEE (리원하), *Design...*, 46-48.

season).³⁷⁰ This way of looking at both distant, close, up and down places is a traditional method of contemplation by Chinese philosophers and furthermore it was developed in Korea, China and Japan.³⁷¹ This contemplation method does not look at a fixed point of view. By observing both macroscopically and microscopically, we grasp the definition of the sky, the earth and all universal things.³⁷² In this way, the gaze of the subject is not fixed and it rather grasps the whole of the subject. Even if the subject does not move, the gaze of the subject moves around.³⁷³



Figure 36 Palazzo Piccolomini Garden in Pienza in 1459

In architecture, the viewpoint of subject of experience is divided into the viewpoint of first person and the third person.³⁷⁴ The Renaissance garden was designed in a

³⁷⁰ Kwon (권영걸), *Creating...*, 159-162.

³⁷¹ Kwon (권영걸), *Creating...*, 162-163.

³⁷² Zhangpa (장파), *The Orient...*, 507-515.

³⁷³ Kwon (권영걸), *Creating...*, .162

³⁷⁴ Kwon (권영걸), *Creating...*, 162-166.

geometric pattern and from the point of view of third person.³⁷⁵ Later the gardens in Baroque period reflected the view of the first person.³⁷⁶ The picturesque garden in England is the representative point of view of first person assuming is the moving first person subject. The location of subject of experience in architecture of Far East countries, can be called the view of first person since it is not the point of view of third person.³⁷⁷



Figure 37 Lion Grove Garden in Suzhou in China, Built in 1342

3.5 Picturesque and Sequence of Scenery

The position of the fixed subject in Western architecture began to move after the Baroque period.³⁷⁸ When designing a building or a garden, it was based on a first person subject who moved from a fixed point of view.³⁷⁹ If the Renaissance and

³⁷⁵ Michel Coan, *Perspectives on Garden Histories, Dumbarton Oaks Colloquium Series in the History of Landscape Architecture*, V.21, Washington D.C.: Dumbarton Oaks Research Library and Collection, 2006, 87-88.

³⁷⁶ Coan, *Perspectives...*, 132.

³⁷⁷ Yu (유현준), *Modernism...*, 85-87.

³⁷⁸ Coan, *Perspectives...*, 92-100

³⁷⁹ Coan, *Perspectives...*, 27-47

Baroque gardens were to create a formal geometric plane, the picturesque garden which developed in England in the 18th century, began to deliberately organize a sequence of visual scenes in accordance with the movement of the subject.³⁸⁰ The picturesque garden intended to realize the nature of classical landscape as it is in reality, and it was composed of visual scenes experienced by observers moving along a free axis to have a narrative sequence.³⁸¹ The picturesque garden was designed not to be a formal geometric pattern, but to inspire some feeling and inspiration as a result of the changing visual scene according to the movement of the subject of experience. The architectural design that constitutes the visual scene centred on the moving subject was influenced by Romanticism and also appeared in the neoclassical architecture in France in the late 18th century. The important design concept of Ecole des Beaux-Arts is to construct a plane to give total uniformity to the continuous spatial scene experienced in the imaginary movement of the subject moving along the central axis (*marche*). The English picturesque principle distinguishes it from the neoclassical architecture of France in that it constitutes a narrative scene that experiences the movement and decay of the central axis and frontal nature along the natural curved path.³⁸² But it is the same in that it creates a sequence of visual scene for the moving subject of experience. The concept of an architectural promenade, which was developed through the changing landscape of Acropolis in accordance with the movement of the observer experienced by Le Corbusier in the early 20th century and the principle of townscape developed in the English modern architecture, both originate from the picturesque principle that constitutes a visual scene that changes according to the movement of the subject.³⁸³ The picturesque gardens in England are known to have been influenced by Chinese gardens. As explained in earlier contexts, Chinese gardens are intended not to look at the garden at a fixed point but to appreciate scenes that change with the movement of people.

³⁸⁰ Coan, *Perspectives...*, 9-26

³⁸¹ Coan, *Perspectives...*, 84-86

³⁸² Coan, *Perspectives...*, 64-84

³⁸³ Clemente Marconi, *The Oxford Handbook of Greek and Roman Art and Architecture*, Oxford Publication, 2014, 302.

Guiding the subject along the suggested route or corridor, the Chinese gardens are similar to the English picturesque gardens.³⁸⁴ They both create clearly intended scenes at each point of path for experience. However, the Chinese gardens have cyclical and simultaneous trajectory without a period or end point, forming a visible relationship in the overall composition.³⁸⁵ In this respect, the Chinese garden differs from the sequence of the narrative scenes that English picturesque makes.



Figure 38 The Garden at Stourhead, Built in 1780

The architecture and garden of Korea is similar to the Chinese garden in that the gaze of subject penetrates in various directions, overlapping the scenes, forming a cyclical, mutually visible relationship.³⁸⁶ However, Korean garden differs from the Chinese garden that it does not constitute the intended route and does not clearly show the intention of the scene.³⁸⁷ This characteristic of Korean architecture originated from the

³⁸⁴ Cody & Steinhardt & Atkin, *Chinese...*, 2011, 46.

³⁸⁵ Kwon (권영걸), *Creating...*, 162-166.

³⁸⁶ Kwon (권영걸), *Creating...*, 218-220.

³⁸⁷ Kwon (권영걸), *Creating...*, 223.

character and position of the fluid and decentralized subject that Korean architecture reflects.³⁸⁸ A representative garden of Korea, *Sosewon* in *Damyang* shows these characteristics of Korean architecture (Figure 38).³⁸⁹ The concept of perspective in the West has a central subject that perceives space.³⁹⁰ However, the spatial system of Korea is not the intentional or unconscious of the coherent subject perceiving space, but it removes and replaces it with the subject of multiple spatial perceptions.³⁹¹ Beauty is not understood as a perspective spatial system. The spatial picture is not seen at once. It is felt that the spatial system of the petty circle must understand the sense of space felt in each place formed by the low wall or the height difference. This process is woven in sequence.³⁹²

The direction of staircase of *Buseoksa* temple complex and the façade of *Murangsujeon* (one of the temples in Buseoksa) are in different axis.³⁹³ There are various interpretations of it. Some say that the design was purposely done in order to induce religious intent and architectural inspiration, but this should be analysed from the perspective of phase change of the subject of experience.³⁹⁴ In other words, although the axis to the staircase was designed from the viewpoint of the person entering the temple, the *Murangsujeon* was designed according to the person inside, looking the outside. The two different axes are result of different position of the subject of experience. When one sits on *maru* of *Buseoksa* and watches the natural scenery, it is

³⁸⁸ Kwon (권영걸), *Creating...*, 166.

³⁸⁹ Kwon (권영걸), *Creating...*, 119-120.

³⁹⁰ LEE (리원허), *Design...*, 38-44.

³⁹¹ Kwon (권영걸), *Creating...*, 165-166.

³⁹² In ha Jung (정인하), *Architecture of Soo Geun Kim: a New ideology of Korean Architecture* (김수근 건축론: 한국 건축의 새로운 이념형), Seoul: Migeonsa, 1996, 148.

³⁹³ Bo Hyun Kim (김보현) & Byung Sun Bea (배병선) & Do Hwa Park (박도화), *Buseoksa Temple* (부석사), Seoul: Dewonsa, 2008, 59.

³⁹⁴ Kwon (권영걸), *Creating...*, 164-172.

clear that it was intentionally designed with different axis. The interpretation of change of scenes by the movement of the subject in one direction of the picturesque is not appropriate to interpret Korean architecture. For example in *Buseoksa* temple, the change of axis can be understood in perspective of flowing subject of experience.³⁹⁵



Figure 39 From the Staircase of Buseoksa to Murangsujeon, Built in 14th Century

There is always a change of axis in Korean architecture.³⁹⁶ It is shown not only in temples but residential houses as well.³⁹⁷ When the subject of experience enters, he/she looks the building from *madang* (courtyard) inside of the building; he/she looks outside.³⁹⁸ Therefore, it is necessary to think that there is a time-space transition between one axis and other axis rather than axis being tilted.³⁹⁹ The reason why these axis changes in Korean architecture are not to compose a sequence of visual scenes

³⁹⁵ Kim (김보현) & Bea (배병선) & Park (박도화), *Buseoksa Temple (부석사)*, 59.

³⁹⁶ Kwon (권영걸), *Creating...*, 144.

³⁹⁷ Kwon (권영걸), *Creating...*, 145.

³⁹⁸ Kwon (권영걸), *Creating...*, 150.

³⁹⁹ Kwon (권영걸), *Creating...*, 149-150.

experienced by the moving subject but because of the dispersed subject of experience with the coexistence of axis of entry and axis from interior.⁴⁰⁰ It is difficult to find such subject of experience that changes its stance from here to there in Western architecture. Richard Serra, a modern sculptor attempted to destroy the centrality and identity of the subject by deliberately denying the sequence of narrative in picturesque scenery, garden and architecture by allowing the location and point experience to be here and there.⁴⁰¹ It carries a critique of the Western picturesque tradition of maintaining the central subject. The aesthetic experience of contemporary sculpture that Serra intends is in line with the experience of Korean architecture.⁴⁰²

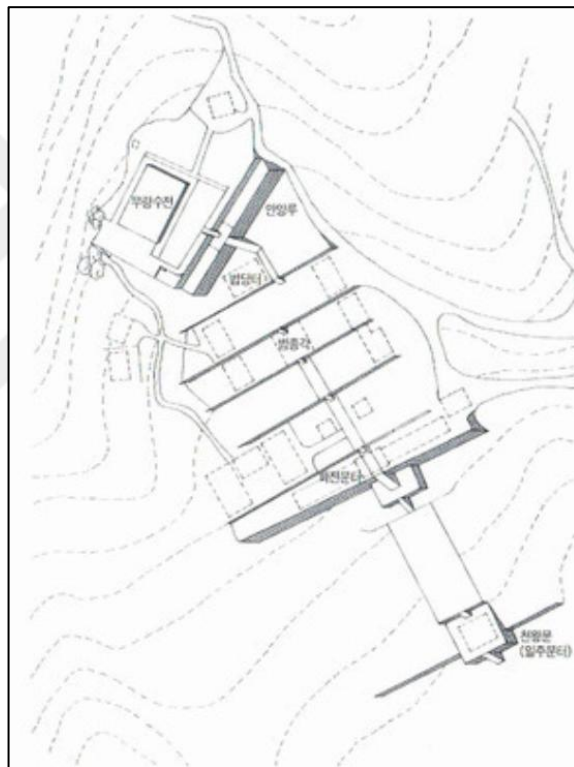


Figure 40 Plan of Buseoksa, Built in 14th Century

⁴⁰⁰ Kwon (권영걸), *Creating...*, 230

⁴⁰¹ Yve-Alain Bois, *'A Picturesque stroll around Clara-Clara'*, trans by John Shepley, Cambridge The MIT Press, 1984, 32-35.

⁴⁰² Bois, *'A Picturesque...'*, 32-62.

3.6 No Human in Korean Architecture

It is a strange thing to say that there is no human in Korean architecture since Korean architecture has human scale.⁴⁰³ However, the human is the central subject of experience in modern era. Western architecture began by the subject of experience, perceiving the building as a subject of aesthetic perception.⁴⁰⁴ There is always a perception between the subject and architecture, and architecture is explained by the subject's aesthetic recognition and experience.⁴⁰⁵ All formal norms and aesthetic orders of Western architecture after the Renaissance period presuppose human as a recognizing subject.⁴⁰⁶ It is called the humanist tradition of Western architecture.⁴⁰⁷ From this point of view, there is no human in Korean architecture.⁴⁰⁸ It does not mean that Korean architecture is irrelevant or unrelated to human values. There is no architecture that exists independently of human, Korean architecture has only been formed in a different way from Western architecture. For example, Confucian architecture expresses a Confucian hierarchy with examples and orders.⁴⁰⁹ However, it is reflected not in the visual form or symbol of the individual but in the order and relation of the whole environment.⁴¹⁰ This can be said to be personification of architecture, which is different from the humanism of Western architecture. If humanism in Western architecture emphasizes the communication of meaning through visual form, humanism which

⁴⁰³ Kwon (권영걸), *Creating...*, 176-177

⁴⁰⁴ Swenarton & Avermaete & van den Heuvel, *Architecture...*, 286.

⁴⁰⁵ Marconi, *The Oxford...*, 621-625.

⁴⁰⁶ Norberg-Schulz, *Intentions...*, 197.

⁴⁰⁷ Marconi, *The Oxford...*, 194 & 500.

⁴⁰⁸ Kwon (권영걸), *Creating...*, 177

⁴⁰⁹ Inaji, *The Garden...*, 127.

⁴¹⁰ Kwon (권영걸), *Creating...*, 172-175

Korean architecture contains is practice of ethics through architecture.⁴¹¹ Humans are melted in every corner of Korean architecture. However, it means that there is no human being as a recognizing subject who is separated from the object as in modern architecture. Humans or subjects are permeated everywhere in Korean architecture. The concept of this subject is called philosophical subject or the subject of fluidity. So there is no morphological object in Korean architecture, and it is said that there is a relationship.⁴¹²

The West is now working to remove man from philosophy and architecture. Jacques Derrida, a deconstructive philosopher attempted to dismantle the central subject and person, which was regarded as the central subject and reason.⁴¹³ His de-constructivism dismantles the human centred philosophy of the West through criticism of the metaphysics of present. It is significant that he criticized Western philosophy to architecture which is in human centred order.⁴¹⁴ Deconstructive architecture dismantles the tradition of Western humanism architecture, but in Korean architecture, humans are already dismantled. There is no human as a central subject from the beginning in Korean architecture.⁴¹⁵ The metaphysics of the present, centring on the subject of reason, does not dominate Korean architecture.

⁴¹¹ Kwon (권영걸), *Creating...*, 138

⁴¹² Kwon (권영걸), *Creating...*, 150-151

⁴¹³ Jacques Derrida, *Edmun Husserl's Origin of Geometry: An Introduction*, trans by John P. Leavery JR, University of Nebraska Press: Lincoln and London, 1989, 51-61.

⁴¹⁴ Branko Mitrovic, *Philosophy for Architects (세상에 단 하나뿐인 건축을 위한 철학)*, trans by Chung Ho LEE (이충호), Seoul: Culturegraphy, 2013, 224.

⁴¹⁵ Kwon (권영걸), *Creating...*, 157-159

CHAPTER 4

CONCEPT OF SPACE

4.1 Concept of Space in West and East

It is often said that architecture is the art of space creation, but the perception that such space being understood as a subject of architecture is a recent phenomenon.⁴¹⁶ At its origin, space was not the only subject of architecture, and creating space was not the only result of architecture. Heidegger said that the installation of structures, sculptures, or even gathering of people creates space.⁴¹⁷

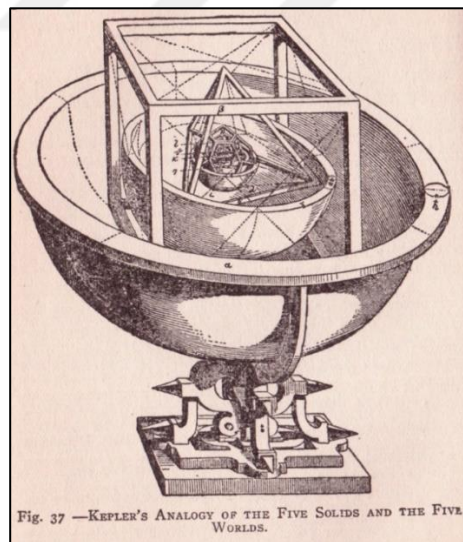


Figure 41 Kepler's Analogy of the Five Solids and the Five Worlds

⁴¹⁶ Norberg-Schulz, *Intentions...*, 95.

⁴¹⁷ Heidegger, *Building...*, 152-157.

Although architecture is also a discipline of creating and forming of space, it is not an exclusive area of it. Space used to be a subject of philosophical inquiry, and mankind lived in nature, looking up to the sky, and thinking about the universe.⁴¹⁸ It was a way to create a space to alleviate fear in primitive nature and to obtain psychological stability, but the perception of the universe developed a very different cognitive system in the West and the East. In the 5th century BC, the influence of the Pythagorean geometry explained the essence of the universe which was the order and harmony according to the mathematical and geometrical rules.⁴¹⁹ Then, Aristotle criticized Plato's view of proposition that he saw space as a material in the concept of the *topos*, and defined *topos* as having no form or material.⁴²⁰

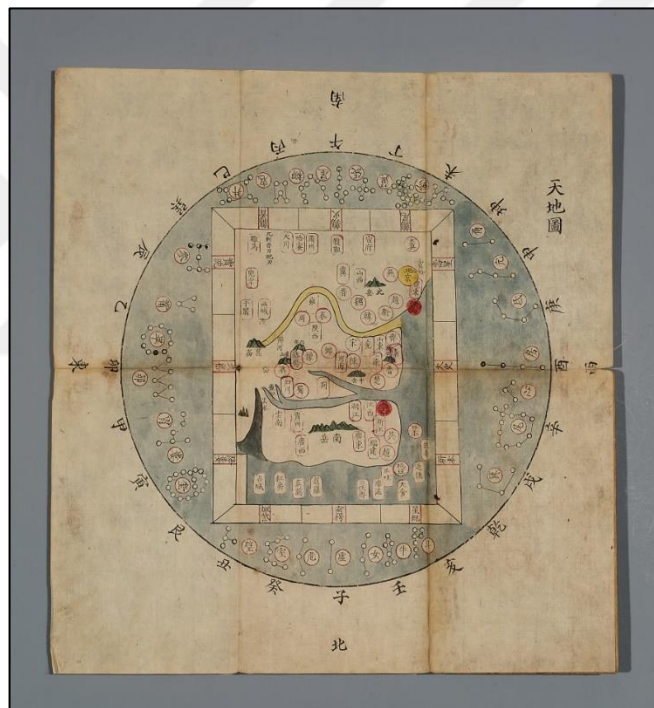


Figure 42 Map of the Sky and Earth, Created in 1851

⁴¹⁸ Heidegger, *Building...*, 44.

⁴¹⁹ Norberg-Schulz, *Intentions...*, 90.

⁴²⁰ Van de Ven, *Space in Architecture: The Evolution of a New Idea in the Theory and History of the Modern Movements*, trans by Jin Won Jung (정진원), Seoul: Gimundang, 1986, 36.

It is not different between the West and the East to give such order to the changing world through thinking about outer space, but the way is different. Plato thought of the universe as an entity with mathematical and geometrical order by devising a virtual conceptual world.⁴²¹ However, the East did not take this dualistic approach.⁴²² It does not have a realistic objective space and therefore no space nor size. The order of the universe is not something that can be arranged by sight, space and is not an object that can be defined, it means that it is empty, and it means relation, fluid and relative. The universe is a world in which there is no distinction between ideology and phenomena, and subjective anaesthetic judgment is impossible, and reality and space are not independent elements. It is like the waves, particles, space and observer in the quantum theory of modern physics are understood as being inseparable from each other. Taoism has a lot of influence on the space of East, and natural phenomena are the result of interaction between the tangible and the intangible.⁴²³ In the Yin and Yang, the flow of outer space between heaven and earth, and the order of universe and nature are not fixed as principles but changing and fluid. Just like the relationship between Yin and Yang, two elements are in a mutual relationship in which both exist and also not exist.⁴²⁴ Therefore, all space is generative in time. Time and space are considered as one, just like Yin and Yang. The West made time spatially but the East understood the space time wise. Therefore, it does not recognize the absoluteness of the external form of space. Space is created but destroyed and changed with time.

4.2 Site and Teo (Site)

The building ground is called the site in the West. The site implies the concept of abstract space. The abstraction of the concept of site appears the virtual space of a computerized website. There are many examples where architectural terms are used as

⁴²¹ Norberg-Schulz, *Intentions...*, 90-91.

⁴²² Nisbett, *The Geography...*, 69.

⁴²³ Kim(김용옥), *How to...*, 108.

⁴²⁴ Inaji, *The Garden...*, 66 & 134.

abstract concepts in the West.⁴²⁵ The term portal, which stands for the giant door of the Gothic cathedral, is the entrance to the internet space. It is somewhat awkward to say that entering the virtual space of internet through the portal in Korean. The main portal or site of Korean is awkward to be abstracted into a virtual space since its place formation is dissimilar.

The ancient Greek mathematical and geometric concept of space seems to provide a starting point for abstracting the site. Aristotle's *topos* is often cited as the most similar to the site concept of architecture.⁴²⁶ It is a neutral, abstract and conceptual place rather than a concrete place. Of course, when building houses in ancient Greece, the spirit of land was considered with importance but through the Renaissance and the Baroque, the site became a coordinated space in empty area.⁴²⁷ In this process, it was regarded as an idealized site devoid of context. The architecture of Palladio, who is famous for villa Rotunda, ignored the context of the site and pursued the ideal prototype of architecture.⁴²⁸

The design methodology developed in the 18th century, Ecole des Beaux-Arts did not consider the context of the site to be complete in its architectural form and composition. The site was given in a neutral and flat form surrounded by roads, and there was no principle or theory to interpret the context and meaning of concrete site. Beaux-arts plan reflected the abstraction of the site's conditions of the 19th century in capitalist metropolis. Philosophers such as Hegel and Schopenhauer regarded abstraction and geometry as a technique to reveal the mind by ruling the disordered state, so the natural

⁴²⁵ Augustin Berque, *Thinking through Landscape*, trans by Anne-Marie Feenberg-Dibon, New York: Routledge, 2013, 31.

⁴²⁶ Derrida, *Edmun...*, 12 & 48.

⁴²⁷ Berque, *Thinking...*, 3 & 46.

⁴²⁸ J. S. Ackerman, "The Belvedere as a Classical Villa," in his *Distance Points: Essays in Theory and Renaissance Art and Architecture*, Cambridge & London, Mass, 1991, 325–359

state was not respected.⁴²⁹ The master of modern architecture, Le Corbusier defined the earth as the foundation of its architectural composition, whose architecture pursued freedom in the earth.⁴³⁰



Figure 43 Confucian Hall in Yandong Village, Created in 1851

‘*Teo*’ means the site for building houses in Korea.⁴³¹ The Korean site is not abstract. All *teos* in Korean are present in the flow of geographical power descending from *Baekdudaegan* mountain range of Korea.⁴³² The nature of the surroundings is more important than the buildings in Korean architecture, and it is more important to know where the buildings are located rather than how they look.⁴³³ It is no exaggeration to say that Korean architecture starts from the *teo* (site). Therefore, people spent most of

⁴²⁹ Heidegger, *Building...*, 78-82.

⁴³⁰ Lee (이종건), *Problems...*, 155-168.

⁴³¹ Inaji, *The Garden...*, 133.

⁴³² Inaji, *The Garden...*, 132-134.

⁴³³ Kwon (권영걸), *Creating...*, 65-67

time and effort for finding and establishing *teo* when building a house.⁴³⁴ It is well shown that how much the architect struggled to get the *teo* of *dosan seodang*. Western architecture dominates the site by the order of geometry, but Korean architecture manages the *teo* rather than making the formal order of architecture.⁴³⁵ The site of Western architecture is a neutral site, separated from the context of nature, the *teo* of Korean architecture creates a relationship with the surrounding nature through the design process itself.⁴³⁶ So it is already a part of architecture and space. Even though the building gets destroyed or gone, the architecture of *teo* remains in Korean architecture.

4.3 Poché and Kan (Unit)

One of the architectural concepts of Beaux-Arts is *poché*. According to Beaux-Arts's composition principle, a good design should have a good *poché*.⁴³⁷ A *poché* is a thick wall composition pattern that is blackened on an architectural plan drawing. However, what *poché* actually means is the composition of the space that it forms rather than the wall pattern itself. The object of perception is a wall, but through it, it is intuitively perceived as a mass surrounded by a wall. Since the Roman times, the West has begun to create a huge internal space surrounded by thick load-bearing walls. For the first time in Western architecture, space became the object of direct recognition by the late 19th century theorists such as Schmarsow who recognized the space as a transparent mass surrounded by walls.⁴³⁸

⁴³⁴ Kwon (권영걸), *Creating...*, 67

⁴³⁵ Kwon (권영걸), *Creating...*, 47-48

⁴³⁶ Kwon (권영걸), *Creating...*, 67-68

⁴³⁷ Kahn, *In the Realm...*, 15.

⁴³⁸ Norberg-Schulz, *Intentions...*, 95-103.

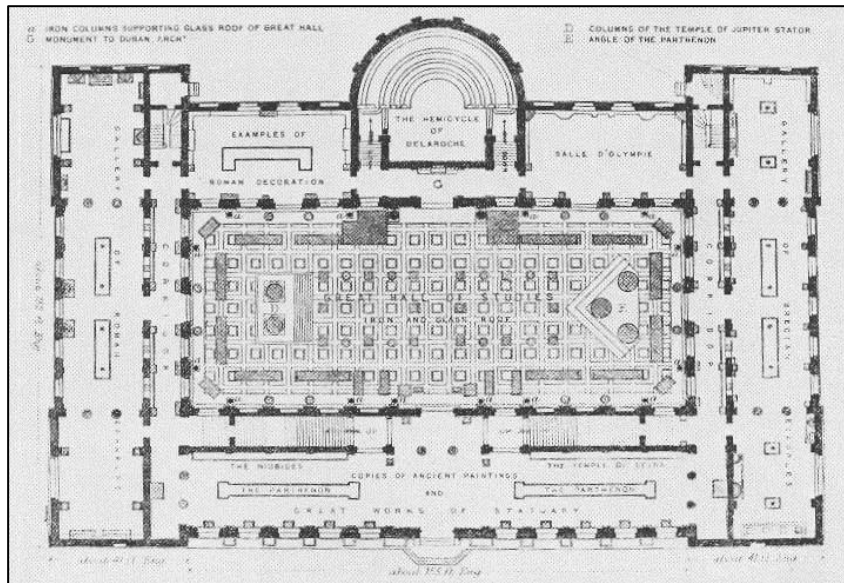


Figure 44 Plan of Palais D'Etudes as an Example of Ecole de Beaux Arts Architecture

It did not have a clear perception of space as a walled volume in Eastern architecture.⁴³⁹ Most of all, the East did not think of a substance that could hold space or a transparent mass that could be manipulated. Space is not a fixed absolute state, but fluid, so it is impossible to lock space into walls.⁴⁴⁰ Just as the vocabulary of space itself means, it is empty.⁴⁴¹ There is a famous article by Lao Tzu about the space that is often quoted when explaining the Eastern architecture.⁴⁴² The reason why the bowl is used as a bowl is because the clay is firmly set that the nature of soil is lost and the space of bowl is created.⁴⁴³ A room is used as a room because there are doors and windows. It builds a wall and pierces windows, so it becomes a room. The reason why bowl and room are made is because both soil and window have become one with the use and abandon their originality. It is often taken similar to *poché* or solid/void concept of Western architecture, but the reality can be interpreted in the opposite way. In other words, the

⁴³⁹ Kwon (권영걸), Creating..., 52

⁴⁴⁰ Kwon (권영걸), Creating..., 44

⁴⁴¹ Kwon (권영걸), Creating..., 53-54

⁴⁴² LEE (리원하), Design..., 95-96.

⁴⁴³ LEE (리원하), Design..., 207.

description of the bowl is not the description of the space meaning that the bowl makes space as the nature of soil disappears.⁴⁴⁴ It is all defined as relationships, not immaterial entities such as soil or space. Both create a new situation that transcends the original, the individual nature. The theory of Yin and Yang of Taoism is not the dichotomy of the two opposing, but the interdependent and relative relationship.⁴⁴⁵ There are no absolute and unchanging entities like walls or spaces. This is the difference between Western and Eastern architectural traditions.

Zhangpa, a Chinese aesthetist said that the emphasis placed on Western architecture is a substantive element such as pillar type and wall type, and what the Chinese have emphasized is the doors and windows which become empty.⁴⁴⁶ The windows and doors make relationships which makes it important. Space is not fixed in size, function, or form but it is in a state of temporal variation in its relation to the surrounding nature. To accommodate these changes, Korean architecture became open, and flexible. Korean architecture implies four pillars which make up one *kan* (unit) which does not confine a space.⁴⁴⁷ The necessary parts are blocked or opened in various ways with reason.⁴⁴⁸ The pillars and walls can change without locking space, creating a deep space. Rooms partitioned and planed by *kan* order are connected to each other or open to the outside.⁴⁴⁹ The connection of these obstructs a characteristic of open space in Korean architecture.⁴⁵⁰ The essence of Korean architecture is often called its space. However, if it means space of Western terminology, its definition does not convey the meaning. The space that Korean architecture contains is different from the space of Western

⁴⁴⁴ Yu (유현준), *Modernism...*, 33.

⁴⁴⁵ Inaji, *The Garden...*, 125.

⁴⁴⁶ Zhangpa (장파), *The Orient...*, 51.

⁴⁴⁷ Inaji, *The Garden...*, 145-146.

⁴⁴⁸ Kwon (권영걸), *Creating...*, 224

⁴⁴⁹ Inaji, *The Garden...*, 146.

⁴⁵⁰ Kwon (권영걸), *Creating...*, 149

architecture. Korean architecture can be said as a tool or a device for creating space, not a material to hold space.⁴⁵¹ Architecture is a tool, but its form is not important much. The structure creates space. If the *poché* represents a line of thought in the plan of Western architecture's walled space, *kan* represents four corner dots revealing open and fluid space of Korean architecture.⁴⁵² *Hanok* is constructed based on *kan*, is simple but varied. Gae Chun Kim, a Korean architect explains the space created by *kan* system that

Hanok is a place which has no desire nor intention but is an unintentional and empty body where the abyss of the universe can be felt even by the one column of it. Looking at the inside of hanok, the space changes to the complete form according to each viewpoint and sometimes it disappears. There is no opening and closing of walls and windows due to the precise positioning and spacing of columns, but the boundaries and size of the spaces change.⁴⁵³



Figure 45 Sebyeongwan in Tongyong (Military Centre)

⁴⁵¹ Kwon (권영걸), *Creating...*, 150

⁴⁵² Kwon (권영걸), *Creating...*, 224

⁴⁵³ Gae Chun Kim(김개천), 24 *Great Buildings of Korean Traditional Architecture(명목의건축 한국 전통의 명건축 24 선)*, Seoul, Culturegraphy, 2011, 62-66.

4.4 Madang (Courtyard)

Western architecture is a solid mass containing space, but Korean architecture creates space by a combination of *madang* and building.⁴⁵⁴ Therefore, the centre of Western architecture is building but it is the empty space in centre (a.k.a *madang*) and the building surrounds *madang* in Korean architecture.⁴⁵⁵ It is empty at centre and the building stands as a backdrop in Korean architecture. The layered space that is created by *madang* and building is a prototype of architecture in East.⁴⁵⁶ For instance, in Chinese architecture, the architectural unit composed of a door, a *madang* and a building is counted as one *mundang* structural unit (문당제도).⁴⁵⁷ This kind of structural unit of space is in contrast to Western architecture's walled space or enclosed volume. The door, *madang* and building are a unit of space in Chinese architecture.⁴⁵⁸ If there is a building, the door is surely built, and the door is followed by the building. The door is the form of the building's epidermis or representative form, and the building is the content with function. In between of a building and a door, there is *madang*.⁴⁵⁹ It is hard to find such architecture that separates inside from outside and isolates contents from surfaces in other architectures.

⁴⁵⁴ Kwon (권영걸), *Creating...*, 150-151

⁴⁵⁵ Inaji, *The Garden...*, 150-153.

⁴⁵⁶ Inaji, *The Garden...*, 158.

⁴⁵⁷ LEE (리원허), *Design...*, 88.

⁴⁵⁸ Inaji, *The Garden...*, 158.

⁴⁵⁹ LEE (리원허), *Design...*, 89.



Figure 46 Viewpoint of Maru Toward Madang in Hanok

Amos Ih Tiao Chang, a Chinese author of ‘The Tao of Architecture (건축 공간과 노자 사상)’, describes the decentralized spatial organization of Chinese architecture as follows:

The space between mass and mass, reducing the solids of mass is to enrich the variety of void rather than mass. Containing space is to hit a note, but the fragmented space can be fabricated into harmonious chords.⁴⁶⁰

It is argued that the architecture with madang at its centre is the direction for future architecture.

Recalling that the construction of mass is usually symbolic of the decline of human progress, the architectural space centred on the empty space of nature is a living and creative space for future growth and substitution.⁴⁶¹

Although it has the same architectural prototype, Korean architecture differs from the Chinese architecture.⁴⁶² The *madang* (courtyard) of Korean architecture is a half-open

⁴⁶⁰ Amos Ih Tiao Chang (창), *The Tao of Architecture (건축 공간과 노자 사상)*, trans by Jang Sup Yun, Seoul: Gimoondang, translated in 2006, 131.

⁴⁶¹ Chang (창), *The Tao...*, 131.

space, and either the side or the corner is open most of the time.⁴⁶³ It does not enclose completely nor fully open which is a characteristic of Korean architecture.⁴⁶⁴ The spatial essence of *hanok* is mutual integrated penetration of various spaces with *madang* at the centre.⁴⁶⁵ In Korea, *madang* is the centre when building houses. The building is planned around *madang* rather than placing *madang* after the building has been built. In order to decide to place a building and a roof line, Korean architecture looks at the whole form of aesthetic and proportion with both *madang* and building.⁴⁶⁶ It is possible to have the symbolic position of the subject of experience in *hanok* at the same time both inside and outside through the *madang*. In Korean architecture, *madang* is the central space of life.⁴⁶⁷ In Western architecture, the land is the land for building, but it is the most important architectural element in Korean architecture.

4.5 Void Versus Yeobeak (Beauty of Void)

The concept of void is used to explain the *madang* of Korean architecture.⁴⁶⁸ The concept of void is basically derived from the aesthetic spatial recognition of Western architecture.⁴⁶⁹ A void is originally a space that has been emptied out of a solid wall or solid mass. Rem Koolhaas has newly defined the concept of void in contemporary

⁴⁶² Inaji, *The Garden...*, 145-149.

⁴⁶³ Kwon (권영걸), *Creating...*, 151

⁴⁶⁴ Kwon (권영걸), *Creating...*, 149

⁴⁶⁵ Kwon (권영걸), *Creating...*, 230

⁴⁶⁶ Kwon (권영걸), *Creating...*, 174

⁴⁶⁷ Inaji, *The Garden...*, 150.

⁴⁶⁸ Kwon (권영걸), *Creating...*, 142-146

⁴⁶⁹ Kwon (권영걸), *Creating...*, 230-231

architecture.⁴⁷⁰ In his book of 'Strategy of Void', he explained his design of French national library's space as a volume extracted from a mass, but a void that remains between filled spaces. As a leftover space, void is defined negatively, and is an empty space with potential and to be variable and whatever.⁴⁷¹ This void, which Koolhaas uses as a design strategy, becomes the centre of architecture against functionalism of the multipurpose space.⁴⁷² In terms of variable and undefined space, Koolhaas' concept of void is connected with the courtyard of Korean architecture. But strictly speaking, it is difficult to apply the concept of void to Korean architecture. The difference between Koolhaas' concept of void and traditional concept of void depends on how to understand empty space.⁴⁷³ In the past, if we noticed between *poché* or solid mass, Koolhaas noticed between spaces as a volume. In the end, it is an extension of the Porsche concept, and if the old *poché* was a negative of a solid wall, then Koolhaas's void is a negative of the charged space.⁴⁷⁴ However, this cognitive void is still a charged void with definite bounds.⁴⁷⁵ There is no such void in Korean architecture. In the Korean architecture, the *madang* is rather fluid than it is prescribed, and it flows without being trapped. In the past, the architecture focused on *poché*, then the space between solid mass. Koolhaas focused on the space as a volume. It is an extension of the concept of *poché*. If *poché* was negative of solid wall, the void of Koolhaas is a negative of filled space. However, this cognitive void is still a charged void with definite boundaries. There is no such void

⁴⁷⁰ Yu (유현준), *Modernism...*, 16.

⁴⁷¹ S.E. Rasmussen, "Experiencing Architecture", trans by Hyung Jong Seon in 2007, Seoul: Yajung Munhawsa, MIT Press, 1962, 50.

⁴⁷² Rem Koolhaas, "Strategy of Void", *S,M,L,XL*, New York: The Monacelli Press, 1995, 603.

⁴⁷³ Yu (유현준), *Modernism...*, 14-18.

⁴⁷⁴ Yu (유현준), *Modernism...*, 50-52.

⁴⁷⁵ Kahn, *In the Realm...*, 15.

in Korean architecture. In Korean architecture, *madang* (courtyard) is rather fluid than it is prescribed, and it flows without being trapped.⁴⁷⁶



Figure 47 Beauty of Korean Void Exhibition



Figure 48 Beauty of Korean Void Exhibition 1

The *madang* of Korean architecture can be better defined as the concept of void.⁴⁷⁷ The space is vague and fluid. The void is defined but by elements which are not limited but

⁴⁷⁶ Kwon (권영걸), *Creating...*, 157-159

⁴⁷⁷ Kwon (권영걸), *Creating...*, 160-162

infinite. It is the four-dimensional space and time, and it is not shaped by a reasonable geometric space.⁴⁷⁸ The *madang* of Korean architecture is defined by buildings and walls, but it spreads around.⁴⁷⁹ The void space is created in between eaves and eaves or building and building, which is not found in Western architecture.⁴⁸⁰ Space that is created with clear intentions, limitations and frames is not a blank space but void space. *Madang* has a beauty of void, defined by a definite boundary of mass or space. Ashihara Yoshinobu defined in *Theory of Architectural Exterior*, that positive space as a space with a central point and clear intention with definite boundaries and the negative space which has ambiguous boundaries and in the natural occurrence of intentional space.⁴⁸¹ There is a positive/negative space in the middle of this space.⁴⁸² Void has a character of positive space but the blank space has the positive/negative space that Ashihara refers to, and the outer space of Korean architecture and Japanese architecture.⁴⁸³ The void space-reflect well the features of the space of Eastern architectural perception and reason. In the Western architecture, space is a clear volume, but the space in Eastern architecture is fluid and with no definite size or function.⁴⁸⁴ Various time and space transitions occur with time and space being occupied or unused. Both *madang* (courtyard) and the *maru* (elevated wooden-floor) make up Korean architecture a space of composure.⁴⁸⁵

⁴⁷⁸ Kwon (권영걸), *Creating...*, 162

⁴⁷⁹ Kwon (권영걸), *Creating...*, 176

⁴⁸⁰ Kwon (권영걸), *Creating...*, 174

⁴⁸¹ Yoshinobu, *Theory of Architectural Exterior Space*, trans by Jung Dong Kim, Seoul: Gimundang, 1979, 28-49.

⁴⁸² Yu (유현준), *Modernism...*, 34-36.

⁴⁸³ Yoshinobu, *Theory...*, 30-41.

⁴⁸⁴ Yu (유현준), *Modernism...*, 50-62.

⁴⁸⁵ Inaji, *The Garden...*, 150.



Figure 49 Abstract Art of Beauty of Korean Void Exhibition

The concept of cavity is used to explain the space of Korean architecture. In Korean architecture, void is a background that cannot be expressed by itself, not the contrast of the solid.⁴⁸⁶ The emptying is to create space out of full solid, a kind of cavity. In Western architecture, void is described as the concept of emptying.⁴⁸⁷ The filling and emptying are understood as a contrast of solid and void in the mass of Western architecture.⁴⁸⁸ In this respect, the space of open *madang* (courtyard) of Korean architecture and the space in between buildings are different from the emptying of Western architecture.⁴⁸⁹ The subject of Korean architecture is in the void created by the *madang* and the space in between buildings, rather from the concept of solid and void.⁴⁹⁰

⁴⁸⁶ Kwon (권영걸), *Creating...*, 180

⁴⁸⁷ Rasmussen, "Experiencing...", 50.

⁴⁸⁸ Yu (유현준), *Modernism...*, 34.

⁴⁸⁹ Yu (유현준), *Modernism...*, 34-36.

⁴⁹⁰ Kwon (권영걸), *Creating...*, 178-179

4.6 Oil Painting and Ink-and-Wash Painting

Implicit voids on paintings of Far East show the characteristic space of Korean architecture.⁴⁹¹ The background is as important as the depicted objects in Eastern paintings.⁴⁹² Object and background are mutually complementary rather than regulative. The void space has an expression of simple form that does not often appear on the canvas as a physical form. Without void space, Eastern paintings cannot be established as paintings.⁴⁹³ Among the paintings, the in- between space of the long-range distant view (원경), middle-range distant view (중경) and close-range distant view (근경) is treated as void space.⁴⁹⁴ The object of ink-and-wash painting is innumerable objects of nature, and there is a certain space, and void between objects and individuals.⁴⁹⁵



Figure 50 Cheongpunggye Painted by Jeongseon in 17th Century

⁴⁹¹ Inaji, *The Garden...*, 179.

⁴⁹² Inaji, *The Garden...*, 55.

⁴⁹³ Yu (유현준), *Modernism...*, 70.

⁴⁹⁴ Inaji, *The Garden...*, 52 & 162.

⁴⁹⁵ Inaji, *The Garden...*, 37-38.

Jeongseon, an artist from 17th century in Joseon dynasty, draw 'Cheongpunggye' which is a representative work of him in a method of drawing the actual state of things.⁴⁹⁶ The in between space of the long-range distant view, middle-range distant view and close-range distant view is connected by void space. Our perception follows the flow of time in this painting. Thus, Eastern painting does not draw space but expresses space and time together. The void of ink-and-wash painting is not an unfilled space but an expression of space and time that cannot be found in western paintings.⁴⁹⁷ Western oil paintings are aimed at perfect reproduction by the painting that controls the paints and the canvas.⁴⁹⁸ The golden ratio is applied on the picture plane so that all elements of painting are placed rightly, filled with a full composition. Western paintings are filled without voids and the background has its own distinct shape.⁴⁹⁹ However, in the Eastern paintings, voids and objects are felt as one and not separated from each other. Just as void and object coexist, the realms of existence and non-existence coexist in a synchronic sense.⁵⁰⁰

⁴⁹⁶ Yu (유현준), Modernism..., 71.

⁴⁹⁷ Yu (유현준), Modernism..., 70.

⁴⁹⁸ Pallasmaa, The Eyes..., 49.

⁴⁹⁹ Pallasmaa, The Eyes..., 13.

⁵⁰⁰ Bush and Shih, Early Chinese Texts on Painting, Hong Kong University Press, 2013, 50-51.



Figure 51 Mona Lisa Painted by Leonardo Da Vinci in 15th Century

Da Vinci is famous for his ambiguous background touch. The *-sfumato-* technique used by Da Vinci in drawing the background of Mona Lisa, is a word derived from an Italian word of ‘disappearing like smoke’.⁵⁰¹ It refers to the contrasting method of smoothly changing the colour like smoke so that the contour between colours cannot be clearly distinguished.⁵⁰² This painting technique which Da Vinci devised is an attempt to create a void through filling.⁵⁰³ In Eastern ink-and-wash painting, the painter paints a dot and it becomes a line then spreads. It forms itself out of human control and allows the painter to do this. This is in line with the way that Korean architecture builds space. Korean architecture has developed a notion of space that expands in relation to the environment and nature, and the concept of space expands infinitely from micro to macro dimension.⁵⁰⁴

⁵⁰¹ Bulent Atalay, *Math and the Mona Lisa: The Art and Science of Leonardo da Vinci*, Washington, Smithsonian Books 2006, 180-181.

⁵⁰² Atalay, *Math...*, 5

⁵⁰³ LEE (리원하), *Design...*, 46.

⁵⁰⁴ Kwon (권영걸), *Creating...*, 175-176

CHAPTER 5

INSIDE AND OUTSIDE

5.1 Difference of Inside and Outside

When a wall is built in a space, the distinction is made between inside and outside, and recognized as inside and outside separately in Western architecture.⁵⁰⁵ The distinction of inside and outside is clear that you open the door from outside when you enter the inside of massive walls.⁵⁰⁶ The inside space is covered with a roof and the outside space is without a roof. The exterior wall of a building is called ‘envelope’ which is a good representation of Western spatial perception that clearly distinguishes the interior and exterior of a building.⁵⁰⁷ Also the term ‘circulation’ which is borrowed from the concept of biology from the circulation of blood, presupposes a complete separation between outside and inside.⁵⁰⁸ The walled city of West is also divided into inside and outside clearly distinguished. The difference of inside and outside starts with confining space.

⁵⁰⁵ Kwon (권영걸), *Creating...*, 43-44

⁵⁰⁶ Kwon (권영걸), *Creating...*, 45-49

⁵⁰⁷ Pallasmaa, *The Eyes...*, 14.

⁵⁰⁸ Kwon (권영걸), *Creating...*, 46-47

Unlike the Western architecture, Korean architecture does not clearly distinguish the inside and outside spaces with walls.⁵⁰⁹ If you lift up door toward *deachung*, the hall and room become one space. Korean architecture distinguishes the space of inside and outside by the roof rather than the wall.⁵¹⁰ A pavilion named *Gwangpunggak* of *Sosewon* in *Damyang* becomes one space when doors are lifted up toward *deachung* and eventually the interior space opens toward the outside nature.⁵¹¹ One can hear the sound of breeze, waterfall and woods in the middle of *Gwangpunggak* pavillion.⁵¹² The distinction between inside and outside is removed and becomes one. This vague boundary between space of inside and outside says that it is not appropriate to use the word ‘envelope’ in Korean architecture.⁵¹³ The harmony that the space of inside and outside creates in Korean architecture is quite similar to the Taoism’s Yin and Yang.⁵¹⁴ ‘Inside and outside’ is more of an abstract concept rather than physical spatial concept in Korea. ‘집안’ literally means ‘inside of house’ physically but it refers ‘family’ as well.

5.2 Overlapping of Inside and Outside

Architecture can be defined as creating a relationship of inner and outer space. However, Korean architecture and Western architecture differ in the way they make inside and outside space. Western architecture creates a confrontational relationship between inside and outside, but Korean architecture overlaps the space of inside and outside. In a way that the space of inside becomes outside then it becomes inside again. When you enter traditional *hanok*, the distinction between the space of inside and outside becomes

⁵⁰⁹ Kwon (권영걸), *Creating...*, 177

⁵¹⁰ Kwon (권영걸), *Creating...*, 174 & 188

⁵¹¹ Kwon (권영걸), *Creating...*, 125

⁵¹² Kwon (권영걸), *Creating...*, 124

⁵¹³ Kwon (권영걸), *Creating...*, 122

⁵¹⁴ Inaji, *The Garden...*, 132-134.

blurred. The doorway is located under the roof and the inner *madang* (courtyard) is outside under the sky. If you enter the *madang* from the doorway, you definitely are going inside, but in reality you are entering the *madang* from outside the doorway. *Madang* is surrounded by the room which is considered as inside of the house but at the same time it is outside of the building.⁵¹⁵ For instance, when one comes outside the room, one is outside but still in *madang* which is still considered as inside of *hanok* complex. It goes back inside and outside again, the process is repeated.⁵¹⁶

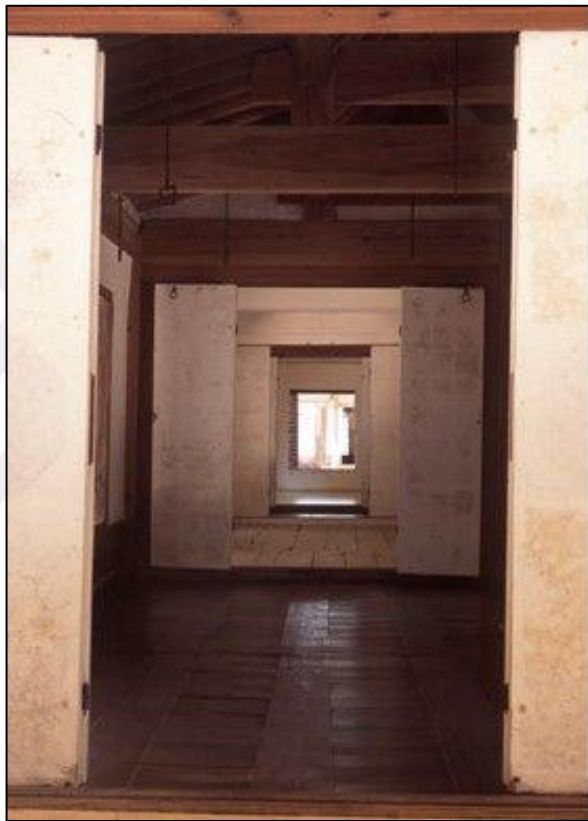


Figure 52 Yeongyeongdang from Changdeokgung Palace, Built in 15th Century

It is easy to experience the characteristics of Korean architecture when the space of inside and outside are mixed and then overlapped. The front *madang* and the back *madang* are seen through the front window. The room, *maru*, *madang*, and wall are

⁵¹⁵ Inaji, *The Garden...*, 148-151.

⁵¹⁶ Kim (김인철), *Opening...*, 228.

mixed to form a scene which is superimposed on each other so that it is difficult to distinguish between the space of inside and outside.⁵¹⁷ Therefore, the architecture which is beautiful and fascinating but clearly distinguished as inside and outside, does not feel as something of Korean architecture.⁵¹⁸ Korean architecture should be overlapped with the space of inside and outside regardless of size.⁵¹⁹ In Korean architecture, when there is ceremony in *madang*, it creates a new interior space by setting up a tent, which creates another interior space. On the other hand, it conversely creates outside as well as inside.⁵²⁰

5.3 Public Space and Private Space

The outside space of a city in Europe has the character of public space. In the ancient Greek polis, all the public life of the citizens took place in the square.⁵²¹ In the Renaissance and Baroque cities, the outside space of the city was more important than the interior space of building.⁵²² On the other hand, the inside of house is where the private area is protected. Typically, European city houses are surrounded by thick walls, no light, only have communication with the outside through windows and balconies. The frustration within the city house is compensated by the outside space of city. Thus, the outside space of city became a place of important public reproduction, and the

⁵¹⁷ Kwon (권영걸), *Creating...*, 145-148

⁵¹⁸ Kwon (권영걸), *Creating...*, 147

⁵¹⁹ Inaji, *The Garden...*, 132.

⁵²⁰ Inaji, *The Garden...*, 150.

⁵²¹ Norberg-Schulz, *Intentions...*, 121.

⁵²² Norberg-Schulz, *Intentions...*, 143-146.

façade of architecture facing the outside space as well.⁵²³ Public space in city is considered less important than individual buildings.

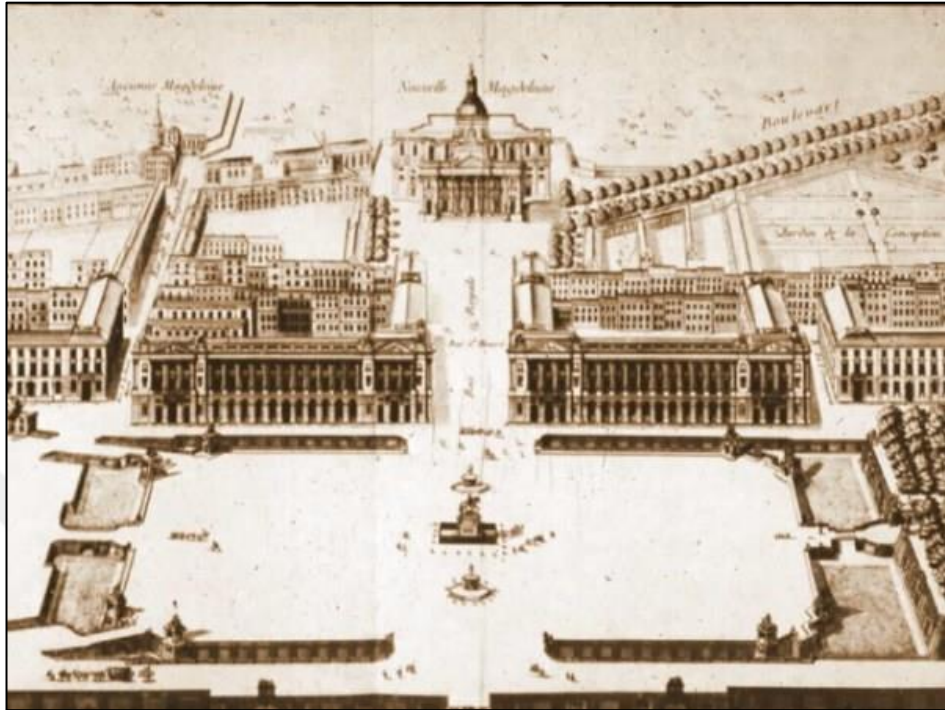


Figure 53 Place de la Concorde, Built in 18th Century

The outside space of Korea is not clear as public space like in a Western city.⁵²⁴ The interior of architecture is not clearly divided into public space and private space. Korean architecture has a character of public space in its interior. The *madang* is like space of Western square in that public ceremonies take place. *Maru* also has the character of public space in the house. The original *deachungmaru* is not simply a place to cool off in the summer, but a space of ceremonial space such as marriages and ancestral rites.⁵²⁵ The word '*deachung*' refers to a governmental place where official rites take place.⁵²⁶

⁵²³ Norberg-Schulz, *Intentions...*, 121.

⁵²⁴ Kwon (권영걸), *Creating...*, 147-148

⁵²⁵ Inaji, *The Garden...*, 134-158.

⁵²⁶ Kwon (권영걸), *Creating...*, 71

The house without shrine generally has a closet for the ancestors in *maru*. It is understandable that such family photographs and graduation photographs are hung in modern Korean living rooms as the extension of tradition.⁵²⁷ In addition, *sarangche* (the men's part of the house) is a space with a mixture of public and private space.⁵²⁸ In Korean architecture, there are many ambiguous spaces where public space and private space are not clearly distinguished.⁵²⁹ Western architecture and cities clearly distinguish public space and private space, but in Korean architecture, the overlapping spaces are dispersed, making it difficult to distinguish such spaces from the viewpoint of Westerners.⁵³⁰



Figure 54 Byeongsan Sewon, Built in 16th Century

The cultural tradition of overlapping public space and private space without clear distinction also appears in modern Korean houses. The apartment plan in Korea is

⁵²⁷ Lee, *Continuity...*, 73-74.

⁵²⁸ Inaji, *The Garden...*, 137.

⁵²⁹ Yim, *The Traditional...*, 104.

⁵³⁰ Yim, *The Traditional...*, 99-101.

different from the Western apartment.⁵³¹ The flat plan of Western apartment clearly distinguishes the dining room and the living room from the private space such as bedroom.⁵³² On the other hand, Korean apartments are arranged around the living room, which is difficult to understand from the perspective of Western architecture. It is because private space such as a room in the house and the public space such as a living room have blurred borders just like in traditional *hanok's madang*.⁵³³ Sang Hae Lee, an architectural scholar said that in the analysis of Korean apartments, the family sense of community strengthened in the process of rapid modernization.⁵³⁴ However, since Korea has traditionally had no clear division of public space and private space which enabled to develop the overlapping character of spatial culture.⁵³⁵

5.4 Interior

Interior refers to the inner space surrounded by the outside space. Western monumental architecture has developed a walled interior or interior that is distinct from the outside world.⁵³⁶ When you enter the Pantheon through the intricate intertwined streets of Rome, you will find a large and spacious interior as much as the outer square, which represents a heavenly world that reflects geometric principles.⁵³⁷ The Middle Ages in Europe had a self-contained tradition that was intended to go inside and hold religious rituals.⁵³⁸ Inside the church, holy paintings were painted both on walls and ceilings. As

⁵³¹ Lee, Continuity..., 65.

⁵³² Lee, Continuity..., 70,

⁵³³ Lee, Continuity..., 71-73.

⁵³⁴ Lee, Continuity..., 70.

⁵³⁵ Lee, Continuity..., 71.

⁵³⁶ Norberg-Schulz, Intentions..., 124.

⁵³⁷ LEE (리원하), Design..., 39.

⁵³⁸ Norberg-Schulz, Intentions..., 123.

the space of church increased and the walls became more wide-open, the interior of Gothic cathedral turned into a world of Divine filled with mysterious light.⁵³⁹ Medieval craftsmen created this space after their religious faith. They believed cathedral was the house and work of God. Islamic architecture is devoted to religious doctrines and has minimum ornamentation in appearance.⁵⁴⁰ However, the complex and elaborate decoration of the interior is admired.⁵⁴¹ Islamic architecture has no outside decoration, but in the inner space it wanted to express the ideal world of Islam.⁵⁴²



Figure 55 Patio de los Arrayanes, Built in 13th Century

Since the modern era, the interior of residence has become important as the private realm of the bourgeoisie has developed.⁵⁴³ The bourgeoisie sought to decorate the

⁵³⁹ Norberg-Schulz, *Intentions...*, 123-124.

⁵⁴⁰ Marconi, *The Oxford...*, 403.

⁵⁴¹ Yu (유현준), *Modernism...*, 60.

⁵⁴² Yu (유현준), *Modernism...*, 58.

⁵⁴³ Kahn, *In the Realm...*, 42-47.

interior of the house with a space of its own world and memory. Walter Benjamin defined the interior of bourgeois houses in the 19th century as leaving traces of individuals, but the concept of modern interior began here.⁵⁴⁴ Adolf Loos was the first architect to refuse the traditional relationship between the inside and the outside, the private and the public space through the windows. Le Corbusier said that “When my friend (Loos) explained to me that an educated person does not look out the window. The window is made of glass. The glass is for the light get in, not for sight. Loos rejected the tradition of linking the private and public spheres of vision, declaring a break in the interior and exterior in modern city.”⁵⁴⁵ Instead, the interior of a house designed by Loos has a frame. Loos named the interior space of houses as *Raumplan*. This is an active device for synchronization, exchange of views, interchange of inside and outside according to the movements of the residents inside the house.⁵⁴⁶ In other words, the interior of Loos house was a frame for living and a stage for the family. So a resident who sits down near a window can look both inside and outside of house. Beatriz Colomina, an architectural critic explains that

the residents of Loos house are actors in the family stage and entangled in their own space as audience at the same time, but at the same time they are separated. The classical distinction between the inside and the outside, the private realm and public realm, the subject and the object are intertwined.⁵⁴⁷

⁵⁴⁴ Walter Benjamin, “Paris, Capital of the Nineteenth Century”, *Reflections Essays, Aphorisms, Autobiographical Writings*, trans by Edmund Jephcott, New York: Schocken Books, 1978, 155-156.

⁵⁴⁵ Le Corbusier, *The City of Tomorrow and Its Planning*, Cambridge: The MIT press, 1986, 185-186.

⁵⁴⁶ Yu (유현준), *Modernism...*, 94.

⁵⁴⁷ Beatriz Colomina, *Privacy and Publicity*, Cambridge The MIT Press, 1994, 244.

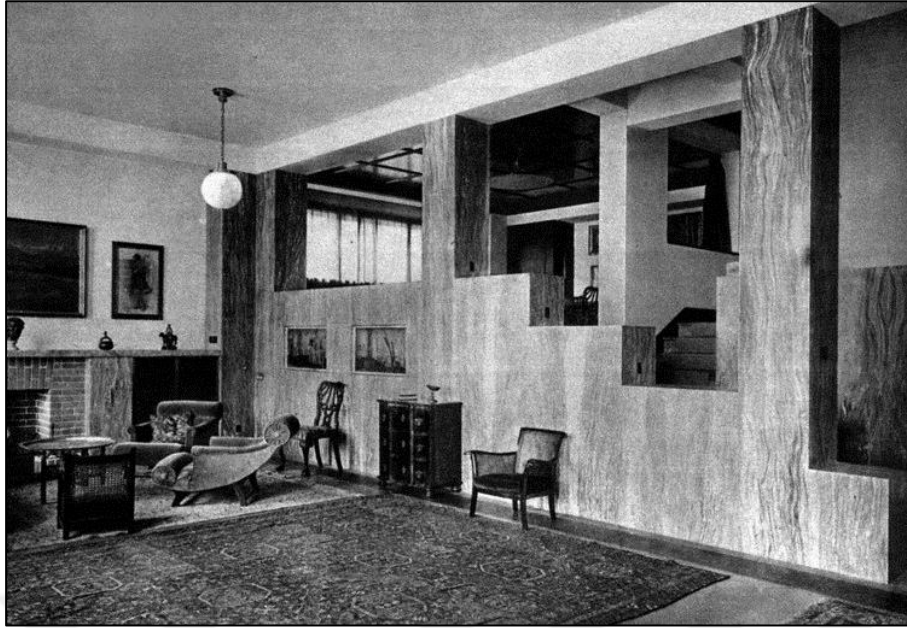


Figure 56 Villa Muller in Czech Republic by Adolf Loos, Built in 1930

It is similar to Korean architecture in that the inside and the outside of a house are overlapping, but it is different from Korean architecture in that it is a completely cut-away from the outer space of city.⁵⁴⁸ Strictly speaking, in Korean architecture where the inner and outer spaces penetrate and the division between the inside and outside is vague and continuous integration is achieved, there is no self-fulfilling world in interior.⁵⁴⁹ In fact, the interior space is not meaningful because the space partitioned in Korean architecture is only part of the larger whole when the inside and outside are connected and integrated.⁵⁵⁰ The room of Korean architecture is not only the internal space that has self-completing meaning, that is the interior, but the minimal space in the larger whole.⁵⁵¹ The Korean architecture has developed into the interior due to the forgetting of the traditional Korean architecture, which blurs inside and outside, and the

⁵⁴⁸ Kwon (권영걸), *Creating...*, 175-176.

⁵⁴⁹ Kwon (권영걸), *Creating...*, 176

⁵⁵⁰ Inaji, *The Garden...*, 150.

⁵⁵¹ Kwon (권영걸), *Creating...*, 178-179

Western architecture that has been cut off from inside and outside.⁵⁵² As you can express your own world in your own way, you can create the interior space that is independent of the exterior and structure of building and its circulation cycle is as fast as a trend of make-up. However, the problem is the relationship between inside and outside, private realm and public realm.⁵⁵³



Figure 57 Chunghyodang, a Traditional Korean House, Built in 17th Century

Western architecture clearly separates the inside and the outside, but the interior and exterior designs are closely related.⁵⁵⁴ The excellence of the architect is in the

⁵⁵² Yu (유현준), *Modernism...*, 132.

⁵⁵³ Yu (유현준), *Modernism...*, 138.

⁵⁵⁴ Kwon (권영걸), *Creating...*, 54

unification of interior and exterior through design.⁵⁵⁵ This tradition is alive even after the modern era where the structure and the epidermis are separated in Western architecture.⁵⁵⁶ The interior of modernist architecture thus preferred furniture with pure white surfaces and functional design. However, the interior of Korean modern architecture is indulged in creating a disconnected world without any relationship between inside and outside.

5.5 Courtyard and Madang (Courtyard)

Madang of Korean architecture, which overlaps the inside and the outside, has differences in its origin but as well as its characters.⁵⁵⁷ The origin of courtyard is said to be the hole made to take smoke out from the primitive housing, or the hole for letting the sunlight in.⁵⁵⁸ In other words, the courtyard was built for the necessary light and ventilation as the house grew, and the function for the view was added later.⁵⁵⁹ So the courtyard is like an empty room inside the house and it is tight and closed. In the Western architecture, this courtyard was developed.⁵⁶⁰ On the other hand, the *madang* of Korean architecture is not only a space for corridor and ventilation but also a living space of complex function. In *madang*, a variety of acts take place. It is used as a work space, a dining space or a banquet hall for ceremonial occasions. In the governmental building, the inside space of building and *madang* are extended to be used as a place where the event is held. Large banquets usually extend to *madang*, a place where the

⁵⁵⁵ Yu (유현준), *Modernism...*, 168-171.

⁵⁵⁶ Yu (유현준), *Modernism...*, 173.

⁵⁵⁷ Inaji, *The Garden...*, 158.

⁵⁵⁸ Inaji, *The Garden...*, 28 & 83.

⁵⁵⁹ Kwon (권영걸), *Creating...*, 66-67.

⁵⁶⁰ Kwon (권영걸), *Creating...*, 53-55.

inside and the outside extend so that various actions can take. The most important feature of *Hanok* is generating creative space by *madang*,⁵⁶¹

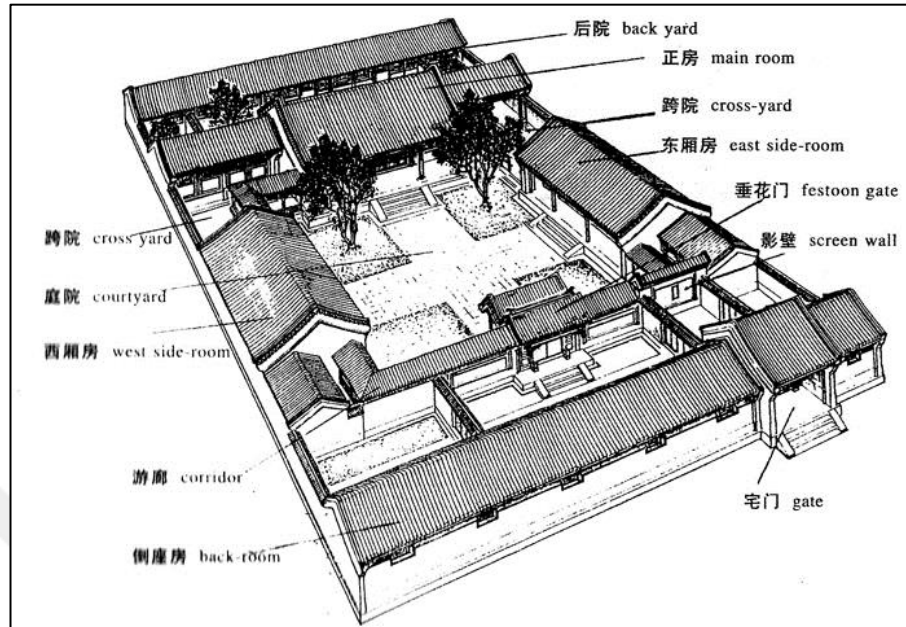


Figure 58 The Layout of a Chinese Siheyuan (Quadrangle), Built in During the Yuan Dynasty (1271-1368)

Siheyuan, a traditional Chinese house has an external space but the character of it is closed which is close to the courtyard in Western architecture not like a multipurpose living space as in Korean Architecture.⁵⁶² The Japanese courtyard, *matchiya* is an ornamental space for viewing and letting the light in rather than living space.⁵⁶³ *Madang* in Korean architecture has different characteristics from those of China and Japan.⁵⁶⁴ The courtyard in Korean architecture is open and extends around rather than disconnected from surroundings.⁵⁶⁵ The reason that *madang* is empty is not just for

⁵⁶¹ Sang Hyun Lee (이상현), *Humanities in Hanok (인문학 한옥에 살다)*, Seoul: Chearunseo, 2014, 102.

⁵⁶² Inaji, *The Garden...*, 90-91.

⁵⁶³ Inaji, *The Garden...*, 10-13.

⁵⁶⁴ Kwon (권영걸), *Creating...*, 113-116.

⁵⁶⁵ Kwon (권영걸), *Creating...*, 116-117

light and ventilation but for life, work and to attract outside scenery to *madang*.⁵⁶⁶ The previous one is the prescribed space and the latter is unspecified space just like the concept of Gilles Deleuze.⁵⁶⁷ The former is prescriptive and the latter produces innumerable changes. The courtyard is a vertical walled space, but the *madang* is a place where the horizontal land meets the sky.⁵⁶⁸ The *madang* is space of the earth, but it is also the place where the energy of sky is filled. Traditionally, the *madang* has placed southward enough to receive the *Yang* (warmth, light).⁵⁶⁹

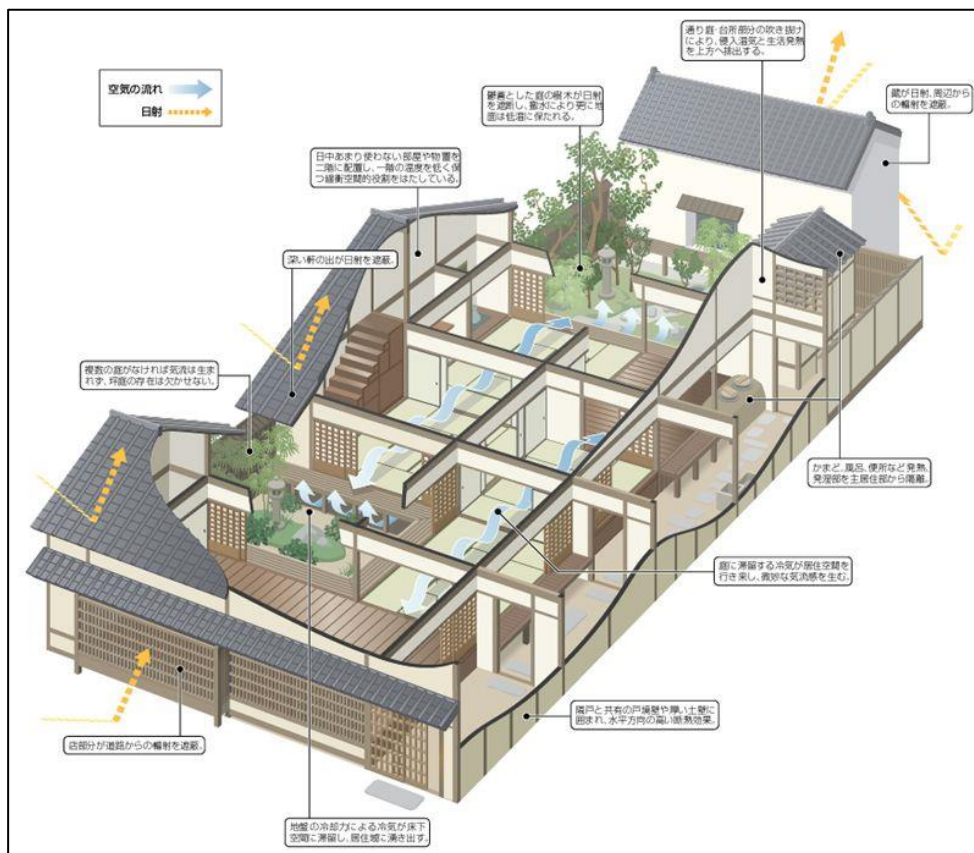


Figure 59 The Layout of a Japanese Matchiya House (Traditional Japanese Residence), Built in 16th-17th Century

⁵⁶⁶ Kwon (권영걸), Creating..., 118

⁵⁶⁷ Deleuze and Guattari, "The Treatise..."352.

⁵⁶⁸ Kwon (권영걸), Creating..., 121-122

⁵⁶⁹ Kwon (권영걸), Creating..., 122

If the courtyard is derived from the expansion of the house, the *madang* can be said to have occurred with the expansion of set of houses. Historically, *hanok's madang* seems to have developed as a mixture of these two processes. In the early Joseon Dynasty, the residence house had a closed courtyard with the space differentiating within a single chamber.⁵⁷⁰ In the late Joseon Dynasty, different kinds of chamber emerged such as *sarangche (the men's part of a house)*, *anche (the main house)*, *hengrangche (the servant's house)*, accordingly various types of *madang* were formed.⁵⁷¹ Yangdong Village's *hanok* was built by Un Jeok Lee for his brother that has *madang* uniquely separated for the servant and the household.⁵⁷² It can be deduced that it is a new form in the process of differentiation of the *madang*.⁵⁷³ It is interesting to note that the process of expansion and gathering of the house have formed a rich external space with a unique character of Korean architecture.⁵⁷⁴ As a result, there are various functions in the Korean houses, having different types of *madang* for each building unit.⁵⁷⁵ This is the difference between courtyard and *madang*.⁵⁷⁶ The courtyard does not form one area that is central to itself. However the *madang* forms an area with the building.⁵⁷⁷ The centre of Korean architecture is the *madang*, but the courtyard is not the centre in Western architecture.

⁵⁷⁰ Kwon (권영걸), *Creating...*, 82 & 117

⁵⁷¹ Inaji, *The Garden...*, 137.

⁵⁷² Kwon (권영걸), *Creating...*, 79.

⁵⁷³ Kwon (권영걸), *Creating...*, 82-83.

⁵⁷⁴ Kwon (권영걸), *Creating...*, 87.

⁵⁷⁵ Kwon (권영걸), *Creating...*, 93-94.

⁵⁷⁶ Kwon (권영걸), *Creating...*, 93.

⁵⁷⁷ Inaji, *The Garden...*, 150.



Figure 60 Inner Madang of Sarangche of Yangdong Village's Hanok, Built in the 16th Century

5.6 Madang and Maru (Elevated Wooden Floor)

In a *hanok*, *madang* is an external space open to the sky and has the character of interior space.⁵⁷⁸ The façade of Korean architecture in *madang* is both the exterior of building and the background of *madang*. In other words, subtle integration of the outside and the inside of a building is performed in the *madang*.⁵⁷⁹ When you turn on the light in the room, the light filtered through the *changhoji* (traditional Korean paper made from mulberry bark to cover doors and windows) illuminates the *madang*.⁵⁸⁰ Through the light, the *madang* becomes an extension of the inside and intercrosses inside and outside.⁵⁸¹ The *madang* is literally empty, but not actually empty. In Korean

⁵⁷⁸ Inaji, *The Garden...*, 153.

⁵⁷⁹ Inaji, *The Garden...*, 150.

⁵⁸⁰ Inaji, *The Garden...*, 145.

⁵⁸¹ Kwon (권영걸), *Creating...*, 71

architecture, the *madang* is an ambiguous space in which the inside and the outside overlap.⁵⁸² The tradition of *madang* in Korean architecture is deeply rooted, and even now, the traces remain scattered in the front porch, the balcony, the utility room, and the living room in modern Korean apartment plan.⁵⁸³ These spaces of modern Korean plan are the modernized remnants of the *madang*.⁵⁸⁴



Figure 61 Daechungmaru in Hanok

The distinction between inside and outside of *maru* (*extensive space outside of a room*) is vague.⁵⁸⁵ The *daechungmaru* (*extensive space of the main floored room or hall in hanok*) is a space where the inside out outside of the building overlap each other so that they can interact with the outside *madang*.⁵⁸⁶ Sometimes you can see the door and window from the room to the *maru* which shows its ambiguous characteristic. In Korea's modern residence, living room is the result of reformulation of tradition Korean

⁵⁸² Yim, *The Traditional...*, 13-31.

⁵⁸³ Lee, *Continuity...*, 65-66.

⁵⁸⁴ Lee, *Continuity...*, 66-68.

⁵⁸⁵ Kwon (권영걸), *Creating...*, 125

⁵⁸⁶ Inaji, *The Garden...*, 160 & 184.

house's *maru*.⁵⁸⁷ The living room is used as a versatile living room. When you are having a guest, this place serves as mixture of *maru* and *madang* in traditional *hanok* as a space for dining or drinking tea.⁵⁸⁸ In modern Korean architecture, it is found that many wooden decks are installed in *madang*.⁵⁸⁹ The *madang* is an external space, but it is an extension of the *maru*. It can be seen that the *madang* has evolved in modern housing in Korea.⁵⁹⁰ It is no wonder that the *madang* is no longer a multipurpose living space for agricultural labor space but became an extension of the *maru*.

The most prominent change in Korean architecture due to the influence of Western architecture after the opening of a port acts in Joseon Dynasty.⁵⁹¹ This means that the traditional relationship between inside and outside is dismantled in Korean architecture.⁵⁹² Modern *hanok* put windows on *maru* and *daechung* to make interior space to be connected with the room and the hall.⁵⁹³ These internal and external disconnects were characteristics of Korea's housing modernization process. As a result, the connection and circulation inside and outside, which is a characteristic of Korean architecture has weakened. Through the process of Western modernization, it has focused on indoor living life style, and there are no more actions in the *madang*.⁵⁹⁴

⁵⁸⁷ Lee, *Continuity...*, 74.

⁵⁸⁸ Kwon (권영걸), *Creating...*, 122-125

⁵⁸⁹ Lee, *Continuity...*, 72-74.

⁵⁹⁰ Lee, *Continuity...*, 70.

⁵⁹¹ Go (고유섭), *Korean...*, 171-172.

⁵⁹² Inaji, *The Garden...*, 153-158.

⁵⁹³ Lee, *Continuity...*, 75-76.

⁵⁹⁴ Lee, *Continuity...*, 70-75.

5.7 Shelter and *Jeongja* (Pavilion)

There is no distinction between inside and outside in a space of dream. To be more precise, there is no outside space in dream. When one is out of dream, the space of dream does not exist already.⁵⁹⁵ On the contrary, the reality is clearly distinguished from the inside and outside, and the subject of recognition which is 'I', always out of object. In other words, dream is the inner world and reality is the outer world.⁵⁹⁶ Of course, it is based on the Western epistemology of perceiving distance between the subject and the object. On the other hand, there are many buildings in Korea that interchange between inside and outside.⁵⁹⁷ *Jeongja* (Korean pavilion built on a mountain or waterfront without walls but only pillars and roofs) is a representative example of such architecture.⁵⁹⁸ *Jeongja* is a visible object located outside and a place to see outside, and inside and outside can be reversed.⁵⁹⁹ *Jeongja* is for looking out nature from inside, but at the same time, it should look beautiful when it is gazed from the other side.⁶⁰⁰ Therefore, it is called *jeongja* where it is place in a superb view, becomes a part of nature, and where nature and human become unity.⁶⁰¹ This kind of inward and outward turning is not possible in the Western epistemological framework.

⁵⁹⁵ Yu (유현준), *Modernism...*, 12-18.

⁵⁹⁶ Pallasmaa, *The Eyes...*, 37 & 48.

⁵⁹⁷ Kwon (권영걸), *Creating...*, 116-117.

⁵⁹⁸ Kwon (권영걸), *Creating...*, 158.

⁵⁹⁹ Kwon (권영걸), *Creating...*, 117.

⁶⁰⁰ Kwon (권영걸), *Creating...*, 117-118.

⁶⁰¹ Kwon (권영걸), *Creating...*, 157-158.

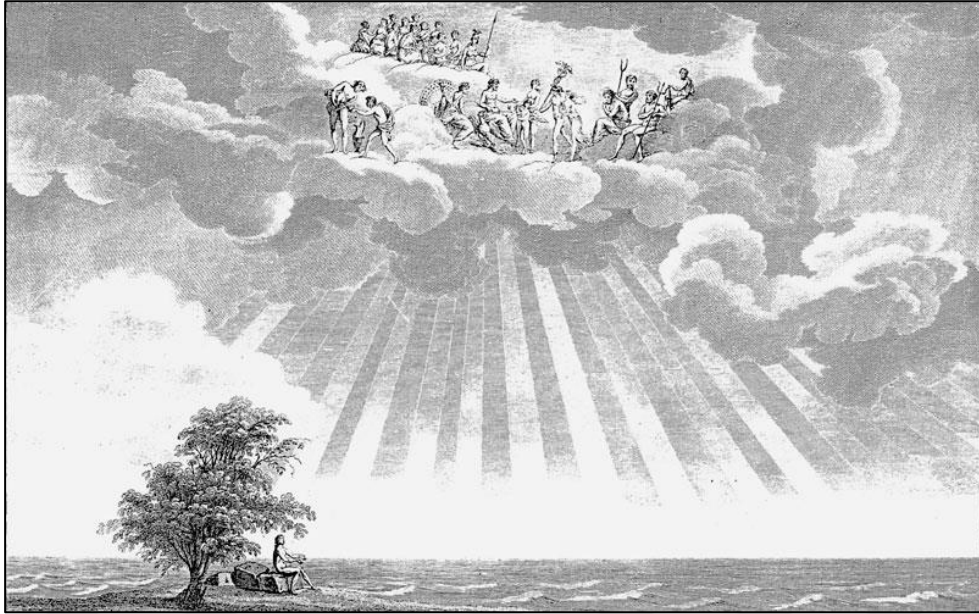


Figure 62 L'Abri du Pauvre Painted by Claude-Nicolas Ledoux, 19th Century

A shelter is a place to protect from the outside. Gaston Bachelard's 'the poetics of space', it says that the house is a concealed and closed hideout and a cozy space as it disconnects from the outside.⁶⁰² So he called the window a cut in the wall. It is painful but it is necessary to look inside from outside. In the early 19th century, the French neoclassical architect, Claude-Nicolas Ledoux was famous for his visionary drawing, and his painting completely eliminates the shelter's basic walls.⁶⁰³ The architectural concept of the West is based on space occupation and its formative expression according to shelter.⁶⁰⁴

⁶⁰² Bachelard, *The Poetics...*, 40 & 174.

⁶⁰³ Kahn, *In the Realm...*, 10.

⁶⁰⁴ Kwon (권영걸), *Creating...*, 42-44



Figure 63 Myeonyangjeon Jungja in Damyang, Built in 1533

The Korean *jeongja* is a wall-less building, but it does not lose space due to the absence of wall, but it integrates with the surroundings through free expansion of space.⁶⁰⁵ *Jeongja* is not a shelter that distinguishes between inside and outside, but is a device that connects inside and outside.⁶⁰⁶ There is a *Jeongja* called *Myeonyangjeong* in *Damyang*, in south province of Korea.⁶⁰⁷ The distinction between inside space of *Myeonyangjeong Jeongja* and outside nature disappears and the inside and outside circulate exquisitely.⁶⁰⁸

⁶⁰⁵ Kwon (권영걸), *Creating...*, 120-121.

⁶⁰⁶ Kwon (권영걸), *Creating...*, 90.

⁶⁰⁷ Kwon (권영걸), *Creating...*, 119.

⁶⁰⁸ Kwon (권영걸), *Creating...*, 118-120.



Figure 64 Gyejung Jungja in Dokrakdang Complex, Built in 16th Century

Dokrakdang complex is located on a rock named *Guanedae* facing the valley.⁶⁰⁹ In Chul Kim, a Korean architect scholar explains that the circulation of inside and outside as follows that “If the *Gyejung Jungja* is an expansion of *Guanedea* rock, the rock is the expansion of the *Gyejung Jungja*, showing the exquisite symbolic circulation of nature and architecture.”⁶¹⁰ The space expansion and circulation are made without distinction among the subject’s fixed position and inside and outside.⁶¹¹ If someone is sitting in *jeongja* or *daechung* of *hanok* while appreciating the surroundings, someone can easily experience the naturally getting into the surrounding nature.⁶¹² This is the phenomenal coexistence of inside and outside that can be felt in Korean architecture.⁶¹³

⁶⁰⁹ Kwon (권영걸), *Creating...*, 94-95.

⁶¹⁰ Kim (김인철), *Opening...*, 119.

⁶¹¹ Kwon (권영걸), *Creating...*, 114-115.

⁶¹² Kwon (권영걸), *Creating...*, 120.

⁶¹³ Kwon (권영걸), *Creating...*, 157.

5.8 Picture Frame and Chagyeong (Borrowed Landscape, 차경)

Eastern architecture has a technique called *chagyeong* (borrowed landscape)⁶¹⁴. It attracts natural scenery. There are many ways of *chagyeong*.⁶¹⁵ The way to see nature from a distance is called *wongyeong*, the way to collect various natural sceneries in one place is called *chigyeong*, and to draw natural scenery in *jeongja* is called *eupgyeong*.⁶¹⁶ It is unclear from when the concept of *chagyeong* came to Korean architecture. However, it is assumed that it adjusted to Korean concept in the Korean climate.⁶¹⁷



Figure 65 Picture Frame of Villa Savoye, Built in 1929

Originally, there was no concept to attract outside natural scenery in Western architecture.⁶¹⁸ Wild nature means chaos and disorder it is a matter of one of problem

⁶¹⁴ Inaji, *The Garden...*, 109 & 162.

⁶¹⁵ Kwon (권영걸), *Creating...*, 159.

⁶¹⁶ Kwon (권영걸), *Creating...*, 169.

⁶¹⁷ Kwon (권영걸), *Creating...*, 162.

⁶¹⁸ Yu (유현준), *Modernism...*, 78-80.

solving.⁶¹⁹ The landscape was untamed primitive nature but humans gave the principle of the universe such as geometric order.⁶²⁰ Based on these dichotomous thoughts, it made clear distinction between inside and outside, between city and nature, and between artificiality and wildness. After the Baroque period, modern subject and empiricism emerged and began to make framed scenes to appreciate the nature in West.⁶²¹ In the 18th century, the picturesque garden of England was created to experience nature as a landscape scene at the viewer's point of view, which is known to have been influenced by Chinese gardens.⁶²² The picturesque principle is a reversal of the inside and outside of Baroque architecture that created a unified scene in interior space.⁶²³ Making a scene of framed architecture experienced by a moving viewer developed in the 19th century as an important principle of Western architecture.⁶²⁴ Le Corbusier's architectural promenade also incorporates the principles of picturesque into the composition of the architectural scenes along the way.⁶²⁵ Modern architecture uses a picture window as a device to draw the landscape into the interior. The picture window allows the exterior view to look like a picture through an artificial frame, which is often used by modern architects such as Le Corbusier and Mies van der Rohe.⁶²⁶ It is widely used in modern architecture.

⁶¹⁹ Nisbett, *The Geography...*, 221.

⁶²⁰ Norberg-Schulz, *Intentions...*, 140-143.

⁶²¹ Yu (유현준), *Modernism...*, 80.

⁶²² Coan, *Perspectives...*, 84-88.

⁶²³ Yu (유현준), *Modernism...*, 82.

⁶²⁴ Yu (유현준), *Modernism...*, 84-86.

⁶²⁵ Pallasmaa, *The Eyes...*, 75.

⁶²⁶ Yu (유현준), *Modernism...*, 96-114.



Figure 66 Lingering Garden in Suzhou in China, Built in 18th Century

In Chinese gardens, an artificial frame called *dohwachang* (frame for natural scenery) was used in Chinese landscaping to appreciate nature in an artificial framework.⁶²⁷ Through a window with various patterns, it is possible to appreciate artificial nature as if it were a painting.⁶²⁸ The picture window or frame in Western modern architecture is a device for drawing the exterior scenery into the interior through the artificial frame like *dohwachang* in China. However, it is difficult to explain the frame of Korean architecture as a picture frame.⁶²⁹ The picture frame is to internalize the subject by enclosing the outside nature in the picture frame.⁶³⁰ Defining this kind of frame, separates nature from its original context. The picture frame of Western architecture is the frame that draws the outside scenery into the inside, and the image that comes into the frame is like the picture which is detached from the context that is viewed inside.⁶³¹

⁶²⁷ Inaji, *The Garden...*, 112.

⁶²⁸ Kwon (권영걸), *Creating...*, 162-164.

⁶²⁹ Kwon (권영걸), *Creating...*, 163-164.

⁶³⁰ Kwon (권영걸), *Creating...*, 162-164.

⁶³¹ Kwon (권영걸), *Creating...*, 160-162.

There is no such picture frame in Korean architecture. In Korean architecture, the scenery that draws through the *chagyeong* is not an image separated from the context, but it enters the building while remaining in its original place.⁶³² The inside and outside are connected and circulating, and there is no distance between the subject and the object.⁶³³ The perceptual distance between the subject and the landscape disappears. For instance, at the entrance of *Bongsan Mountain seowon* (*Bongsan* lecture hall), the *Bongsan* Mountain is approached but actually is located across the river.⁶³⁴ *Chagyeong* in Korean architecture is not nature that is internalized by the frame, but draws nature beyond the spatial boundaries of inside and outside.⁶³⁵ Although the nature comes in through *chagyeong*, the subject of experience is in nature.⁶³⁶ Since the subject in the landscape, all the inside and outside of surrounding scenery comes in, and all senses such as hearing, smelling, tasting, and tactile senses are utilized naturally.⁶³⁷



Figure 67 View from Manderu of Byeongsan Seowon Lecture Hall, Built in 16th Century

⁶³² Kwon (권영걸), *Creating...*, 162.

⁶³³ Inaji, *The Garden...*, 163.

⁶³⁴ Kwon (권영걸), *Creating...*, 86-87.

⁶³⁵ Kwon (권영걸), *Creating...*, 162-164.

⁶³⁶ Kwon (권영걸), *Creating...*, 160-161.

⁶³⁷ Kwon (권영걸), *Creating...*, 158-162.

Heidegger, a philosopher criticized the technological charge of technology in modern society in order to make nature appear as it is.⁶³⁸ Modern technology exclusively organizes nature according to its ability to store potential energy.⁶³⁹ He likened this getting rid of frame of nature to the hydroelectric dam by modern technology. Unlike windmills or waterwheels, hydroelectric dams forcibly store and use natural energy.⁶⁴⁰ If we change the natural energy into landscape and compare picture frame of Western architecture to hydroelectric dam, the *chagyeong* in Korean architecture is like windmill. *Chagyeong* of Korean architecture draws natural scenery into a building rather than framing the scenery.⁶⁴¹ Of course, this nature is also controlled through architecture. This nature is not nature as it is but nature that exists in relationships. In other words, nature and architecture interact and coexist. In Korean architecture, *chagyeong* makes nature and architecture as one.⁶⁴² In this respect, *chagyeong* of Korean architecture is different from the Chinese garden which creates artificial nature.⁶⁴³ The *jungja* in Korean garden does not reveal its intention through the artificial landscape like the Chinese garden.⁶⁴⁴ The location of building itself makes the scenery natural. In this regard, it is necessary to pay attention to the character of the frame that attracts landscape in Korean architecture.⁶⁴⁵ When you sit on the *maru* of the *Bongsan seowon* (lecture hall), the roof and the three-dimensional structure of *seowon* eliminate the

⁶³⁸ Heidegger, *Building...*, 83.

⁶³⁹ Heidegger, *Building...*, 84.

⁶⁴⁰ Martin Heidegger, *The Question Concerning Technology and Other Essays*, New York: Harper and Row, 1977, 14-16.

⁶⁴¹ Inaji, *The Garden...*, 163.

⁶⁴² Kwon (권영걸), *Creating...*, 162-164.

⁶⁴³ Kwon (권영걸), *Creating...*, 161.

⁶⁴⁴ Kwon (권영걸), *Creating...*, 120-121.

⁶⁴⁵ Inaji, *The Garden...*, 184-185.

distance between the subject of experience and nature.⁶⁴⁶ This effect is influenced by the fact that Korean architecture uses natural materials to promote a stereoscopic framework.⁶⁴⁷ The fact that natural materials are used to build a stereoscopic framework has an impact. The three-dimensional framework created by natural materials is a frame that draws nature, and itself becomes a part of nature and belongs to nature.⁶⁴⁸ Nature enters the building and the building becomes part of nature. It is not the frame that separates the nature from the context, but nature dominates the frame like a windmill or a waterwheel.⁶⁴⁹ The frame formed by the Korean traditional architecture is different from the hole in the wall that gives the illusion of the picture.⁶⁵⁰ The picture frame of Western architecture presupposes interception inside and outside.⁶⁵¹ The scenery here is pictorial and communication through the picture is visual. However, the frame that is created by *chagyeong* of Korean architecture is spatial and the body sense of the subject of experience is involved.⁶⁵² The frame of Korean architecture such as *jungja* of *Dosan seowon*, is the tectonic framework in the same sense.⁶⁵³ The framework of Korean architecture is not an abstracted frame, but a three-dimensional frame in which structure and space are integrated.⁶⁵⁴ Therefore, the landscape is not confined to the picture plane and does not presuppose a visual subject in a fixed

⁶⁴⁶ Kwon (권영걸), *Creating...*, 87 & 119-121.

⁶⁴⁷ Kwon (권영걸), *Creating...*, 173-175.

⁶⁴⁸ Kwon (권영걸), *Creating...*, 173.

⁶⁴⁹ Inaji, *The Garden...*, 185.

⁶⁵⁰ Kwon (권영걸), *Creating...*, 170.

⁶⁵¹ Pallasmaa, *The Eyes...*, 74.

⁶⁵² Kwon (권영걸), *Creating...*, 170-171.

⁶⁵³ Kwon (권영걸), *Creating...*, 175.

⁶⁵⁴ Kwon (권영걸), *Creating...*, 176.

position.⁶⁵⁵ Rather, it makes the subject of experience a sense of belonging to nature.⁶⁵⁶ This is why the effect of the traditional Korean architecture is felt comfortably by the body.

5.9 Window and Changmoon (창문)

Windows and doors are devices that connect the inside and the outside, and connect the interior and the exterior.⁶⁵⁷ In the west, windows and doors are strictly distinguished. The window serves as an eye that connects the inside and the outside and is a hole that accepts light and air. The door is a device for accessing inside and outside.⁶⁵⁸ In other words, the window is for visual communication and the door is for accessing the body. In particular, the door is a device for culturalizing of social status and cultural codes, and is represented by design elements together with decoration. Beatriz Colomina, an architectural critic wrote the meaning of severance of in and out of window in Western architecture that

Viewing a landscape through a window means separation. It breaks the connection between being in the landscape and looking at the landscape. The landscape is purely visual and it is an experience we can touch.⁶⁵⁹

Colomina defines the window as a ‘gaze for the domination of the outside world’ and criticizes the traditional role of the window that visually connects the inside and outside.⁶⁶⁰

⁶⁵⁵ Kwon (권영걸), *Creating...*, 173-175.

⁶⁵⁶ Kwon (권영걸), *Creating...*, 168-169.

⁶⁵⁷ Norberg-Schulz, *Intentions...*, 138.

⁶⁵⁸ Pallasmaa, *The Eyes...*, 51.

⁶⁵⁹ Colomina, *Privacy...*, 1994, 133.



Figure 68 No Distinction Between Windows and Doors in Asan Mang's Residence, Built in 14th Century

In Korea, doors and windows were distinguished in ancient dwellings, but in the Joseon Dynasty (1392-1892), windows and doors were used without distinction.⁶⁶¹ The format of the window and door did not differ greatly.⁶⁶² It is only distinguished by the height of the wainscot. When the window reaches the floor, it becomes a door. In Korean, windows and doors are all called 'windowdoor (창문)', literally combined.⁶⁶³ In the west, since the modern architecture, the walls have been liberated from the structural frame, allowing free expression of windows and doors. It is because of the relationship between the inside and the outside as described above. In Western architecture, the boundary between inside and outside should be pierced with a minimum opening.⁶⁶⁴

⁶⁶⁰ Beatriz Colomina, Jennifer Bloomer, *Sexuality and Space*, New York Princeton Architectural Press, 1992, 73-128.

⁶⁶¹ Kwon (권영걸), *Creating...*, 175-177.

⁶⁶² Inaji, *The Garden...*, 141, 147, 153.

⁶⁶³ Kwon (권영걸), *Creating...*, 178-179.

⁶⁶⁴ Yu (유현준), *Modernism...*, 48-52.

However, there is no reason to distinguish between doors and windows unless the distinction between inside and outside is not clear, so it is not only for illumination and ventilation.⁶⁶⁵ In Korean architecture, the windows are freely made using the wooden structure, and the influence of the *ondol* (Korean way of floor heating system) and the sitting life style is important.⁶⁶⁶ Korean architecture with floor heating system enabled to withstand the cold winter even with the open wall because of the warm floor through building.⁶⁶⁷ In a traditional *hanok*, the window and the door were distinguished only in the kitchen.⁶⁶⁸



⁶⁶⁵ Kwon (권영걸), *Creating...*, 93-94.

⁶⁶⁶ Inaji, *The Garden...*, 144.

⁶⁶⁷ Kwon (권영걸), *Creating...*, 70-71.

⁶⁶⁸ Kwon (권영걸), *Creating...*, 71.

CHAPTER 6

SENSE OF BOUNDARY

6.1 Ambiguity of Boundary

Boundary is an element that divides in and out of architecture sets the area. It is no exaggeration to say that it is the essence of architecture to deal with boundaries because architecture constructs spaces and its relations through boundaries.⁶⁶⁹ There is no architecture in this world that has infinite space. The ancient Greek philosophers thought that space has certain boundaries.⁶⁷⁰ When Aristotle also defined *topos*, *topos* presented the notion that there is a clear boundary around it which is an immovable boundary that forms space and place.⁶⁷¹ The idea of clear boundaries between space and place was consistently reflected in Western architecture. Even now, when you look at the Western architecture, it can be seen that the boundary surrounds the architecture clearly.⁶⁷²

⁶⁶⁹ Norberg-Schulz, *Intentions...*, 134-141.

⁶⁷⁰ Zhangpa (장파), *The Orient...*, 322-326.

⁶⁷¹ Derrida, *Edmun...*, 12 & 48.

⁶⁷² Yu (유현준), *Modernism...*, 62-68.



Figure 69 Ringstrasse of Vienna, Austria in 1860

The boundaries of Western architecture are mainly made of walls.⁶⁷³ A wall is a vertical mass that surrounds space and is the element that divides the room from the room.⁶⁷⁴ The boundary pattern where the room and the room meet, in other words, the thick wall pattern dividing the space on the plane was defined as *poché* in the Ecole des Beaux-Arts.⁶⁷⁵ In Beaux-Arts's design theory, *poché* should be clear in order to be well structured.⁶⁷⁶ The *poché*'s clarity means perfect boundary and edge processing, which means clarity of spatial composition. Clear boundaries can easily be experienced in Western cities.⁶⁷⁷ The western castle city has clear boundaries between inside and outside.⁶⁷⁸ It is the nature which is outside boundaries of the walls, and the inside has an

⁶⁷³ Norberg-Schulz, *Intentions...*, 95, 114, 137.

⁶⁷⁴ Yu (유현준), *Modernism...*, 46-50.

⁶⁷⁵ Kahn, *In the Realm...*, 44.

⁶⁷⁶ Kahn, *In the Realm...*, 15.

⁶⁷⁷ Yu (유현준), *Modernism...*, 48-60.

⁶⁷⁸ Yu (유현준), *Modernism...*, 60-64.

inner order tightly bounded by buildings.⁶⁷⁹ The building that fills the inside of city has clear boundaries, so the outer space of city are clear when Western historical cities are expressed in terms of land and province relations. An American architect, Colin Rowe from 1970s, developed the urban theory of the outer space of the city by combining Sitte's research with with gestalt theory.⁶⁸⁰



Figure 70 Ambiguity of Boundary in Tongdosa Temple Complex in Namyang, Built in 17th Centruy

Unlike Western architecture, the boundary of Korean architecture is not clear. Doorways, *madang*, eaves, rooms, and *daechung* have vague boundaries.⁶⁸¹ Variable walls are the characteristic of Korean architecture which create fluid boundaries.⁶⁸² The ambiguity of these boundaries is manifested by the overlapping of spaces and the mutual

⁶⁷⁹ Yu (유현준), *Modernism...*, 64.

⁶⁸⁰ Colin Rowe, Fred Koetter, *Collage City*, Cambridge: The MIT Press, 1978, 60-90.

⁶⁸¹ Kwon (권영걸), *Creating...*, 222.

⁶⁸² Inaji, *The Garden...*, X.

penetration.⁶⁸³ In Korean architecture, there are spaces that can become both outside and inside. Since the boundaries of inside and outside are not clearly defined and intruded with each other.⁶⁸⁴ The inside and outside spaces are overlapped to conceive a stereoscopic view.⁶⁸⁵ This is a unique spatial experience that differs from Western architecture with clear boundaries between inside and outside. Korean architecture is not clearly defined the boundaries.⁶⁸⁶ The boundary of *seowon* (lecture hall), temples, gardens are generally open all around.⁶⁸⁷ It is difficult to find a completely closed boundary in the external space in Korean architecture. This is also a difference from Chinese architecture, but in the Chinese architecture, the *madang* is closed with walls and its boundary is clear and closed.⁶⁸⁸ A closed *madang* is like a closed room without a roof, and is connected through a door to a neighboring space. The continuous organization of *madang*, which is characteristic of Chinese architecture, is based on this way. The *madang* in Korean architecture is surrounded by walls but does not form a closed boundary.⁶⁸⁹ *Numaru* is a representative building that creates a vague boundary that overlaps the areas by dividing or integrating.⁶⁹⁰ The ambiguity of the boundary in Korean architecture is also closely related to the spatial status of the subject of experience.⁶⁹¹ The boundary becomes clear when the subject of experience is outside having a distance from the object. However the concept of boundary is inevitable and vague, when the subject of experience is both inside and outside.

⁶⁸³ Kwon (권영걸), *Creating...*, 179.

⁶⁸⁴ Inaji, *The Garden...*, 132 & 150.

⁶⁸⁵ Kwon (권영걸), *Creating...*, 230.

⁶⁸⁶ Kwon (권영걸), *Creating...*, 221-222.

⁶⁸⁷ Kwon (권영걸), *Creating...*, 93-95.

⁶⁸⁸ Inaji, *The Garden...*, 160.

⁶⁸⁹ Kwon (권영걸), *Creating...*, 230-231.

⁶⁹⁰ Inaji, *The Garden...*, 139 & 192.

⁶⁹¹ Kwon (권영걸), *Creating...*, 118.

6.2 Boundary and Area

The boundary of Korean architecture is vague, but its territoriality is clear.⁶⁹² The area is a unique principle in which buildings are placed around *madang*, and Korean architecture is composed of *madang* at centre.⁶⁹³ Since the boundaries of *madang* are ambiguous, the boundaries are not clearly defined, but the nature of each is clear. The inner-*madang* is located in front of men household's building and is often blocked by the back of the house.⁶⁹⁴ For those who are unfamiliar with the way of Korean life, the realm of the domain is not well understood.⁶⁹⁵ Since the boundaries of areas are ambiguous, overlapping between areas may occur.⁶⁹⁶ It is divided into distinct areas by buildings, *madang*, and fence as described by Bong Yeol Kim.⁶⁹⁷ However, each area is not disconnected, but continuous and inter-penetrative.⁶⁹⁸ So at some point, the boundaries between areas disappear and the whole is experienced as an integrated one.⁶⁹⁹ Therefore, Korean architecture should understand the area better than individual buildings. When restoring traditional architecture, research on the area should be done deeply.⁷⁰⁰ If you think about traditional architecture as an individual building, you may miss the essence because you do not understand the area. It is same for cities. Korean cities do not have clear boundaries between the buildings and the outer space of the city,

⁶⁹² Kwon (권영걸), *Creating...*, 222.

⁶⁹³ Inaji, *The Garden...*, 153.

⁶⁹⁴ Inaji, *The Garden...*, 137.

⁶⁹⁵ Kwon (권영걸), *Creating...*, 130-132.

⁶⁹⁶ Kwon (권영걸), *Creating...*, 178.

⁶⁹⁷ Kim (김봉렬), *Rediscovery...*, 59.

⁶⁹⁸ Kwon (권영걸), *Creating...*, 230.

⁶⁹⁹ Kwon (권영걸), *Creating...*, 179.

⁷⁰⁰ Kwon (권영걸), *Creating...*, 171.

but are connected by roads, *madangs*, buildings and walls. Therefore, Korean cities seem to be scattered around buildings without the clear order of outer space that roads and buildings meet like Western historical cities.⁷⁰¹ This is why Korean urban housing and rural housing are not so distinct.



Figure 71 Dam (walled boundary) of Changdeokgung Palace in Nakseonjae

The western architecture is the architecture of the wall and the Korean architecture is the architecture of the floor.⁷⁰² Walls make clear boundaries, but the floor sets the areas.⁷⁰³ Therefore, the long avenues developed in the Western cities, but not in Korean cities where the architecture of floor developed.⁷⁰⁴ Even now, we can see that the buildings are twisted little by little on the urban streets of Korea without building lines.⁷⁰⁵ This

⁷⁰¹ Ju Eun Kim, *Seeking Wisdom in Tradition: The Promise of Future Housing*, University of Maryland: College Park, 2015, 21-25.

⁷⁰² Kwon (권영걸), *Creating...*, 71.

⁷⁰³ Kwon (권영걸), *Creating...*, 53-54 & 71.

⁷⁰⁴ Kwon (권영걸), *Creating...*, 71.

⁷⁰⁵ Kim, *Seeking...*, 21-28.

shows the characteristics of a Korean city made up of areas rather than streets or avenues.⁷⁰⁶ In Korean architecture, the wall itself is not recognized as an important element forming the boundary with the city, so there is a trace of wall on the wall facing the street. The city centred on the streets has a sense of visual experience as a dominant sensation, but the city centred on the area does not consciously appreciate the visual order. As Ashihara Yoshinobu pointed out that in the outer space of a city, it is the cultural difference that lacks awareness of street scenes in Asian cities.⁷⁰⁷

6.3 Gestalt and Yin & Yang

It is a well-known fact that Western architecture has focused on space rather than form since the modern era. Architectural theorists have explained this by relying on Gestalt theory.⁷⁰⁸ In the past, architecture focused on solid masses and walls, then the architecture of modern times focused on the space surrounded by masses and walls.⁷⁰⁹ The solid and void relationship is reversed.⁷¹⁰ This can be explained by analogy to the Yin and Yang in the East. Lao Tzu's idea that the bowl made out of clay finds its usefulness in its emptiness.⁷¹¹ However, the Yin and Yang theory in East Asia and the Gestalt's spatial perception in West are different. The crucial difference lies in the nature of the boundary. The Yin and Yang theory is not a confrontation like the solid and void but always has one intention to be in a harmony.⁷¹² The Yang gives birth to Yin, and the

⁷⁰⁶ Kim, *Seeking...*, 28.

⁷⁰⁷ Yoshinobu, *Theory...*, 28-49.

⁷⁰⁸ Kwon (권영걸), *Creating...*, 55.

⁷⁰⁹ Norberg-Schulz, *Intentions...*, 45, 100-106.

⁷¹⁰ Yu (유현준), *Modernism...*, 12-18.

⁷¹¹ Cornelis van de van, *Space in Architecture*, Wauwatosa, WI, U.S.A: Imperial Books and Collectibles 1978, 16-18.

⁷¹² Kwon (권영걸), *Creating...*, 31.

Yin gives birth to Yang again.⁷¹³ Yin and Yang means a relationship not an existence.⁷¹⁴ Therefore, the boundary between Yin and Yang is fluid which means that it cannot be perceived as a perceptual form such as background, figure, negative and positive as in Gestalt theory. In Gestalt psychology,⁷¹⁵ the boundaries of the background and the form are fixed in place but the boundaries of Yin and Yang are not fixed and indeterminate in Yin and Yang theory.⁷¹⁶ The *Taegeuk* figure of Yin and Yang theory is a symbolic diagram expressing the fluid character of boundary.⁷¹⁷ Therefore, it is difficult to explain the concept of space based on Western Gestalt theory through the Yin and Yang theory.

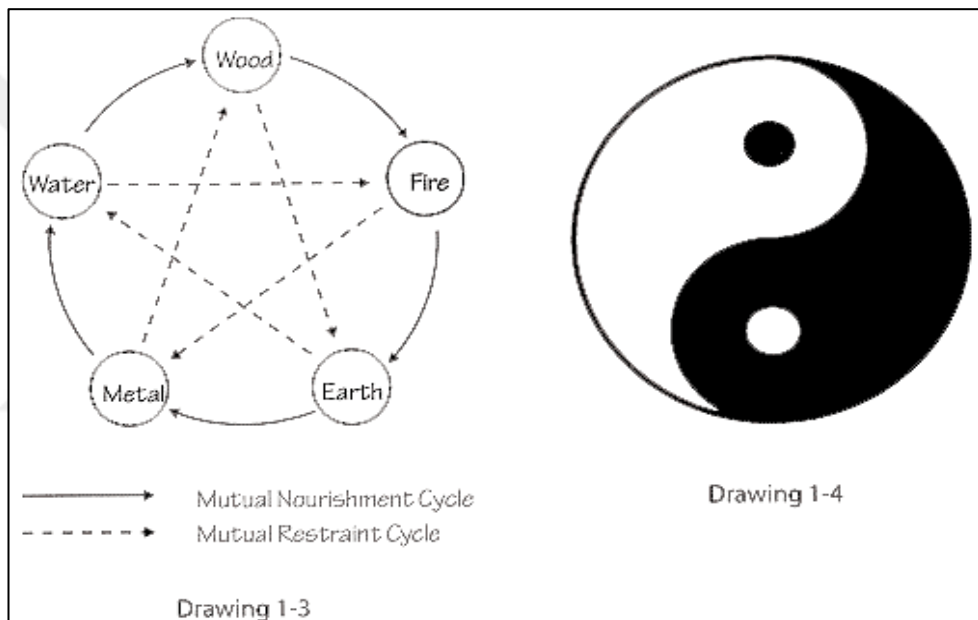


Figure 72 Yin and Yang Diagram by the ShouyuLiang Studies

⁷¹³ Kwon (권영걸), *Creating...*, 31-33.

⁷¹⁴ Nisbett, *The Geography...*, 13.

⁷¹⁵ Heidegger, *Building...*, 83.

⁷¹⁶ Yu (유현준), *Modernism...*, 32.

⁷¹⁷ Kwon (권영걸), *Creating...*, 63-64.

6.4 Transparency and Interpenetration of Space

Due to the ambiguity of boundary, the characteristics of Korean architecture are explained by the concept of transparency.⁷¹⁸ As it is well known, transparency and interpenetration are key spatial concepts in Western modern architecture. In Western modern architecture, glass walls were used for the first time in history, making boundaries of buildings that were clogged with heavy walls transparent.⁷¹⁹ As the walls become transparent, the inner and outer spaces become visually penetrating each other, and through the transparency, various inner and outer spaces can be visually overlapped and the depth of the space can be recognized.⁷²⁰ Transparency and interpenetration of space in modern architecture are similar to those of space and boundary in Korean traditional architecture.⁷²¹ But the difference of two is obvious. Transparency of modern architecture and mutual penetration of space have gained transparency of the boundary with glass walls, but mutual penetration and superposition of space in Korean architecture is formed by boundary's fluidity.⁷²² In other words, the transparency of Western modern architecture is that the nature of the boundary has changed transparently while the boundary has been kept clear, but the Korean architecture is the transparency which is recognized as the superposition of space due to the ambiguity of the boundary.⁷²³ The transparency of the wall caused by glass in Western modern

⁷¹⁸ Kwon (권영걸), *Creating...*, 198.

⁷¹⁹ Norberg-Schulz, *Intentions...*, 18 & 205.

⁷²⁰ Laszlo Moholy-Nagy, *The New Vision and Abstract of an Artist*, trans. by Daphne M. Hoffmann, Brewer: Warren & Putnam, 1947, 56-60.

⁷²¹ Kwon (권영걸), *Creating...*, 198.

⁷²² Kwon (권영걸), *Creating...*, 176-179

⁷²³ Kwon (권영걸), *Creating...*, 198-199.

architecture attained visual transparency but it does not form the boundary of ambiguous character which is the characteristic of Korean architecture.⁷²⁴



Figure 73 Transparency: Literal and Phenomenal, Bauhaus

Laszlo Moholy-Nagy saw that cognitive transparency and spatial interplay and synchronicity experienced in cubism was realized in modern iron structures such as the Eiffel Tower.⁷²⁵ This modern structure, in which the inner and outer spaces are simultaneously perceived between thin iron pieces and the relative spaces are overlapped and intruded, has a cognitive transparency like cubism.⁷²⁶ And this was the same as the transparency of the modern architecture that the observer wandered around to experience the superposition of overlapping spaces perceived through a transparent glass wall.⁷²⁷ This cognitive transparency has the aspect of mutual penetration and superposition of the space brought about by the ambiguity of the boundary in Korean architecture.⁷²⁸ However, the transparency of modern architecture that Laszlo Moholy-

⁷²⁴ Moholy-Nagy, *The New...*, 63-64.

⁷²⁵ Moholy-Nagy, *The New...*, 6.

⁷²⁶ Moholy-Nagy, *The New...*, 76.

⁷²⁷ Norberg-Schulz, *Intentions...*, 205.

⁷²⁸ Kwon (권영걸), *Creating...*, 198-199.

Nagy explains is different from that of Korean architecture in that it is based on the movements of viewers armed with modern visions.⁷²⁹ The transparency of Korean architecture presupposes a distributed dynamic subject that is not in the dynamic view of the central subject described, but inside and outside, and here and there at the same time.⁷³⁰



Figure 74 Transparency in Yeongyeongdang, Changdeokgung Palace

Rober Slutzky criticized the transparency of modern architecture, which Moholy defined into a more concrete concept of phenomenal transparency.⁷³¹ He distinguished the transparency of cubist painting from perceptual transparency perceived by moving the spatial position of overlapping shapes back and forth on the screen, and distinguishing it from the material transparency of glass.⁷³² The transparency achieved by Cubism and modern architecture is not directly transparent like glass, but purely

⁷²⁹ Moholy-Nagy, *The New...*, 76-81.

⁷³⁰ Yim, *The Traditional...*, 13.

⁷³¹ Robert Slutzky & Coling Rowe, "Transparency: Literal and Phenomenal", *perspecta*, Yale School of Architecture, 1962, 41.

⁷³² Slutzky & Rowe, "Transparency...", 8.

phenomenal transparency that occurs in our perception process. However, phenomenological transparency theory, as many critics pointed out, reflects the Western tradition of explaining architecture as a visual perception that maintains distance from the subject.⁷³³ Transparency in Korean architecture is not the phenomenal transparency of the elevation but transparency that is perceived by superimposing the edges of the space by the fluid boundaries and is perceived and experienced comprehensively through the movement and phase change of the subject.⁷³⁴ In this respect, the transparency explained by Moholy seems closer to the essence of experience in Korean architecture, except for the nature of boundary and the status of the subject of experience.

6.5 Threshold and Munjibang (Threshold)

A threshold defines the boundary between inside and outside. Threshold is a notion that the Team X's architects of the 1950s criticized modern functionalism a space element or place that is often found in traditional villages and architecture in non-Western societies.⁷³⁵ The threshold is also referred to as the transition space as a place of preparation for passage going from here to there.⁷³⁶ Often the boundary separates spaces and threshold reveals the nature of the boundary. Threshold exists in any architecture. The outside of the Greek temple is the rim of the threshold.⁷³⁷ The walled inner chamber is the space of god, but outside it creates a row of ridges and creates a threshold as a transition space at the boundary between the human realm and the realm of god.⁷³⁸ The porch on the front of the temple also has the character of threshold.

⁷³³ Detlef Mertins, "Transparency: Autonomy and Relationality", *AA files*, London, 1996, 32.

⁷³⁴ Kwon (권영걸), *Creating...*, 150-151.

⁷³⁵ Mark Swenarton & Tom Avermaete & Dirk van den Heuvel, *Architecture and the Welfare State*, New York: Routledge, 2015, 134.

⁷³⁶ Swenarton & Avermaete & van den Heuvel, *Architecture...*, 122.

⁷³⁷ Marquand, *Greek...*, 286-288.

⁷³⁸ Marquand, *Greek...*, 288-292.

Porches and porch loggia used in Western architecture also function as mode threshold and internal and external transition spaces.⁷³⁹ Modern functionalism architecture has led to a sudden break inside and out as the walls become thinner, and a result threshold has disappeared.⁷⁴⁰



Figure 75 Munjibang (Threshold) at Changdeokgung Palace

In Korean architecture, there is no transition space such as the entrance or the lobby of Western architecture, and threshold as a boundary element that goes from one space to another, there are *mungan* (the space just within a gate), *munjibang* (threshold), *gidan* (stylobate), and *teonmaru* (narrow wooden porch running along the outside of a room).⁷⁴¹ The threshold of Korean architecture differs from the threshold of Western architecture in that it demands movement of the body for passage as well as spatial

⁷³⁹ Berque, Thinking..., 34.

⁷⁴⁰ Yu (유현준), Modernism..., 120-128.

⁷⁴¹ Kwon (권영걸), Creating..., 122.

transformation.⁷⁴² For example, in order to get into the house from the *madang*, you have to take off your shoes. There are always level differences under the doorway and doors.⁷⁴³ The *munjibang* is not just made for structural reasons. The *munjibang* of Korean architecture requires that you carefully lift your legs or bow your head when crossing the border. The wall in the doorway of the noble's house requires some sensible action of body by blocking a bit of one's sight. This is a daily ritual that occurs at the doorway. The same is true for *gidan* and *teonmaru*.⁷⁴⁴ In this way, the *munjibang* of Korean architecture is different from the threshold of Western architecture in that it requires the body. Western architecture can be said to have no *munjibang* although there is a threshold. In Korean architecture, the meaning of the threshold is large.

6.6 Boundary Components and Boundary Space

A door or a threshold that pass from one space to another or from one area to another is called a boundary element. Western architecture has clear boundaries so the boundary elements are.⁷⁴⁵ When you open the front door from outside and enter the inside, it becomes an inside space.⁷⁴⁶ The process of entering the city through the gates of the medieval city and washing hands at the entrance of the cathedral⁷⁴⁷ is a simple and clear process of sanctification in order to enter the sphere of the world from the inner world.⁷⁴⁸ However, the boundary elements are not clear in Korean architecture. It is obvious that the entrance to the village is a boundary element that separates the area of

⁷⁴² Kwon (권영걸), *Creating...*, 64.

⁷⁴³ Kwon (권영걸), *Creating...*, 120-122.

⁷⁴⁴ Inaji, *The Garden...*, 146.

⁷⁴⁵ Norberg-Schulz, *Intentions...*, 134-142.

⁷⁴⁶ Berque, *Thinking...*, 6.

⁷⁴⁷ Norberg-Schulz, *Intentions...*, 124.

⁷⁴⁸ Pallasmaa, *The Eyes...*, 68 & 105.

the village. The boundary exists only symbolically, not partitioned into a wall or entered through a door. In addition, there are many boundary elements of ambiguous characters because the boundary between inside and outside is not clear in Korean architecture. Elements such as *mungan* (the space just within a gate), *munjibang* (threshold), *gidan* (stylobate), and *teonmaru* (narrow wooden porch running along the outside of a room) all form boundaries of ambiguous character.⁷⁴⁹ The boundary element of Korean architecture itself is a space, but it is also variable. These boundary elements can be defined as boundary spaces.⁷⁵⁰ The *gidan* surrounding the *madang* is a boundary between the inside and outside, outside and inside, so it can belong to the *madang* or to the *maru*. In fact, as the living space expands, its use is determined. The *gidan* can be used as a work space, dining or sitting.⁷⁵¹ In the former case, it becomes an extension of *maru*. In the latter case, it becomes an extension of the *madang*. In other words, the ambiguity of boundary in Korean architecture does not simply mean the ambiguity of the physical boundary but also the variability as a living space.⁷⁵² This change in boundary space, involves a qualitative change in the *madang* or *maru* itself.⁷⁵³ The lower edge of the eaves below the *maru* is a boundary space between the inside and the outside. Inside and outside are connected like this. In Western architecture, these scenes usually take place in the inside of the interior space, but Korean architecture goes beyond the boundaries of internal and external spaces.⁷⁵⁴ The *madang* of Korean architecture is an external space, but it is similar to the internal space in terms of what happens there.⁷⁵⁵

⁷⁴⁹ Kwon (권영걸), *Creating...*, 122.

⁷⁵⁰ Kwon (권영걸), *Creating...*, 222.

⁷⁵¹ Kwon (권영걸), *Creating...*, 72.

⁷⁵² Kwon (권영걸), *Creating...*, 198-199.

⁷⁵³ Inaji, *The Garden...*, 150-153.

⁷⁵⁴ Kwon (권영걸), *Creating...*, 120-122.

⁷⁵⁵ Inaji, *The Garden...*, 150.



Figure 76 Courtyard Ceremony at Seongeup Traditional Village in Jeju Island

Previously, I defined Korean architecture as the architecture of floor.⁷⁵⁶ Depending on the function, the floor is made up of *maru*, *ondol* and ground, and there are many levels of change, which seems to be related to the development of boundary space in Korean architecture.⁷⁵⁷ The boundary space in which the transition from consciousness and ceremony to another space or area occurs is called liminal space.⁷⁵⁸ It means neither this nor the other. It can belong to this and it can belong to the other side too.⁷⁵⁹ In this regard, the boundary space of Korean architecture can be called the liminal space. Liminal space is different from in-between space.⁷⁶⁰ The interspace is simply a space between this side and the other side, and there is no variability that can overlap the side

⁷⁵⁶ Kwon (권영걸), *Creating...*, 71.

⁷⁵⁷ Inaji, *The Garden...*, 149.

⁷⁵⁸ Kwon (권영걸), *Creating...*, 122.

⁷⁵⁹ Kwon (권영걸), *Creating...*, 70.

⁷⁶⁰ Kwon (권영걸), *Creating...*, 120-122.

or the side to draw the periphery and change the quality of the surroundings as well as itself.⁷⁶¹

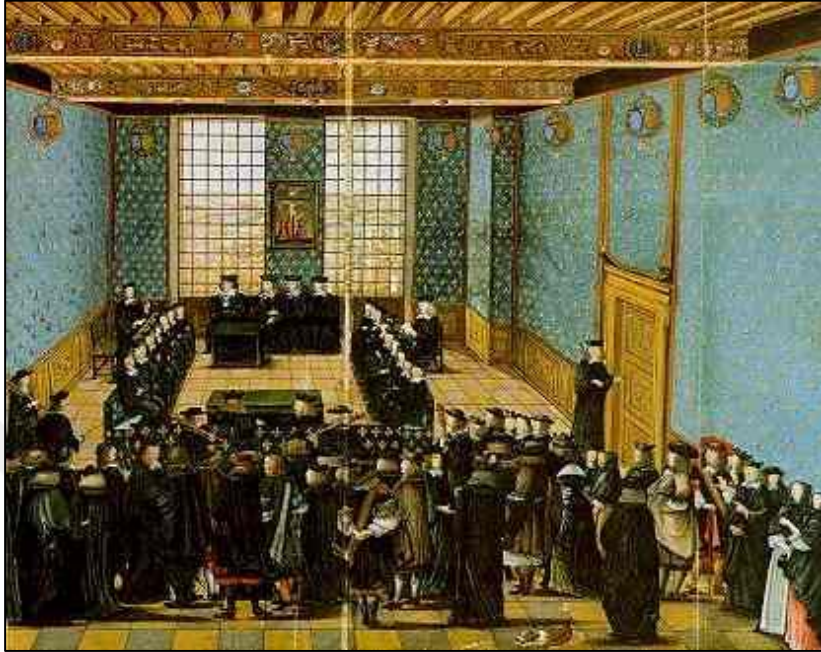


Figure 77 The Fall of Fouquet, This is Versailles

6.7 Eave and Choema (Eave)

The deep *choema* (eaves) of Korean architecture has various functions.⁷⁶² It not only blocks the rain but also blocks the light. It hangs candles under the eaves and sometimes hangs foods to dry.⁷⁶³ Thus, the *choema* of Korean architecture forms space. The *choema* internalize the outer space or connect the outer space to the inner space which can be said to be a boundary space of ambiguous nature.⁷⁶⁴ Western architecture has eaves no other function than simply blocking the rain but has greater symbolic meaning

⁷⁶¹ Inaji, *The Garden...*, 150.

⁷⁶² Kwon (권영걸), *Creating...*, 198-199.

⁷⁶³ Kwon (권영걸), *Creating...*, 199.

⁷⁶⁴ Kwon (권영걸), *Creating...*, 70.

as the finishing detail of the part where the wall and the roof meet.⁷⁶⁵ In Western architecture, the control of light was not through eaves, but through walls and windows.⁷⁶⁶ From the elements of the wall of Loggia, pillars and arches, and tracery were developed. In modern architecture, the decorative function is removed and the walls become smooth, and these traditional elementary drains disappear and horizontal or vertical louvers are installed on the walls to control the light.⁷⁶⁷



Figure 78 Traditional Cheoma in Hanok Village in Seoul

Cheoma is a unique technology of Eastern architecture.⁷⁶⁸ The architect who first introduced the concept of *cheoma* in the West was Frank Lloyd Wright of the United

⁷⁶⁵ Banham, *The Architecture...*, 108 & 117.

⁷⁶⁶ Banham, *The Architecture...*, 1969, 120-121.

⁷⁶⁷ Banham, *The Architecture...*, 1969, 59 & 67.

⁷⁶⁸ Inaji, *The Garden...*, 74 & 163.

States and it is well known that he was influenced by Japanese architecture..⁷⁶⁹ As Tanajaki Junichiro said that Japanese architecture has a deep eaves, but it does not from a boundary space facing the *madang*. However, the *cheoma* of Korean architecture from a boundary space facing the *madang* and perform many functions..⁷⁷⁰

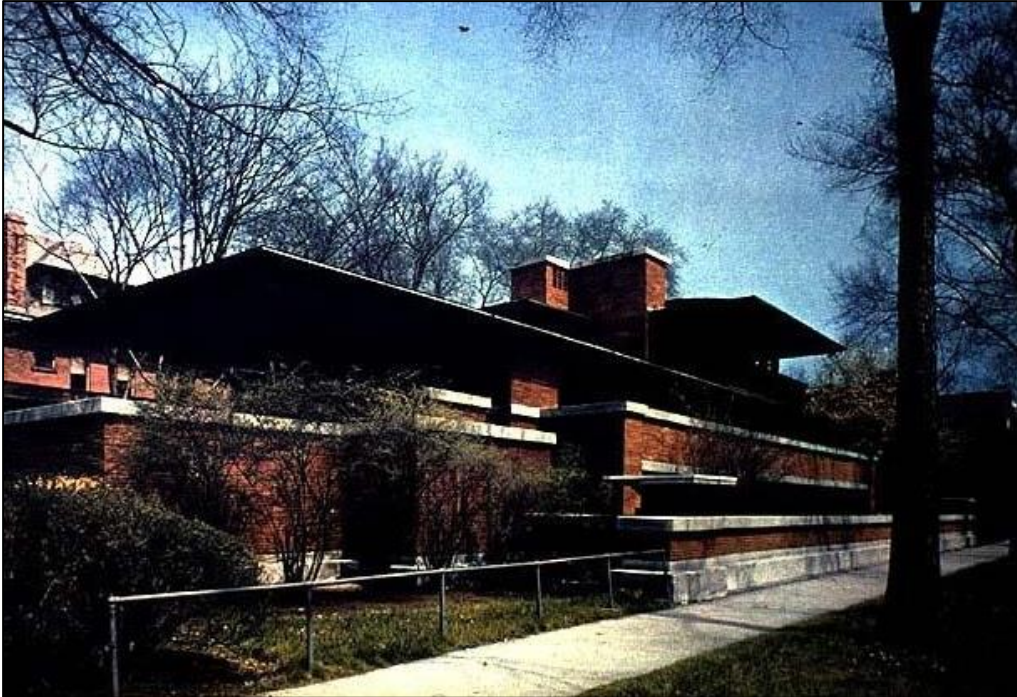


Figure 79 Robie House by Frank Lloyd Wright

6.8 Corridor and Toenmaru (Corridor)

There is an element called corridor that connects the room to the room. It is usually a linear space placed between a room and a room, or on one side of a room..⁷⁷¹ It was in the 17th century that hallways appeared in Western architecture. Prior to modern times, the main line was directly connected from room to room..⁷⁷² As the composition of the

⁷⁶⁹ Banham, *The Architecture...*, 1969, 93.

⁷⁷⁰ Junichiro (타나자끼 준이찌로), *Praise...*, 57-61.

⁷⁷¹ Bachelard, *The Poetics...*, 57.

⁷⁷² Swenarton & Avermaete & van den Heuvel, *Architecture...*, 252-253.

room becomes complicated and the protection of the private space becomes important, the functional passage that connects the room and the room is newly appeared as a constituent element of the building.⁷⁷³ Korean traditional architecture has no space like a corridor. In the *Hanok*, there is no system for connecting each room. The room of Korean architecture surrounds the *madang* and the room leads to the *madang*.⁷⁷⁴ When the rooms need to be connected with each other in succession, they used *toenmaru*.⁷⁷⁵ The *toenmaru* which is located between the room and the *madang*, is a unique element of the *hanok* that is not found in Western architecture. It serves as a hallway connecting the room to the room and a transition space connecting the *madang* and living room.⁷⁷⁶ It is not just a passage, but a versatile space that functions as an entrance hall and a reception room.⁷⁷⁷ It is a place where you can sit, rest, chat or eat. For instance packed longevity man (merchant) entered the *madang* and walked around on the *teonmaru* without being refused admittance.⁷⁷⁸ This is possible because the *teonmaru* is neither the inside nor the outside, and it has the characteristics of the inner and outer transition spaces.⁷⁷⁹ It is impossible in modern housing where the internal external spaces are clearly separated.⁷⁸⁰ It is a vague boundary space of Korean architecture which is different from Western architecture which establishes a clear boundary between inside and outside, private space and public space.⁷⁸¹

⁷⁷³ Norberg-Schulz, *Intentions...*, 119-121..

⁷⁷⁴ Kwon (권영걸), *Creating...*, 230.

⁷⁷⁵ Inaji, *The Garden...*, 146.

⁷⁷⁶ Inaji, *The Garden...*, 139 & 144.

⁷⁷⁷ Inaji, *The Garden...*, 139.

⁷⁷⁸ Kwon (권영걸), *Creating...*, 178-179.

⁷⁷⁹ Kwon (권영걸), *Creating...*, 198.

⁷⁸⁰ Kwon (권영걸), *Creating...*, 194-198.

⁷⁸¹ Inaji, *The Garden...*, x & 132.



Figure 80 Toenmaru of Buddhist Temple in Daegu

After the opening of harbor to the West, a long corridor was installed in the interior of the *hanok* under the influence of the Western architecture, resulting in a change of connection between the room and the *daechengmaru*.⁷⁸² Bo Sun Youn's house in Asan also used a glass door like a corridor. As a result, the outside breeze was blocked by the corridor, and *daechungmaru* became more independent as an indoor space.⁷⁸³ There was also a change in the way of life, and started to put chairs and furniture in the room.⁷⁸⁴ In the 20th century, the Western courtyard houses started to appear in Korea, influenced by the West and Japan. Western modernization promoted the overall interior space of Korean architecture and increased the independence of interior space.⁷⁸⁵ As the corridor was created, the passage became a functional space, and the space of

⁷⁸² Kim, Seeking..., 37-44.

⁷⁸³ Kwon (권영걸), Creating..., 125.

⁷⁸⁴ Young Hun Shin, Sanghe Lee, Dokyung Kim (신영훈, 이상해, 김도경), *100 Years of Our Architecture (우리 건축 100 년)*, Seoul: Hyunamsa, 2005, 204.

⁷⁸⁵ Lee, Continuity..., 72-74.

multipurpose nature such as ridge disappeared.⁷⁸⁶ Also, communication and contact between the room and the room became difficult.



Figure 81 The Hallway of the Stata Centre at MIT

Although Louis Kahn has already defined hallways as galleries, there is a tendency recently in modern architecture to criticize the corridor as a function space and to make the hall a public space.⁷⁸⁷ For example, the hallway of the Stata Centre at MIT, designed by Frank Gehry, is not a mere passage, but a multipurpose public space where a variety of actions take place.⁷⁸⁸ Modern architecture is trying to regain the inherent characteristics of Korean architecture lost in the Western modernization process.

6.9 Livingroom and Maru (마루)

Maru is a unique space in Korean architecture. Chinese architecture is consisted of a unit composed of a *madang* and a *dang* which facing inside and outside each other.⁷⁸⁹

⁷⁸⁶ Lee, *Continuity...*, 70-73.

⁷⁸⁷ Swenarton & Avermaete & van den Heuvel, *Architecture...*, 2015, 252.

⁷⁸⁸ Yu (유현준), *Modernism...*, 172-173.

⁷⁸⁹ Inaji, *The Garden...*, 83-86.

In Korean architecture, there is an intermediate floor between the *madang* and the room. The relationship between *maru* and *madang* is important.⁷⁹⁰ To get to the *maru* from *madang*, you need to take your shoes off and climb up to the knee height.⁷⁹¹ The *maru* is a unique space where internal and external spaces are connected through the movement of the body. *Maru* of Korean traditional houses have been translated into living rooms from modern houses.⁷⁹² The living room of Western architecture is a newly created room with the appearance of the family of the 19th century, and it is a room for a family different from the former reception room. In other words, living room of Western house is not room of ambiguous character such as floor. It is a room of public function among several rooms in Western houses. In this respect, the *maru* of Korean architecture is different from the living room of Western architecture.⁷⁹³ The living room in the modern apartment in Korea is like the *maru* of the *hanok* which is different from the living room of the Western house.⁷⁹⁴ The living room of Korean apartment is arranged in the room and is open, and it is used as a multipurpose function to connect each room.⁷⁹⁵ The living room of the apartment in Korea has a mixed character of the traditional Korean house *maru* and the floor in the Western living room.⁷⁹⁶

⁷⁹⁰ Inaji, *The Garden...*, 150.

⁷⁹¹ Inaji, *The Garden...*, 153.

⁷⁹² Kim, *Seeking...*, 38.

⁷⁹³ Inaji, *The Garden...*, 153.

⁷⁹⁴ In Suk Park (박인석), *Apartment of Korean Society (아파트 한국 사회)*, Seoul: Hyunamsa, 2013, p. 199.

⁷⁹⁵ Lee, *Continuity...*, 70-74.

⁷⁹⁶ Lee, *Continuity...*, 74.



Figure 82 Yeongeongdang Lecture Hall in Nakseonjae

6.10 Wall and Dam (Fence Wall)

Western architecture starts from making walls.⁷⁹⁷ The wall creates an enclosed space to protect the interior from the outside.⁷⁹⁸ ‘Residing’ means living in a walled space in the West. In and out of the wall, there is a hierarchy here and there. The wall used to be a barrier to escape.⁷⁹⁹ Korean architecture does not start from building walls. After building the structure of an open space of *kan* (unit), the house is built while blocking necessary parts.⁸⁰⁰ There are many ways to prevent it, and there are many changes in the space where it is blocked or opened by installing an open door. In Western architecture, if you break down the wall, the house collapses. In Korean architecture, the walls are filled only between pillars. In Korean architecture, there is a *dam* (a type of fence wall made of stone which is much lower than the eaves of building) instead of a wall. *Dams* are vertical elements that divide boundaries and set areas. In the manor house, *madang* is often blocked by *dams*.⁸⁰¹ The walls of Western architecture divides

⁷⁹⁷ Bachelard, *The Poetics...*, 5.

⁷⁹⁸ Norberg-Schulz, *Intentions...*, 114.

⁷⁹⁹ Banham, *The Architecture...*, 1969, 23.

⁸⁰⁰ Inaji, *The Garden...*, 145.

⁸⁰¹ Inaji, *The Garden...*, 150.

the inside and outside, separating relations. However the *dams* of Korean architecture are devices that rather create relationship, not to separate.⁸⁰² So the *dam* is not high and always connected to the door. There is a *dam* but you can still see both outside from inside and inside from outside.⁸⁰³ Except for special occasions like the palace architecture, the Korean architecture is not so high.⁸⁰⁴ Most of the doors are higher than the height of average human. Contrary to the defensive nature of Western architecture,⁸⁰⁵ emphasizing a wall with being higher than a door. The *dam* of Korean architecture is not a wall to protect the inside, but a device that displays areas and establishes relationships. It is possible to look out the scenery outside the *dam* from the view of *numaru* (a loft), which is usually in the loft of the house.⁸⁰⁶



Figure 83 Low Dam of Inner Room of Yunjung House in Nonsan of Chungnam

The low *dam* of Korean architecture and the vagueness of the boundaries is also evidence that Korean society was stable and safe. In an unstable society, the problem of

⁸⁰² Inaji, *The Garden...*, 153.

⁸⁰³ Inaji, *The Garden...*, 153.

⁸⁰⁴ Inaji, *The Garden...*, 166 & 172.

⁸⁰⁵ Kwon (권영걸), *Creating...*, 194.

⁸⁰⁶ Inaji, *The Garden...*, 139 & 158.

public order is inevitable. Indeed, China and Japan have made the *dam* high for defensive purposes.⁸⁰⁷ The *dam* of Korean architecture was originally intended for defense, but it was developed as a courtesy means to distinguish the area of men and women in houses of the Joseon Dynasty.⁸⁰⁸ The low wall shows the character of the boundary of Korean architecture even though it was aimed at monitoring laborers.⁸⁰⁹ The *dam* of Korean architecture is divided into areas but not completely separated. There are boundaries marked with *dams*, but the *dams* are sometimes broken in order to communicate with each other by having openings.⁸¹⁰ There are three areas in *Dosan Seodang* (lecture hall) which are *daecheong madang* (extended floor courtyard), *daemoon madang* (main gate courtyard), and the area outside the *daemoon* (main gate).⁸¹¹ The *dam* of *Dosan Seodang* is broken by a pond and connected with the surrounding area. The boundary function of the *dam* is absent or very weak. According to the observations of a Korean architect Sung Ho Ham, the *dam* of *Dosan Seodang* was planted like a tree in a garden and not built to form a boundary. It is a block but it is vacant here and there, it plays a part to draw scenery through a gap.⁸¹² The *dam* of *Sosewon* meets the stream then leaps, likewise the library of prince, *Changdeokgung* palace's *dam* is cut as well. It is difficult to find such an open *dam* in Chinese or Japanese architecture.⁸¹³ The *dam* of Korean architecture is a device that defines the area and communicates between areas. This is more of a symbolic boundary than physically dividing the inside and the outside area. A small *dam* placed to the *hanok*'s

⁸⁰⁷ Inaji, *The Garden...*, 74 & 100.

⁸⁰⁸ Kwon (권영걸), *Creating...*, 194.

⁸⁰⁹ Kwon (권영걸), *Creating...*, 194-195.

⁸¹⁰ Kwon (권영걸), *Creating...*, 198.

⁸¹¹ Kwon (권영걸), *Creating...*, 84-85.

⁸¹² Sung Ho Ham (함성호), *Reading Old Houses with Philosophy (철학으로 읽는 옛집)*, Seoul, Paju: Yeolimwon (열림원), 2011, 124.

⁸¹³ Kwon (권영걸), *Creating...*, 86.

porch actually does not divide the space between father in-law and husband and wife's space but psychological boundaries are made.⁸¹⁴



Figure 84 Cut Dam of Sosewon in Yehang of Jeonnam

6.11 Temple's Toran

Religious architecture is a symbolic space that expresses religious aspirations and ideals and is an area of the sacred that is distinguished from the secular world.⁸¹⁵ The cathedral symbolizes the heavenly world and the Buddhist temple symbolizes the Buddha's land. In order to enter a religious space from a secular society, it must cross the border.⁸¹⁶ However, Korean architecture is different from Western architecture in its entry process. The basilica of the Roman period passes from portico to atrium then narthex in order to enter the cathedral which is the process of entering the sacred.⁸¹⁷

⁸¹⁴ Kwon (권영걸), *Creating...*, 194-195.

⁸¹⁵ Norberg-Schulz, *Intentions...*, 47-48.

⁸¹⁶ Norberg-Schulz, *Intentions...*, 124.

⁸¹⁷ Norberg-Schulz, *Intentions...*, 124 & Fig 32.

The entry to the medieval cathedral is more immediate. Through the gothic portal with statues carved on to the massive wall, it was God's kingdom to open the door of the medieval cathedral.⁸¹⁸ The contrast is dramatic and the boundaries are clear.



Figure 85 Iljumun Gate of Seonamsa in Suncheon

On the other hand, the process of entry of Korean Buddhist temple from secular society is progressive and procedural. In general, the process of entrance of Buddhist temples leads to *iljumun* (the Buddhist temple gate which has a low of column in line) which is a passage from the secular world to the sacred land of Buddha, to *chunwangmun* (the Buddhist temple gate dedicated to the Four Devas).⁸¹⁹ But it is not a disconnected, incremental or dramatic entry process like Western religious architecture. The areas of temporal and non-natural territories are not disconnected, but at each stage, space leaks, interconnected and expanded.⁸²⁰ Then we will soon reach the land of Buddha. From the doctrinal point of view, it is still a world of delusion in *chunwangmun* but at *hetalmun* (gate of nirvana), it is a world of enlightenment. It is very natural in this respect that

⁸¹⁸ Norberg-Schulz, *Intentions...*, 124 & 135.

⁸¹⁹ Go (고유섭), *Korean...*, 165-168.

⁸²⁰ Go (고유섭), *Korean...*, 158-160.

Haeinsa temple *Guksadang* (the shrine of the indigenous faith who carries the land god) is placed in the boundary space between them.⁸²¹ This is because the spaces area overlapped.⁸²² The prose of the temple shows the boundaries of Korean architecture that is open and closed as if the division between inside and outside is unclear.⁸²³ The gradual process of progression leads to the land of Buddha. This cannot be explained by the gradual spatial experience along the linear time axis.⁸²⁴ The gate of the temple in Korean architecture is not a monument or threshold to pass like the portal of the cathedral, but a vague border where temporal and spatial transformation occurs.



⁸²¹ Go (고유섭), *Korean...*,160-161.

⁸²² Yim, *The Traditional...*, 104-105.

⁸²³ Yim, *The Traditional...*, 104-107

⁸²⁴ Yim, *The Traditional...*, 106

CHAPTER 7

UNIT AND GROUP

7.1 Specialization of Architectural Space

The primitive house was consisted of a simple room.⁸²⁵ As civilization develops, a single simple room gradually becomes different into several spaces.⁸²⁶ There are many rooms under one roof, and a lot of buildings expanded into a cluster. However, in the way that space is differentiated or assembled, Eastern and Western architecture have developed in different directions. If Western architecture developed into a lumpy structure with multiple spaces under the roof, the Eastern architecture was the way in which several buildings were clustered horizontally.⁸²⁷ It is called a specialization of the same kind as an affiliate. The Forbidden City in Beijing and the Louvre in Paris area similar in size but the overall order is completely different.⁸²⁸ The Louvre is a monolithic building, but the Forbidden City is an architecture formed by the dispersion of poles and communities.⁸²⁹ Early on, a Korean historian of arts and architecture, Yu

⁸²⁵ Norberg-Schulz, *Intentions...*, 114.

⁸²⁶ Norberg-Schulz, *Intentions...*, 114-118.

⁸²⁷ Swenarton & Avermaete & van den Heuvel, *Architecture...*, 33-34.

⁸²⁸ LEE (리원허), *Design...*, 164.

⁸²⁹ LEE (리원허), *Design...*, 164-165.

Sup Go pointed out as an important difference between the East and West architecture.⁸³⁰

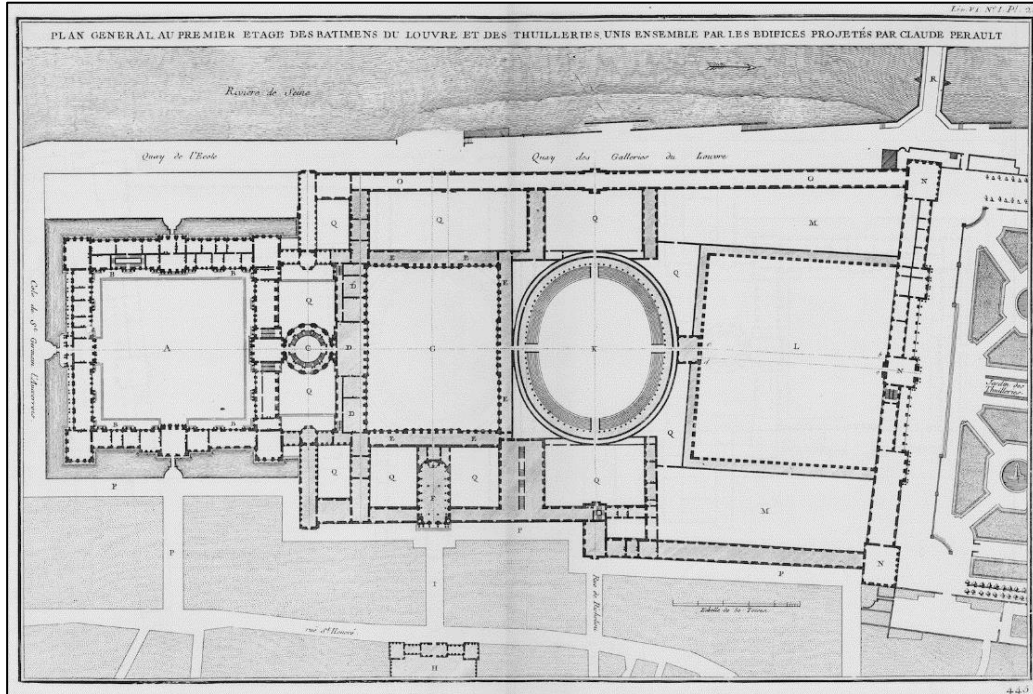


Figure 86 Plan of Louvre in Paris

The reason for the expansion of the space in such a way that the Eastern architecture differentiated was mainly from the use of the wooden structure and furniture. Compared to a masonry using stone or brick, the wooden structure is weak in material strength, and because pillars, beams, and roofs area woven into frames, it is not only limited in space partition, but also disadvantageous in expanding internal space.⁸³¹ The weakness of the wood on fire would have been the reason why the space did not divide into a single mass.⁸³² So in Eastern architecture, a large-scale facility containing various activities cannot be solved by single building but divided into several.⁸³³ The difference in the

⁸³⁰ Go (고유섭), *Korean...*, 15.

⁸³¹ LEE (리원허), *Design...*, 49-54.

⁸³² Kwon (권영걸), *Creating...*,70.

⁸³³ Kwon (권영걸), *Creating...*,173.

way that the space of East and West architecture expands has also directly affected the development of interior space in Western architecture and the development of exterior space in Eastern architecture.⁸³⁴

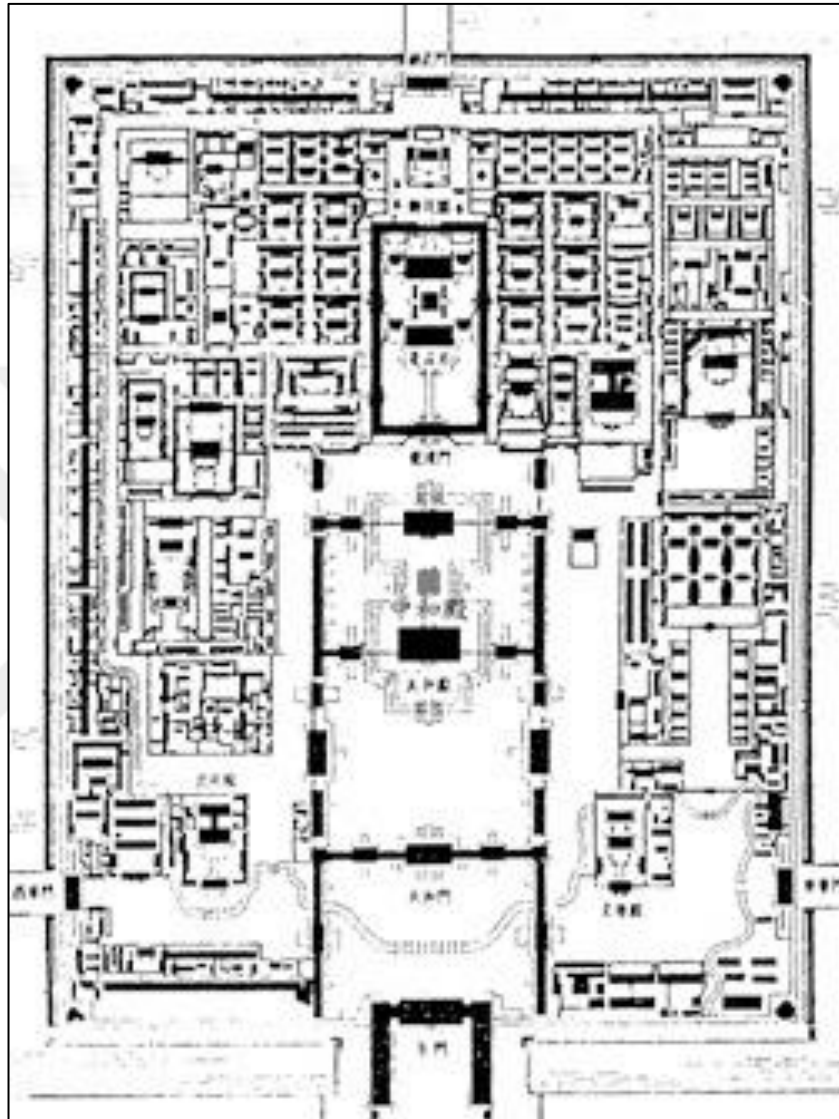


Figure 87 Plan of the Forbidden City in China

⁸³⁴ Kwon (권영걸), *Creating...*, 172-180.

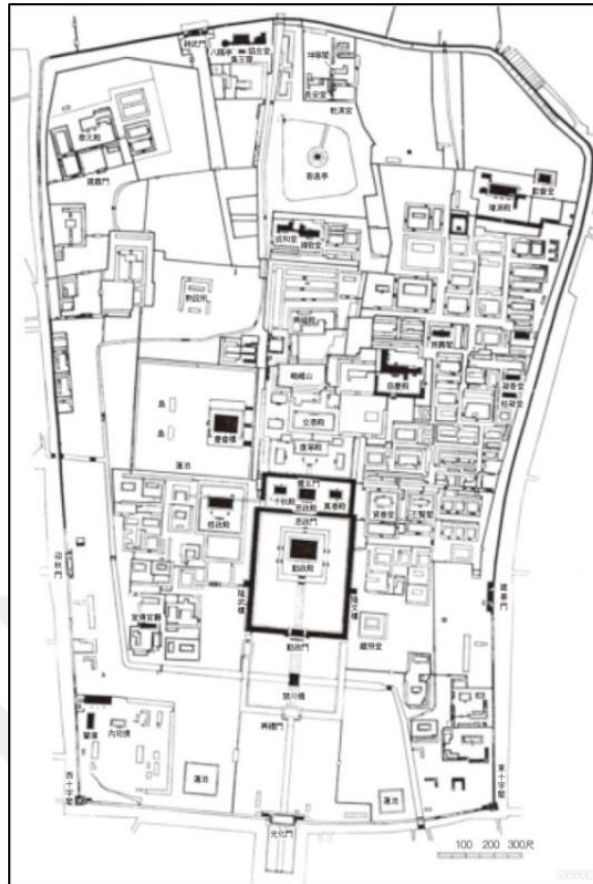


Figure 88 Plan of Gyeongbokgung Palace in Korea

East Asian architecture also varies slightly in the aspects of spatial differentiation in each country.⁸³⁵ Since ancient times, Chinese architecture has been actively differentiated.⁸³⁶ Depending on the function of the building, the space was expanded horizontally centring on the *madang* as the walls were divided.⁸³⁷ Korean and Japan were influenced by ancient Chinese architecture but gradually developed independently.⁸³⁸ Japanese architecture has developed a concentrated type of building with many divided

⁸³⁵ Inaji, *The Garden...*, x.

⁸³⁶ Inaji, *The Garden...*, 103-127.

⁸³⁷ Inaji, *The Garden...*, 137.

⁸³⁸ Inaji, *The Garden...*, x.

rooms in a single building, having character of relatively active division.⁸³⁹ There are many wooden houses with large lumps in palaces and houses.⁸⁴⁰ On the other hand, a building was divided into a certain size and it was not expanded much but the differentiation of the building was developed so that several buildings were clustered around the *madang* in Korea architecture.⁸⁴¹ The differentiation and division of room formed at the same time in Korean architecture.

7.2 Part and Whole

The Greek architecture, the lumps expand as individual spaces are merged to become a self-finished object.⁸⁴² Individuals gather together to become larger ones, and individual spaces lose their independence within large individuals.⁸⁴³ So the Western architecture values masses that make up the whole but not the individual mass.⁸⁴⁴ The individuality of individual space is lost in the whole and becomes a part of the whole. The aesthetics of Western architecture was defined in the harmony and unity of the part and the whole by Renaissance architect, Alberti.⁸⁴⁵ If you add or subtract a bit, the whole harmony and unity breaks.⁸⁴⁶ Alberti believed that the parts and the whole must be in perfect harmony, as is the principle of nature.⁸⁴⁷

⁸³⁹ Inaji, *The Garden...*, 58.

⁸⁴⁰ Inaji, *The Garden...*, 34-52.

⁸⁴¹ Inaji, *The Garden...*, 137, 143, 161.

⁸⁴² Nisbett, *The Geography...*, 19, 69.

⁸⁴³ Norberg-Schulz, *Intentions...*, 65.

⁸⁴⁴ Norberg-Schulz, *Intentions...*, 97-98.

⁸⁴⁵ Norberg-Schulz, *Intentions...*, 89.

⁸⁴⁶ Norberg-Schulz, *Intentions...*, 152.

⁸⁴⁷ Norberg-Schulz, *Intentions...*, 91.



Figure 89 Façade of Santa Maria Novella in Florence by Alberti

In Korean architecture where the differentiation of *kan* and *chea* are performed at the same time, *kan* and *chea* maintain its independence as well as the whole.⁸⁴⁸ In Korean architecture, a *kan* is created as a space under a roof and it is divided and various *kans* gather together as a whole.⁸⁴⁹ Each *kan* is independent and sometimes tightly connected.⁸⁵⁰ In other words, Korean architecture is formed as a collection of individuals but the individual is not a mere accessory of the whole, but exists as a separate entity of its own.⁸⁵¹ Korean architecture has these characteristics in the relationship between the part and the whole.⁸⁵² As described above, Korean architecture is made up of a combination of areas centred on the *madang*, and each area is formed by the relationship between building, walls and corridors.⁸⁵³ This is clearly contrasted with

⁸⁴⁸ Inaji, The Garden..., 150-151.

⁸⁴⁹ Kwon (권영걸), Creating..., 67.

⁸⁵⁰ Lee, Continuity..., 65-71.

⁸⁵¹ Inaji, The Garden..., 143-147.

⁸⁵² Inaji, The Garden..., 132.

⁸⁵³ Inaji, The Garden..., 145 & 185.

the way an individual in the Western architecture is made up of the whole.⁸⁵⁴ There is no such concept of the area in the West, which consists entirely of a combination of private rooms.⁸⁵⁵ This difference in spatial differentiation cannot be neglected by the unique ideas and cultures of the East and the West on the part and the whole, the individual and the aggregation and the individuality and the unity.



Figure 90 Dosan Seodang (lecture hall) complex in Andong

7.3 Alphabet and Chinese Character

Western alphabet and Chinese character illustrate the difference between the Eastern and Western culture of self-completeness and collectivity of individuals.⁸⁵⁶ The Western alphabet is the basic block of words.⁸⁵⁷ The order in which the alphabets are arranged

⁸⁵⁴ Norberg-Schulz, *Intentions...*, 127-140.

⁸⁵⁵ Kwon (권영걸), *Creating...*, 173.

⁸⁵⁶ Yu (유현준), *Modernism...*, 36-40.

⁸⁵⁷ Yu (유현준), *Modernism...*, 36.

along the axis creates words with different meanings.⁸⁵⁸ The alphabet itself has no meaning.⁸⁵⁹ Only when the alphabet forms the complete word then the meaning of the word is created. Characters are symbols, but they have no individual meaning or symbolism.⁸⁶⁰ On the other hand, Chinese alphabet is a literal character and the each has its own independent meaning.⁸⁶¹ Thousands of these basic Chinese characters are linked up, down, left and right to create words with different meanings according to its various combinations.⁸⁶² So the combination of Chinese character has a free growth pattern. Hangeul (Korean alphabet) is an intermediate character between alphabet and Chinese character.⁸⁶³ A syllable that makes up a word consists of an abstract alphabet, but the letters are independent. A Hangeul alphabet is not self-completing like Chinese alphabet but arrays can be both horizontally and vertically written like Chinese character.⁸⁶⁴ In this regard, the arrangement of Hangeul has both characters of alphabet and Chinese character attributes. The difference between the Eastern and Western structures seen in the relationship between the part and the whole is similar to the difference between the way the Western alphabet and Chinese character are composed.⁸⁶⁵ Western architecture is a single lump like an alphabet, but the rooms expand, while the Eastern architecture proliferates while retaining the shape of the individual.⁸⁶⁶ The abstraction of the alphabet and the conceptualization of Chinese

⁸⁵⁸ Yu (유현준), *Modernism...*, 37.

⁸⁵⁹ Yu (유현준), *Modernism...*, 36-37.

⁸⁶⁰ Yu (유현준), *Modernism...*, 37.

⁸⁶¹ LEE (리원허), *Design...*, 71.

⁸⁶² Kwon (권영걸), *Creating...*, 27-29.

⁸⁶³ Kwon (권영걸), *Creating...*, 27.

⁸⁶⁴ Yunhe LEE (리원허), *Design*, 71-75.

⁸⁶⁵ Kwon (권영걸), *Creating...*, 27-28.

⁸⁶⁶ LEE (리원허), *Design...*, 74.

characters are similar to the way Western and Eastern architecture combine individual spaces to form the whole.⁸⁶⁷

In the West, the meaning of the invention of printing is inevitable in this respect. In the medieval times of the West, the bible was considered to be based on a perfectly harmonious order of the universe and believed in a harmonious whole. Here, the meaning of the individual and the appearance of the individual did not matter. So, in the Middle Ages, if one piece of wood print had a mistake of word, the whole wood print was destroyed. The development of metal printing in the West was possible after the Renaissance as modern ideas developed. A perfectly harmonious finite world was possible after the disintegration of the entity, which was understood only in the whole. By 144, Gutenberg discovered the 'Erros' that changed the alphabetical order in 'Moress', and discovered that if the two alphabets were arbitrarily constructed, an enormous whole, a new world was formed. The part that is understood only in the harmony of the whole is transformed into a neutral and meaningless individual, so that the typography printing technique was invented.⁸⁶⁸ Sociologist Marshall McLuhan called it as the Gutenberg Galaxy, a revolutionary change to the media society.⁸⁶⁹

7.4 Room and Bang (Room)

Room, a unit of Western architecture is translated into a *bang* in Korean.⁸⁷⁰ Both rooms and bangs refer to unit spaces of architecture, but there is a clear difference between the two. Western-style rooms have functions such as dining, living, bed and study.⁸⁷¹

⁸⁶⁷ Yu (유현준), *Modernism...*, 38.

⁸⁶⁸ LEE (리원허), *Design...*, 72-73.

⁸⁶⁹ Marshall McLuhan, *The Gutenberg Galaxy*, Toronto University of Toronto Press, 1962, 11-13.

⁸⁷⁰ Inaji, *The Garden...*, 145-146.

⁸⁷¹ Bachelard, *The Poetics...*, 27.

However, *hanok* does not distinguish bangs according to its function.⁸⁷² There is only the name of the location of bang and the person who uses it such as *anbang* (main room of householder), *geoneonbang* (opposite room of *anbang*) and *sarangbang* (also known as *munbang*, reception room for guests of householder).⁸⁷³ The *hanok* room has no fixed use.⁸⁷⁴ The *maru* also refers to the character of the space, not the functional space for a specific purpose.⁸⁷⁵ Unlike the Western rooms, bangs and *marus* of *hanok* are multipurpose spaces where various actions take place.⁸⁷⁶ In *hanok*, only the kitchen and the warehouse can distinguish functions but the Korean traditional kitchen is a multipurpose space in that it is responsible for cooking and heating as well.⁸⁷⁷ The use of *hanok*'s bang as a multipurpose space is deeply related to the sitting life style.⁸⁷⁸



Figure 91 Traditional Chinese Living Room (Wasil) in Beijing

⁸⁷² Yim, *The Traditional...*, 15

⁸⁷³ Inaji, *The Garden...*, 137-142.

⁸⁷⁴ Inaji, *The Garden...*, 146.

⁸⁷⁵ Yim, *The Traditional...*, 104-107

⁸⁷⁶ Inaji, *The Garden...*, 150.

⁸⁷⁷ Inaji, *The Garden...*, 144.

⁸⁷⁸ Inaji, *The Garden...*, 144.

Since Chinese culture is based on sheltered life style, each room needs to be brought in for a specific purpose, and the purpose of room is determined accordingly.⁸⁷⁹ In Chinese architecture, a room is divided into a *wasil* (bedroom) means a place to sleep, and a living room where a desk and a chair are placed respectively.⁸⁸⁰ However, in Korean architecture, a *bang* (room) becomes a dining room if you put a table in your room, a study if you put a desk, and a bedroom if you put a futon. It also becomes loft if you put a futon in a furniture, or a reception room when you bring teapots.⁸⁸¹ The *bang* of *hanok* does not specify the function of *bang* so it can be used for various purposes since the Korean culture is based on sitting life style. The *hanok bangs* can have various activities such as eating, sleeping, entertainment. *Bang* is indeed an indefinite space.

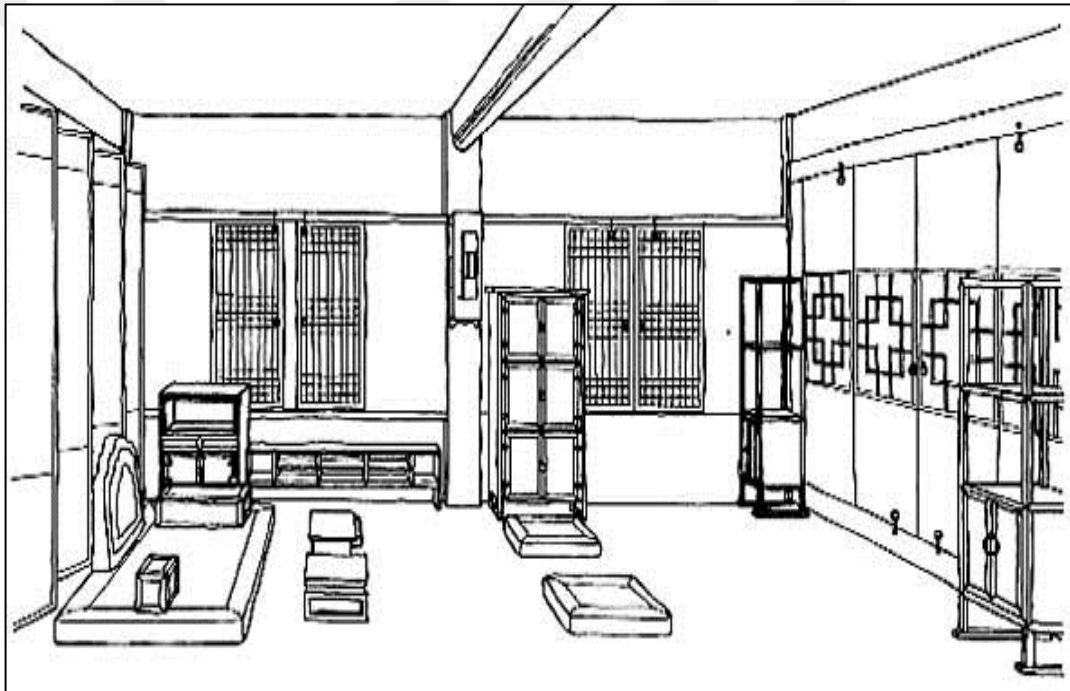


Figure 92 Schematic Drawing of Hanok's Munbang (Study)

⁸⁷⁹ Inaji, The Garden..., 103-107.

⁸⁸⁰ Inaji, The Garden..., 32 & 93.

⁸⁸¹ Inaji, The Garden, 146-149.

Kim Su Geun, a Korean architect defined hanok's *munbang* (study) as the most Korean space. It is the place where most of the time spent reading by the *sunbi* (classical Korean scholar class), but it is different in character from the study of the Western architecture.⁸⁸² *Munbang* is a space where its function is not limited.⁸⁸³ It is also a place for contemplation and creation. Kim defined *munbang* as a third space different from Western primary space or secondary space.⁸⁸⁴ In the front *madang* of *space residence* (공간 사옥) that he designed, it is seen that his intention of realizing the third space. The *bang* of Korean architecture is a minimal space unit, but it is connected with the *madang* to overcome the simplicity and to contain various actions.⁸⁸⁵ In other words, *bang* is not established without *madang*. The spatial composition of Korean architecture is different from the Western architecture that connects the room to the room even in modern days.⁸⁸⁶ *Hanok's* bangs are economical since they can contain many functions with minimal space.⁸⁸⁷ If being functional means being economical, then the *hanok's* *bang* is more functional space than a Western room, and even more ethical.

⁸⁸² Kim Su Geun (김수근), *The Good Road is Better When It Is Narrow and the Bad Road is Better when It is Wide* (좋은 길은 좁을수록 좋고 나쁜 길은 넓을수록 좋다), Seoul: Gonggansa, 2006, 256

⁸⁸³ Inaji, *The Garden...*, 147.

⁸⁸⁴ Kim (김수근), *The Good...*, 292.

⁸⁸⁵ Lee, *Continuity...*, 68.

⁸⁸⁶ Lee, *Continuity...*, 75.

⁸⁸⁷ Lee, *Continuity...*, 65.



Figure 93 Madang of Space Residence (공간사옥) by Kim Su Geun

The tradition of *bang* remains in modern Korean houses. The living room of Korean modern house is similar to the *maru* of *hanok*, so various activities such as entertainment, resting, sleeping, eating and studying can take place.⁸⁸⁸ In Korea, there are cases where a bed and a desk are put together in the room, or a table is put in a room, which is also a tradition of the *bang*.

⁸⁸⁸ Lee, *Continuity...*, 70 & 72.



Figure 94 Variations in Space Created by Kan in Simsujeong Pavilion in the Yangdong Village

7.5 Composition and Weaving

Architecture is about arranging and organizing space with some intention.⁸⁸⁹ However Eastern architecture and European architecture differ in principle and method resulted due to the dramatic differences in the nature of through processes.⁸⁹⁰ The composition of space and form in European architecture is called composition.⁸⁹¹ Architecture was designed according to several types when the function of pre-modern architecture was not so complicated and not large scale.⁸⁹² However, since the modern era, complex structures with new functions that are difficult to digest with the existing types have emerged, and as the size of the buildings has increased, the construction principle of

⁸⁸⁹ Norberg-Schulz, *Intentions...*, 7-9, 46.

⁸⁹⁰ Nisbett, *The Geography...*, xviii.

⁸⁹¹ Norberg-Schulz, *Intentions*, 97-99.

⁸⁹² Norberg-Schulz, *Intentions...*, 106.

arranging spaces has developed.⁸⁹³ At the Ecole des Beaux-Arts in France, this theory of construction was developed theoretically.⁸⁹⁴ The most important thing in Beaux-Arts's composition principle is the central space.⁸⁹⁵ Ancillary spaces are arranged along the axis around the central space to harmonize with the unity of the whole, and the principle of this construction has been regarded as a good design to be expressed well.⁸⁹⁶

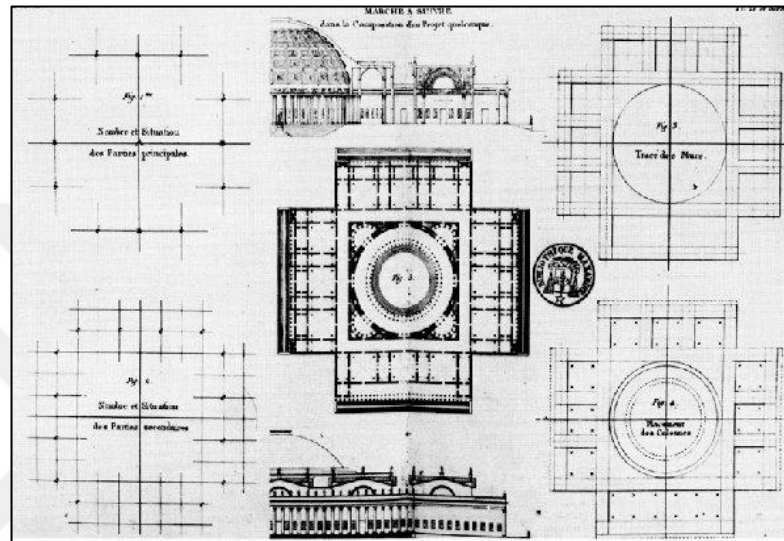


Figure 95 Marche by Jean Nicolas Nicolas Durand in 1813

There is no concept of composition in Korean architecture.⁸⁹⁷ The architecture of Korea starts from one column of four pillars and repeats and extends to two columns and three columns, and its shape is broken in the form of the base, ㄱ, ㄴ, ㄷ, ㄹ and ㅁ (A, B,

⁸⁹³ Norberg-Schulz, *Intentions...*, 205.

⁸⁹⁴ Kahn, *In the Realm...*, 44.

⁸⁹⁵ Banham, *The Architecture...*, 317.

⁸⁹⁶ Jeffrey W. Cody & Nancy S. Steinhardt & Tony Atkin, *Chinese Architecture and the Beaux-Arts, Hawai & Hong Kong: University of Hawai'i Press & Hong Kong University Press, 2011, 137-139.*

⁸⁹⁷ Kwon (권영걸), *Creating...*, 143-144.

C, D, E of Korean alphabets).⁸⁹⁸ In Korean architecture, spaces of rooms are connected, but no formative meaning or aesthetic principle dominates. The concept of centre or axis is not applied as absolute norm⁸⁹⁹. If the composition of Western architecture is to arrange the unit spaces according to the absolute rule, Korean architecture woven the interrelationship of the rooms.⁹⁰⁰ It is not an externally given order, but rather a connection of a partial order, a relationship between a room and a room.⁹⁰¹ The structure of Korea is related to the pattern of life as a qualitative issue of internal quality.⁹⁰² The tradition of Korean architecture is similar to the way in which unit generations are combined in various ways in modern Korean apartments to create unique types of patterns.⁹⁰³ On the other hand, Western apartments are unit generations arranged in the morphological order of the whole mass.⁹⁰⁴ Contrary to the Western Beaux-Arts style, there is also a vernacular style architecture that organizes organic forms by combining unit spaces from the inside to the outside.⁹⁰⁵ However, Korean architecture differs from the Western vernacular architecture in that it forms a clear hierarchy as a whole while weaving the functional relationship with each other.⁹⁰⁶

Perhaps the most visible example of the collective order of hierarchy among Korean architecture is Confucianism. Confucianism is a study of social hierarchy, order, and

⁸⁹⁸ Go (고유섭), *Korean...*, 28.

⁸⁹⁹ Kwon (권영걸), *Creating...*, 146-147.

⁹⁰⁰ Norberg-Schulz, *Intentions...*, 92-101.

⁹⁰¹ Kwon (권영걸), *Creating...*, 147.

⁹⁰² Inaji, *The Garden...*, 150-153.

⁹⁰³ Lee, *Continuity...*, 65 & 75.

⁹⁰⁴ Norberg-Schulz, *Intentions...*, 159 & 177.

⁹⁰⁵ Inaji, *The Garden...*, 150.

⁹⁰⁶ Inaji, *The Garden...*, 134-137.

behavioral norms, and the essence of Confucian values lies in the hierarchy.⁹⁰⁷ It is natural that this principle is reflected in building a house and building a space.⁹⁰⁸ In particular, *Yangban* (upper class in ancient Korea) houses and palaces, and *seowons* (lecture halls) are architectural structures emphasizing Confucian order and behavioral norms.⁹⁰⁹ However, the Confucian hierarchy reflected in Korean architecture is due to the interrelationship, not the one way like the composition of Western architecture. For example, the Louvre in France was constructed so that everything gathered like radiation, focusing on the king's room.⁹¹⁰

The collective order of Korean architecture is different from Chinese architecture.⁹¹¹ Chinese architecture has expanded horizontally centring on the *madang* rather than expanding into concentration and merging like the Western architecture for thousands years from ancient times.⁹¹² The order of the set was based on the central axis.⁹¹³ Arranging buildings in China is called *Pochi* or *Poguk*.⁹¹⁴ The *Pochi* principles of Chinese architecture are briefly summarized as follows the central axis is a symmetrical arrangement of buildings on a central axis, strictly arranged within the square axis.⁹¹⁵ This concept has been sprouting from the time of the Zhou Dynasty in China, and it is also evident in the Chinese Forbidden City and urban planning.⁹¹⁶ This principle is also

⁹⁰⁷ Inaji, *The Garden...*, 132.

⁹⁰⁸ Inaji, *The Garden...*, 137.

⁹⁰⁹ Inaji, *The Garden...*, 137-143 & 179-184.

⁹¹⁰ LEE (리원허), *Design...*, 164-165.

⁹¹¹ Inaji, *The Garden...*, 158.

⁹¹² Banham, *The Architecture...*, 7-11.

⁹¹³ LEE (리원허), *Design...*, 178-182.

⁹¹⁴ Kwon (권영걸), *Creating...*, 142.

⁹¹⁵ Kim(김동욱), *Korean Architecture...*, 318.

⁹¹⁶ Banham, *The Architecture...*, 224 & 243.

applied to the *Siheyuan*, which is the representative housing type in China, and has a symmetrical geometry.⁹¹⁷

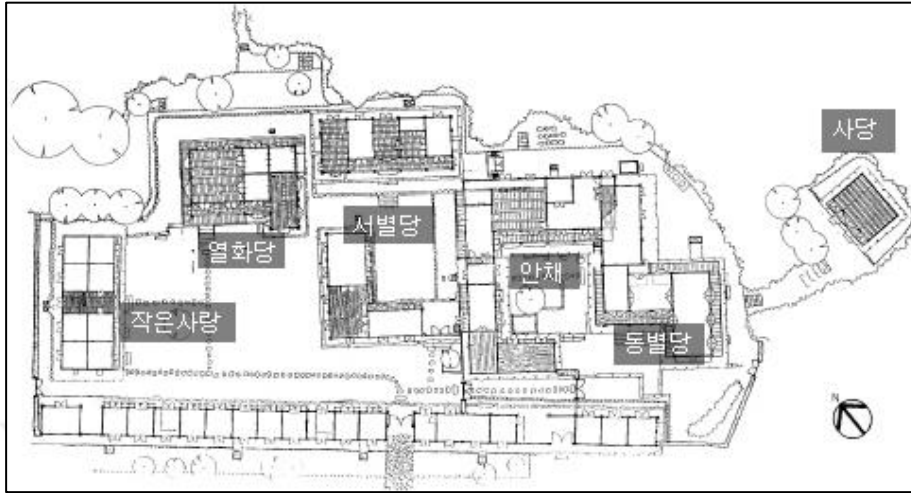


Figure 96 Plan of Seongyojang Pavilion in Gangreung, Korea in 17th Century

The ancient Korean architecture was influenced by China, but since the 9th century, it has been adapted to the topography and the climate of Korea.⁹¹⁸ Bong Hee Jeon, a traditional Korean architectural scholar explains that the set of Korean architecture becomes difficult to be explained by its arrangement from escaping the stage of ancient architecture. Unlike the layout concept in which each unit building is a part constituting the whole, the unit building in Korean architecture is a master, and at the same time, each has a relationship of consciousness and consideration for each other.⁹¹⁹ It is persuasive in that the arrangement of Korean architecture is not a tightly packed whole.

⁹¹⁷ Inaji, *The Garden...*, 149.

⁹¹⁸ Go (고유섭), *Korean...*, 130-131.

⁹¹⁹ Bong Hee Jeon & Kang Min Lee (전봉희 & 이강민), *3kan X 3kan: Typological Approach to Korean Architecture (3칸 X 3칸: 한국 건축의 유형학적 접근)*, Seoul: Seoul National University Press, 2006, 214.

7.6 Chess and (the game of) Go

The difference in occupancy of space in the East and West architecture is well explained through the comparison of chess and go. Eastern architecture is like creating a space that grows organically by placing pillars on a checkerboard grid, but the composition of Western architecture has self-completing system like chess.⁹²⁰ The French philosopher Deleuze says that go is a pure strategy but chess is semiotic.⁹²¹ The space they presuppose is not the same.⁹²² In chess, it is problem to organize a closed space by itself, to move from one point to another, to conquer the greatest number of areas with a minimum number.⁹²³ In go, it is a problem of arranging itself in an open space, preserving space and having the possibility to jump anywhere.⁹²⁴ The movement here is permanent, not point to point, no destination or direction, no departure or arrival.⁹²⁵ The flexible space of go is opposed to the latticed space of chess. Go's nomos are opposed to the polis of chess so the chess is problematic if the go is utilitarian.⁹²⁶ If chess is deduced from a single genius as a species through a myriad of differentiations, or as deduced to a derivative attribute from a stable essence, the former transitions to a contingency that conditions and resolves it in one problem.⁹²⁷

⁹²⁰ Yu, *Modernism...*, 40.

⁹²¹ Gilles Deleuze, Felix Guattari, "The Treatise on Nomadology", *A Thousand Plateau*, Minnesota: University of Minnesota Press, 1996, 352..

⁹²² Deleuze and Guattari, "The Treatise...",352-353.

⁹²³ Deleuze and Guattari, "The Treatise...",353-354.

⁹²⁴ Deleuze and Guattari, "The Treatise...",353.

⁹²⁵ Deleuze and Guattari, "The Treatise...",353.

⁹²⁶ Deleuze and Guattari, "The Treatise...",353.

⁹²⁷ Deleuze and Guattari, "The Treatise...",353.

The layout of Korean architecture is the same as the space created by go. It is intentional but not axiomatic, has possibility to change according to the combination, and is a problematic space that responds to the change of the terrain.⁹²⁸ On the other hand, in the case of Western architecture is a closed space and the principle of composition and arrangement is consistent with the principle of equilibrium and abstraction, and even change the nature.⁹²⁹ Like the chess of Western architecture, it is a self-finished object, but Korean architecture is a space created by relationships and gatherings like the stone of go.⁹³⁰ Western architecture grows like space of checkerboard. The value of elements such as pillars, roofs, walls and floors of Korean architecture is determined by the relative relationship, like the stone on the go.⁹³¹

7.7 Type and Process

Architectural design methods can be divided into type and process. Prior to modern times, architecture was mainly based on type.⁹³² The type is already given and the change happens inside the type. Modern functional architecture, on the other hand, depends on the process.⁹³³ The form of architecture is made up not a given type but of an organic combination of individual spaces.⁹³⁴ Korean traditional architecture includes both methods. In a separate building, one type of space, the space is differentiated, but the way *chea* is assembled is organic.⁹³⁵ Unlike Western architecture, which is

⁹²⁸ Inaji, *The Garden...*, 132 & 145.

⁹²⁹ Norberg-Schulz, *Intentions...*, 46 & 91, 136 & 147.

⁹³⁰ Deleuze and Guattari, "The Treatise...", 353.

⁹³¹ Inaji, *The Garden...*, 185.

⁹³² Banham, *The Architecture...*, 298.

⁹³³ Pallasmaa, *The Eyes...*, 68 & 105.

⁹³⁴ Norberg-Schulz, *Intentions...*, 206-211.

⁹³⁵ Kwon (권영길), *Creating...*, 69.

expanded into a single mass, Korean architecture takes the differentiation of *kan* and the differentiation of *chea* at the same time.⁹³⁶ Of course, although the type of community can be typified, Korean architecture is not easy to define clearly because its form is loose and varied.⁹³⁷ The west has historically built a variety of architectural types depending on its function.⁹³⁸ There are various types of architecture ranging from shrines and churches to the department stores with the history of modern values. This type of architecture is built once and lasts for a long time.⁹³⁹ Even if the era changes and the function as well, the original type of architecture is maintained.⁹⁴⁰ That is to say, the type of Western architecture has a morphological continuity that transcends functions.⁹⁴¹ So the castle became the monastery, and later the museum, the school and etc. Built in the late 19th century, the Orsay station in Paris was transformed into the Orsay museum which is famous for its impressionism paintings.⁹⁴² This type of transformation is possible because the type of Western architecture is strong in morphological symbolism and space unit is large, but the division of space is not complicated.⁹⁴³

⁹³⁶ Kwon (권영걸), *Creating...*, 224.

⁹³⁷ Kwon (권영걸), *Creating...*, 220-230.

⁹³⁸ Banham, *The Architecture...*, 298.

⁹³⁹ Norberg-Schulz, *Intentions...*, 212-223.

⁹⁴⁰ Norberg-Schulz, *Intentions...*, 167.

⁹⁴¹ Norberg-Schulz, *Intentions...*, 159-162.

⁹⁴² Berque, *Thinking...*, 48-50.

⁹⁴³ Norberg-Schulz, *Intentions...*, 156-159.



Figure 97 Exterior of Orsay Museum

Korean architecture uses the same type of building for all purposes, rather than the type of architecture that is functional.⁹⁴⁴ This is because of the wooden structure of Korean architecture has a limited constructive framework.⁹⁴⁵ However, the unit space, which is made by the wooden framework and structure, is flexible so that it can accommodate various programs in various external spaces depending on its usage and needs.⁹⁴⁶ In summary, Western architecture has a variety of morphological types, but the division of space is not delicate.⁹⁴⁷ Korean architecture has little type change and morphological symbolism is weak, but the organization of internal and external spaces is complex and delicate.⁹⁴⁸ Therefore, it is difficult for Korean architecture to transform a building into a function that is different from its original purpose.

⁹⁴⁴ Inaji, *The Garden...*, 150.

⁹⁴⁵ Kwon (권영걸), *Creating...*, 89.

⁹⁴⁶ Kwon (권영걸), *Creating...*, 93-95.

⁹⁴⁷ Norberg-Schulz, *Intentions...*, 159 & 177.

⁹⁴⁸ Kim (김개천), *24 Great...*, 123.

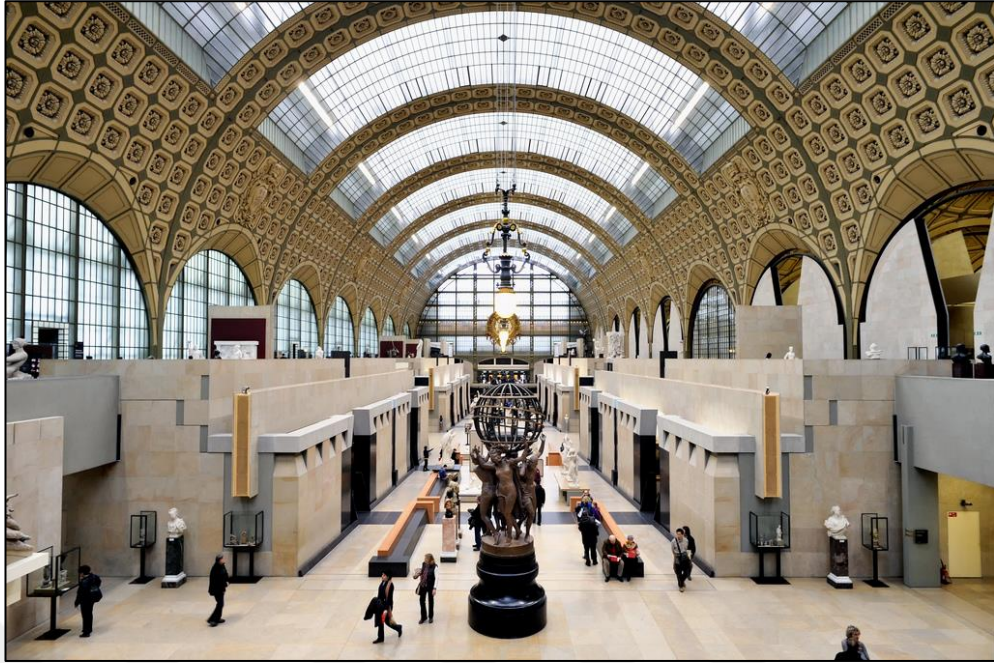


Figure 98 Interior Which is Different From its Exterior, Orsay Museum

Korean architecture corresponds to the case of Eastern architecture where the most type of change is little and the division of space is delicate.⁹⁴⁹ Although it is relatively clear that the types of temples, shrines and houses are comparatively clear in Japanese architecture but temples, shrines, houses and governmental buildings in Korean architecture not easily distinguished from each other at first glance.⁹⁵⁰ However, each facility is not very easy to convert to other uses because the organization of space is very sophisticated.⁹⁵¹ It is not easy to turn a shrine to a house or a temple. There is a close relationship between spatial organization and function.⁹⁵² In order to change an existing building to another purpose, only the skeleton is left, and it is forced to be dismantled.⁹⁵³ The type of Korean architecture is not the individuality of function, form, and

⁹⁴⁹ Kwon (권영걸), *Creating...*, 94.

⁹⁵⁰ Kwon (권영걸), *Creating...*, 95-102.

⁹⁵¹ Kwon (권영걸), *Creating...*, 119-121-.

⁹⁵² Go (고유섭), *Korean...*, 169-170.

⁹⁵³ Kwon (권영걸), *Creating...*, 177-179.

personality as the type of Western architecture but the frame of construction that enables delicate combination of various spaces.⁹⁵⁴ So, *Hanok* is a form of architecture that is flexible and adaptable.⁹⁵⁵ Once built, however buildings are complex and tightly organized, making it difficult to convert them to other uses.⁹⁵⁶ This is the paradox of type of *hanok*. We can here find the answer why traditional Korean architecture could not adopt modernity.⁹⁵⁷

7.8 Symmetry and Asymmetry

From a long time ago symmetry was thought to be a perfect and ideal order given to nature.⁹⁵⁸ Architecture, both the East and the West, followed these natural laws.⁹⁵⁹ It pursued a formal order based on rigorous symmetry as the best value, which represented civilization, liberation from chaos and savagery.⁹⁶⁰ Particularly in the West, symmetry has been regarded as the absolute principle of nature and universe, and it has been applied to architecture as an absolute rule.⁹⁶¹ China also has applied strict symmetry in architecture with the principle of equality of right and left balance from ancient architectural system.⁹⁶² Itojuta, a Japanese architect who studied Western architecture for the first time in the 20th century, said that there is a tendency to add unnecessary

⁹⁵⁴ Kwon (권영걸), *Creating...*, 178.

⁹⁵⁵ Kwon (권영걸), *Creating...*, 175.

⁹⁵⁶ Kwon (권영걸), *Creating...*, 176.

⁹⁵⁷ Lee, *Continuity...*, 70.

⁹⁵⁸ Banham, *The Architecture...*, 7-8.

⁹⁵⁹ Berque, *Thinking...*, 54.

⁹⁶⁰ Banham, *The Architecture...*, 8 & 18.

⁹⁶¹ Norberg-Schulz, *Intentions...*, 197-198.

⁹⁶² Banham, *The Architecture...*, 7-18.

buildings in order to keep the strict symmetry in Chinese architecture.⁹⁶³ The royal palace in Korean architecture follows the principles of symmetry and centrality.⁹⁶⁴ However, there are only few cases of rigorous symmetry in a collection of buildings in Korean architecture.⁹⁶⁵

Korean architecture is constructed asymmetrically according to natural topography or functional needs.⁹⁶⁶ For example, *Beongsan Seowon* (lecture hall) has its *dongjae* lecture hall slightly tilted toward the shrine even though it is based on the Confucian architecture so that the principle of symmetry is applied with flexibility.⁹⁶⁷ Asymmetric symmetry can be said to have a balance between left and right but to adapt according to the given condition.⁹⁶⁸ There are a lot of examples in Korean architecture. As for the assembly arrangement of the *Oksan Seowon*, *Dodong Seowon* and *Dosan Seowon*, the central area is symmetrical with a strong geometric order while surrounding areas are asymmetrical and arranged in an organic arrangement freely.⁹⁶⁹ Also Yu Sup Go, an architect claims that symmetry is not inherent in our Korean ancestors.⁹⁷⁰

There is almost no symmetry in the Korean houses.⁹⁷¹ The reason for this is because of the Korean traditional heating system which is attached in the kitchen next to the

⁹⁶³ Jeon & Lee (전봉희 & 이강민), *3kan X 3kan...*, 27.

⁹⁶⁴ Jeon & Lee (전봉희 & 이강민), *3kan X 3kan...*, 30.

⁹⁶⁵ Kwon (권영걸), *Creating...*, 84.

⁹⁶⁶ Kwon (권영걸), *Creating...*, 144.

⁹⁶⁷ Kwon (권영걸), *Creating...*, 86.

⁹⁶⁸ Kwon (권영걸), *Creating...*, 86-87.

⁹⁶⁹ Kim (김경수), *A Walk...*, 2000, 171.

⁹⁷⁰ Go (고유섭), *Korean...*, 16.

⁹⁷¹ Kwon (권영걸), *Creating...*, 144.

room.⁹⁷² It is difficult to be symmetrical in its natural overall layout.⁹⁷³ However, despite of the overall asymmetry, there is a centre and hierarchy.⁹⁷⁴ *Hanok* has an organic composition and differs from that of the Western house which has asymmetrical form.⁹⁷⁵ Usually, when building a large-scale traditional *hanok*, it starts to arrange it from the inner space and it becomes the centre of the *hanok*.⁹⁷⁶ Hanok is an organic combination that does not follow symmetry but forms a whole cluster, but there is an empty centre inside the *madang*.⁹⁷⁷ This is distinct characteristic of *hanok* from the Western houses, Japanese and Chinese houses.⁹⁷⁸

7.9 Longer Side and Shorter Side (Façade of architecture)

A room or house with a single *kan* is spatially extended and has longer sides and shorter sides, the front of the house must be determined.⁹⁷⁹ The front of house sets the way to place the house, determining direction to approach the house, establishing the relationship between the house and the surroundings which forms the depth of the space.⁹⁸⁰ Eastern architecture and Western architecture evolved differently in this respect. The monumental architecture of the West is arranged in the longitudinal

⁹⁷² Inaji, *The Garden...*, 143-144.

⁹⁷³ Kwon (권영걸), *Creating...*, 66-67.

⁹⁷⁴ Kwon (권영걸), *Creating...*, 87.

⁹⁷⁵ Kwon (권영걸), *Creating...*, 67.

⁹⁷⁶ Kwon (권영걸), *Creating...*, 149-151.

⁹⁷⁷ Yim, *The Traditional...*, 127

⁹⁷⁸ Kwon (권영걸), *Creating...*, 143-146.

⁹⁷⁹ Lee, *Continuity...*, 66-67.

⁹⁸⁰ Kwon (권영걸), *Creating...*, 230.

direction with the short side facing the front.⁹⁸¹ Both the ancient shrine and the medieval Gothic cathedral are all with facades on their short sides. Especially in classical style, the triangular pediment representing the short side is regarded as a symbol of the façade, and has been given a special meaning.⁹⁸² This symbolic façade, derived from the Greek temple, was later added to the entrance of both domestic and public architecture.⁹⁸³

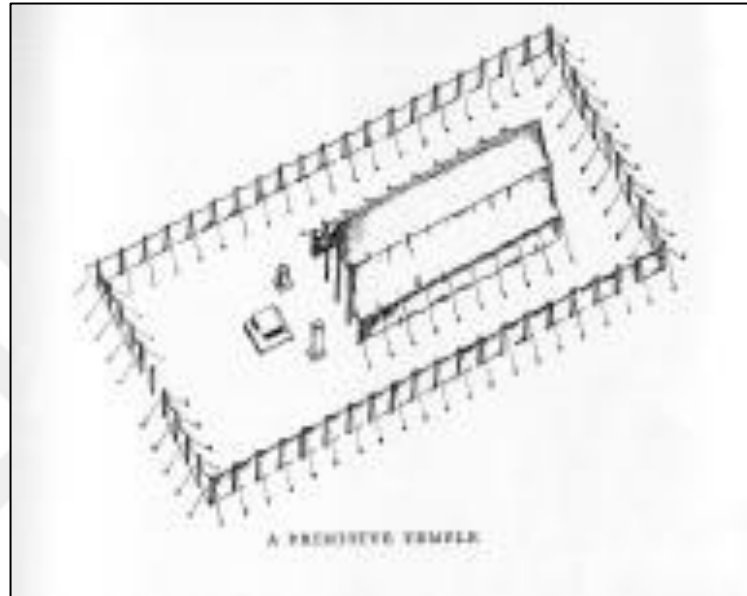


Figure 99 A Primitive Temple by Le Corbusier

Regardless of authoritative architecture, private house and religious architecture, Korean architecture faces with the long side of the building and approached from the long side.⁹⁸⁴ Buddhist temples started from the longer side as the front but gradually expanded in the lateral direction.⁹⁸⁵ Yu Sup Go who discussed architectural aesthetics

⁹⁸¹ Kwon (권영걸), *Creating...*, 52-57 & 173.

⁹⁸² Norberg-Schulz, *Intentions...*, 124.

⁹⁸³ Norberg-Schulz, *Intentions...*, 126.

⁹⁸⁴ Kwon (권영걸), *Creating...*, 141-158.

⁹⁸⁵ Go (고유섭), *Korean...*, 71-77.

for the first time in Korea, also regarded this Korean trend an important difference between Korean and Western architecture in the beginning of the Joseon architecture and art history.⁹⁸⁶ Decoration is focused on the front in Western architecture.⁹⁸⁷ On the other hand, in Korean architecture, eaves make a single piece roof.⁹⁸⁸ This architecture has no directionality and is open all around and covered by a concave roof like in a *Jeongja* (pavilion).⁹⁸⁹ It is the opposite of Western architecture which differentiates the triangular gable roof as the symbol of the facade in front of a rectangular building.⁹⁹⁰



Figure 100 Buseoksa Temple's Beom Jong Ru Bell Tower in Yeongju

⁹⁸⁶ Go (고유섭), *Korean...*, 10-18

⁹⁸⁷ Go (고유섭), *Korean...*, 32.

⁹⁸⁸ Go (고유섭), *Korean...*, 29-32.

⁹⁸⁹ Go (고유섭), *Korean...*, 20.

⁹⁹⁰ Go (고유섭), *Korean...*, 52.

In Western sacred architecture, the short side is façade but in Korean architecture, the long side is the front.⁹⁹¹ What does this difference mean? The reason why wooden-structure architecture in Korea expanded in the horizontal axis is explained from the viewpoint of structural efficiency.⁹⁹² In order to increase the size of architecture, it has to increase the number of columns in lateral direction since the Eastern architecture is based on wooden structure and the structure is constrained and the roof becomes too high.⁹⁹³ However, this does not explain why the long side becomes the front. In Korean architecture, if the frontal aspect of the longitudinal direction was important as a symbol, the height of the roof would not have been a problem.⁹⁹⁴

Western architecture began with monumental architecture such as temple and the tombs of the power, however in the Korean architecture, starting from the traditional houses helps to understand why the concept of front façade differs⁹⁹⁵ Religious architecture is important to create the depth of space in West.⁹⁹⁶ Therefore, the ancient temple and the church were placed long in the longitudinal direction.⁹⁹⁷ For instance, the sense of depth which is formed by the longitudinal axis of the Gothic cathedral means entering the world of God.⁹⁹⁸ In Korea, strictly speaking, there were no religious buildings such as temples.⁹⁹⁹ Therefore, the depth of the inner space is not required. Ancient monumental buildings such as *Seokgulam* temple or *Muryongwangleung* king's tomb

⁹⁹¹ Go (고유섭), *Korean...*, 32.

⁹⁹² Go (고유섭), *Korean...*, 33-35.

⁹⁹³ Jeon & Lee (전봉희 & 이강민), *3kan X 3kan...*, 51.

⁹⁹⁴ Go (고유섭), *Korean...*, 28-32.

⁹⁹⁵ Go (고유섭), *Korean...*, 31-32.

⁹⁹⁶ Norberg-Schulz, *Intentions...*, 94-111.

⁹⁹⁷ Pierre Von Meiss, *Elements of Architecture: From Form to Place*, London: Routledge, 1990, 66.

⁹⁹⁸ Norberg-Schulz, *Intentions...*, 123-124.

⁹⁹⁹ Go (고유섭), *Korean...*, 71.

have deep inner space.¹⁰⁰⁰ However, at least after the Joseon Dynasty, this deep space is not well visible.¹⁰⁰¹ If the intention was to form a depth of space in the longitudinal direction, the short side would have been the front, despite of the disadvantage of structure.¹⁰⁰² The building which is seated in the longitudinal direction in Korean architecture appears in the construction of Confucian ritual of special character.¹⁰⁰³ In the case of the Seong Gye Lee shrine of *Jeonju*, it can be seen that the longitudinal roof is added to the entrance. It is inferred that this is related to a special ritual.¹⁰⁰⁴ The belfry of the Buddhist temples sometimes faces the front with its gable in the longitudinal direction it appears in the mixed ritual of Confucian and Buddhist.¹⁰⁰⁵ However, even when the gable side becomes front in the longitudinal direction, a horizontal roof is always placed under the gable wall.¹⁰⁰⁶



¹⁰⁰⁰ Go (고유섭), *Korean...*, 88-92.

¹⁰⁰¹ Go (고유섭), *Korean...*, 158-169.

¹⁰⁰² Go (고유섭), *Korean...*, 159.

¹⁰⁰³ Inaji, *The Garden...*, 137

¹⁰⁰⁴ Byeong Haw Hong (홍병화), Sung Woo Kim(김성우), *A Change of Meaning in the Plan of the Belfry in the Temple of the Joseon Dynasty*, Korean Society of Architecture and History, 2008, 125-138.

¹⁰⁰⁵ Go (고유섭), *Korean...*, 167-169.

¹⁰⁰⁶ Go (고유섭), *Korean...*, 28-32.



Figure 101 Museum of Royal Lee Family of Joseon Dynasty

The subject of front façade can be related to the shape of the land. The architecture of European city is built on the narrow and deep land of the roadside.¹⁰⁰⁷ Since the narrow side of the sloped roof is finished with a paved gable, it can be considered that the shape of narrow and deep urban parcels influenced the frontal appearance of Western architecture.¹⁰⁰⁸ However, it can be seen that there is also a symbolic preference of the Japanese modern housings, *matchiya* which faces the narrow and deep land.¹⁰⁰⁹

In Korean architecture, the triangular gable roof began to be installed in front side of building after being influenced by Western architecture after opening of port.¹⁰¹⁰ Even now, many houses with triangular gable roof facades are built. However, in Korean traditional culture, this is a case without traditional cultural root. It is neither an old

¹⁰⁰⁷ Pallasmaa, *The Eyes...*, 58.

¹⁰⁰⁸ Banham, *The Architecture...*, 200.

¹⁰⁰⁹ Inaji, *The Garden...*, 37

¹⁰¹⁰ Go (고유섭), *Korean...*, 172.

agrarian society nor a time when the symbolism of the roof works but the cultural tradition of the front façade of architecture needs concern in Korea.¹⁰¹¹

7.10 Depth and Kyeo (Depth)

Just as the frontal nature of architecture is different, the way of forming the depth of space differs in that of Eastern and Western architecture.¹⁰¹² The monumental architecture of the West can be arranged long in the longitudinal direction, so that it forms a deep feeling along the direction naturally.¹⁰¹³ Greek temples and houses have depths of space in the longitudinal direction.¹⁰¹⁴ The origin of the Greek temple is the *megaron* where the axis is formed in a direction of depth towards the room from the portico with pillars.¹⁰¹⁵ Gothic cathedral is also oblong which leads to a depth of space. In Gothic cathedral, the vertical depth of space is interpreted as a process leading from the earth to heaven.¹⁰¹⁶ Since Korean architecture is arranged in the longitudinal direction, there is no depth of interior space such as Western architecture.¹⁰¹⁷ So how do you create a sense of space in Korean architecture? In Korean architecture, the sense of depth of space is not a single building, but a space between the building and the outside space.¹⁰¹⁸ In other words, Western architecture forms a sense of depth in space within a direction, but Korean architecture creates a sense of depth in space by superimposing the gaps of inside and outside spaces.

¹⁰¹¹ Go (고유섭), *Korean...*, 2-32 & 171-172.

¹⁰¹² Yu (유현준), *Modernism...*, 46.

¹⁰¹³ Norberg-Schulz, *Intentions...*, 124.

¹⁰¹⁴ Norberg-Schulz, *Intentions...*, 94-122.

¹⁰¹⁵ Marquand, *Greek...*, 356-358.

¹⁰¹⁶ Norberg-Schulz, *Intentions...*, 124 & 135.

¹⁰¹⁷ Go (고유섭), *Korean...*, 31-32.

¹⁰¹⁸ Kwon (권영걸), *Creating...*, 230.



Figure 102 A Sense of Depth in Gothic Cathedral, Notre Dame in France

In Korean architecture, the relationship between the building and the *madang* is important.¹⁰¹⁹ The arrangement of Korean architecture in front of the landscape is related to the actions in the *madang*.¹⁰²⁰ The rituals and actions take place in the *madang* are expanded concentrically around the *madang*.¹⁰²¹ The depth of space created by Korean architecture is thus circular rather than axial.¹⁰²² The spaces in Korean architecture complement this circular depth. In Cheol Kim, a Korean architect

¹⁰¹⁹ Inaji, *The Garden...*, 134-137.

¹⁰²⁰ Yim, *The Traditional...*, 104-107

¹⁰²¹ Inaji, *The Garden...*, 139-141.

¹⁰²² Kwon (권영걸), *Creating...*, 230.

explains these characteristics of Korean architecture as follows: Since the elements that make up Korean architecture are a *Kyeo* (layer), the space of the building itself is weak, but it creates a sense of spaciousness by creating thickness and depth by superimposing between the walls.¹⁰²³ Japanese architecture also forms a deep *kyeo* sense of space, but it is different from Korean architecture's *kyeo* in that space is created inside the building.¹⁰²⁴ Inside of the Buddhist temple in Japan, there are two *kyeos* of outer and inner side. Initially, two separated buildings were placed across the *madang* and then gradually integrated into one building.¹⁰²⁵



Figure 103 A Sense of Depth in Seongyojang Pavilion in Gangwondo Province in Korea

¹⁰²³ Kim (김인철), *Opening...*, 240.

¹⁰²⁴ Kwon (권영걸), *Creating...*, 143-152.

¹⁰²⁵ Inaji, *The Garden...*, 40-60.

7.11 Axis of Sight and Mind

In Western architecture, the axis is an important element that forms the direction and depth of the space.¹⁰²⁶ It is the principle that constitutes the space from the forum of Rome to the architecture of the Baroque period, the composition of the city and the composition of Beaux-arts.¹⁰²⁷ Assuming that the way the experience of architecture is similar to the process that takes place in the mind of the person who built it, the axis applied to the composition of Western architecture is consistent with the visual experience of the viewer.¹⁰²⁸ In the Roman forum, a temple is placed at the apex of the axis, forming a spatial scene along the axis of sight which is *vista*.¹⁰²⁹ Inside the Gothic cathedral, the sight along the central axis coincides with the direction of the religious procession occurring inside.¹⁰³⁰ Therefore, the axis of Western architecture has a visual direction, and the subject of experience moves along the axis.¹⁰³¹ The construction axes for placement usually coincide with visual axes.¹⁰³² The symmetrical configuration using the axes is also applied to Korean architecture with the instinctive order of humans.¹⁰³³ However, in Korean architecture, the visual axis has never been developed into a dominant constitutional principle or central principle of arrangement.¹⁰³⁴ It is because making the depth of space by *kyeo*, the axis of vision is not needed to give

¹⁰²⁶ Norberg-Schulz, *Intentions...*, 143-154.

¹⁰²⁷ Norberg-Schulz, *Intentions...*, 143.

¹⁰²⁸ Norberg-Schulz, *Intentions...*, 94 & 146.

¹⁰²⁹ Marconi, *The Oxford...*, 204-213.

¹⁰³⁰ Norberg-Schulz, *Intentions...*, 139-149.

¹⁰³¹ Norberg-Schulz, *Intentions...*, 135 & 154.

¹⁰³² Yu (유현준), *Modernism...*, 52-60.

¹⁰³³ Kwon (권영걸), *Creating...*, 66-67.

¹⁰³⁴ Kwon (권영걸), *Creating...*, 145.

directionality and the depth of space.¹⁰³⁵ In the case of palaces, seowons, and temples, the axis for placement is used but there are many axes instead of one central axis like Western architecture.¹⁰³⁶ Traditional architectural scholars have defined the change of axis in Korean architecture, or several axes as central axis, parallel axis, diagonal axis, curved axis and straight axis.¹⁰³⁷ However, this kind of classification focuses only on the type of axis, and seems to have little relation to the actual construction principles of Korean architecture.

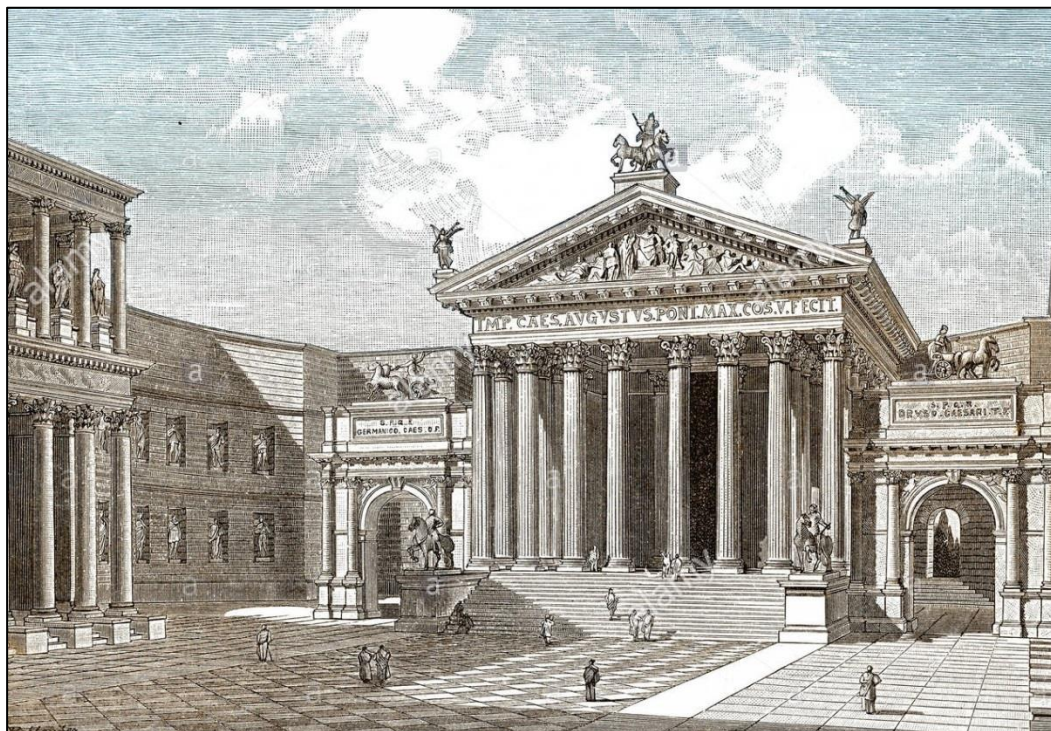


Figure 104 Vista of the Ancient Rome's Forum

Korean architecture does not form a strong visual axis even if there is a certain axis in the entire layout.¹⁰³⁸ Even if the axis is emphasized in the layout, there is a building on

¹⁰³⁵ Kwon (권영걸), *Creating...*, 230.

¹⁰³⁶ Kwon (권영걸), *Creating...*, 143-159.

¹⁰³⁷ Young Bae Ahn (안영배), *Outer Space of Korean Architecture (한국 건축의 외부 공간)*, Paju, Bojinje, 1978, 337-338.

¹⁰³⁸ Kwon (권영걸), *Creating...*, 150-151.

the axis, so that it must pass under the frontal building or turn sideways to enter the rear building. The entrance stairs are often used as a device to create direction and axis.¹⁰³⁹ The entrance stairs of Korean architecture are often staggered and do not form a strong visual direction.¹⁰⁴⁰ The axis of Korean architecture is recognized in the mind rather than a visual axis.¹⁰⁴¹ In Buddhist temples, the entrance axis connecting the several gates is directional but forms a psychological axis rather than a visual axis.¹⁰⁴² The reason why the Korean architecture has a certain direction but the axis changes is because the axis of mind works rather than the visual axis. The axis of Western architecture is visual, while the axis of Eastern architecture is subject of comprehension.¹⁰⁴³ In the East, the term axis is often used to describe imaginary axes that do not look like a shaft. There is a pile in the centre of the Mongolian tent which is called the axis of the world and the pillars that support the sky and the trees that connect life and knowledge with the earth and sky are symbols of the fundamental axes.¹⁰⁴⁴ The visual axis is horizontal, but these axes are vertical. Therefore, explaining Korean architecture through the axis of vision seems irrelevant.¹⁰⁴⁵ In order to classify the type of traditional Korean architecture, the entrance axis and the composition axis are divided.¹⁰⁴⁶ The arrangement of Korean temples is classified as a pivotal type, a parallel pivotal type, and the type of these pivotal axes reflects their own ideas.¹⁰⁴⁷ This type of

¹⁰³⁹ Kwon (권영걸), *Creating...*, 150.

¹⁰⁴⁰ Kwon (권영걸), *Creating...*, 229.

¹⁰⁴¹ Kwon (권영걸), *Creating...*, 64-68.

¹⁰⁴² Go (고유섭), *Korean...*, 162-163.

¹⁰⁴³ Marconi, *The Oxford...*, 302, 344, 666.

¹⁰⁴⁴ Thierry Paquot, *Le Toit (지붕-우주의문턱)*, 2003, translated by Hye Jung Jeon in 20.10.2014, Seoul, Nulwa, 53.

¹⁰⁴⁵ Kwon (권영걸), *Creating...*, 151.

¹⁰⁴⁶ Kwon (권영걸), *Creating...*, 150.

¹⁰⁴⁷ Ahn (안영배), *Outer Space...*, 338.

Korean architecture is over emphasizing the role of the axis in Korean architecture. In fact, the axis is not so important in Korean architecture.¹⁰⁴⁸ This is not a real design principle of Korean architecture, but it is likely to be a modern interpretation.¹⁰⁴⁹



Figure 105 Stairs of Youngmunsa Temple in Yang Pyeong

7.12 Relation between Architecture and City

The relationship between individuals and sets provides an important clue to understand differences between cities in the East and the West.¹⁰⁵⁰ Since Western architecture is a

¹⁰⁴⁸ Kwon (권영걸), *Creating...*, 93.

¹⁰⁴⁹ Kwon (권영걸), *Creating...*, 18-19.

¹⁰⁵⁰ Kwon (권영걸), *Creating...*, 21.

mass with composed structures and the city is consisted of a collection of these buildings, the relationship between architecture and city is mutually regulated.¹⁰⁵¹ In other words, outside the building is the urban space which has the continuous building. This relationship does not hold in Korean cities and architecture since Korean architecture itself is a complex of buildings and *madangs*, the relationship between architecture and city is not mutually exclusive.¹⁰⁵² Architecture is not an individual that corresponds to a city, but architecture itself is urban¹⁰⁵³. Therefore, there is no urban form defined as a set of buildings in Korean cities. The concept of solid and void which is used to analyze Western cities, is not suitable as a theory to understand Korean cities.¹⁰⁵⁴

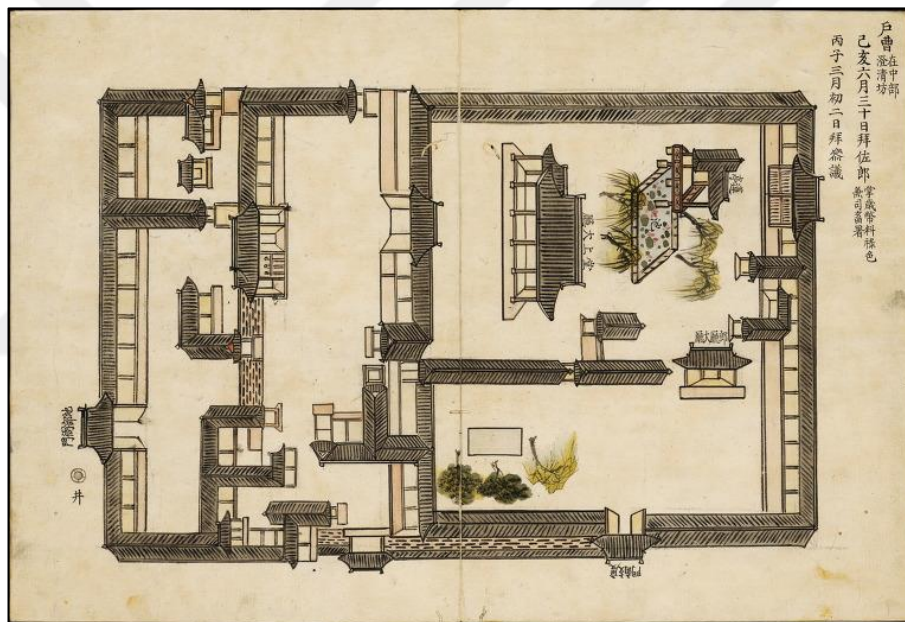


Figure 106 An Example of Building Complex as a Small Urban, Sukcheonjeado by Pil Gyo Han in 18th Century

¹⁰⁵¹ Norberg-Schulz, *Intentions...*, 103-114.

¹⁰⁵² Kwon (권영걸), *Creating...*, 67.

¹⁰⁵³ Kwon (권영걸), *Creating...*, 67 & 147.

¹⁰⁵⁴ Yu (유현준), *Modernism...*, 50-55.

If Western city is made up of a collection of buildings, a Korean city is made up of loose organization of roads and areas.¹⁰⁵⁵ An area consists of a complex of buildings and *madangs*.¹⁰⁵⁶ An individual building is perceived as a latent element within the area rather than directly corresponding to the outer space of the city.¹⁰⁵⁷ Therefore, for foreigners who are accustomed to the concept of linear geographic system, searching for the right address is difficult.¹⁰⁵⁸ The dotted geographic system of the Korean city is one of the greatest differences from the Western city.¹⁰⁵⁹ Through the modernization, Korean cities were composed with main roads and large super blocks surrounding them.¹⁰⁶⁰ The interior of city blocks is like an area bounded by narrow road networks with different scale and patterns. If a Western city has a homogeneous patterned road system and an urban block formed by a roadside building surrounded by a repeating organization, the Korean city forms a dual structure in which the system of the main road surrounding the city block and the organic road network in the city block coexist.¹⁰⁶¹

¹⁰⁵⁵ Kwon (권영걸), *Creating...*, 223-227.

¹⁰⁵⁶ Kwon (권영걸), *Creating...*, 144-145.

¹⁰⁵⁷ Kwon (권영걸), *Creating...*, 147.

¹⁰⁵⁸ LEE (리원허), *Design...*, 444-452.

¹⁰⁵⁹ LEE (리원허), *Design...*, 440-442.

¹⁰⁶⁰ Lee, *Continuity...*, 68-69.

¹⁰⁶¹ Kwon (권영걸), *Creating...*, 144-145.



Figure 107 An Example of Korean Map After Modernization, The Great South Gate Market (남대문시장) in 20th Century, Seoul

It seems difficult for urbanism developed in the West to read the spatial order of the Korean cities.¹⁰⁶² The concept of line and area seems more appropriate than the concept of solid and void in understanding Korean cities.

¹⁰⁶² Yu (유현준), *Modernism...*, 50-60.

CHAPTER 8

ARCHITECTURE AND NATURE

8.1 Difference in Concept of Nature

Building a house is fundamentally a fight against nature.¹⁰⁶³ It has to withstand harsh and changing natural forces of gravity and wind, snow and rain to protect human beings.¹⁰⁶⁴ To protect oneself from the threat of nature, the construction of a house by humans is not different in the East and the West, but the difference of thinking about nature led Eastern and Western architectural tradition in a very different direction.¹⁰⁶⁵ The first people to develop the idea of nature are the Greeks.¹⁰⁶⁶ They defined the natural world as the remainder of the universe which means human world and natural world are defined independently, aside from human culture.¹⁰⁶⁷ It seems right, but surprisingly, it was only the Greek culture that clearly distinguished the natural world from the human world.¹⁰⁶⁸ But the Greeks did not place nature in a confrontational relationship with humans.¹⁰⁶⁹ The ancient Greeks believed that every land had a unique

¹⁰⁶³ Nisbett, *The Geography...*, 19-21.

¹⁰⁶⁴ Pallasmaa, *The Eyes...*, 64-65.

¹⁰⁶⁵ Nisbett, *The Geography...*, xvi-xxi.

¹⁰⁶⁶ Nisbett, *The Geography...*, 4.

¹⁰⁶⁷ Nisbett, *The Geography...*, 8-11.

¹⁰⁶⁸ Nisbett, *The Geography...*, 45.

¹⁰⁶⁹ Nisbett, *The Geography...*, 31.

spirit. So choosing the land when building the shrine or the temple was as important as building it.¹⁰⁷⁰ Architecture was to reveal the spirit of the land.¹⁰⁷¹ This view of nature has changed over the course of the Hellenistic period. The Greeks gradually transformed nature into a rational order, not a mysterious object.¹⁰⁷² The Greeks gradually developed the natural world by finding the ideal figure of nature in an unseen order and marking it in ideological order such as mathematics or geometry.¹⁰⁷³ However the nature was still a benevolent mother ruled by good and not in a hostile relationship with humans.¹⁰⁷⁴

In the Middle Ages in Europe, based on Bible, the universe was identified as a whole with a harmonious order and hierarchy, and recognized nature as an object to which man could rule.¹⁰⁷⁵ After the Renaissance began in the 15th century, Westerners gave nature a rational order based on classics and understood it as the order given by God.¹⁰⁷⁶ On the other hand, however there was a fear that this order of nature might one day collapse.¹⁰⁷⁷ By the 16th and 17th centuries, nature is perceived as a domain governed by lawlessness and chaos.¹⁰⁷⁸ As it is now, nature has become an untamed wild place and must be controlled and dominated by humans. Then, the emerging Western rationalists regarded nature as an object that work like a machine.¹⁰⁷⁹ The modern Western view of

¹⁰⁷⁰ Berque, *Thinking...*, 3 & 46.

¹⁰⁷¹ Berque, *Thinking...*, 46.

¹⁰⁷² Zhangpa (장파), *The Orient...*, 371.

¹⁰⁷³ Zhangpa (장파), *The Orient...*, 372-373.

¹⁰⁷⁴ Zhangpa (장파), *The Orient...*, 370-373.

¹⁰⁷⁵ Zhangpa (장파), *The Orient...*, 328.

¹⁰⁷⁶ Zhangpa (장파), *The Orient...*, 328-329.

¹⁰⁷⁷ Zhangpa (장파), *The Orient...*, 404.

¹⁰⁷⁸ Zhangpa (장파), *The Orient...*, 401-404.

¹⁰⁷⁹ Stewart, *Fashioning...*, 58

nature, in which nature is objectified in opposition to human beings, is rooted in Western dualist thinking.¹⁰⁸⁰ After Plato who explained the essence of nature as an idea, the reason for objectifying nature becomes more and more concrete.¹⁰⁸¹ The nature that was represented by idea became object of God in middle ages and the object of mechanical nature after modernism.¹⁰⁸² The relationship between human and nature changed into instrumental relationship. The fact that human beings are separated from nature and dominate nature, the organic relationship between nature and human being is lost, and the fact that human beings are part of nature is gradually overlooked.¹⁰⁸³



Figure 108 Wanderer Über dem Nebelmeer by Caspar David Friedrich in 1818

¹⁰⁸⁰ Nisbett, *The Geography...*, 69.

¹⁰⁸¹ Zhangpa (장파), *The Orient...*, 372.

¹⁰⁸² Zhangpa (장파), *The Orient...*, 416-420.

¹⁰⁸³ Kwon (권영걸), *Creating...*, 43-44.

Human beings in both the West and the East, feel fear and experience alienation in primitive nature.¹⁰⁸⁴ However, the way to overcome alienation was different in the West and East.¹⁰⁸⁵ The West attempted to object and dominate the nature, but the East wanted to coexist and conform to the flow of nature.¹⁰⁸⁶ Western pursued happiness through active action in response to nature, and the East pursued satisfaction through passive coexistence with nature.¹⁰⁸⁷ In Eastern Confucianism, nature is understood as a gigantic circulation system as one creature.¹⁰⁸⁸ In this process of circulation and round-trip, there is no endless change, no endless existence.¹⁰⁸⁹ There is no formal or visual order but an immanent and invisible but understandable order.¹⁰⁹⁰ So in the East, the nature is understood by responding to inner life rather than form or rule based on mathematics and geometry.¹⁰⁹¹ In this respect, the nature of the East is different from the nature of the West.¹⁰⁹² The nature is understood as a state, not as a physical place or substance, but as a part of human being.¹⁰⁹³

¹⁰⁸⁴ Zhangpa (장파), *The Orient...*, 37-41.

¹⁰⁸⁵ Zhangpa (장파), *The Orient...*, 369.

¹⁰⁸⁶ Zhangpa (장파), *The Orient...*, 370-374.

¹⁰⁸⁷ Zhangpa (장파), *The Orient...*, 370-385.

¹⁰⁸⁸ Nisbett, *The Geography...*, 15-20.

¹⁰⁸⁹ Nisbett, *The Geography...*, 14.

¹⁰⁹⁰ Nisbett, *The Geography...*, 127-130.

¹⁰⁹¹ Zhangpa (장파), *The Orient...*, 371.

¹⁰⁹² Kim(김용옥), *How to...*, 202.

¹⁰⁹³ Kwon (권영걸), *Creating...*,44.



Figure 109 Ingokyugeo (인곡유거), Human in the Nature in the East, Painted by Jung Sun in 17th Century

The best line in Eastern thought is unity with the nature. The nature and human beings are organically interconnected creatures.¹⁰⁹⁴ It is the common ultimate purpose of the universe on the basis of Eastern thought that human beings come to a state where they conform to the flow of nature with the unity of nature.¹⁰⁹⁵ Confucius said that creating a word of humanity world in harmony with all things of heaven and earth is the way to complete the unfinished world.¹⁰⁹⁶

¹⁰⁹⁴ Kwon (권영걸), Creating...,31-32.

¹⁰⁹⁵ Kwon (권영걸), Creating...,31.

¹⁰⁹⁶ Nisbett, The Geography..., 7-30.

8.2 Relationship between Korean Architecture and Nature

Human beings have overcome such anxiety and alienation in the world by building houses in nature and establishing meaningful relationships with nature.¹⁰⁹⁷ However, the differences in the concept of nature in the East and the West show the fundamental difference between Korean architecture and Western architecture in the attitude and manner of establishing the relationship between nature and architecture.¹⁰⁹⁸ In the West, architecture is an artificial world distinct from nature.¹⁰⁹⁹ However, Korean architecture does not seek separation from nature.¹¹⁰⁰ Korean traditional architecture wants to create a unification of a building in nature rather than an artificial piece separated from nature.¹¹⁰¹ The unity with nature pursued by Korean architecture means that architecture enters the flow of nature, the circulation system of life and belongs as part of nature.¹¹⁰² Architecture is not a way of occupation and domination of nature, but an activity of nature.¹¹⁰³ Therefore, Korean architecture is not limited to buildings but is a concept that includes nature.¹¹⁰⁴ In Korean traditional architecture, the boundary between architecture and nature is vague.¹¹⁰⁵ In Korean old paintings, most of the houses are represented by one element buried in nature.¹¹⁰⁶ Sun Woo Choi explains the

¹⁰⁹⁷ Kwon (권영걸), *Creating...*, 60-63.

¹⁰⁹⁸ Kwon (권영걸), *Creating...*, 42-44.

¹⁰⁹⁹ Kwon (권영걸), *Creating...*, 43-44.

¹¹⁰⁰ Inaji, *The Garden...*, 158.

¹¹⁰¹ Kwon (권영걸), *Creating...*, 77.

¹¹⁰² Kwon (권영걸), *Creating...*, 78.

¹¹⁰³ Kwon (권영걸), *Creating...*, 77-78.

¹¹⁰⁴ Kwon (권영걸), *Creating...*, 84.

¹¹⁰⁵ Kwon (권영걸), *Creating...*, 93.

¹¹⁰⁶ Yu (유현준), *Modernism...*, 70-71.

beauty of Korean architecture as the grave or the mausoleum.¹¹⁰⁷ It is said that the house has to sit nicely in the natural scenery and the effect will be made in the natural scenery having mountain behind the house and water in front of the house. The Korean architecture has a characteristic that it looks better when viewed from a distance.¹¹⁰⁸

Yanagi Muneyoshi who felt a charm of Joseon Dynasty architecture has explained the harmony of Korean architecture with nature.

There is a beauty in its architecture which is planned with deep consideration for its arrangement with nature. Nature does protect architecture and architecture does decorate the nature so the human should not break the organic relationship in it. However it is now becoming destroyed by the thoughtless¹¹⁰⁹

Yanagi was writing about bitter story of Gyeongbokgung Palace which was destroyed by Japanese imperialism at that time. In the past, our ancestors selected the outstanding scenery of nature and called it 'the 8 Great Views (팔경)' which is viewed, painted, wrote as poetry and song.¹¹¹⁰ The famous 8 Great Views has its own view with the architecture in it. For instance, except one view, the rest has its architecture in the nature which shows that Koreans consider architecture as part of nature.¹¹¹¹ Thus, Korean architecture exists as an element of landscape.¹¹¹² The most beautiful view, the place where the most beautiful nature and human being area integrated becomes *Jeongja*

¹¹⁰⁷ Choi (최순우), *Standing...*, 20-21.

¹¹⁰⁸ Choi (최순우), *Standing...*, 21.

¹¹⁰⁹ Muneyosi (야나기 무네요시), *Thinking...*, 179.

¹¹¹⁰ Inaji, *The Garden...*, 78.

¹¹¹¹ Kwon (권영걸), *Creating...*, 194.

¹¹¹² Kwon (권영걸), *Creating...*, 90.

(pavilion). So *Jeongja* rather than a building is a place that embraces environment and surrounds nature.¹¹¹³



Figure 110 The Jeongja in the Nature, Choganjeong Pavilion (초간정) in Yecheon, Built in 1582 by Muh Hea Kwon (권문해)

In this way, the purpose of Korean architecture is not in harmony with nature but in the completion of nature.¹¹¹⁴ By placing architecture in nature, it creates change and new elements. Nature's change is infinite and architecture becomes part of it. In an infinite change of nature, architecture is only a very limited tool that humans can deal with. In this respect, Korean architecture is a device that reacts with nature.¹¹¹⁵

¹¹¹³ Kwon (권영걸), *Creating...*, 16-17.

¹¹¹⁴ Kwon (권영걸), *Creating...*, 90-91.

¹¹¹⁵ Kwon (권영걸), *Creating...*, 93.

8.3 Versailles and Changdeokgung Palace

In the West, the end of the 17th century, French mansions or palaces built around the city were in direct contact with nature.¹¹¹⁶ The Versailles in France is built on the concept of chateau which was the typical palace of the country where palace in a complex city became located close to nature with intention.¹¹¹⁷ Behind Versailles, there is a huge forest where kings organized hunting parties. However, the relationship between architecture and nature in the Palace of Versailles differs from that of Korea's palaces.¹¹¹⁸



Figure 111 The Garden of Versailles Built in 17th Century

Versailles places nature at its side, which is a conquered field. Although architecture and nature are close in distance the nature there is controlled and managed by non-natural order.¹¹¹⁹ The strict centre and geometric order of the garden of Versailles shows the

¹¹¹⁶ Coan, *Perspectives...*, 67-68.

¹¹¹⁷ Coan, *Perspectives...*, 68.

¹¹¹⁸ Coan, *Perspectives...*, 69-73.

¹¹¹⁹ Banham, *The Architecture...*, 1969, 269.

human intelligence and ability and the conquered nature is the object that the king dominates, overlooks and enjoys.¹¹²⁰ On the other hand, the back garden of Changdeokgung palace does not control nature but utilizes a natural topography such as the mountain as the background of the palace.¹¹²¹ Many buildings in Changdeokgung palace are absorbed in nature.¹¹²² Changdeokgung palace itself is a part of nature as a whole with the flow of topography, and exists as a mixture of nature and manmade.¹¹²³ Changdeokgung shows the essence of Korean architecture where architecture coexists with nature.

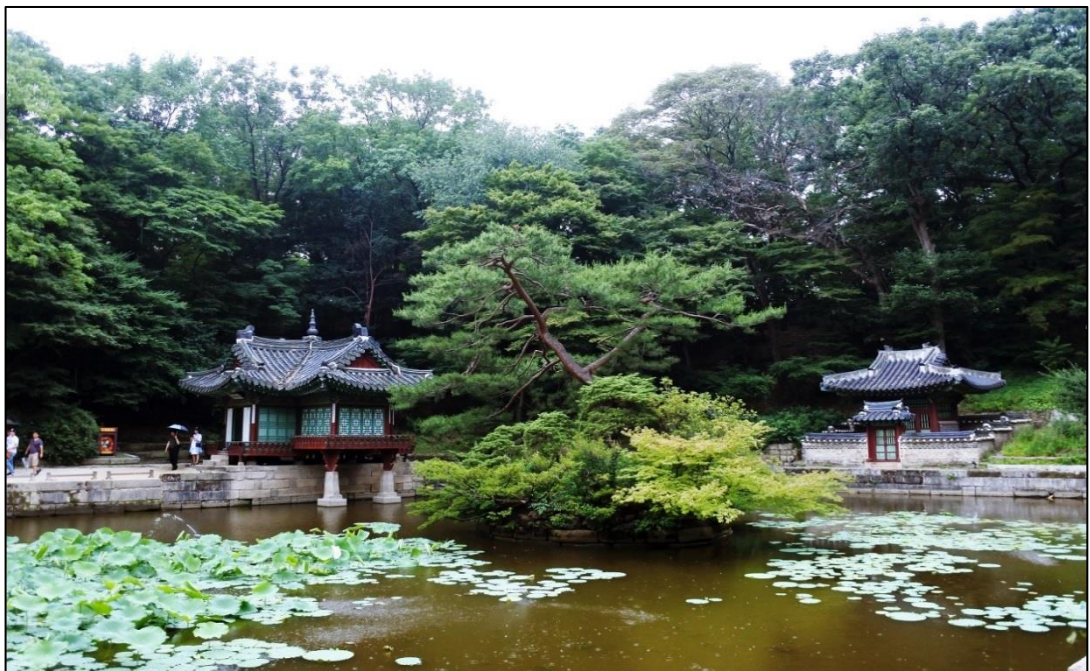


Figure 112 Back Garden of Changdeokgung Palace Rebuilt in 17th Century

¹¹²⁰ LEE (리원허), Design..., 122.

¹¹²¹ Kwon (권영걸), Creating..., 67.

¹¹²² Kwon (권영걸), Creating..., 77-79.

¹¹²³ Kwon (권영걸), Creating..., 78.

8.4 Korean Traditional Mountain Temples

Although the natural concepts of East Asian countries are similar, there is a clear difference between Korea, China and Japan in the way of establishing relations between nature and architecture.¹¹²⁴ In East Asia, there are many mountain temples settled in nature.¹¹²⁵ The Korean mountain temple is different from the Chinese or the Japanese one.¹¹²⁶ While Korean mountain temples area surrounded by mountains, the mountain temples of China and Japan are mostly located on mountain ridges.¹¹²⁷ The Korean mountain temples are located in the deep mountains which creates a very unique landscape and a relationship with nature¹¹²⁸ The relationship with the surrounding nature in the principle of Feng-Shui is different. Korean mountain temple tries to enter into the process of circulation of nature by establishing organic relation with it.¹¹²⁹ On the other hand, mountain temples of China and Japan engage mountains in a conceptual and abstract relationship.¹¹³⁰ The Mt. *Odae* (오대산), called the sacred place of Chinese Buddhism, refers to the top of five mountains which symbolize the universe.¹¹³¹ However, there is no organic relationship between architecture and nature as seen in the Korean mountain temples.

¹¹²⁴ Kwon (권영걸), *Creating...*, 74.

¹¹²⁵ Kwon (권영걸), *Creating...*, 77-79.

¹¹²⁶ Kwon (권영걸), *Creating...*, 220-232.

¹¹²⁷ Kwon (권영걸), *Creating...*, 84-89.

¹¹²⁸ Kwon (권영걸), *Creating...*, 119-121.

¹¹²⁹ Kwon (권영걸), *Creating...*, 79-84.

¹¹³⁰ Kwon (권영걸), *Creating...*, 83-84.

¹¹³¹ Go (고유섭), *Korean...*, 70 & 84.

The arrangement style of Buddhist temples in the Joseon Dynasty is often called *Sadongjungjeng* (사동중정: centring around *madang*) Style. Four buildings which are Buddhist sanctum, Buddhist nunnery and Buddhist tower, loosely surround the *madang*.¹¹³² Before the Joseon Dynasty, the ancient temples of Korea were covered by a corridor with geometry under the influence of China.¹¹³³ The layout of the Chinese temples is still geometrical and the *madang* is surrounded by fences and corridors. However, Korean temples are not open to strict geometry and have open corners and open spaces toward the neighboring spaces.¹¹³⁴ There is a Buddhist tower on the front of mountain temple's *madang* which is usually not designated for special purposes.¹¹³⁵ As the geometrical and closed form of ancient temples are dismantled, the transformation into a loose form with an open *madang* where the four sides are communicated is a unique feature of the Korean mountain temples.¹¹³⁶



Figure 113 Seonamsa Temple in Suncheon, Built in 6th by King Hyunggang Century then Rebuilt in 17th Century by King Hyunjong

¹¹³² Go (고유섭), *Korean...*, 164.

¹¹³³ Go (고유섭), *Korean...*, 110-111.

¹¹³⁴ Go (고유섭), *Korean...*, 110-112.

¹¹³⁵ Go (고유섭), *Korean...*, 126-128.

¹¹³⁶ Go (고유섭), *Korean...*, 162-167.

Why did the Korean temples change into the form of *Sadongjungjeng* which has an open *madang*? Although there was the policy of suppression on Buddhism during Joseon Dynasty which resulted economic and functional suppression of the Buddhist temple, it was still clear that it was for connecting and communicating with the surrounding nature.¹¹³⁷ Since the gentle mountainous terrain covers seventy percent of Korea, it is an inevitable factor for Korean architecture to face mountains, hills, valleys and flowing or still waters often.¹¹³⁸ Architecture had to interact directly with nature. In this respect, Korean architecture differs from Chinese and Japanese architecture.¹¹³⁹

8.5 Ideal Order and Nature

There is a principle of arrangement that represents ideal order in Korean architecture.¹¹⁴⁰ But when the ideal principle encounters the constraints of nature, the architect must choose whether to submit to nature or to conform to nature.¹¹⁴¹ If the ideological order is strong, it is a good idea to transform the earth even if the conditions of the land are not met.¹¹⁴² Western architecture usually follows the ideological principle.¹¹⁴³ It is easy to see these examples in Chinese architecture. However, Korean architecture compromised with the surrounding landscape and nature, and compromised the order of the land, rather than pursuing ideological and artificial order.¹¹⁴⁴ Rather than aligning nature

¹¹³⁷ Inaji, *The Garden...*, 136.

¹¹³⁸ Kwon (권영걸), *Creating...*, 140.

¹¹³⁹ Kwon (권영걸), *Creating...*, 140-142.

¹¹⁴⁰ Kwon (권영걸), *Creating...*, 142-144.

¹¹⁴¹ Kwon (권영걸), *Creating...*, 144-145.

¹¹⁴² Kwon (권영걸), *Creating...*, 169.

¹¹⁴³ Norberg-Schulz, *Intentions...*, 46 & 70.

¹¹⁴⁴ Kwon (권영걸), *Creating...*, 168-169.

with architecture, it organizes building to fit with nature as it is.¹¹⁴⁵ The drawing of the Jongmyo Shrine, which depicts the Jongmyo Shrine as a geometric geomorphic arrangement in the drawing, but the axis is twisted to fit the local terrain.¹¹⁴⁶ The Korean paintings of Changdeokgung palace and Changgyeonggung palace were also drawn in geometric order by projection. However, the actual layout of the palace varies according to the terrain.¹¹⁴⁷ The arrangement of the architectural drawing and the actual architecture is incompatible.¹¹⁴⁸ Korean ancestors were flexible in applying the ideological order.¹¹⁴⁹ The ideological order is only a principle and it does not have to be imprinted in reality. Since the principle of nature is not fixed, it can be changed according to the conditions of reality.¹¹⁵⁰ There is such a margin in the principle of nature.

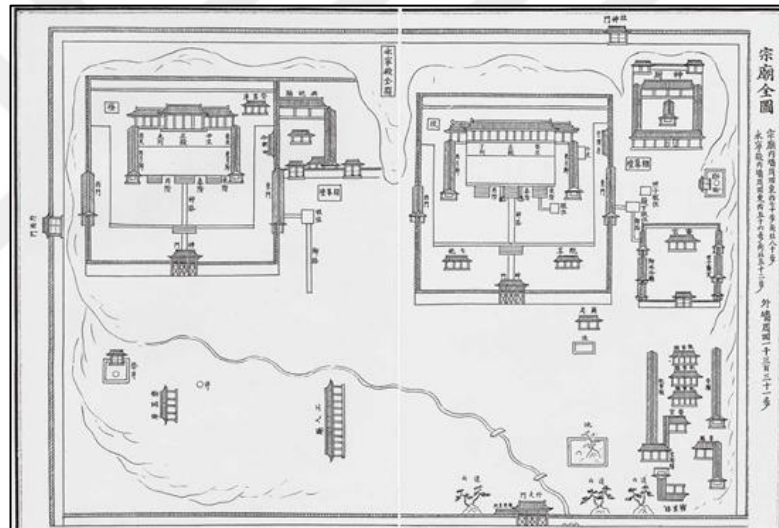


Figure 114 Plan of Jongmyo Shrine, Built in 14th Century by King Sung Gye Lee

¹¹⁴⁵ Kwon (권영걸), *Creating...*, 177.

¹¹⁴⁶ LEE (리원허), *Design...*, 131-136.

¹¹⁴⁷ Go (고유섭), *Korean...*, 147-151.

¹¹⁴⁸ Zhangpa (장파), *The Orient...*, 150-156.

¹¹⁴⁹ Kwon (권영걸), *Creating...*, 86-87.

¹¹⁵⁰ Kwon (권영걸), *Creating...*, 94-95.

Seowon (lecture hall) is an example that emphasizes the most principles in Korean architecture.¹¹⁵¹ However, Dosan Seowon is lightly bent to the left from the central axis of the main gate. According to Young Bae Ahn, a Korean architectural analyst, Dosan Seowon was built by Dosan's disciple, Mok Cho which he intended to build Dosan Seowon a bit misaligned with Dosan Seodang in order not to isolate his teacher's original lecture hall.¹¹⁵² Rather than carrying out the ideological order, the concept of urban design which respects existing buildings and utilizes the surrounding environment, view and natural topography is applied.¹¹⁵³

Perhaps it would have been fundamentally impossible for Korea to conquer and dominate nature in a mountainous country.¹¹⁵⁴ So even the fortress walls developed by using the topography.¹¹⁵⁵ Urban planning is the same. Designed in accordance with Confucian principles, Hanyang (old name for Seoul) created an order that conforms to nature with minimal planning in the natural conditions of mountains and the land of Korea.¹¹⁵⁶ Architecture has to respect the constraints of nature and become a part of nature. As described above, the various levels and areas in the valley of Sosewon show the essence of Korean architecture that aims to unite with nature.¹¹⁵⁷ However, we today regard nature as an object to be conquered or overcome. We now lack the emotional frame armed with the modern instrumental view of nature.¹¹⁵⁸ It is in the

¹¹⁵¹ Kwon (권영걸), *Creating...*, 177.

¹¹⁵² Young Bae Ahn (안영배), *Space of Flow and Addition (흐름과 더함의 공간)*, Seoul, Dareunsesang, 2008, 290.

¹¹⁵³ Kwon (권영걸), *Creating...*, 113-118.

¹¹⁵⁴ Go (고유섭), *Korean...*, 133-137.

¹¹⁵⁵ Go (고유섭), *Korean...*, 134-135.

¹¹⁵⁶ Inaji, *The Garden...*, 137.

¹¹⁵⁷ Kwon (권영걸), *Creating...*, 119-120.

¹¹⁵⁸ Lee, *Continuity...*, 75-76.

process of Western modernization that Korean architecture lost this tradition of respect for nature.

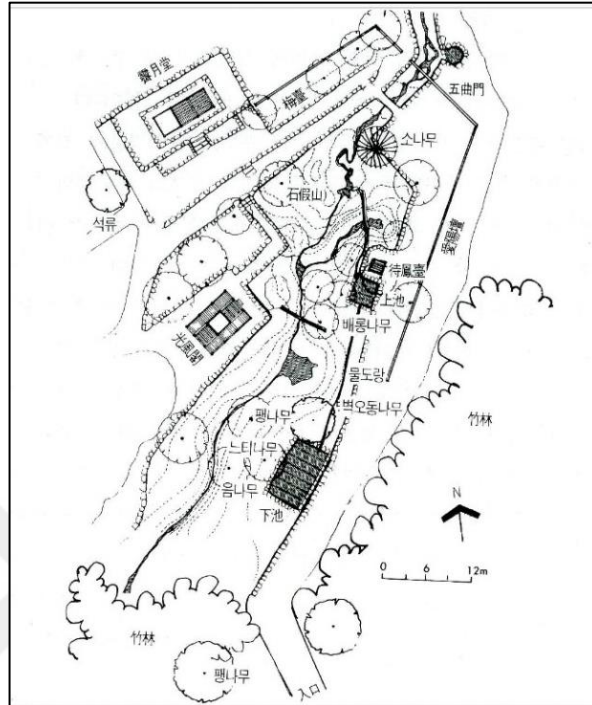


Figure 115 Plan of Sosewon, Built in 16th Century by San Bo Yang

8.6 Beauty of Nature

Korean traditional architecture is often used as it is processed with minimal natural materials.¹¹⁵⁹ It shows the aesthetic attitude of Korean ancestors who know how to conform to the natural state as it is.¹¹⁶⁰ By manipulating and transforming the constraints of natural materials using technology, it is in conformity with the constraints of nature rather than pursuing their own intent or outward order.¹¹⁶¹ So they used the curved wooden columns of natural state as it is and made the foundation with untreated

¹¹⁵⁹ Go (고유섭), *Korean...*, 33-35.

¹¹⁶⁰ Kwon (권영걸), *Creating...*, 77.

¹¹⁶¹ LEE (리원허), *Design...*, 47-48.

natural stones.¹¹⁶² Of course, in the latter period of the Joseon Dynasty, it was difficult to obtain the timber and for the ease of construction, the natural material was used as it was.¹¹⁶³ However, there is also a great reason why Korean ancestors did not cling to the idealistic order, ethics and principles because ethics of Confucianism was equally applied for the nature in Joseon Period.¹¹⁶⁴



Figure 116 Natural Wodden Beams and Columns are Used in Gesimsa Temple, Built in 14th Century by Chungsook

The philosophy of Lao Tzu who set the example of nature as follows:

The largely completed one looks as it is squashed, the straight one looks as if it is curved, and the elaborated one looks as it is awkward.¹¹⁶⁵

This is the mode of nature-architecture relation in Korean traditional architecture. It is the beauty that early modern Korean scholars such as Yu Sup Go paid attention to

¹¹⁶² Kwon (권영걸), *Creating...*, 177.

¹¹⁶³ Go (고유섭), *Korean...*, 33.

¹¹⁶⁴ Kwon (권영걸), *Creating...*, 63-64.

¹¹⁶⁵ Kim (김봉렬), *Place...*, 144.

Korean architecture and art of the Joseon Dynasty.¹¹⁶⁶ The indifference and randomness aesthetics they devised were intended to explain the distinctive features of Korean architecture which does not separate human being and object from each other and impart an artificial order to nature.¹¹⁶⁷

8.7 Roofline of Korean Architecture

The gentle curve of the roof is an important feature of traditional Korean architecture.¹¹⁶⁸ How does this curve to be determined? Generally when a carpenter builds a roof line, he stands at the *madang*, looking the building to have harmonious relationship with the surrounding nature with the roof line.¹¹⁶⁹ In other words, the roof line is determined in consideration of the surrounding natural background.¹¹⁷⁰ In this case, the building comes into nature with the surroundings through the *madang* and the roof line, and as a result, the nature and the building are placed in a single flow in nature.¹¹⁷¹ The designing the roof line of Korean architecture is the act of turning artificial structure into nature.¹¹⁷² Therefore, the roof line which is a characteristic of Korean architecture is not an aesthetic element of the building itself, but rather a part of relationship between building and nature.¹¹⁷³ In this way, it is not wrong to say that the roof of Korean architecture resembles the mountainous scenery of Korean landscape. Yanagi Muneyoshi said that the eaves of Korean architecture must have influenced by

¹¹⁶⁶ Go (고유섭), *Korean...*, 169-171.

¹¹⁶⁷ Kwon (권영걸), *Creating...*, 64.

¹¹⁶⁸ Go (고유섭), *Korean...*, 29.

¹¹⁶⁹ Go (고유섭), *Korean...*, 30-31.

¹¹⁷⁰ Kwon (권영걸), *Creating...*, 188-189.

¹¹⁷¹ Yim, *The Traditional...*, 73-74.

¹¹⁷² Kwon (권영걸), *Creating...*, 70-71.

¹¹⁷³ Kwon (권영걸), *Creating...*, 174-175.

the beauty of Korean nature. In other words, it is a manifestation of aesthetic sense to match with the natural environment.¹¹⁷⁴



Figure 117 Gyeongbokgung Palace With Mountainous Background, Built in 1395 by King TAEJO

8.8 Landscape and Scenery

Strictly speaking, ‘nature as it is’ does not exist in reality.¹¹⁷⁵ Natural scenery is a process of recognition, a result of human understanding and confirmation of nature in culture.¹¹⁷⁶ The concept of landscape is not the nature itself, but the nature of our perception and intentions.¹¹⁷⁷ In the West, nature was the object of imperfect fear.¹¹⁷⁸

¹¹⁷⁴ Muneyosi (아나기 무네요시), *Thinking...*, 176-179.

¹¹⁷⁵ Berque, *Thinking...*, 24.

¹¹⁷⁶ Berque, *Thinking...*, 25-26.

¹¹⁷⁷ Coan, *Perspectives...*, 6-8.

¹¹⁷⁸ Zhangpa (장파), *The Orient...*, 37-41.

After the Renaissance, this fear of nature turned into 'affinity with nature' when the Renaissance garden began in this time period.¹¹⁷⁹ It created an ideal and perfect harmonious nature by giving an artificial order to the nature as it is.¹¹⁸⁰ The Renaissance garden was designed in a geometric pattern, self-contained, ideal representation of nature.¹¹⁸¹ The consciousness of landscape started to be regarded as a beauty of nature after Baroque period.¹¹⁸² A new landscape ritual emerged in nature from a place of fear to a wild place to be explored.¹¹⁸³ From this time, wild nature began to be recognized as a fascination refuge from burdensome civilization and place of appreciation.¹¹⁸⁴ Picturesque garden was designed from this period.

This Western modern consciousness of landscape begins by awakening primitive nature in confrontation of the city.¹¹⁸⁵ After Baroque period, the praise of nature has the meaning of resistance to artificial civilization and rejection of urbanity. As the metropolis developed, it was at this time that parks, roadside trees, and promenades were introduced into the city.¹¹⁸⁶ The city park which began to be built from the end of the 18th century brought nature first into the city.¹¹⁸⁷ The nature introduced in Western cities is like landscape as objectified nature. The concept of landscape comes from the Dutch landscape paintings in the 16th and 17th centuries, which means a visual landscape

¹¹⁷⁹ Coan, *Perspectives...*, 28-63.

¹¹⁸⁰ Coan, *Perspectives...*, 3.

¹¹⁸¹ Coan, *Perspectives...*, 104.

¹¹⁸² Coan, *Perspectives...*, 41-44.

¹¹⁸³ Coan, *Perspectives...*, 88.

¹¹⁸⁴ Coan, *Perspectives...*, 184-186.

¹¹⁸⁵ Berque, *Thinking...*, 47.

¹¹⁸⁶ Coan, *Perspectives...*, 158.

¹¹⁸⁷ Coan, *Perspectives...*, 182-192.

and a concept of seeing nature that is an object of recognition, then objectified.¹¹⁸⁸ In the East, natural scenery is called *punggyeong* (풍경: landscape) and *pungguang* (풍광: scenery). *Punggyeong* can be sensed but cannot be seen like wind and light.¹¹⁸⁹ If the landscape concept of the West is visual, the *punggyeong* (landscape) concept of the East is much more perceivable and intangible. This is the difference between “landscape” and “*punggyeong*”.

In order to explain the natural landscape of Korea, there are concepts of *gyeong* (경) and *gok* (곡).¹¹⁹⁰ The *gyeong* and *gok* are used in writings and songs in order to praise nature.¹¹⁹¹ The *gyeong* refers to the beautiful natural phenomenon or place in the continuous context and *gok* is the place where the terrain is unique such as a beautiful valley meanders.¹¹⁹² The *gyeong* and *gok* refer to a natural phenomenon in nature where human beings live together within, without manipulating the order of the universe but interacting with the energy of nature with human sympathetic mind.¹¹⁹³ In short, unlike landscape, *punggyeong* is not simply objectified nature to be visually appreciated.¹¹⁹⁴ The garden of Korea does not create an artificial nature, but it makes nature more natural by filling the scarcity of nature. Therefore, the nature and landscape

¹¹⁸⁸ Coan, *Perspectives...*, 71.

¹¹⁸⁹ Kwon (권영걸), *Creating...*, 159-162.

¹¹⁹⁰ Kwon (권영걸), *Creating...*, 166.

¹¹⁹¹ Kwon (권영걸), *Creating...*, 126.

¹¹⁹² Kwon (권영걸), *Creating...*, 168.

¹¹⁹³ Kwon (권영걸), *Creating...*, 166-168.

¹¹⁹⁴ Kwon (권영걸), *Creating...*, 169.

are not clearly separated.¹¹⁹⁵ The back garden of Changdeokgung Palace is explained by Sun Woo Choi, a Korean historian of Arts and architecture, as follows:

a hillock becomes the back garden of Changdeokgung palace when it passes over the fence, when the back garden of palace passes over the fence and spread over it becomes a mountain.¹¹⁹⁶

Juhapnu (주합루: where scholars study and also debate about policies) of Changdeokgung Palace is famous for its stairs which was made by cutting the stone slope.¹¹⁹⁷ The stonework is different in height and length as well as the location of the stairs of its original natural terrain. Here, stone staircase is a device that connects nature with architecture.¹¹⁹⁸ Compared to Tivoli's Renaissance garden, having natural slope of Tivoli treated with an abrupt retaining wall, creating the perfect artificial garden that surrounds it.¹¹⁹⁹ Utilizing the slope, this famous garden is a human-made world separated from nature. However, architecture, landscape and nature are not separated at the back garden of Changdeokgung Palace.¹²⁰⁰ The picturesque garden of England attract some of the private landscapes of surrounding natural landscapes, so that the gardens look beyond the boundaries of nature and look like natural extensions.¹²⁰¹ The boundary of the private land was expressed without a fence by using trench, so that it was not clogged when people look outside. But here the boundary between garden and nature is not vanished, but only visually concealed.¹²⁰² Bong Yeol Kim defined the

¹¹⁹⁵ Kwon (권영걸), *Creating...*, 170.

¹¹⁹⁶ Choi (최순우), *Standing...*, 94.

¹¹⁹⁷ Kwon (권영걸), *Creating...*, 86-87.

¹¹⁹⁸ Kwon (권영걸), *Creating...*, 67 & 78.

¹¹⁹⁹ Coan, *Perspectives...*, 48 & 54.

¹²⁰⁰ Kwon (권영걸), *Creating...*, 78.

¹²⁰¹ Yu (유현준), *Modernism...*, 78-82.

¹²⁰² Yu (유현준), *Modernism...*, 84-85.

spirit of Korean architecture as “the atomization of nature and the naturalization of architecture”.¹²⁰³ This explains the cultural attitudes toward the nature in Korea which is distinct from the West.¹²⁰⁴ While there is a clear distinction between nature and culture, nature and artifacts in the West, the boundary between nature and culture, nature and architecture in Korea is overlaid and overlapped with each other.¹²⁰⁵ The harmony with nature which is characteristic of Korean architecture means the blurring of the boundary between nature and architecture.¹²⁰⁶

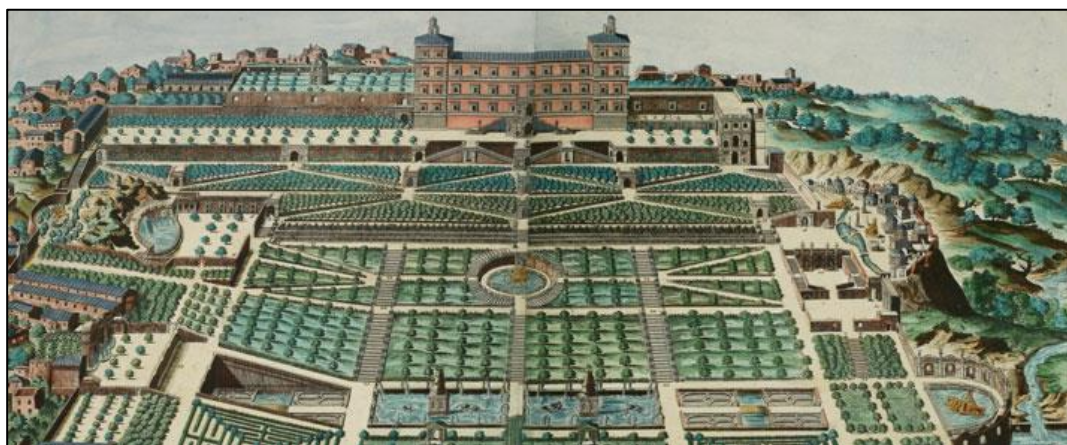


Figure 118 Garden of the Villa d'Este in Tivoli, Built in 1550 by the Mannerist Architect Pirro Ligorio for the Governor Cardinal Ippolito II d'Este

The concept of landscape architecture that combines architecture and landscape in the West has emerged recently. The landscape architecture is a concept derived from the historical and cultural background of the West that has separated architecture and nature.¹²⁰⁷ It is based on objectified nature and the consciousness of landscape.¹²⁰⁸ In

¹²⁰³ Kim (김봉렬), *Rediscovery...*, 17.

¹²⁰⁴ Kwon (권영걸), *Creating...*, 32-34.

¹²⁰⁵ Yim, *The Traditional...*, 13.

¹²⁰⁶ Yim, *The Traditional...*, 112.

¹²⁰⁷ Berque, *Thinking...*, 1-4.

¹²⁰⁸ Berque, *Thinking...*, 59.

criticism of these landscapes, Augustin Berque argued for aesthetics of landscape.¹²⁰⁹ In order to truly regain the relationship with nature, the aesthetics of landscape aesthetics must go beyond the boundary between nature and culture and make nature aesthetically pleasing, and architecture must enter into the cycle of nature.¹²¹⁰ This idea is equivalent with the traditional Korean architecture. There is no reason to say landscape architecture because the boundary between architecture and nature, nature and landscape is already vague from the beginning.



Figure 119 Juhapnu of Changdeokgung Palace's Back Garden, Built in 1776 by King Jungjo

¹²⁰⁹ Berque, *Thinking...*, 55.

¹²¹⁰ Berque, *Thinking...*, 55-62.

8.9 Difference Between Korean, Chinese and Japanese Garden



Figure 120 Chinese Traditional Garden in Suzhou

Korea, China and Japan in East Asia have a similar natural concept but there is a clear difference in the composition of the garden.¹²¹¹ The ancient gardens influenced by China are similar in all countries above mentioned but each country has developed a distinctive garden that reflects its unique culture and climate.¹²¹² The garden of China is an artificial nature.¹²¹³ To make it look like nature, Chinese people glued stones to look natural.¹²¹⁴ It is a miniature version of nature and has a closed boundary.¹²¹⁵ On the other hand, Korean gardens exist in nature as a part of nature and utilize nature.¹²¹⁶

¹²¹¹ Kwon (권영걸), *Creating...*, 74-79.

¹²¹² Kwon (권영걸), *Creating...*, 76-78.

¹²¹³ Kwon (권영걸), *Creating...*, 75.

¹²¹⁴ Kwon (권영걸), *Creating...*, 140.

¹²¹⁵ Kwon (권영걸), *Creating...*, 139-140.

¹²¹⁶ Kwon (권영걸), *Creating...*, 141.

The Changdeokgung Palace's garden which used the hills of nature as it is which represents the Korean garden.¹²¹⁷



Figure 121 Japanese Traditional Garden of Ryoyanji Temple in Kyoto

The difference between Korean and Chinese gardens seem to be the difference between natural landscape and topography.¹²¹⁸ China should have built a house in endlessly wide terrain, and had no choice but to artificially reshape nature.¹²¹⁹ However since Korea has low mountains and valleys, it cannot help but take advantage of nature and its relationship with nature.¹²²⁰ The difference between Korean and Japanese gardens is also clear. Korean gardens penetrate nature, but Japanese gardens invite nature.¹²²¹ The representative Japanese “rock garden” (가레산스이) form is expressed in a space

¹²¹⁷ Kwon (권영걸), *Creating...*, 113.

¹²¹⁸ Kwon (권영걸), *Creating...*, 100-101.

¹²¹⁹ Kwon (권영걸), *Creating...*, 74-77.

¹²²⁰ Kwon (권영걸), *Creating...*, 77-78.

¹²²¹ Kwon (권영걸), *Creating...*, 101-102.

surrounded by fences by abstracting the sea and island with sand and stone.¹²²² This is a symbol of nature and a celebration of nature.¹²²³ The Japanese rock garden is a reinterpreted, purified and abstracted nature, that is to say an idealized state of nature.¹²²⁴ The Japanese garden is gathered by processing and shrinking nature is the subject of contemplation, but Korean garden admits nature as it is and enjoys the nature itself.¹²²⁵ Korean garden is nature itself, and changes after nature. The aesthetics of appreciating nature, rather than recreating or gathering nature show a different level of comprehension.¹²²⁶



Figure 122 Korean Traditional Garden of Changdeokgung Palace in Seoul

¹²²² Kwon (권영걸), *Creating...*, 101.

¹²²³ Kwon (권영걸), *Creating...*, 126-127.

¹²²⁴ Kwon (권영걸), *Creating...*, 128.

¹²²⁵ Kwon (권영걸), *Creating...*, 138-142.

¹²²⁶ Go (고유섭), *Korean...*, 157-158.

8.10 Imitation of Nature

Nature has been recognized as a source of beauty from ancient Greek times.¹²²⁷ Of course here nature speaks of idealized nature. The Greeks explained nature through mathematics and geometry, and nature was the source of all beauty.¹²²⁸ West knew to reproduce nature in its ideal form, like painting and poetry, to imitate nature by human sensibility.¹²²⁹ However, since architecture is not originally an art of reproduction, there is a fundamental limitation in imitating nature.¹²³⁰ Since the Renaissance, architecture has entered the realm of visual art and science, and the most important theoretical theme of Western architecture has been to solve this problematic of imitation.¹²³¹ From the 15th to the 18th century, many architectural theorists tried to explain the origin of architecture from a primitive nature.¹²³² The first definite theorizing of the idea that architecture imitates nature as a source of proportion and beauty is by Alberti, an architect of Renaissance.¹²³³ According to him, all phenomena of nature obey the laws of partial and whole *concinnitas*. The harmony between the part and the whole is the absolute law of nature and the source of beauty such as proportion of the square and the circle, basic principles¹²³⁴. Since the nature is a model of all arts, architecture must imitate it. This is the purpose of architecture, the dignity, the charm and the authority of it.

¹²²⁷ Zhangpa (장파), *The Orient...*, 370-373.

¹²²⁸ Norberg-Schulz, *Intentions...*, 91-92.

¹²²⁹ Zhangpa (장파), *The Orient...*, 373.

¹²³⁰ Norberg-Schulz, *Intentions...*, 168.

¹²³¹ Norberg-Schulz, *Intentions...*, 188.

¹²³² Norberg-Schulz, *Intentions...*, 70-77.

¹²³³ LEE (리원허), *Design...*, 48.

¹²³⁴ LEE (리원허), *Design...*, 47-49.

The role of art is to evoke sensory experience of nature. Nature here involves the quality of human experience, not as an external object or phenomenon.¹²³⁵ Eastern architecture also made the ultimate ideal of resembling nature.¹²³⁶ However, there is no absolute beauty in the Eastern concept of nature.¹²³⁷ Beauty is beautiful when it is in relation to something; objects change and forms disappear over time.¹²³⁸ The nature represented by Western architecture is an invariant principle, but the nature in which Korean architecture situated in resemblance of it changes and not fixed.¹²³⁹ It is temporary, always moves and is incomplete and difficult to visualize. Therefore, it is impossible to capture and represent nature in idealized form.¹²⁴⁰ It is also difficult for humans to imitate nature since humans are also part of the natural circulation system. The alternative belongs to nature.¹²⁴¹ The will to resemble nature is eventually united with nature.¹²⁴² Human beings are not central here. Humans and nature are indistinguishable. There are no subjects or objects differentiated in nature; all beings can be subjects.¹²⁴³

¹²³⁵ Zhangpa (장파), *The Orient...*, 85-90.

¹²³⁶ Kwon (권영걸), *Creating...*, 142-143.

¹²³⁷ Kwon (권영걸), *Creating...*, 138-143.

¹²³⁸ Kwon (권영걸), *Creating...*, 91-93.

¹²³⁹ Kwon (권영걸), *Creating...*, 93.

¹²⁴⁰ Kwon (권영걸), *Creating...*, 113-118.

¹²⁴¹ Kwon (권영걸), *Creating...*, 141.

¹²⁴² Kwon (권영걸), *Creating...*, 142-143.

¹²⁴³ Kwon (권영걸), *Creating...*, 149-151.



Figure 123 Pencil and Wash Sketch of St. Sauveur, Caen by John Ruskin in 1848

Romanticists in the 18th century understood nature as the concept of organic whole by the influence of Eastern thought.¹²⁴⁴ The beauty of Gothic cathedral is the natural result of human expressive instinct. Art has to follow the way of nature and is given vitality by its power. In the 19th century, the British Gothic Revivalist Ruskin also understood architecture as the second nature in this respect. Based on the belief that nature is a creation of God and beauty is based on nature, he saw Gothic architecture as a form of nature, a second nature.¹²⁴⁵

¹²⁴⁴ Yu (유현준), *Modernism...*, 78-80.

¹²⁴⁵ Adrian Forty, *Words and Buildings: A Vocabulary of Modern Architecture*, London, Thames & Hudson, 2012, 230-234.



Figure 124 Ingokyugeo (인곡유거), Human in the Nature in the East, Painted by Jung Sun in 17th Century

Ruskin understood architecture as the second nature which differs slightly from the naturalism of Korean architecture.¹²⁴⁶ As a second nature, architecture resembles nature but is distinguished from nature. Nature is a subject separated from human being; and nature and man overcome alienation by communicating aesthetically through second nature, the art. On the other hand, the naturalism of Korean architecture does not mean the second nature in that human is part of nature.¹²⁴⁷ West, particularly after Renaissance, imitates nature's principles by analyzing objectified nature, but Korea seeks to participate in the principle of cycle of nature.¹²⁴⁸ The core idea of Taoism is

¹²⁴⁶ Forty, *Words...*, 234.

¹²⁴⁷ Forty, *Words...*, 233-234.

¹²⁴⁸ Kwon (권영걸), *Creating...*, 162.

that the unity of nature, that is the unity of nature and human, is the pursuit of human nature and the resemblance of nature.¹²⁴⁹ To resemble nature is to conform to the principles and flows of nature, not imitate any visual form or principle.



¹²⁴⁹ Inaji, *The Garden...*, 123-127.

CHAPTER 9

SYMBOL AND COMMUNICATION

9.1 Monument and Background

Architecture begins when humans attach the building symbols and meanings.¹²⁵⁰ Symbols and representations have described the origin of architecture in terms of the discovery of fire and human association.¹²⁵¹ Unlike other animals, a human who could walk upright was able to build houses with free hands, starting from the starry sky, and building through the bridge between man and the sacred sky.¹²⁵² Architecture is the beginning of a central and transcendent order of unification of individuals and communities.¹²⁵³ As you know, architecture in the West began from a symbolic monument that connects human and the Absolute like a king's tomb, temple, and church.¹²⁵⁴ Monumental architecture expresses an unchanging order and a desire for eternity.¹²⁵⁵ Western architecture has developed as symbolism applied to monumental architecture is extended to everyday buildings.¹²⁵⁶ It is after modernism that this

¹²⁵⁰ Yu (유현준), *Modernism...*, 12-15.

¹²⁵¹ Norberg-Schulz, *Intentions...*, 18.

¹²⁵² Yu (유현준), *Modernism...*, 16.

¹²⁵³ Karsten Harries, *The Ethical Function of Architecture*, Cambridge, The MIT Press, 2000, 137-141.

¹²⁵⁴ LEE (리원허), *Design...*, 44-46.

¹²⁵⁵ LEE (리원허), *Design...*, 46.

¹²⁵⁶ LEE (리원허), *Design...*, 46-49.

tradition is broken in the West.¹²⁵⁷ Modernism architecture was a case where the form language started from the house then was applied to monumental architecture and public architecture.¹²⁵⁸ Adolf Loos insisted that symbols should be removed from architecture with functional purposes, as symbolism represented by past monumental architecture lost its meaning in modern society.¹²⁵⁹

In the East, they did not try to create a symbolic monument. The traditional idea of the East did not have a strong desire to build a monument that symbolized eternity because it thought that everything passes.¹²⁶⁰ In Confucian thinking, the pursuit of external beauty was immoral and the architecture was not regarded as a symbol of eternity. Gyesung, a Chinese landscape architect said that:

The environment we create is sufficient to accommodate the length of time that we can use. Even if we create a new environment for our descendants, they will not be satisfied with what we have created.¹²⁶¹

The Chinese people also used the stone-brick structure in addition to wood, and they know that the stone was a material that lasted longer than woods, but they used trees in monumental buildings such as palaces and temples.¹²⁶²

¹²⁵⁷ Norberg-Schulz, *Intentions...*, 21-27.

¹²⁵⁸ Norberg-Schulz, *Intentions...*, 110-127.

¹²⁵⁹ Loos & Veillich, *The architecture...*, 79-81.

¹²⁶⁰ LEE (리원하), *Design...*, 49-54.

¹²⁶¹ LEE (리원하), *Design...*, 46.

¹²⁶² LEE (리원하), *Design...*, 54.



Figure 125 Ancient Korean Royal Tomb, Samreung in Gyeongju, approximately Built in 13th Century During Shilla Period

From the royal tombs of Korea, it is clear that Koreans' thought about architecture is different from Western. The tomb at Western magnate is a huge form of monument as seen in pyramids, temples, or mausoleums.¹²⁶³ However, the ancient Korean royal tomb was an ordinary hill without any decoration or symbol.¹²⁶⁴ In the Joseon Dynasty, the monument was built and surrounded only with stone. Compared with the pyramids and mausoleum, the Korean royal tomb is another nature created by human. Korea also disguised the grave as part of nature.¹²⁶⁵

Korea's palaces and religious buildings are a background for life and rituals, rather than symbolic monuments.¹²⁶⁶ Life and rituals take place in the *madang* rather than inside the building, and the building has the background character of the *madang*.¹²⁶⁷ The *madang* of Gyeongbokgung royal palace was used for ceremonial events such as

¹²⁶³ LEE (리원허), *Design...*, 39-45.

¹²⁶⁴ Go (고유섭), *Korean...*, 98-102.

¹²⁶⁵ Go (고유섭), *Korean...*, 33-35.

¹²⁶⁶ Kwon (권영걸), *Creating...*, 176-177.

¹²⁶⁷ Yim, *The Traditional...*, 121-125

welcoming foreign delegations or king's coronation.¹²⁶⁸ This contrasts with the European coronation which held in cathedral. The symbolism given to Korean architecture has only played a role of complementing and completing these functions in the *madang*.¹²⁶⁹



Figure 126 Coronation Ceremony at Geunjeongjung Madang of Gyeongbokgung Palace in Seoul

Western architecture started with a symbolic monument, but in the East, palaces and religious buildings were built in the same manner of residential buildings.¹²⁷⁰ This is closely related to the fact that the concept of architecture as a monument has not developed in the East.¹²⁷¹ Although the scale and form were different according to the importance and hierarchy of the building, the architecture itself was not regarded as a symbolic object.¹²⁷² The impression of foreigners visiting Seoul is that there is no such impressive building in Seoul. Westerners who are accustomed to monumental

¹²⁶⁸ Go (고유섭), *Korean...*, 151-158.

¹²⁶⁹ Inaji, *The Garden...*, 150.

¹²⁷⁰ Kwon (권영걸), *Creating...*, 65-71.

¹²⁷¹ Kwon (권영걸), *Creating...*, 42-44.

¹²⁷² Kwon (권영걸), *Creating...*, 143-146.

architecture such as palaces and churches are natural to think so.¹²⁷³ Korean architecture is different kind of architecture from Western monumental architecture.¹²⁷⁴ However, Does that mean that there is no symbolic architecture in Korea? The answer is no, it is the same in any culture that human beings build houses and give them a community and universal order but the way is different.¹²⁷⁵

9.2 Eternity and Circularity

The anxieties and fears in the world of unstable phenomena are overcome by Westerners by stopping the time of reality and pursuing eternity.¹²⁷⁶ Here is the essence of the monument that Western architecture has pursued from ancient times. Mathematics, geometry, rational and unchanging order, and stone monuments all deviate from the uncertainties of time and aim for eternity.¹²⁷⁷ On the other hand, the East did not try to escape the change of phenomena and the fear of time. According to Taoist teaching, there is nothing that exists forever in time.¹²⁷⁸ There is neither material nor eternal perfect state. Lao Tzu said that the perfect thing stopped growing which means death. Nature is always in change and growth.¹²⁷⁹ So the East built an imaginary order in a way that conformed to the changes and times of nature, and pursued beauty in such changes.¹²⁸⁰

¹²⁷³ LEE (리원허), *Design...*, 52-54.

¹²⁷⁴ Go (고유섭), *Korean...*, 27-28.

¹²⁷⁵ Go (고유섭), *Korean...*, 28.

¹²⁷⁶ Zhangpa (장파), *The Orient...*, 202-210.

¹²⁷⁷ Norberg-Schulz, *Intentions...*, 91-92.

¹²⁷⁸ Zhangpa (장파), *The Orient...*, 374-385.

¹²⁷⁹ LEE (리원허), *Design...*, 64.

¹²⁸⁰ LEE (리원허), *Design...*, 63-65.



Figure 127 Parthenon on the Acropolis

In the East, the building was also considered to be a place to stay temporarily while on the world. So the value is put more on non-permanent and temporary architecture, which will someday return to nature. The Chinese landscape architect, Gyesung says about the attitude of Chinese people in architecture in the following:

You can build houses that last a thousand year, but no one can tell who will live in a hundred year. It is enough to create a pleasant and comfortable place to enclose a humble harmonious house.¹²⁸¹

Even the construction of a city with a defensive purpose is never forever, and it is always in the process of metabolism.¹²⁸² Rather than stopping time and pursuing eternity, the architecture of East, takes part in the eternity of nature by adapting to the changes in time and natural cycles set in nature, and in keeping with its relationship with the surroundings and the temporal situation.¹²⁸³ Japanese Shinto is famous for setting two identical sites, building a building on single side, leaving the other empty, removing

¹²⁸¹ Kim(김동욱), *Korean Architecture...*, 30.

¹²⁸² LEE (리원허), *Design...*, 46.

¹²⁸³ Kwon (권영걸), *Creating...*, 74-84.

the one built then build the new one in the other side every 20 years.¹²⁸⁴ This is a different kind of monument from the Western case which rises and aspires to exist forever.



Figure 128 Jongmyo Shrine

Jongmyo Shrine is the representative monumental building of Korea which was not built at one time, but gradually expanded over time. Beginning with the first seven *kan* (unit), it has been expanded to nineteen *kan* through three extension works.¹²⁸⁵ It is an architecture that is not planned to be completed from the beginning but grows as needed.¹²⁸⁶ Here, the past, the present and the eternity become an organic one. Life and death are not separated, but the dead become eternal reality through descendants.¹²⁸⁷ Jongmyo Shrine shows the difference of thinking between Korean and Western about the memorial characteristic of architecture. The place and time are the source of the symbolism that Jongmyo Shrine has. So Jongmyo Shrine is not an Eastern Parthenon as

¹²⁸⁴ Inaji, *The Garden...*, 3-5.

¹²⁸⁵ Kwon (권영걸), *Creating...*, 224.

¹²⁸⁶ Kwon (권영걸), *Creating...*, 224-230.

¹²⁸⁷ Kwon (권영걸), *Creating...*, 172-177.

it is often said. *Hanok* is only rebuilt not restored.¹²⁸⁸ Restoration presupposes that there is an unchanging circle. However, there is no prototype such as a circle because there is no prototype that does not change forever in Korean architecture. So it is called rebuilding or reconstruction. Korean architecture can always be turned into nature, or it can be rebuilt when it disappears.¹²⁸⁹

9.3 Visual Symbol and Temporal Symbol

The symbolism of architecture is necessary condition for experiencing the physical environment constructed by man in meaningful order.¹²⁹⁰ For example, the interior of the medieval Gothic cathedral symbolizes a celestial city with a high ceiling and a festival of light coming through stained glass.¹²⁹¹ The proportions and geometries pursued by Renaissance architecture represent the perfect harmony of the universe.¹²⁹² The Primitive hut represents the original form of architecture constructed by rational humans in primitive natural conditions. The symbolism of Western architecture has been represented through this visual form.¹²⁹³ On the other hand, the symbolism of Korean architecture is more relational, functional and temporal rather than morphological.¹²⁹⁴

There is Japanese rock garden of Ryoanji in Japan which was influenced by the idea of Lao Tzu symbolizing the time of the East.¹²⁹⁵ Ryoanji garden's nature is reduced and

¹²⁸⁸ Kwon (권영걸), *Creating...*, 197-198.

¹²⁸⁹ Go (고유섭), *Korean...*, 33-35.

¹²⁹⁰ Yu (유현준), *Modernism...*, 12-15.

¹²⁹¹ Norberg-Schulz, *Intentions...*, 124 & 135.

¹²⁹² Norberg-Schulz, *Intentions...*, 91-102.

¹²⁹³ Norberg-Schulz, *Intentions...*, 146

¹²⁹⁴ Kim (김개천), *24 Great...*, 123.

¹²⁹⁵ Kwon (권영걸), *Creating...*, 135.

abstractly expressed and what this garden symbolizes is an invisible time rather than a natural form or an ideal form.¹²⁹⁶ The sand of Ryoanji symbolizes the sea, and the stone symbolizes the island which is an abstract representation of nature.¹²⁹⁷ However, it is not a form of nature that Ryoanji symbolizes. Ryoanji's *madang* is empty, but no one can enter it, and it is like a transparent ice block which is an example of showing the materiality of space clearly.¹²⁹⁸ What Ryoanji symbolizes is an invisible time rather than an empty transparent space like ice.¹²⁹⁹ In Ryoanji, it symbolizes time in the diminished and purified nature but the changing nature of Korean garden symbolizes time itself. The symbolism of the time that Korean gardens contain is not a pure recognition level for the subject of experience but an ontological event which is revealed in time and space through the experience of the body in the living world.¹³⁰⁰

In Western architecture, it relies on visual symbolism and communication.¹³⁰¹ Human beings as a recognition subjects are always outside the object of symbolism. But in Korean architecture, human becomes part of the symbolic system, not the subject of symbolism.¹³⁰² In this respect, the symbolism of the bearing of Korean architecture, based on the Feng Shui and Yin and Yang contrasts with Western architecture.¹³⁰³ As explained in the location of the subject of experience, the Villa Rotunda designed by Palladio, reflects the symbolic position of human beings in the centre of the hall,

¹²⁹⁶ Kwon (권영걸), *Creating...*, 2005, 131.

¹²⁹⁷ Kwon (권영걸), *Creating...*, 131-132.

¹²⁹⁸ Kwon (권영걸), *Creating...*, 132.

¹²⁹⁹ Architectural Environmental Editors (건축과 환경 편집부), *Seung Hyo Sang Exhibition: Urban Void (승효상 전시 도록: 어반 보이드)*, Seoul, Architecture and Environment, 2002, 41.

¹³⁰⁰ Kwon (권영걸), *Creating...*, 113-119.

¹³⁰¹ Norberg-Schulz, *Intentions...*, 111 & 121

¹³⁰² Kwon (권영걸), *Creating...*, 91-93.

¹³⁰³ Kwon (권영걸), *Creating...*, 79-83.

representing humanity of the late Renaissance.¹³⁰⁴ However, since human symbolic position is not in architecture, there is no symbolism of bearing. The Villa Rotunda is a self-contained object that controls the periphery and is only centred and perfectly symmetrical.¹³⁰⁵ On the other hand, Korean architecture has a space and time symbolism in relation to human beings because of the human being as the subject of experience.¹³⁰⁶ This is the difference between Western architecture and Korean architecture.

9.4 Appropriateness and Example

It was a longstanding norm of architecture whether in the East or in the West, that all buildings fit into their respective functions, purposes, and personality.¹³⁰⁷ Vitruvius in *'The Ten Books on Architecture'* defined this as the décor. Décor refers to the appropriateness of architectural forms and contents, and is achieved when architecture is made according to precedent, custom, and natural principles.¹³⁰⁸ The shrine should have different orders according to the nature of the deity to which it belongs, and the house must reflect the social standing of the owner appropriately.¹³⁰⁹ The décor of classical architecture evolved into a convenience or appropriateness in the 18th century in France. Compliance refers to the general rule of design that must be followed when placing parts, which Jacques Francois Blondel, a professor at the Royal Academy of architecture, has shown that the building exposes the purpose, motives, and intentions of

¹³⁰⁴ Ackerman, "The Belvedere...", 325-359

¹³⁰⁵ Ackerman, "The Belvedere...", 325-359

¹³⁰⁶ Kwon (권영걸), *Creating...*, 119.

¹³⁰⁷ Kwon (권영걸), *Creating...*, 43-49.

¹³⁰⁸ Zhangpa (장파), *The Orient...*, 374-385.

¹³⁰⁹ Yu (유현준), *Modernism...*, 20-34.

building.¹³¹⁰ It is said through suitability and through conformity that architecture is dignified and personally given, and it defines conformity as the first principle of architectural design.¹³¹¹

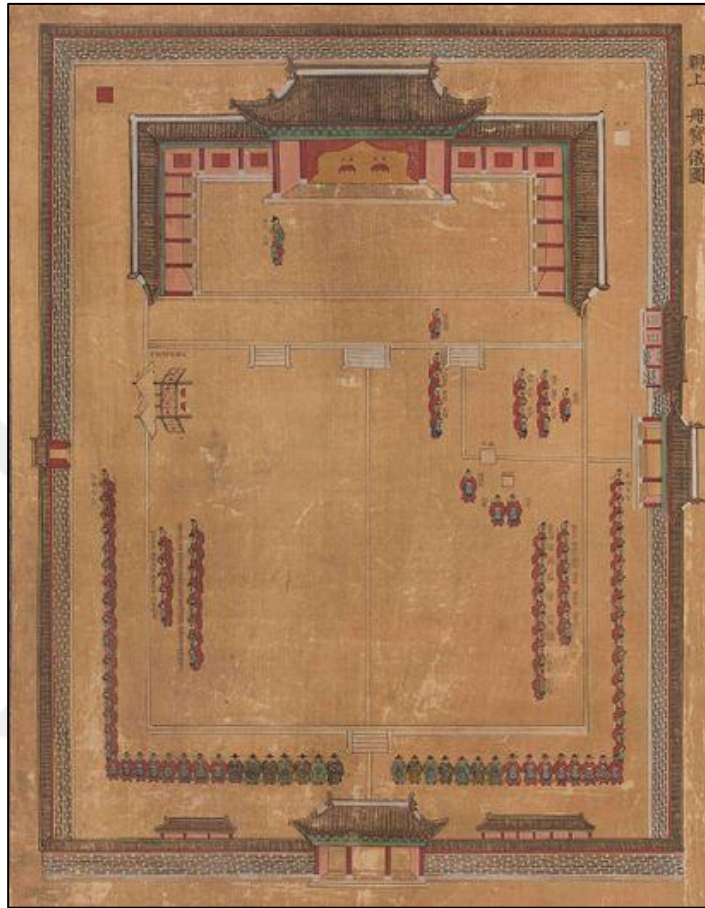


Figure 129 The Process and Rituals Explained in Jongmyo Shrine
(종묘친제규제도설병풍)

In Korea, architecture has never played a role in the enlightenment of ethics through visual forms.¹³¹² Rather, it was only about the abstinence, size, and height of decoration in architecture. It means the ethical norms and social communication of individual

¹³¹⁰ Banham, *The Architecture...*, 101.

¹³¹¹ Donal Drew, Egber, *The Beaux-arts Tradition in French Architecture*, Princeton, Princeton University Press, 1980, 131.

¹³¹² Kim (김인철), *Opening...*, 260.

buildings.¹³¹³ In the chaotic times of ancient China, Confucius focused on everyday courtesy such as music, dance, festivals and rituals.¹³¹⁴ Courtesy unifies the individual's aesthetic desires and moral ethics of society.¹³¹⁵ It is the nature of human to find pleasure, but the expression of emotion must be in accordance with the demands of the ritual. Evil is a definite expression but must be tempered.¹³¹⁶ Satisfaction with the desires and senses belonging to the human nature leads not only to individual discretion but to perfection through the application of codes and norms through courtesy which is the order of the world.¹³¹⁷ It was introduced to Joseon Dynasty in Korea, and Joseon faithfully applied Confucian courtesy to social principles at that time.¹³¹⁸ Confucianism is a study of hierarchy, order, and norms of society.¹³¹⁹ By observing Confucian morality, it believed a harmonious world can be achieved without conflicts between human beings, nature and the universe.¹³²⁰ The courtesy of Confucianism is the regulatory system that emphasizes the fostering of individuals as subjects to practice examples. In China, architecture has been treated as part of the Confucian system, since the establishment of the system and norms of architecture has been arranged since the Zhou Dynasty in China.¹³²¹ The Confucian scholars have concluded the so-called principles of Confucianism. This architectural system is both a political system and a

¹³¹³ Kwon (권영걸), *Creating...*, 142-159.

¹³¹⁴ Inaji, *The Garden...*, 119-121.

¹³¹⁵ Kwon (권영걸), *Creating...*, 29-31.

¹³¹⁶ Kwon (권영걸), *Creating...*, 32-34.

¹³¹⁷ Kwon (권영걸), *Creating...*, 34.

¹³¹⁸ Inaji, *The Garden...*, 133-137.

¹³¹⁹ Inaji, *The Garden...*, 137.

¹³²⁰ Kwon (권영걸), *Creating...*, 45.

¹³²¹ LEE (리원허), *Design...*, 55-65.

part of courtesy.¹³²² Of course, the order and norms of the courtesy have been reflected in building houses and spaces in Korea. The courtesy is specifically applied in the scale of architecture, decoration, and the law. From the palace to the ordinary house of the common people, the decoration and its scale are divided into a chart, and it shows that the courtesy of architecture has been applied since the ancient times of Korea.¹³²³ During the Joseon Dynasty, the house restraint, which was announced in the 13th year of King Sejong, stipulated that the houses of the common people should not exceed ten *kans* and, trimmed stones should not be used.¹³²⁴ The courtesy of architecture is the institution and rule, but not visual impressions or formal languages.¹³²⁵ The concept of conformity of Western architecture is expressed by the impression given by the visual form of architecture, but the subject of courtesy of human and their acts are not included in architecture.¹³²⁶ Architecture is a tool and a means to practice the courtesy in East.

9.5 Character and Signboard

Often a building is said to be a court or a bank. The form of the building represents the function or purpose of the building.¹³²⁷ In the West, such a building has a tradition of expressing its function, purpose, and personality in form.¹³²⁸ In the 18th century, the principles of classical architecture evolved into characteristic theory.¹³²⁹ The Royal Academy of architecture in France is that every building must communicate its function,

¹³²² LEE (리원허), Design..., 61.

¹³²³ Kwon (권영걸), Creating..., 145.

¹³²⁴ Kwon (권영걸), Creating..., 144-145.

¹³²⁵ Inaji, The Garden..., 137.

¹³²⁶ Norberg-Schulz, Intentions..., 111 & 121

¹³²⁷ Zhangpa (장파), The Orient..., 180-186.

¹³²⁸ Norberg-Schulz, Intentions..., 14-21

¹³²⁹ Norberg-Schulz, Intentions..., 24-32

purpose and character directly to the viewer through the way of composition and construction.¹³³⁰ That is to say, the church should be a church and the school should look like a school. The nature of Western architecture is the result of the communication of visual impressions in direct experience and emotion, and the meaning of architecture comes from the immediacy of this perception.¹³³¹ Western architecture thus made visual impressions of objects important.

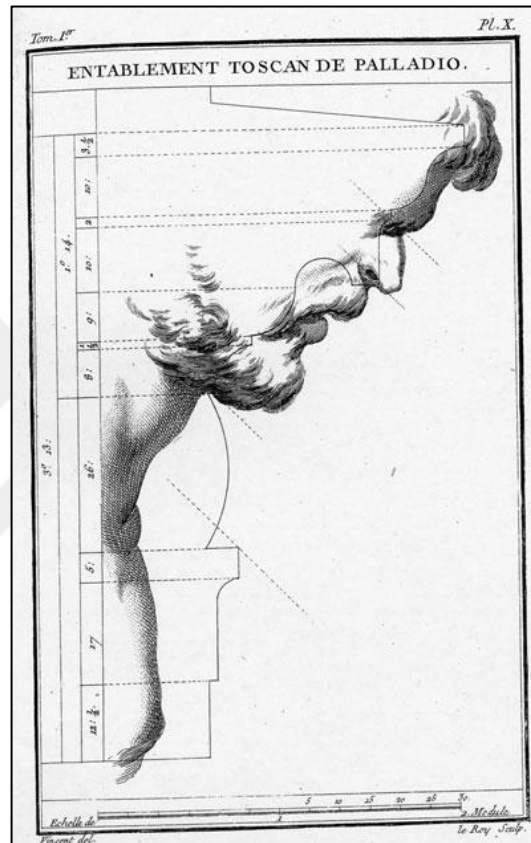


Figure 130 The Signature of Architecture: Compositional Ideas in the Theory of Profiles

Korean architecture was weak in its original form as a language.¹³³² Architecture of different functions was basically constructed in the same type with slight differences in

¹³³⁰ Cody & Steinhardt & Atkin, *Chinese...*, 2011, 101-102.

¹³³¹ Norberg-Schulz, *Intentions...*, 121

¹³³² Go (고유섭), *Korean...*, 25-26.

layout, decoration or scale. Therefore, it is not easy to understand the function, purpose, and personality of the Korean architecture only in terms of form and arrangement.¹³³³ It is difficult to distinguish whether it is a house or a tavern if it is not presented. This is because the building does not reveal its character through the exterior. In the architecture of East, it was culturally much easier to communicate by means of letters than forms. Winthor Lee, explained the Chinese architecture as follows;

The architecture of China was composed not only by the arrangement and appearance of the building itself, but also by the style or spirit that is to be possessed by various decorations and displays. At the same time, in China, it is possible to express ideas with letters and literature, so the partial arrangement in buildings were used as a means of expressing the architectural content and attracted those who appreciate the architecture to the world.¹³³⁴

It is the name of a building that can be regarded as the characteristic of Western architecture in Eastern architecture.¹³³⁵ In the East, there is a plate on the building which represents the position and character of the building and communicates the behavior and discipline of the person living in it.¹³³⁶ There are several words referring to houses which are *Gung* (궁), *Jeon* (전), *Dang* (당).¹³³⁷ The *Gung* means palace, the *Jeon* means the building where king and queen stay, and the *Dang* means the building where princes stay. If the architecture in West expresses the social status, the function and the purpose of the owner of the architecture through visual impressions of the form, the architecture of East shows the hierarchy and personality through words.¹³³⁸

¹³³³ Kwon (권영걸), *Creating...*, 144-146.

¹³³⁴ LEE (리원허), *Design...*, 110.

¹³³⁵ LEE (리원허), *Design...*, 95.

¹³³⁶ LEE (리원허), *Design...*, 96.

¹³³⁷ LEE (리원허), *Design...*, 88-95

¹³³⁸ LEE (리원허), *Design...*, 107-111.



Figure 131 The Signboard of Juhapru of Changdeokgung Palace

In the Renaissance period, the Palace of the wealthy merchants and nobles is called palazzo.¹³³⁹ There followed the name of the owner family such as Palazzo Medici or Palazzo Rucellai, and in the lower part of Palazzo, it was covered with rustication of rough stones which has a defensive impression of a fortress.¹³⁴⁰ However, the houses of upper class in Korea, the name of house revealed its characteristics.¹³⁴¹ The board is attached in front of main building of house with the expression or the value showing the personality of the owner.¹³⁴² There is no communication through visual impression but the revealing of value through personal conversation with house.¹³⁴³ For example, at Geunjeonjung of Gyeongbokgun Palace, the name of Geunjeongjung reminds the king, a mind to rule the country and to serve the people with eagerness.¹³⁴⁴ Sujoldang of

¹³³⁹ Marconi, *The Oxford...*, 211.

¹³⁴⁰ Marconi, *The Oxford...*, 511-512.

¹³⁴¹ Inaji, *The Garden...*, 136-144.

¹³⁴² Inaji, *The Garden...*, 137-139.

¹³⁴³ Inaji, *The Garden...*, 138.

¹³⁴⁴ Go (고유섭), *Korean...*, 151-158.

Yangdong village is a house that is to keep oneself with low and humble mind and Dokrakdang of Yangdong village is a house to enjoy alone.¹³⁴⁵ So the name of house directly expresses the function and the purpose that it serves. Juhapnu (주합루: where scholars study and also debate about policies) was made by king Jungjo, which reminded the king with its name that to administer affairs of politics based on the unity of the universe.¹³⁴⁶ What is important is not the visual impression delivered through the form, but the personal connection with the building. As a result, the building is personalized with the person who uses. The West has shaped the house, but Korea personalized it. The language that assesses people and methods was also used to assess the house.¹³⁴⁷

Korean architecture expressed the hierarchy, character, and moral value of the building in this way. Here, architecture and people are unified without being separated.¹³⁴⁸ The house represents the owner's spirit, personality and ideology.¹³⁴⁹ The elegance of architecture is not the impression of appearance, but the empathy of the owner's personality.¹³⁵⁰ The dignity of the building can be said to empathize the character and the value of house owner rather than being obtained by the beautiful curves of eave, and pillars.¹³⁵¹

¹³⁴⁵ Inaji, *The Garden...*, 143.

¹³⁴⁶ Kwon (권영걸), *Creating...*, 86-87.

¹³⁴⁷ Kwon (권영걸), *Creating...*, 222-232.

¹³⁴⁸ Kwon (권영걸), *Creating...*, 146-149.

¹³⁴⁹ Kwon (권영걸), *Creating...*, 91-93.

¹³⁵⁰ Kwon (권영걸), *Creating...*, 94.

¹³⁵¹ Kim Dong Uk (김동욱), *Dosan Seodang: Building the ideal of the Noblemen (도산 서당: 선비들의 이상향을짓다)*, Dolbaege Publication, 2012, 211.

CHAPTER 10

CONCLUSION

10.1 The Product of Different Recognition Systems

Korean architecture is the product of a different recognition system. The architecture of Korea was not a monumental object but a background of life and ritual. Joseon Dynasty was a country of Tao and courtesy, and the noblemen wanted to reach the Tao through practice of courtesy. The architecture was a device and a stage to practice courtesy. The universe is the ultimate principle of all things and nature, and the way of life that follows it. The courtesy is the normative and formal laws of everyday life.

The architecture of Korea is not an object of visual appreciation but a tool of aesthetic awareness that leads to the unity of nature and universe. In Korea, there was such architecture but through the process of rapid Western modernization, this tradition of life and architecture disappeared. Modern Korean architecture is in chaos and disorder with no new norms that succeed the past architectural values with new ideas. The wisdom hidden in tradition in Korean architecture should be observed, analyzed and theorized but the problem is traditional architecture was the stage of a life past.

Contemporary architecture necessarily compromises with the present life situation. Forms and spaces of past architecture cannot be applied to modern times. For example, the spatial organization of the *hanok's* kitchen and the room is derived from a mixture of heating and cooking, which is called *ondol*. However, it is a contradiction to maintain it in the modern house where the way of cooking and heating has changed. In addition, some of the principles of traditional architecture cannot be applied to modern times. For example, the way of experiencing modern city and architecture is different from the past.

As people have already become accustomed to the Western recognition system, people cannot insist on building and experiencing the city and architecture with the gaze of the past. The wisdom of traditional architecture and the present necessarily should be compromised. Korean architecture was a tool for human to have relationships and a means of living. It is the language of the relationship, not the form, especially the relation with nature, the use of terrain, the way of handling spatial relations and boundaries. This value is still valid in present.

Western architecture developed theories and principles to control architectural individuality. After the shared norms of architecture have been lost in modern society, individualism has prevailed. Now a new order of architecture is required. Would not it be possible to answer the question by the value of Korean traditional architecture? Achieving Tao and courtesy of Confucianism, Can architecture also normalize the language of relations useful in contemporary architecture? It leads to architectural intention by establishing courtesy of using materials and houses to set up relationship with nature and surrounding environment. It is possible only through institutionalization of relations. As Korea passes through the process of passive modernization, it seeks to trace back the without reconsidering that the tradition has been forgotten. The presence does not exist without the past. In the process of globalization, the tradition or subject of the region has already been taken root and the claim that there is no tradition to return is only a half true statement. It constitutes a tradition and is directly connected with the issue of identity and localizing the modernity to the region. It is necessary for Korea's architecture to become part of the universality and to make a change and contribution to the world architecture by entering the space of the world architecture discourse. Despite the globalization trend, it is difficult for global architecture to be fully homogenized. Because architecture is built on the ground, the architectural culture and tradition of each region will continue until the universal technology overwhelms and the style of life unifies up to the point that nature, topography and climate are not a problem at all. Practice and research on the identity of Korean architecture should continue.

BIBLIOGRAPHY

- Adolf Loos, Joseph Veillich, *The architecture of Adolf Loos: An Arts Council Exhibition*, London: The Council, 1985. 79-81.
- Adrian Forty, *Words and Buildings: A Vocabulary of Modern Architecture*, London, Thames & Hudson, 2012, 230-234.
- Allan Marquand, *Greek Architecture*, New York: The Macmillan Company & Princeton University, 1909, 5-48 & 356-358.
- Amos Ih Tiao Chang (창), *The Tao of Architecture (건축 공간과 노자 사상)*, trans by Jang Sup Yun, Seoul: Gimoondang, translated in 2006, 131.
- Architectural Environmental Editors (건축과 환경 편집부), *Seung Hyo Sang Exhibition: Urban Void (승효상 전시 도록: 어번 보이드)*, Seoul, Architecture and Environment, 2002, 41.
- Augustin Berque, *Thinking through Landscape*, trans by Anne-Marie Feenberg-Dibon, New York: Routledge, 2013.
- Beatriz Colomina, Jennifer Bloomer, *Sexuality and Space*, New York Princeton Architectural Press, 1992, 73-128.
- Beatriz Colomina, *Privacy and Publicity*, Cambridge The MIT Press, 1994, 133 & 244.
- Bo Hyun Kim (김보현) & Byung Sun Bea (배병선) & Do Hwa Park (박도화), *Buseoksa Temple (부석사)*, Seoul: Dewonsa, 2008, 59.
- Bong Hee Jeon & Kang Min Lee (전봉희 & 이강민), *3kan X 3kan: Typological Approach to Korean Architecture (3 칸 X 3 칸: 한국 건축의 유형학적 접근)*, Seoul: Seoul National University Press, 2006, 27-214.

- Bong Yeol Kim (김봉렬), *Place Where I Want to Go and Stay 2 (가보고 싶은 곳 머물고 싶은 곳 2)*, Seoul: Culture Graphy, 2013, 144-184.
- Bong Yeol Kim (김봉렬), *Rediscovery of Korean Architecture (한국 건축의 재발견)*, Seoul: Yisang Architecture, 1999.
- Bong Yeol Kim (김봉렬), *Rediscovery of Korean Architecture 3 (한국 건축의 재발견 3)*, Seoul, Lee Sang Architecture, 1999, 59-202.
- Branko Mitrovic, *Philosophy for Architects (세상에 단 하나뿐인 건축을 위한 철학)*, trans by Chung Ho LEE (이충호), Seoul: Culturegraphy, 2013, 224.
- Bulent Atalay, *Math and the Mona Lisa: The Art and Science of Leonardo da Vinci*, Washington, Smithsonian Books 2006, 5 & 180-181.
- Bush and Shih, *Early Chinese Texts on Painting*, Hong Kong University Press, 2013, 50-51.
- Byeong Haw Hong (홍병화), Sung Woo Kim(김성우), *A Change of Meaning in the Plan of the Belfry in the Temple of the Joseon Dynasty*, Korean Society of Architecture and History, 2008, 125-138.
- Chang Mo Ahn (안창모), *Concept of Architecture and Attitude to the Western Architecture in Early Modern Korea (한말 건축에 대한 인식과 건축 개념)*, *The Journal of Aesthetics and Science of Art 20th edition*, 2004.
- Christian Norberg-Schulz, *Intentions in Architecture*, MIT Press, 1966.
- Christopher Wren, *Parentalia (파렌탈리아)*, trans by Hyun Jun Yu, Seoul: Miseum, 2008, 60.
- Clemente Marconi, *The Oxford Handbook of Greek and Roman Art and Architecture*, Oxford Publication, 2014.
- Colin Rowe, Fred Koetter, *Collage City*, Cambridge: The MIT Press, 1978, 60-90.
- Cornelis van de van, *Space in Architecture*, Wauwatosa, WI, U.S.A: Imperial Books and Collectibles 1978, 16-18.

- David B. Brownlee & David G. De Long, *Louis I. Kahn: In the Realm of Architecture*, trans by Hee Jin Kim, Paju: Mimesis, 2010, 42-44.
- Detlef Mertins, “Transparency: Autonomy and Relationality”, *AA files*, London, 1996, 32.
- Donal Drew, Egber, *The Beaux-arts Tradition in French Architecture*, Princeton, Princeton University Press, 1980, 131.
- Edmund Husserl, *Origin of Geometry*, trans by John P. Leavery, Lincoln: University of Nebraskas Press, 1989, 15-30.
- Eugene Emmanuel Viollet-le-Duc, *Lectures on Architecture 2 (건축강의 2)*, trans by Yu Gyeong Jung, Seoul, Arcanet, 2015, 42.
- Frank Lloyd Wright, *The National House*, New York: Horizon Press, 1954, 15.
- Gae Chun Kim(김개천), 24 Great Buildings of Korean Traditional Architecture(명목의건축 한국 전통의 명건축 24 선), Seoul, Culturegraphy, 2011, 62-123.
- Gaston Bachelard, *The Poetics of Space*, trans by Maria Jolas, John R. Stilgoe, Boston: Beacon press, 1964.
- Gianni Vattimo, “Ornament/Monument”, *The End of Modernity*, Baltimore, The Johns Hokins University Press, 1991, 81-86.
- Gilles Deleuze, Felix Guattari, “The Treatise on Nomadology”, *A Thousand Plateau*, Minnesota: University of Minnesota Press, 1996, 352.-354.
- Gyeong Su Kim (김경수), *A Walk of Architectural Aesthetics (건축 미학 산책)*, Seoul: Balon, 2000, 171.
- Hyun Jun Yu (유현준), *Modernism: Hybrid of Eastern and Western Culture (모더니즘: 동서양 문화의 하이브리드)*, Seoul: Miseum, 2008.
- Ignasi de Sola-Morales Rubio, *Differences*, Cambridge, The MIT Press, 1996, 57-59 & 70-71.

- In Cheol Kim (김인철), *Opening Space (공간열기)*, Seoul: Paju DongNyeok, 2011, 119-260.
- In ha Jung (정인하), *Architecture of Soo Geun Kim: a New ideology of Korean Architecture (김수근 건축론: 한국 건축의 새로운 이념형)*, Seoul: Migeonsa, 1996, 148.
- In Suk Park (박인석), *Apartment of Korean Society (아파트 한국 사회)*, Seoul: Hyunamsa, 2013, p. 199.
- J. S. Ackerman, "The Belvedere as a Classical Villa," in his *Distance Points: Essays in Theory and Renaissance Art and Architecture*, Cambridge & London, Mass, 1991, 325-359.
- J. S. Ackerman, "The Belvedere as a Classical Villa," in his *Distance Points: Essays in Theory and Renaissance Art and Architecture*, Cambridge & London, Mass, 1991, 325-359.
- Jacques Derrida, *Edmund Husserl's Origin of Geometry: An Introduction*, trans by John P. Leavary JR, University of Nebraska Press: Lincoln and London, 1989, 12-61.
- James S. Ackerman, *Architecture of Michelangelo*, New York: The Viking Press, 1961, 42-44 & 126-134.
- James Turrell, *Plato's Cave and Light Within, Elephant and Change in Architecture*, 9th Alvar Aalto Symposium, 2003, 144.
- Janet Stewart, *Fashioning Vienna Adolf Loos's Cultural Criticism*, London & New York, Routledge, 2000.
- Jeffrey W. Cody & Nancy S. Steinhardt & Tony Atkin, *Chinese Architecture and the Beaux-Arts, Hawai & Hong Kong: University of Hawai'i Press & Hong Kong University Press*, 2011, 101-139.
- Jo Seung Gu (조승구), *Towards the Sublime Represented in the Contemporary Architecture Based on the Reinterpretation of Kant's Sublime*, Korean Architectural Scholar Association (대한건축학회지회연합회), (Seoul: Korean Architectural Scholar Association v.11 n.01, 2009), 1-10.
- John Rajchman, *Constructions*, Cambridge: The MIT press, 2000, 90-100.

- Jong Gun Lee (이종건), *Problems: Architectural Criticism* (문제들: 건축 비평집), Seoul: Sigongmunhawsa, 2014, 155-174.
- Ju Eun Kim, *Seeking Wisdom in Tradition: The Promise of Future Housing*, University of Maryland: College Park, 2015, 21-44.
- Juhani Pallasmaa, *The Eyes of the Skin*, Hoboken: Wiley Academy, 2005.
- Karsten Harries, *The Ethical Function of Architecture*, Cambridge, The MIT Press, 2000, 137-141.
- Kim Dong Uk (김동욱), *Dosan Seodang: Building the ideal of the Noblemen* (도산 서당: 선비들의 이상향을짓다), Dolbaege Publication, 2012, 211.
- Kim Dong Uk (김동욱), *Korean Architecture-Chinese Architecture-Japanese Architecture* (한국 건축 중국 건축 일본 건축), Paju: Kimyongsa, 2015.
- Kim Su Geun (김수근), *Hymn of gan* (간의 찬가), Seoul: Gonggansa, 2006, 176.
- Kim Su Geun (김수근), *The Good Road is Better When It Is Narrow and the Bad Road is Better when It is Wide* (좋은 길은 좁을수록 좋고 나쁜 길은 넓을수록 좋다), Seoul: Gonggansa, 2006, 256 & 292.
- Kim Su Geun (김수근), *Ultimate Space* (궁극 공간), Seoul: Gonggansa, 2006, 290-295.
- Kim Yong Ok (김용옥), *Beauty and Ugliness* (아름다움과 추함), Seoul: Tongmunguan, 1996, 59-61.
- Kim Yong-ok (김용옥), *How to do Oriental studies* (동양학 어떻게 할 것인가), Tongnamu, Seoul: Tongnamu Books 1997.
- Kim Yong-ok (김용옥), *What is woman* (여자란 무엇인가), Seoul, Tongnamu Books, 1986, 180.
- Laszlo Moholy-Nagy, *The New Vision and Abstract of an Artist*, trans. by Daphne M. Hoffmann, Brewer: Warren & Putnam, 1947, 6-76.

- Le Corbusier (르코르뷔지에), *Une Maison – Un Palais (집-궁전)*, trans by Gwan Seok Lee(Seoul: Yeolhwadang, 2012, 20-32.
- Le Corbusier, *The City of Tomorrow and Its Planning*, Cambridge: The MIT press, 1986, 185-186.
- Mark Swenarton & Tom Avermaete & Dirk van den Heuvel, *Architecture and the Welfare State*, New York: Routledge, 2015.
- Marshall McLuhan, *The Gutenberg Galaxy*, Toronto University of Toronto Press, 1962, 11-13.
- Martin Heidegger, *Building Dwelling Thinking in Poetry, Language, Thought*, trans by Albert Hofstadter, New York: Harper Colophon Books, 1972.
- Martin Heidegger, *The Question Concerning Technology and Other Essays*, New York: Harper and Row, 1977, 14-16.
- Martin Pawley, preface, *Theory and Design in the Second Machine Age*, Hoboken: Wiley-Blackwell, 1990, x.
- Max Risselada, *Raumplan Versus Plan Libre*, Rizzoli, New York, 1989, 6-8.
- Michel Coan, Perspectives on Garden Histories, *Dumbarton Oaks Colloquium Series in the History of Landscape Architecture*, V.21, Washington D.C.: Dumbarton Oaks Research Library and Collection, 2006.
- Neil Leach, “Hans-Georg Gadamer’s The Ontological Foundation of the Occasional and the Decorative”, *Rethinking Architecture: A Reader in Cultural Theory*, London, Routledge, 1997, 133-135.
- Pierre Von Meiss, *Elements of Architecture: From Form to Place*, London: Routledge, 1990, 66.
- Rem Koolhaas, “Strategy of Void”, *S,M,L,XL*, New York: The Monacelli Press, 1995, 603.
- Reyner Banham, *The Architecture of the Well-Tempered Environment*, London: Architectural Press & The University of Chicago press, 1969.
- Richard E. Nisbett, *The Geography of Thought, How Asians and Westerners Think Differently and Why*, The Free Press, New York, 2003.

- Robert Slutzky & Coling Rowe, “Transparency: Literal and Phenomenal”, *perspecta*, Yale School of Architecture, 1962, 41.
- S.E. Rasmussen, “Experiencing Architecture”, trans by Hyung Jong Seon in 2007, Seoul: Yajung Munhawsa, MIT Press, 1962, 50.
- Sang Hae Lee, Continuity and Consistency of the Traditional Courtyard House Plan in Modern Korean Dwellings, Seoul: TDSR Vol. III no, 1991.
- Sang Hyun Lee (이상현), *Humanities in Hanok (인문학 한옥에 살다)*, Seoul: Chearunseo, 2014, 102.
- Sun Woo Choi (최순우), *Standing beside the Murangsujeon Column (무량수전 배흘림 기둥에 기대서서)*, Seoul: Hakgoje, 2008, 20-21 & 89-94.
- Sung Ho Ham (함성호), Reading Old Houses with Philosophy (철학으로 읽는 옛집), Seoul, Paju: Yeolimwon (열림원), 2011, 124.
- Tanajaki Junichiro (타나자끼 준이찌로), *Praise of Sacred Space (음예공간예찬)*, trans by Ji Gyeon Kim (김지견), Seoul: Balon, 1997, 57-68.
- Thierry Paquot, Le Toit (지붕-우주의문턱), 2003, translated by Hye Jung Jeon in 20.10.2014, Seoul, Nulwa, 53.
- Toshiro Inaji, The Garden as Architecture, *Form and Spirit in the Gardens of Japan, China and Korea*, trans by Pamela Virgilio, Tokyo: Sankaido, 1990,.
- Van de Ven, *Space in Architecture: The Evolution of a New Idea in the Theory and History of the Modern Movements*, trans by Jin Won Jung (정진원), Seoul: Gimundang, 1986, 36.
- Vincent Scully, *Architecture: The Nature and the Manmade*, New York: St. Martin’s Press, 1991, 27.
- Vitruvius Pollio, *Vitruvius: the ten books on architecture*. Dover publication (translated by M.H. Morgan, 1960), 5-13.
- Walter Benjamin, “Paris, Capital of the Nineteenth Century”, *Reflections Essays, Aphorisms, Autobiographical Writings*, trans by Edmund Jephcott, New York: Schocken Books, 1978, 155-156.

- Yanagi Muneyosi (야나기 무네요시), *Art of Joseon (조선의 미술)*, trans Yu Sup Go (고유섭), Seoul: Tongmunguan, 1963.
- Yanagi Muneyosi (야나기 무네요시), *Thinking of Joseon (조선을 생각한다)*, trans U Sung Sim (심우성), Seoul: Hakgoje, 1996, 176-183.
- Yim Seock Jae, *The Traditional Space: A Study of Korean Architecture*, Seoul: Ewah Womans University Press, 2005.
- Yoshinobu, *Theory of Architectural Exterior Space*, trans by Jung Dong Kim, Seoul: Gimundang, 1979, 28-49.
- Young Bae Ahn (안영배), *Outer Space of Korean Architecture (한국 건축의 외부 공간)*, Paju, Bojinje, 1978, 337-338.
- Young Bae Ahn (안영배), *Space of Flow and Addition (흐름과 더함의 공간)*, Seoul, Dareunsang, 2008, 290.
- Young Geol Kwon (권영걸), *Creating Space in Korea, China and Japan (한중일의 공간 조영)*, Seoul: Kukje, 2005.
- Young Hun Shin, Sanghe Lee, Dokyung Kim (신영훈, 이상해, 김도경), *100 Years of Our Architecture (우리 건축 100 년)*, Seoul: Hyunamsa, 2005, 204.
- Yu Sup Go (고유섭), *Korean History of Architecture and Art (한국 건축 미술사 초고)*, Seoul: Deawonsa, 1999.
- Yunhe LEE (리원허), *Design Theory of Chinese Classical Architecture (중국 고전 건축의 원리)*, trans by Sanghee LEE, Seoul: Sigongsa, translated in 2000.
- Yve-Alain Bois, “*A Picturesque stroll around Clara-Clara*”, trans by John Shepley, Cambridge The MIT Press, 1984, 32-62.
- Zhangpa (장파), *The Orient, West and Beauty (동양과 서양, 그리고 미학)*, trans by Yu Jung Ha (유중하), Seoul: Paju Pureunsup, 1999.

APPENDICES

APPENDIX A: TURKISH SUMMARY / TÜRKÇE ÖZET

DÜNYANIN İKİ UCUNDA: BATI MİMARLIK GELENEĞİ İLE KARŞILAŞTIRMALI OLARAK GELENEKSEL KORE MİMARLIĞI

Batı mimarisi çeşitli bilgi sistemleri ve disiplinleri tarafından tanımlanır.¹³⁵² Mimarlık antik dönemden başlayarak düşünce ürünü bir eser oldu. Romalı mimar, Vitruvius, mimarların matematik, beşeri bilimler, astronomi ve tıp gibi çeşitli disiplinlerde akıcı olması gerektiğini söyler.¹³⁵³

Doğu'da ise mimari yaklaşım tamamen farklı. İngiliz mimarlık tarihçisi ve eleştirmen Reyner Banham, “Mimarlık, bir binanın pek çok tasarım yolundan biridir. Bugün sadece Batı medeniyeti kültürel hegemonya kurmuş durumda”,¹³⁵⁴ Alfred North Whitehead, ise “Doğu'da Batı felsefesi yoktu ama buna benzer bir şey var,”¹³⁵⁵ demiştir.

¹³⁵² Norberg-Schulz, *Intentions...*, 209-213.

¹³⁵³ Pollio, *The ten...*, 5-13.

¹³⁵⁴ Banham, *The Architecture...*, 265-270.

¹³⁵⁵ Pawley, *Theory...*, x.

Doğu'da ev inşa etmenin derin bilgeliği ve ilkeleri birikti, ancak Batı'daki gibi bağımsız çalışmalara dönüştürülmediler.¹³⁵⁶ Asya'da mimarlık, görgü ve gelenekleri içeren Konfüçyüs politik sisteminin uygulamalarının bir parçasıydı.¹³⁵⁷ Kore'de, iç mimarlık fikir ve teorilerinde iyi düşünülmüş soylular ve keşişler vardı, ancak düşünsel gelenekleri Batı'da olduğu gibi uzmanlaşmış alanlar olarak kurumsallaştırılmadı.¹³⁵⁸

Doğu ve Batı'da, insanların mimarlığa verdiği tepkiler de farklılaştı.¹³⁵⁹ Batı'da mimarlığın değeri büyük ölçüde görsel perspektife dayanıyordu. Özellikle Rönesans ve Barok dönemlerinde “görsellik” eşsiz bir yer edindi ve görsel zevk mimarlığın güzelliğinin özü olarak kabul edildi.¹³⁶⁰

Tabii ki, görsellik sadece bağımsız bir bakış açısı değil, aynı zamanda çeşitli duyuların bir sentezidir. Batı'da görme, insanın çeşitli duyuları arasında en yükseğiydi. 20. yüzyılın ortalarından bu yana, mimarlık anlayışı işitme ve dokunma hissi gibi çeşitli duylara dayanan bir algı olarak algılanmıştır, ancak en azından o zamana kadar Batı mimarisi “görsellik” tarafından algılanmış ve deneyimlenmiştir.¹³⁶¹

Batı kültürü görselliği uzun süredir en önemli anlam olarak görüyor.¹³⁶² Yunanistan'da görmenin gözlerden gelen bir ışık ışını oldu düşünülüyordu. Yunan düşünürleri görmeyi duysal organlardan biri değil, önemli bir bilgi aracı olarak

¹³⁵⁶ Inaji, *The Garden...*, 93.

¹³⁵⁷ Inaji, *The Garden...*, 120-128.

¹³⁵⁸ Inaji, *The Garden...*, 131-136.

¹³⁵⁹ LEE (리원허), *Design...*, 44.

¹³⁶⁰ Kwon (권영걸), *Creating...*, 47.

¹³⁶¹ Pallasmaa, *The Eyes...*, 15-21.

¹³⁶² Pallasmaa, *The Eyes...*, 11.

görüyorlardı. Platon ve Aristoteles de görselin en önemli anlam olduğuna inandı.¹³⁶³ Platon'un mağara benzetmesinde, ideoloji dünyasından gelen ışık olan görme, gerçeğin aracısıdır.¹³⁶⁴ Aristo, insanı rasyonel hayvan olarak tanımlar ve insan yetenekleri arasındaki rasyonelliğin altını çizer.

Mimarlığın mekan yaratma sanatı olduğu sık sık söylenir, ancak mekanın bir mimarlık konusu olarak algılandığı algısı yenidir.¹³⁶⁵ Kökeni itibariyle “yer” mimarlığın tek konusu değildi ve “yer” yaratmak mimarlığın tek sonucu değildi. Heidegger yapıların, heykellerin ve hatta insanların toplanmasının “yer”i belirlediğini söyledi.¹³⁶⁶

Mimarlık aynı zamanda mekan yaratma ve biçimlendirme disiplini olmasına rağmen, bunun özel bir alanı değildir. Uzay, felsefi bir sorgulamanın konusuydu ve insanlık doğada yaşadı, gökyüzüne bakarak ve evreni düşünerek.¹³⁶⁷ O, ilkel nitelikteki korkuyu hafifletmek ve psikolojik istikrar elde etmek için “yer” yaratmanın bir yoluydu, ancak evrenin algısı Batı ve Doğu'da çok farklı bir bilişsel sistem geliştirdi. M.Ö. 5. yüzyılda Pisagor geometrisi, matematiksel ve geometrik kurallara göre düzen ve uyum olan evrenin özünü açıkladı.¹³⁶⁸ Ardından, Aristoteles, Platon'un mekanın *topos* kavramında bir madde olduğu önerisini eleştirdi ve “topos”un biçim veya madde içermeyen bir şey olarak tanımladı.¹³⁶⁹

¹³⁶³ Pallasmaa, *The Eyes...*, 18.

¹³⁶⁴ Turrell, *Plato's...*, 144.

¹³⁶⁵ Norberg-Schulz, *Intentions...*, 95.

¹³⁶⁶ Heidegger, *Building...*, 152-157.

¹³⁶⁷ Heidegger, *Building...*, 44.

¹³⁶⁸ Norberg-Schulz, *Intentions...*, 90.

¹³⁶⁹ Van de Ven, *Space in Architecture: The Evolution of a New Idea in the Theory and History of the Modern Movements*, trans by Jin Won Jung (정진원), Seoul: Gimundang, 1986, 36.

Dış dünya üzerine düşünerek değişen dünyaya bir düzen vermek Batı ile Doğu arasında farklı değil, ancak yol farklıdır. Platon, evreni sanal ve kavramsal bir dünya yaratarak matematiksel ve geometrik düzende bir varlık olarak düşündü.¹³⁷⁰ Ancak Doğu, bu dualist yaklaşımı benimsemedi.¹³⁷¹ O gerçek bir nesnel boşluğa sahip değildir, dolayısıyla boşluğu veya büyüklüğü yoktur. Evrenin düzeni, görme ve mekan tarafından düzenlenebilecek bir şey değildir; tanımlanabilecek bir nesne de değildir. Bu boş olduğu anlamına gelir ve bağıntı, akışkanlık ve görecelilik anlamına gelir. Evren, ideoloji ve görüngüler arasında hiçbir ayrımın olmadığı bir dünyadır; öznel anestetik yargılaması imkansızdır ve gerçeklik ile mekan bağımsız öğeler değildir. O, dalgalar, parçacıklar, mekan ve gözlemcinin birbirinden ayrılamaz olduğunun anlaşıldığı modern fiziğin kuantum teorisinde olduğu gibidir. Taoculuk, Doğu'nun mekanı üzerinde çok fazla etkiye sahiptir ve doğal görüngüler maddi ve maddi olmayanlar arasındaki etkileşimin sonucudur.¹³⁷² Yin ve Yang'da, cennetle yeryüzü arasında uzayın akışı ve evrenin ve doğanın düzeni, ilkeler olarak sabitlenmemiştir, onlar değişken ve akıcıdır. Yin ve Yang arasındaki ilişki gibi, iki unsur ikisinin de içinde hem var olduğu hem de olmadığı karşılıklı ilişki içindedir.¹³⁷³ Bu nedenle, tüm mekan zaman içinde üretkendir. Zaman ve mekan, Yin ve Yang gibi, “bir” olarak kabul edilir. Batı mekansal olarak zamanı icad etti ama Doğu uzay-zamanını bilgece kavradı. Bu nedenle, dış mekan biçiminin mutlaklığını tanımıyor. Mekan yaratıldı, ancak zamanla yıkıldı ve değiştirildi.

Batı mimarisi uzay içeren sağlam bir küttedir, ancak Kore mimarisi bir madang (avlu) ve binanın birleşimiyle bir “yer” yaratır.¹³⁷⁴ Bu nedenle, Batı mimarisinin merkezi binadır, ancak merkezdeki boş alandır ve bina Kore mimarisinde madang'ı

¹³⁷⁰ Norberg-Schulz, *Intentions...*, 90-91.

¹³⁷¹ Nisbett, *The Geography...*, 69.

¹³⁷² Kim(김용옥), *How to...*, 108.

¹³⁷³ Inaji, *The Garden...*, 66 & 134.

¹³⁷⁴ Kwon (권영걸), *Creating...*, 150-151

çevreler.¹³⁷⁵ Bina merkezde boştur ve Kore mimarisinde bina fon olarak durmaktadır. Madang ve bina tarafından yaratılan katmanlı alan Doğu'da bir mimari prototiptir.¹³⁷⁶ Örneğin, Çin mimarisinde, bir kapı, bir madang ve bir binadan oluşan mimari birim, bir “mundang” yapı birimi olarak sayılır (문당제도).¹³⁷⁷ Bu tür bir yapısal alan birimi, Batı mimarisinin duvarlarla kaplı alanlarının veya kapalı hacimlerinin aksinedir. Kapı, madang ve bina Çin mimarisinde bir alan birimidir.¹³⁷⁸ Bir bina varsa, kapı kesinlikle inşa edilir ve kapı bina tarafından takip edilir. Kapı, binanın epidermisi veya temsilci biçiminin bir şeklidir ve binanın işlevi olan içeriktir. Bir bina ve bir kapı arasında, madang vardır.¹³⁷⁹ İçeriği dışarıdan ayıran ve içeriği diğer mimarilerdeki yüzeylerden izole eden bir mimariyi bulmak zor.

Aynı mimari prototip olmasına rağmen, Kore mimarisi Çin mimarisinden farklıdır.¹³⁸⁰ Kore mimarisinin özelliği yarı açık bir alandır ve her iki taraf veya köşe çoğu zaman açıktır.¹³⁸¹ Kore mimarisinin bir özelliği ne tamamen kapalı ne de tamamen açık olmasıdır.¹³⁸² Hanok'un (ev) mekansal özü, merkezdeki madang ile çeşitli alanların karşılıklı bütünleşmesidir.¹³⁸³ Kore'de, evler inşa edilirken madang merkezdedir. Bina inşa edildikten sonra madang yerleştirmek yerine, bina madangın çevresinde planlanmıştır. Kore mimarisi, bir bina ve çatı hattını

¹³⁷⁵ Inaji, The Garden..., 150-153.

¹³⁷⁶ Inaji, The Garden..., 158.

¹³⁷⁷ LEE (리원허), Design..., 88.

¹³⁷⁸ Inaji, The Garden..., 158.

¹³⁷⁹ LEE (리원허), Design..., 89.

¹³⁸⁰ Inaji, The Garden..., 145-149.

¹³⁸¹ Kwon (권영걸), Creating..., 151

¹³⁸² Kwon (권영걸), Creating..., 149

¹³⁸³ Kwon (권영걸), Creating..., 230

yerleştirmeye karar vermek için, estetik ve oran bütünlüğünü madang ve bina ile birlikte ele alır.¹³⁸⁴ Hanok içinde, madang aracılığıyla, aynı zamanda hem içerde hem dışarda deneyim konusunun sembolik konumuna sahip olmak mümkündür. Kore mimarisinde, madang yaşamın merkezi alanıdır.¹³⁸⁵ Batı mimarisinde, arsa inşaat içindir, oysa Kore mimarisinde en önemli mimari unsurdur.

Batı mimarisinin modern çağdan beri biçime değil mekana odaklandığı bilinen bir gerçektir. Mimari teorisyenler bunu Gestalt teorisiyle açıkladılar.¹³⁸⁶ Geçmişte, mimari yekpare kütlelere ve duvarlara, ardından modern zamanların mimarisinde kütleler ve duvarlarla çevrili mekana odaklandı.¹³⁸⁷ Doluluk ve boşluk ilişkisi tersine çevrildi. Bu, Doğu'daki Yin ve Yang'a benzetilerek açıklanabilir. Lao Tzu'nun kilden yapılmış olan "kap kullanışlılığını boşluğunda bulur" fikri gibi.¹³⁸⁸ Ancak, Doğu Asya'daki Yin ve Yang teorisi ve Batı'daki Gestalt'ın mekansal algısı farklıdır. Önemli fark, sınırın doğasında yatmaktadır. Yin ve Yang teorisi, doluluk ve boşluk gibi bir karşıtlık değil, ancak her zaman uyum içinde olmak gibi bir niyeti bulunur.¹³⁸⁹ Yang, Yin'i doğurur ve Yin, tekrar Yang'ı doğurur.¹³⁹⁰ Yin ve Yang, bir varlık değil bir ilişkidir.¹³⁹¹ Bu nedenle, Yin ve Yang arasındaki sınır akışkandır, yani Gestalt teorisinde olduğu gibi arka plan, şekil, negatif ve pozitif gibi algısal bir biçim olarak algılanamaz.¹³⁹² Gestalt teorisinde arkaplan ve

¹³⁸⁴ Kwon (권영걸), *Creating...*, 174

¹³⁸⁵ Inaji, *The Garden...*, 150.

¹³⁸⁶ Kwon (권영걸), *Creating...*, 55.

¹³⁸⁷ Norberg-Schulz, *Intentions...*, 45, 100-106.

¹³⁸⁸ van de van, *Space...*, 16-18.

¹³⁸⁹ Kwon (권영걸), *Creating...*, 31.

¹³⁹⁰ Kwon (권영걸), *Creating...*, 31-33.

¹³⁹¹ Nisbett, *The Geography...*, 13.

¹³⁹² Heidegger, *Building...*, 83.

biçimin sınırları sabittir, ancak Yin ve Yang'ın sınırları belirsiz ve sabit değildir.¹³⁹³ Yin ve Yang teorisinin Taegeuk figürü, sınırın akışkan karakterini ifade eden sembolik bir şemadır.¹³⁹⁴ Bu nedenle, Batı Gestalt teorisine dayanan mekan kavramını Yin ve Yang teorisi ile açıklamak zor.

Batı mimarisinde, eksen mekanın derinliğin yönünü oluşturan önemli bir unsurdur.¹³⁹⁵ Roma forumundan Barok dönem mimarisine, kent kompozisyonundan Beaux-arts kompozisyonuna kadar mekanı oluşturan ilkedir.¹³⁹⁶ Mimarlık deneyiminin, onu inşa eden kişinin aklında gerçekleşen sürece benzer olduğunu varsayarak, Batı mimarisinin kompozisyonuna uygulanan eksen izleyicinin görsel deneyimiyle tutarlıdır.¹³⁹⁷ Roma forumunda, eksenin tepesine, görüş eksenini boyunca uzamsal bir manzara oluşturan bir tapınak yerleştirilmiştir.¹³⁹⁸ Gotik katedralin içinde, orta eksen boyunca uzanan manzara, içinde gerçekleşen dini törenin doğrultusuyla örtüşüyor.¹³⁹⁹ Bu nedenle, Batı mimarisinin eksenini görsel bir doğrultuya sahiptir ve deneyimin konusu eksen boyunca hareket eder.¹⁴⁰⁰ Yerleştirme için gereken inşaat eksenleri genellikle görsel eksenlerle çakışır. Eksenleri kullanan simetrik konfigürasyon, Kore mimarisine içgüdüsel bir insan tertibiyle de uygulanır.¹⁴⁰¹ Bununla birlikte, Kore mimarisinde, görsel eksen hiçbir zaman baskın bir yapısal ilke veya merkezi

¹³⁹³ Yu (유현준), *Modernism...*, 32.

¹³⁹⁴ Kwon (권영걸), *Creating...*, 63-64.

¹³⁹⁵ Norberg-Schulz, *Intentions...*, 143-154.

¹³⁹⁶ Norberg-Schulz, *Intentions...*, 143.

¹³⁹⁷ Norberg-Schulz, *Intentions...*, 94 & 146.

¹³⁹⁸ Marconi, *The Oxford...*, 204-213.

¹³⁹⁹ Norberg-Schulz, *Intentions...*, 139-149.

¹⁴⁰⁰ Norberg-Schulz, *Intentions...*, 135 & 154.

¹⁴⁰¹ Kwon (권영걸), *Creating...*, 66-67.

düzenleme ilkesi olarak geliştirilmemiştir.¹⁴⁰² Bunun nedeni, mekan derinliğinin “kyeo” (katman) ile verilmesi; doğrusallık ve mekan derinliği vermek için görüş eksenine ihtiyaç duyulmamasıdır.¹⁴⁰³ Saraylar, “seowon” (ders odası) ve tapınaklar örneğinde, yerleştirme eksenini kullanılır, ancak Batı mimarisinde olduğu gibi bir merkezi eksen yerine birçok eksen vardır.¹⁴⁰⁴ Geleneksel mimari uzmanları, Kore mimarisindeki eksen değişimi veya birkaç eksen oluşunu merkezi eksen, paralel eksen, çapraz eksen, eğri eksen ve düz eksen olarak tanımlamışlardır.¹⁴⁰⁵ Bununla birlikte, bu tür bir sınıflandırma sadece eksen tipine odaklanır ve Kore mimarisinin asıl yapımlar ilkelere ile çok az ilişkisi olduğu görülmektedir.

Kore mimarisi, tüm düzende belirli bir eksen olsa bile güçlü bir görsel eksen oluşturur.¹⁴⁰⁶ Eksen düzeni vurgulanmış olsa bile, eksen üzerinde bir bina vardır, böylece cephedeki binanın altından geçmesi veya arka binaya girmek için yana doğru dönmesi gerekir. Giriş merdivenleri genellikle doğrudan ve eksen oluşturmak için bir araç olarak kullanılır.¹⁴⁰⁷ Kore mimarisinin giriş merdivenleri çoğunlukla çapraz olması nedeniyle güçlü bir görsel doğrultu oluşturur.¹⁴⁰⁸ Kore mimarisinin eksenini görsel bir eksen yerine zihinde tanımlar.¹⁴⁰⁹ Budist tapınaklarında, birkaç kapıyı birbirine bağlayan giriş eksenini doğrusaldır, ancak görsel bir eksen yerine psikolojik bir eksen oluşturur.¹⁴¹⁰ Kore mimarisinin belirli

¹⁴⁰² Kwon (권영걸), *Creating...*, 145.

¹⁴⁰³ Kwon (권영걸), *Creating...*, 230.

¹⁴⁰⁴ Kwon (권영걸), *Creating...*, 143-159.

¹⁴⁰⁵ Ahn (안영배), *Outer...*, 337-338.

¹⁴⁰⁶ Kwon (권영걸), *Creating...*,150-151.

¹⁴⁰⁷ Kwon (권영걸), *Creating...*,150.

¹⁴⁰⁸ Kwon (권영걸), *Creating...*,229.

¹⁴⁰⁹ Kwon (권영걸), *Creating...*,64-68.

¹⁴¹⁰ Go (고유섭), *Korean...*, 162-163.

bir yöne sahip olmasına rağmen ekseninin değişmesinin nedeni, görsel eksen yerine zihin ekseninin işliyor olmasıdır. Batı mimarisinin eksenini görselken, Doğu mimarisinin eksenini kavrayış konusudur.¹⁴¹¹ Doğu'da eksen terimi genellikle bir sütun gibi olmayan hayali eksenleri tanımlamak için kullanılır. Moğol çadırının merkezinde, dünyanın eksenini olarak adlandırılan bir kazık ve gökyüzünü destekleyen direkler ve yaşam ile bilgiyi yeryüzü ve gökyüzünü ile birbirine bağlayan ağaçlar bulunur, bunlar temel eksen sembolleridir.¹⁴¹² Görsel eksen yataydır, ancak bu eksenler dikeydir. Bu nedenle, Kore mimarisini görüş ekseninde açıklamak anlamsız görünür.¹⁴¹³ Yazarlar geleneksel Kore mimarisinin türünü sınıflandırmak için, giriş eksenini ve kompozisyon eksenini ayırmıştır.¹⁴¹⁴ Ayrıca, Kore tapınaklarının düzeni, esas tür ve paralel esas tür olarak sınıflandırılır. Bu esas eksen türleri kendi fikirlerini yansıtır.¹⁴¹⁵ Bu tür Kore mimarisi algısı, eksenin Kore mimarisindeki rolünü aşırı vurgulamaktadır. Aslında, Kore mimarisinde eksen o kadar önemli değildir.¹⁴¹⁶ Bu, Kore mimarisinin gerçek bir tasarım ilkesi değildir, bu yapıların modern bir yorum olması muhtemeldir.¹⁴¹⁷

Doğudaki mimari neden Batı'daki gibi bağımsız bir çalışma alanı içinde gelişmedi? Sebep Doğu ve Batı'nın eşsiz ve farklı düşünce sistemlerinde bulunabilir. Bu Doğu monizmi ve Batı dualizmidir. Batı'da, antik Yunan zamanlarından beri, dünyadaki şeyleri tanımada özne ve nesne, görüngü ve öz, maddi ve ruhu ayırt etme eğilimi vardı.¹⁴¹⁸ Buna dualist yaklaşım denir.¹⁴¹⁹ Bağımsız bir varlık olarak insan

¹⁴¹¹ Marconi, *The Oxford...*, 302, 344, 666.

¹⁴¹² Paquot, *Le Toit...*, 53.

¹⁴¹³ Kwon (권영걸), *Creating...*, 151.

¹⁴¹⁴ Kwon (권영걸), *Creating...*, 150.

¹⁴¹⁵ Ahn (안영배), *Outer Space...*, 338.

¹⁴¹⁶ Kwon (권영걸), *Creating...*, 93.

¹⁴¹⁷ Kwon (권영걸), *Creating...*, 18-19.

¹⁴¹⁸ Nisbett, *The Geography...*, 69.

nesneleri gözlemler ve nesnelere saklı belirli ilkeleri keşfeder. Yunanlılar, kavramsal düşünceyle nesnelere içsel olan kuralları ve düzenleri ortaya çıkarmaya çalıştı ve matematiğe ve geometriye dayanan görsel bir biçimde ifade etti.¹⁴²⁰ Nitekim, görüngüsel dünya sanaldır ve gerçek olan idealdir.

Dualizmin bakış açısında, şeylerin özü, duyuşal özelliklerden bağımsız olarak ideal bir düzen olarak kabul edildi.¹⁴²¹ Batıda sanat kavramı dualizmin temelinde gelişmiştir. Batı sanatı, uzun süredir geometri, oran, simetri, bütünü uyumu ve sanatın birliği gibi değişmez bir estetik ilkeyi temsil etti.¹⁴²² Batı'da, sanatın türü, estetik özü ifade etme aracına göre ayırt edilir.¹⁴²³ Müzik bir sahne sanatı, resim ve heykel görsel sanattır. Mimari, üç boyutlu bir alanı kapladığı ve işlevlerini yerine getirdiği için resim veya heykelden ayırt edilmesiyle görsel bir sanat olarak sınıflandırılır.¹⁴²⁴

Doğu'da ideal özün temsili olan kavramsal bir dünya olarak sanat yoktur.¹⁴²⁵ O görüngüler ve ve gerçekliğin, madde ve ruhun ayrılığını tanımıyor. Doğu ideolojisine, Taoçuluk ya da Budizm olmasına bakılmaksızın, monizm hakimdir.¹⁴²⁶ Olayların ve gerçekliğin, madde ve ruhun ayrılığı tanınmıyor. Budizm'de madde fikir; fikir de maddedir.¹⁴²⁷ Monizm görüşüne göre, sonuç

¹⁴¹⁹ Nisbett, *The Geography...*, 35.

¹⁴²⁰ Norberg-Schulz, *Intentions...*, 146.

¹⁴²¹ Kim(김용옥), *How to...*, 267.

¹⁴²² Zhangpa (장파), *The Orient...*, 92.

¹⁴²³ Zhangpa (장파), *The Orient...*, 94-97.

¹⁴²⁴ Norberg-Schulz, *Intentions...*, 145-146.

¹⁴²⁵ Zhangpa (장파), *The Orient...*, 100.

¹⁴²⁶ Kim(김용옥), *How to...*, 267-269.

¹⁴²⁷ LEE (리원허), *Design...*, 137.

bir.¹⁴²⁸ Bu, akışkan, çeşitli ve düzenli olan evrenin prensibidir.¹⁴²⁹ Evrensel doğanın düzenini biçimlendirme örneğidir. Doğu'da, örnek mutlak değil, zamana ve mekâna göre görecelidir.¹⁴³⁰

Fizik ve ahlak arasında ayırım yapılmamalıdır. Doğu'da, tüm organlar bir organizma olarak kabul edildiğinden ve ayrılan organların anlamlarını yitirdiği düşünüldüğü için anatomi geliştirilemedi.¹⁴³¹ Çinli Filozof Zhang Pa, Doğu epistemolojisinin özelliklerini statik işlevle açıkladı.¹⁴³² Batı sanatı, estetik özü ifade eden duyu aracılığına göre türlere ayrılır, ancak Çin sanatında tür duyusal ortama göre ayrılmaz. Doğu'da şiir, resim ve edebiyat bir arada ifade edilir.¹⁴³³ Doğu'da resim, gösterildiği gibi ifade edilme, ancak zihin ve ruh ifadeleri ile sanatın özü olan zihin ve beden birliğini içerir.¹⁴³⁴ Şiir, edebiyat ve resim oluşturma yeteneğine sahip olmak, iç kişiliğin ifadesidir ve bir gelişme yoludur; Batı sanatında olduğu gibi dışsal görsel temsil değil.¹⁴³⁵ Mimarlığın anlamı, mimarlığın herhangi bir estetik görsel temsili değildir, mimarlığın anlamı mimarlık insan eylemiyle birleştiği zaman bir deneyim olarak ortaya çıkmıştır.¹⁴³⁶ Bu şekilde, Kore mimarisi ne bir sanat tarzı ne de görsel sanattır.

¹⁴²⁸ Kim(김용옥), *How to...*, 272.

¹⁴²⁹ Kim(김용옥), *How to...*, 271.

¹⁴³⁰ Kwon (권영걸), *Creating...*, 32-34.

¹⁴³¹ Zhangpa (장파), *The Orient...*, 57.

¹⁴³² Zhangpa (장파), *The Orient...*, 58-59.

¹⁴³³ Zhangpa (장파), *The Orient...*, 92-93.

¹⁴³⁴ Zhangpa (장파), *The Orient...*, 100.

¹⁴³⁵ Zhangpa (장파), *The Orient...*, 105-111.

¹⁴³⁶ Kwon (권영걸), *Creating...*, 56-60.

Eski Yunan zamanlarından beri doğa bir güzellik kaynağı olarak kabul edilmiştir.¹⁴³⁷ Tabii ki burada doğa idealleşmiş doğayı belirtir. Yunanlılar doğayı matematik ve geometri ile açıkladılar ve doğa tüm güzelliğin kaynağıydı.¹⁴³⁸ Batı, doğayı insanın duyarlılığı ile taklit etmek için, resim ve şiir gibi ideal biçimiyle yeniden üretmeyi biliyordu.¹⁴³⁹ Bununla birlikte, mimari aslında bir tekrar üretme sanatı olmadığından doğanın taklit edilmesinde temel bir sınırlama vardır.¹⁴⁴⁰ Rönesans'tan bu yana mimarlık görsel sanat ve bilim dünyasına girdi ve Batı mimarisinin en önemli teorik teması bu taklit sorununu çözmek içindi.¹⁴⁴¹ 15. yüzyıldan 18. yüzyıla kadar birçok mimarlık teorisyeni mimarlığın kökenini ilkel doğadan çıkartarak açıklamaya çalıştı.¹⁴⁴² Mimarlığın doğayı bir orantı ve güzellik kaynağı olarak taklit ettiği fikrinin net olarak ilk teorileştirilmesi, Rönesans mimarı Alberti tarafından yapıldı¹⁴⁴³ Ona göre, doğadaki bütün görüngüler parça ve bütünden oluşan coincinnitas (birleşiklik) kanunlarına uyar. Parça ve bütün arasındaki uyum, doğanın mutlak yasası ve temel ilkeler olan kare ve dairenin oranları gibi güzelliğin kaynağıdır.¹⁴⁴⁴ Doğa tüm sanatların bir modeli olduğundan, mimarlık onu taklit etmelidir. Mimarlığın amacı, onur, cazibe ve otoritedir.

Sanatın rolü, doğanın duyuşal deneyimini uyandırmaktır. Buradaki doğa, dış bir nesne veya görüngü olarak değil, insan deneyiminin niteliğini içerir.¹⁴⁴⁵ Doğu

¹⁴³⁷ Zhangpa (장파), *The Orient...*, 370-373.

¹⁴³⁸ Norberg-Schulz, *Intentions...*, 91-92.

¹⁴³⁹ Zhangpa (장파), *The Orient...*, 373.

¹⁴⁴⁰ Norberg-Schulz, *Intentions...*, 168.

¹⁴⁴¹ Norberg-Schulz, *Intentions...*, 188.

¹⁴⁴² Norberg-Schulz, *Intentions...*, 70-77.

¹⁴⁴³ LEE (리원허), *Design...*, 48.

¹⁴⁴⁴ LEE (리원허), *Design...*, 47-49.

¹⁴⁴⁵ Zhangpa (장파), *The Orient...*, 85-90.

mimarisi aynı zamanda doğaya benzemenin en idealini yaptı.¹⁴⁴⁶ Ancak, Doğu doğa kavramında mutlak bir güzellik yoktur.¹⁴⁴⁷ Güzellik bir şeyle ilgili olduğunda güzeldir; nesnelere değişir ve biçimler zamanla kaybolur.¹⁴⁴⁸ Batı mimarisinin temsil ettiği doğa değişmez bir ilkedir, ancak Kore mimarisinin ona benzeyen yerleşimi değişir ve sabit değildir.¹⁴⁴⁹ Geçicidir, daima hareket eder ve eksiktir ve görselleştirmesi zordur. Bu nedenle, doğayı idealize edilmiş biçimde yakalamak ve temsil etmek mümkün değildir.¹⁴⁵⁰ İnsanların aynı zamanda doğal dolaşım sisteminin bir parçası olduğu için insanların doğayı taklit etmesi de zordur. Alternatif doğaya aittir.¹⁴⁵¹ Doğayı andıracak irade sonunda doğayla birleşir.¹⁴⁵² İnsan burada merkezi değildir. İnsanlar ve doğa ayırt edilemez. Doğada farklılaşan hiçbir özne ya da nesne yoktur; bütün varlıklar özne olabilir.¹⁴⁵³

18. yüzyıldaki romantikler doğayı, Doğu düşüncesinin etkisiyle organik bir bütün kavramı olarak anladılar.¹⁴⁵⁴ Gotik katedralin güzelliği, insanın ifade içgüdüsünün doğal sonucudur. Sanat, doğanın yolunu izlemeli ve gücüyle canlılık kazanmalıdır.

19. yüzyılda İngiliz Gotik Revivalist Ruskin, aynı zamanda mimarlığı da bu bağlamda ikinci doğa olarak anladı. Doğanın Tanrı'yı yarattığı ve güzelliğin

¹⁴⁴⁶ Kwon (권영걸), *Creating...*, 142-143.

¹⁴⁴⁷ Kwon (권영걸), *Creating...*, 138-143.

¹⁴⁴⁸ Kwon (권영걸), *Creating...*, 91-93.

¹⁴⁴⁹ Kwon (권영걸), *Creating...*, 93.

¹⁴⁵⁰ Kwon (권영걸), *Creating...*, 113-118.

¹⁴⁵¹ Kwon (권영걸), *Creating...*, 141.

¹⁴⁵² Kwon (권영걸), *Creating...*, 142-143.

¹⁴⁵³ Kwon (권영걸), *Creating...*, 149-151.

¹⁴⁵⁴ Yu (유현준), *Modernism...*, 78-80.

doğaya dayandığı inancına dayanarak Gotik mimariyi bir doğa biçimi, ikinci bir doğa olarak gördü.¹⁴⁵⁵

Ruskin mimarlığı, Kore mimarisinin doğallığından biraz farklı olan ikinci doğa olarak anladı.¹⁴⁵⁶ İkinci bir doğa olarak, mimarlık doğaya benzer, ancak doğadan ayırt edilir. Doğa insandan ayrılmış bir konudur; doğa ve insan, ikinci doğa yani sanat aracılığıyla estetik olarak iletişim kurarak yabancılaşmanın üstesinden gelir. Öte yandan, Kore mimarisinin doğallığı, insanın doğanın bir parçası olduğu ikinci doğa anlamına gelmez.¹⁴⁵⁷ Batı, özellikle Rönesans'tan sonra, nesneleştirilen doğayı analiz ederek doğanın ilkelerini taklit eder, ancak Kore, doğanın döngüsü ilkesine katılmaya çalışır.¹⁴⁵⁸ Taoizm'in ana fikri, doğanın birliğinin, doğa ve insan birliği olduğu, insan doğasının arayışı ve doğaya benzerlik olduğudur.¹⁴⁵⁹ Doğaya benzemek doğanın ilke ve akışlarına uyum göstermek, herhangi bir görsel biçim veya ilkeyi taklit etmemektir.

Batı mimarisi, mimari bireyselliği kontrol etmek için teori ve ilkeler geliştirdi. Modern toplumda paylaşılan mimarlık normları kaybolduktan sonra bireysellik egemen oldu. Şimdi yeni bir mimari düzen gerekli. Soruna Kore geleneksel mimarisinin değeri ile yanıt vermek mümkün olmaz mı? Mimarlık Tao ve Konfüçyüsçülük yardımıyla, çağdaş mimaride faydalı olan ilişkiler dilini normalleştirebilir mi? Mimari niyeti, doğa ve çevre ile ilişki kurmak için malzeme ve “evi” doğru kullanımıyla ortaya çıkarıyor. Bu sadece ilişkilerin kurumsallaşması ile mümkündür. Kore, pasif modernleşme sürecinden geçerken, geleneğin unutulduğunu düşünmeden geçmişe bakıyor. Mevcudiyet geçmiş olmadan var olmaz. Küreselleşme sürecinde, gelenek veya bölge konusu çoktan

¹⁴⁵⁵ Forty, *Words...*, 230-234.

¹⁴⁵⁶ Forty, *Words...*, 234.

¹⁴⁵⁷ Forty, *Words...*, 233-234.

¹⁴⁵⁸ Kwon (권영걸), *Creating...*, 162.

¹⁴⁵⁹ Inaji, *The Garden...*, 123-127.

kök saldı ve geri dönecek gelenek olmadığı iddiası yalnızca yarı doğru bir ifade. Bu bir gelenek oluşturuyor ve kimlik konusu ile doğrudan bağlantılı olarak modernliği bölgeye yerleştiriyor. Kore mimarisinin evrenselliğin bir parçası olması ve dünya mimarlık söylemin alanına girerek dünya mimarisinde bir değişim ve katkı yapması gerekmektedir. Küreselleşme eğilimine rağmen, küresel mimarlığın tamamen homojenize edilmesi zor. Mimari toprakta inşa edildiğine göre, her bölgenin mimari kültürü ve geleneği, evrensel teknoloji tamamen istila edinceye, yaşam tarzı doğanın, topografyanın ve iklimin bir sorun olmadığı noktada birleşinceye kadar devam edecektir. Kore mimarisinin kimliği üzerine uygulama ve araştırmalar devam etmelidir.



APPENDIX B: TEZ İZİN FORMU/THESES PERMISSION FORM

ENSTİTÜ / INSTITUTE

Fen Bilimleri Enstitüsü / Graduate School of Natural and Applied Sciences

Sosyal Bilimler Enstitüsü / Graduate School of Social Sciences

Uygulamalı Matematik Enstitüsü / Graduate School of Applied Mathematics

Enformatik Enstitüsü / Graduate School of Informatics

Deniz Bilimleri Enstitüsü / Graduate School of Marine Sciences

YAZARIN / AUTHOR

Soyadı / Surname : JUNG

Adı / Name : Ji Suk

Bölümü / Department : Mimarlık Tarihi

TEZİN ADI / TITLE OF THE THESIS (İngilizce / English) : ARCHITECTURE AT THE ENDS OF THE WORLD: KOREAN AND WESTERN ARCHITECTURAL TRADITIONS IN COMPARISON

TEZİN TÜRÜ / DEGREE: Yüksek Lisans / Master

Doktora / PhD

1. Tezin tamamı dünya çapında erişime açılacaktır. / Release the entire work immediately for access worldwide.
2. Tez iki yıl süreyle erişime kapalı olacaktır. / Secure the entire work for patent and/or proprietary purposes for a period of two year. *
3. Tez altı ay süreyle erişime kapalı olacaktır. / Secure the entire work for period of six months. *

* Enstitü Yönetim Kurulu Kararının basılı kopyası tezle birlikte kütüphaneye teslim edilecektir.

A copy of the Decision of the Institute Administrative Committee will be delivered to the library together with the printed thesis.

Yazarın imzası / Signature

Tarih / Date