

~~HIROSHI NAITO~~  
A STUDY OF THE SEA-FOLK MUSEUM  
AND  
THE MAKINO MUSEUM OF PLANTS AND PEOPLE

by

YOKO KANAI

A.A., Waseda University College of Technology  
Tokyo, Japan, 1991

A.A., Musashino Art University  
Tokyo, Japan, 1988

-----  
A THESIS

Submitted in partial fulfillment of the  
Requirements for the degree

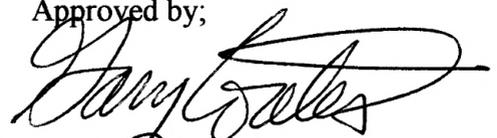
MASTER OF ARCHITECTURE

Department of Architecture  
College of Architecture, Planning and Design

KANSAS STATE UNIVERSITY  
Manhattan, Kansas

2002

Approved by;



Major Professor  
Prof. Gary Coates

LD  
2668  
.T4  
ARCH  
2002  
K36  
C.2

## **ABSTRACT**

This thesis is a study of the Japanese architect, Hiroshi Naito, and his architecture. Naito is recognized as an architect who demonstrates an awareness of Japanese culture, tradition, regional contexts, and the human condition while expressing a renewed Japanese sense of place in contemporary architecture. Naito's architecture has a distinctive atmosphere that makes people feel a deep sense of intimacy and identity. Such qualities are important to building users but often missing in modern Japanese architecture.

This study explores what makes people feel a sense of place and intimacy in Naito's works and why his architecture is different from other Japanese modern architecture through the study of his: 1) background; 2) two major projects, the Sea-Folk Museum and the Makino Museum of Plants and People; and 3) six design principles. The six design principles are based on an interview with the architect, phenomenological interpretations of his buildings based on site observations, and articles written by Naito. Since the significance of his architecture is poorly understood by visual images, the description to this author's site visit to his major projects, the Sea-Folk Museum and the Makino Museum of Plants and People, play an important role in this study. Additionally,

a theory of Critical Regionalism as discussed by Alexander Tzonis, Liane Lefaivre, and Kenneth Frampton is examined to inquire into the relationship between regionalism in modern architecture and a sense of intimacy in Naito's buildings.

This study is not limited to an analysis of the form and space of Naito's architecture; it speaks also, if only by contrast, to an undesirable phenomenon of recent architecture, placelessness and culturelessness. Naito's works reveal the importance of regionalism and the human senses to avoid these undesirable phenomena and create an architecture with a full of sense of place. In addition, one of Naito's principles, the mediation between traditional wisdom and modern technology, is examined in the final chapter as an increasingly important means by which Naito is currently striving to create a distinctively Japanese sense of place through his architecture.

## TABLE OF CONTENTS

<b>LIST OF ILLUSTRATIONS</b>	iv
<b>SOURCES OF ILLUSTRATIONS</b>	viii
<b>ACKNOWLEDGEMENTS</b>	ix
<b><u>INTRODUCTION</u></b>	1
Method of Study	6
Structure of This Thesis	7
<b><u>CHAPTER 1</u></b>	
<b>HIROSHI NAITO: BACKGROUND AND INFLUENCES</b>	10
Professor Yoshizaka at Waseda University	11
Practicing in Spain	14
Realization of Space, Light and Shadow in Japanese Architecture	16
Starting His Own Career	18
Transition from the Sea-Folk Museum to the Makino Museum of Plants and People	26
<b><u>CHAPTER 2</u></b>	
<b>CASE STUDIES: THE SEA-FOLK MUSEUM AND THE MAKINO MUSEUM OF PLANTS AND PEOPLE</b>	28
<b>The Sea-Folk Museum: Toward Architecture as “Protoform”</b>	30
Background	30
Design Process: Repository 1985-1989	33
Design Process: Exhibition Hall 1988-1992	38
Silent Architecture: Notes from This Author’s Site Visit	41
<b>The Makino Museum of Plants and People: Architecture within Nature</b>	49
Background	49

Process: 1995-1999	53
Architecture within Nature: Notes from This Author's site visit	58
<b><u>CHAPTER3</u></b>	
<b>SIX DESIGN PRINCIPLES OF HIROSHI NAITO</b>	64
<b>1.) Response to Landscape</b>	65
Topographical Contextuality	66
Integration with Nature	68
<b>2.) Response to Climate</b>	71
Climate as a Major Determination of Built Form and Materials	73
Use of Rain as a Way to Respond to Climate	74
The Idea of Open Space	77
<b>3.) The Architectural Protoform</b>	78
<b>4.) Tectonics and the Human Body</b>	81
<b>5.) Architecture for Experience and Sensory Perception</b>	85
Sense of Materials	86
Use of Water and Rain	87
Light and Shadow	88
<b>6.) Mediation between Modern Technology and Traditional Wisdom</b>	91
<b><u>CHAPTER4</u></b>	
<b>REGIONALISM-THE CASE OF JAPAN</b>	94
<b>Modernism and Regionalism-The Case of Japan after 1868</b>	96
International Style-1920s	97
Kenzo Tange- In between Nationalism and Regionalism	98
-Regionalism after World War II	99

<b>Regionalism and Nationalism</b>	102
<b>Critical Regionalism</b>	103
Critical Regionalism- Alexander Tzonis and Liane Lefaivre	103
Kenneth Frampton’s “Ten points on Critical Regionalism”	105
<b>Critical Regionalism and Naito’s Design Principles</b>	112
“Ten Points on an Architecture of Regionalism” in Naito’s Architecture and Idea	112
Two Distinctive Aspects of Critical Regionalism in Naito’s Architecture	120
<b>Conclusion</b>	122
<b><u>CHAPTER5</u></b>	
<b>CONCLUSION- TOWARD A CREATIVE REGIONALISM</b>	124
<b>RINRI Institution of Ethics- Fuji RINRI Seminar House</b>	125
Background	127
Three Trials	130
Naito’s Principles in the Fuji RINRI Seminar House	132
Naito’s Future Direction	136
<b>Lessons from Naito’s Views and Works</b>	138
Naito’s Views- Summary	138
-The Truth of Architecture- It is in Necessity	138
-Critical View	139
<b>Conclusion- Lesson from Naito’s Architecture</b>	142
<b><u>BIBLIOGRAPHY</u></b>	145
<b><u>APPENDIX</u></b>	
<b>INTERVIEW WITH HIROSHI NAITO</b>	149

## **LIST OF ILLUSTRATIONS**

1.1	Building designed by Bunzo Yamaguchi	11
1.2	Interuniversity Seminar House designed by Takamasa Yoshizaka	12
1.3	National Art and Cultural Center designed by Fernand Higuera	15
1.4	South exterior of Naito's house	21
1.5	Living room at Naito's house	21
1.6	Exterior of the Gallery Tom	21
1.7	Gallery space in the Gallery Tom	21
1.8	Exterior of the Sea-Folk Museum	23
1.9	Entrance of the Black House	24
1.10	The Chiro Art Museum Azumino	25
1.11	Interior space in the Chihiro Art Museum Azumino	25
1.12	The Tenshin Memorial Goura Art Museum	26
1.15	The Ushibuka Fish Market and the bridge designed by Renzo Piano	26
2.1	Location of the Sea-Folk Museum	30
2.2	Site plan of the Sea-Folk Museum	32
2.3	North elevation of the Sea-Folk Museum	32
2.4	Image sketch of the Sea-Folk Museum by Hiroshi Naito	33
2.5	Structural model of the Sea-Folk Museum	34
2.6	Interior space of the repository building for the ships	36
2.7	Interior space of the repository building for the fishing tools	36
2.8	Interior space of the repository building for the paper and cloth	36
2.9	Construction site of the Sea-Folk Museum	37
2.10	Site assembly of precast concrete frames	37
2.11	Image sketches by Hiroshi Naito	38
2.12	Triangular opening on the gable	40
2.13	Construction process of the main exhibition hall	41
2.14	Wooden framework of the exhibition hall	41
2.15	View of Toba bay	42
2.16	View of the Sea-Folk Museum from the pathway to the museum	42

2.17	Entrance path	42
2.18	Water pond and the sculptures	43
2.19	Canopy of the entrance	43
2.20	Interior of the main exhibition hall	44
2.21	Light comes through the opening on the wall	44
2.22	Steel entrance door of the exhibition hall	44
2.23	Interior space of the exhibition hall	45
2.24	View of the small bay from the exhibition hall	45
2.25	Entrance of the repository building	46
2.26	Entrance hall of the repository building	47
2.27	Low opening in the entrance hall	47
2.28	Internal space of the repository building for ships	47
2.29	Location of the Makino Museum of Plants and People	49
2.30	Site plan of the Makino Museum of the Plants and People	50
2.31	Plans of the Makino Museum of the Plants and People	52
2.32	Elevations and sections of the museum buildings	52
2.33	Site model of the Makino Museum of Plants and People	55
2.34	Construction process of the museum building	57
2.35	Construction process of the museum building	57
2.36	View of the museum buildings from the bottom of mountain	58
2.37	View of Kochi City from the entrance path	58
2.38	The museum building of the Makino Museum of Plants and People	59
2.39	Entrance hall of the museum building	59
2.40	Central deck of the museum building	59
2.41	Semi-exterior space	59
2.42	View of the central deck from inside the gallery	60
2.43	Wooden pergola	60
2.44	Water pots under the eave	62
2.45	Central courtyard of the exhibition hall	62
2.46	Central courtyard of the exhibition hall	62
2.47	Central courtyard of the exhibition hall	62

2.48	Interior space of the exhibition hall	63
3.1	Exhibition hall and the repository buildings- the Sea-Folk Museum	66
3.2	Plan shows the contour line- the Sea-Folk Museum	66
3.3	Section of the site- the Sea-Folk Museum	67
3.4	Roof of the Makino Museum of Plants and people	67
3.5	Overview of the Sea-Folk Museum	69
3.6	Overview of the Makino Museum of Plants and People	70
3.7	Rain running through the hole of gutter- the Sea-Folk Museum	76
3.8	Stone circle- the Sea-Folk Museum	76
3.9	Small stream of rain water- the Sea-Folk Museum	76
3.10	Rain water running down fro the hill- the Sea-Folk Museum	76
3.11	Water pot in rainy day-the Makino Museum of Plants and People	77
3.12	Atrium space of the Tokyo International Forum	83
3.13	Structure of the Tokyo International Forum and visitors	83
3.14	Wooden framework of the Sea-Folk Museum	89
3.15	Natural materials-the Sea-Folk Museum	87
4.1	The Okada House designed by Sutemi Horiguchi	98
4.2	Elevation of Japanese Cultural Center in Bangkok	99
4.3	The Kagawa Prefecture Office, Japan	100
4.4	The Yoyogi Olympic Stadium, Tokyo	102
4.5	Roof of the Sea-Folk Museum	113
4.6	Deep eave of the Makino Museum of Plants and People	113
4.7	Water plaza in the Sea-Folk Museum	116
4.8	Courtyard of the Makino Museum of Plants and People	116
4.9	Interior space of the main exhibition hall- the Sea-Folk Museum	117
4.10	Roof structure of the Makino Museum of Plants and People	117
4.11	Ise Shrine	121
4.12	Kyoto Palace	121
5.1	First floor plan-the Fuji RINRI Seminar House	127
5.2	Second floor plan-the Fuji RINRI Seminar House	128
5.3	South elevation -the Fuji RINRI Seminar House	128

5.4	Exterior of the Fuji RINRI Seminar House	129
5.5	View of the west side of the seminar house	129
5.6	Gallery space of the Fuji RINRI Seminar House	129
5.7	Entrance hall of the Fuji RINRI Seminar House	129
5.8	Interior of the large lecture hall	129
5.9	Interior of the large lecture hall	129
5.10	Detail of the joints	130
5.11	View of the courtyard from the entrance hall	131
5.12	Detail of the wooden sash	132
5.13	Detail of the wooden sash	132
5.14	West side exterior of the seminar house	133
5.15	Roof structure of the large lecture room	133
5.16	Diagram of the air circulation in winter	135
5.17	Diagram of the air flow in the library-winter	135
5.18	Diagram of the air flow in the lecture room-summer	135

## SOURCES OF ILLUSTRATIONS

(Numbers in brackets indicate page numbers from the sources)

Figs.1.1(p173), 4.1(p134), 4.2(p197). from “30 People Who Moved Modernism.” *Kenchiku Bunka* [Architecture Culture]. Vol.55, No.639. Tokyo: Shokokusya Publishing Co., Ltd. January 2000.

Fig. 1.2(p13) from Speidel, Manfred. (ed.). *Team Zoo: Buildings and Projects 1971-1990*. New York: Rizzoli, 1991.

Fig. 1.3(p.29). from “Fernand Higuera” *Kenchiku to Toshi* [a+u: Architecture and Urbanism]. Tokyo: a+u Publishing Co., Ltd. August 1971.

Figs. 1.4(p72), 1.5(p73), 1.6(p50), 1.7(p50), 1.9(p88), 1.12(p236), 1.13(p234) from Naito, Hiroshi. *Kenchikuno Hajimarini Mukatsute* [Toward the Beginning of Architecture]. Tokyo: Okokusya, 1999.

Figs 1.10, 1.11 from Naito, Hiroshi. *Azumino Chihiro Bijyutsukan* [Chihiro Art Museum Azumino]. Tokyo: Naito Architect & Associates, 1999.

Figs. 2.2, 2.3, 2.4, 2.5, 2.6, 2.8, 2.9, 2.12, 2.13, 2.14, 2.17, 2.19, 2.20, 2.21, 2.23, 2.25, 2.26, 2.27, 2.28, 3.5, 3.14, 3.15, 4.5, 4.9 from Naito, Hiroshi. *Umi no Hakubutsukan* [Sea-folk Museum]. Tokyo: Naito Architect & Associates, 1993

Figs. 2.30, 2.31, 2.32, 2.33, 2.34, 2.35, 2.42, 2.43, 2.48, 3.6, 3.8, 4.10 from Naito, Hiroshi. *Makino Tomitarō Kinenkan* [Makino Museum of Plants and People]. Tokyo: Naito Architect & Associates, 2000.

Figs. 3.12, 3.13 from [http://www.greatbuildings.com/cgi\\_bin/gbi CGI/Tokyo\\_International\\_Forum.html/cid\\_tokyo\\_forum](http://www.greatbuildings.com/cgi_bin/gbi CGI/Tokyo_International_Forum.html/cid_tokyo_forum)

Figs. 4.3, 4.4 from Kenzo Tange Associates: <http://www.ktaweb.com/works/index.html>

Fig. 4.11 from <http://old.jccc.net/~jjackson/ise.html>

Fig. 4.12 from <http://web.kyoto-inet.or.jp/org/orion/jap/hstj/kamigyogosho6.html>

Figs. 5.1(p74), 5.2(p74), 5.3(p77), 5.4(p64), 5.5(p67), 5.6(p68), 5.7(p69), 5.8(p74), 5.9(p72), 5.10(p82), 5.11(p70), 5.12(p81), 5.13(p81), 5.14(p70), 5.15(p75), 5.16(p80), 5.17(p80), 5.18(p80) from “RINRI Kenkyujyo Fujikougen RIRI Seminar House” [RINRI Institution of Ethics Fuji RINRI Seminar House]. in *Shinkenchiku* [New Architecture]. Tokyo: Shinkenchikusya Publishing Co., Ltd. November 2001.

All remaining images photographed by this author on site.

## **ACKNOWLEDGEMENTS**

I would like to express my gratitude to my major advisor, Professor Gary Coates, who opened my eyes to the problems of contemporary architecture in Japan. Professor Coates provided me freedom to explore my interests within a broad perspective to let me gain a greater understanding of the many ideas discussed in this thesis. His deep knowledge of architecture and critiques of my ideas and writing have been of the greatest help for his thesis. I hold him in high regard and express my sincere thanks to him.

I wish to express my thanks to Dr. David Seamon and Professor Marina Pecar, the other members of my advisory committee, for their invaluable help, kindness, and critical reviews and suggestions for improvement.

I would like to express my very special thanks and respect to architect Hiroshi Naito who always supported and gave me valuable advice since I was his student at Waseda University College of Technology. Without his great contributions and provisions of his valuable time for an interview and drawings, this study could never been completed.

Finally, I do not have words enough to thank my family members and my friends who always supported and encouraged me while studying at Kansas State University.

## INTRODUCTION

The aim of this thesis is to study, interpret and reconcile the design works and principles of Japanese architect, Hiroshi Naito (1950- ). This study is not intended to analyze Naito's architecture from a philosophical point of view, but rather to examine the elements that foster people's sense of deep intimate connection to his buildings.

Architecture in Japan has a long history as a distinctive culture formed by tradition, climate, and a sense of regional identity. Like other vernacular architecture, traditional Japanese architecture emphasized one of architecture's roles, to cultivate identity: to tell us where we are, and who we are. The sense of belonging is strongly rooted in a specific place and region. However, recently, through the adoption of Western ideas and design principles, Japanese architects have become less responsive to the character of site and climate: instead, the focus is primarily on temporal impact and image. The glass wall façade and box forms are fashionable symbols of a "universal" Japanese modern architecture. The formal expression of a "universal" approach is totally disconnected from climate and character of place. Edward Relph in his book, *Place and Placelessness*, poses the problem of place-making in modern times: "There are many signs [...] that 'placelessness'- the weakening of distinct and diverse experiences and identities of place- is now a dominant force."<sup>1</sup> Architecture has a role to create a "sense of place" which is

---

<sup>1</sup> Relph, Edward. *Place and Placelessness*. London: Pion Limited, 1976, p 6.

“the ability to recognize different places and different identities of a place”.<sup>2</sup> The recent universal architectural approach, which gives less consideration to site specifics and more consideration on to fashionable images, disconnects architecture and environment, and contributes to the acceleration of “placelessness” in modern society.

Under these circumstances, Hiroshi Naito, who opposes recent architectural fashions and expresses a more traditional sensibility regarding Japanese modern architecture, is a distinctive architect among those of his generation. His works are remarkable, not so much because of their physical expression, but because of the “sense of place” they achieve with the use of ordinary materials, carefully detailed structures, and the consideration of climate and regional contexts. Naito’s views about architecture come from ordinary experience and are determined by regional contexts: the culture, climate and topographical features of the site. As a result of Naito’s attention to regional context he creates architecture with a full “sense of place.”

Naito does not see his projects as abstract concepts and manipulations of visual images, because he believes that:

“The language of architecture or, in other words, the rhetoric we use in the design world, is hard to understand for ordinary visitors to this world. In many cases, the words we entrust to a design mean nothing to the layman, unless we can translate them so that they can be visually understood.”<sup>3</sup>

---

<sup>2</sup> Relph, Edward. *Place and Placelessness*. London: Pion Limited, 1976, p 63.

<sup>3</sup> Naito, Hiroshi. *Azumino Chihiro Bijyutsukan* [Chihiro Art Museum Azumino]. Translated by Brian Amstutz. Tokyo: Naito Architect & Associates, 1999.

Naito believes that as architects talk more about abstract concepts in their projects, they stray further from reality. He seeks to express and responds to only what is there: such as climate, topography and nature.

Naito's architecture, despite its significance, is not seen as the most exciting architecture by the architectural magazines. But, the real experience of his works is totally different than what can be perceived merely from pictures. His buildings are not self-referential art statements; rather, they are environments which are created for enjoyment and for moving through. In this sense, he primarily designs for real spatial experience. Naito's buildings are strongly self-assertive, yet at the same time they stand on the site in silence. The large structural frameworks that characterize Naito's work create a warm ambience and wondrous rhythms of light and shadow. People who experience his buildings often have impressions of warmth, familiarity, comfort and a feeling of positive self-esteem. At the Sea-Folk Museum, simple, beautiful buildings are integrated with the landscape and create memorable scenery. Inside the Makino Museum of Plants and People, for example, a distinctive air immediately puts one at ease. Naito's buildings have a memorable atmosphere that hardly communicates through photography: they express a tactile logic rather than merely a visual one. Naito's buildings demonstrate that the real qualities of significant architecture contain intangible aspects, and can only be understood by being there to experience them with all the senses. Naito's architecture is

very much based in reality, and on the potential for sensory experiences that can only exist in a specific location.

Most people this author had conversations with at the Sea-Folk Museum and the Makino Museum of Plants and People had similar impressions about Naito's buildings, but no one could make clear why he or she felt so. Naito replies that the reason for that phenomenon is:

“It is not tangible elements such as ‘kawara’, Japanese roofing tiles, or the walls, the framework, or exhibits, which make the people feel this way. It seems that the air effused through the museum provokes a false view of paramnesia hidden behind the people’s eyes accustomed to seeing daily scenery.”<sup>4</sup>

As Naito says, people’s impressions are not simply coming from a single image of the built form, but from an understanding of human existence experienced through the body, memory and the human senses. Facing his buildings, one is struck by the true beauty coming from their simplicity that rejects unnecessary ornamentation. In contrast, it is often seen when visiting the exciting architecture published in magazines that the building is an alienated object on the real site. Here, Naito’s buildings reveal one of the problems that modern architecture has; it is increasingly less responsible to the contexts of culture, climate, and topographical features.

Hiroshi Naito is recognized as an architect who has full awareness of regional contexts and the human condition. His approach to design is similar to that identified by Kenneth Frampton in his theory of “Critical Regionalism.”<sup>5</sup> The goal of Critical Regionalism is to take a

---

<sup>4</sup> Naito, Hiroshi. *Umi no Hakubutsukan* [Sea-Folk Museum]. Translated by Makiko Quini. Tokyo: Naito Architect & Associates, 1993.

<sup>5</sup> Frampton, Kenneth. “Ten Points on an Architecture of Regionalism: A Provisional Polemic.” in Speck, Lawrence. ed. *Center: Journal for Architecture in America*, Vol.3, New York: Rizzoli, 1987, pp20-27.

position in the middle between regional identity and modern society. Naito attempts to meet this goal and he goes beyond it; his projects are evidence of the possibility of creating architecture with regional identity within a universal culture. Naito criticizes the Japanese Postmodernist's approach; which totally neglects the true meaning of culture in order to plunges forward into the past. Hence, vernacular architecture is misapplied as just a form of nostalgia. Moreover, the fact that regionalism was used as a symbol of nationalism during World War II has led to negative connotations for such nostalgic forms of regionalism in Japan.

However, in spite of these possible negative connotations, Naito believes that regionalism is one way to create modern architecture with a "sense of place." From studying Naito's architecture and design principles, it becomes clear that his obsession with the regionalist approach as a "tool", not a theory, is a rich source of simple beauty, sense of place, and a continuous relationship between nature, architecture, and humanity. It provides hope for a meaningful approach to architecture and place-making in this confusing period of time.

## **Methodology**

The main methods used in this study to inquire into Naito's design principles were: 1) interviews with the architect<sup>6</sup>; 2) examination of articles written by him; and 3) site observations of his two major projects, the Sea-Folk Museum and the Makino Museum of Plants and People. The reason why I chose these two projects is that one can see a synthesis of Naito's thought over the course of two 7 to 8-year cycles: 1) from his own house in 1984 to the Sea-Folk Museum in 1992; and from the Sea-Folk Museum in the Makino Museum of Plants and People completed in 1999.

During the period of the research trip, in July 2001, an interview was conducted at Naito's office at Tokyo University. On the top of that I also had a chance to talk to him in his architectural office several times. Finally, I visited and photographed his award-winning projects, the Sea-Folk Museum, located in Toba City in the middle of Japan, and the Makino Museum of Plants and People, in Kochi City on Shikoku Island. These buildings are located in different regions, and this trip helped me to understand the regional differences in each location as well as to experience and analyze Naito's two major works.

Since the significance of his architecture is strongly related to the positive responses of people who experienced his spaces, the description of my own first hand experience of exterior forms and interior spaces of these case study buildings has an important role for his study.

---

<sup>6</sup> The original text of the interview is in Japanese.

The writings of Naito are also studied and analyzed in order to understand the foundation of his design principles. Naito, despite his growing reputation in Japan, is not well known outside Japan. Naito's theory of design is presented in several books and articles; however, almost all of them are written in Japanese. Hence, it is important to translate from Japanese to English at least portions these works as valuable references, so that international audiences can have more access to Naito's ideas. Naito's important ideas, therefore, are translated and put in each chapter of this thesis.

### **Structure of this Thesis**

This thesis is composed of four parts. Chapter 1 examines Hiroshi Naito's background and influences. Interviews of and writings by Naito are analyzed in order to clarify the influence of other architects on his work. Also his works are introduced in chronological order, and briefly discussed.

In chapter 2, two of his major projects, the Sea-Folk Museum, completed in 1992, and the Makino Museum of Plants and People, completed in 1999, are analyzed because these works articulate Naito's approach to architecture during each period of time in his still unfolding career. In addition, by studying these works it becomes clear how Naito is conscious of regional conditions: culture, climate, and topographical features, as well as construction methods. The case studies are structured in three parts: 1) background; 2) process; and 3) description of spatial experience from my notes during the site visit.

Chapter 3 inquires into Naito's design principles. It also examines the relationship between his principles and the qualities that make people feel sympathy, familiarity, and a sense of memory.

Based upon an understanding of Naito's background and major works, Chapter 4 briefly overviews the history of architectural regionalism in Japan, and describes regionalism as it is seen in Naito's architecture. Naito points out that the negative aspect of regionalism in Japan is its connection to nationalism, before and during World War II in Japan. Moreover, the introduction of the International Style neglected to consider any possible link between regional identity and modern architecture. Under these conditions, Japanese architects have two opposing feelings toward regionalism: rejection and attachment. But, the polarity implies the same for Critical Regionalism, which set a goal to mediate between regional identity and universal culture. Hence, Critical Regionalism is studied from articles written by Kenneth Frampton and other authors. In addition, Naito's design principles are compared to a set of criteria of Critical Regionalism suggested by Kenneth Frampton in order to examine the relationship between Naito's approach and the premises of Critical Regionalism.

The last chapter, Chapter 5, is in three parts. The first part, "Creative Regionalism," is a discussion of where his work is heading as seen in his recent work, the RINRI Institute of Ethics Fuji RINRI Seminar House, completed in August 2001. The second part is a summary of Naito's views about modern architecture. This part also discusses how the regionalist approach

that we see in Naito's works can be a tool to create places with a sense of intimacy. Finally, this chapter closes with a discussion of the lessons that can be learned from Naito's views and architecture.

## CHAPTER 1

### **HIROSHI NAITO: BACKGROUND AND INFLUENCE**

Hiroshi Naito was born in 1950 in Yokohama, Japan. He lived in Yokohama until the age of 5, when he moved to Kamakura. Kamakura has many historical temples from the 13th century; yet, at the same time, the deep forest and small mountains still remain. The mountains near his house were his playgrounds and he enjoyed exploring nature in his childhood.

Naito started considering becoming an architect when he was in high school, and he explains that the reason as follows:

“My father was an engineer: cars, airplanes, and any other mechanical stuff.<sup>7</sup> He was a great engineer, but I think engineers are soon forgotten. I would prefer to leave my own footprints. I think that was the reason why I chose architecture as a profession.”<sup>8</sup>

There is, however, an architect who introduced architecture to Naito, Bunzo Yamaguchi (1902-1978). Yamaguchi was one of the architects who incorporated modernism into his architecture in the early 20<sup>th</sup> century. In 1930, he went to Germany to work for Walter Gropius. After coming back from Germany, he completed several projects that express an influence from Gropius; yet at the same time he sought to program these projects with a rationalistic and social scientific point of view.

---

<sup>7</sup> Naito's father also taught at university, and his effort to develop manpower helicopter is well known.

<sup>8</sup> Naito, Hiroshi. Interview by Yoko Kanai at Tokyo University, 24 July 2001. Text contained in the Appendix, p149.

Since Naito's grandparent's house was next to Yamaguchi, Naito often visited Yamaguchi's house. It was natural for Naito to develop an interest in architecture while looking at architectural magazines and listening to Yamaguchi's stories at his house.

When Naito graduated from high school, he asked Yamaguchi's opinion about his scholarly plan, and Naito decided to study architecture at Waseda University, an institution known to foster liberal and self-confident students.



Fig 1.1: Apartment complex designed by Bunzo Yamaguchi in 1936, Tokyo Japan.

### **Professor Yoshizaka at Waseda University**

From 1965 to 1972, there was rampant student rioting in Japan. When Naito entered Waseda University in 1970, the University was closed to avoid student violence. Since there were no classes and no teachers at the University, Naito studied architecture through books, discussion with friends, and a part-time job at an architecture office until his junior year. For his senior year he met Professor Takamasa Yoshizaka, (1917-1980) who influenced him greatly.

Yoshizaka worked for Corbusier from 1950 to 1952 and introduced Corbusier's philosophy through books<sup>9</sup> and education in Japan. Yoshizaka, however, did not stick to the International Style. Yoshizaka's remarkable research on regionalism and vernacular houses through observation and sketching, not only in Japan but also other countries in the world, played a major role in the development of regionalism in Japan.<sup>10</sup> His unique philosophy and personality influenced a large number of young architects and urban planners who studied under him at Waseda University during 1950s to 1970s, including Kouichi Toyama and Makoto Suzuki: both of whom are professors at Waseda University now, and members of Team Zoo. They all borrow heavily from Yoshizaka's architectural philosophy for their teaching and architectural practice.

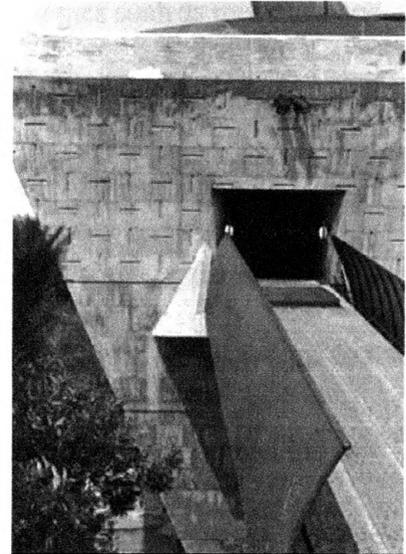


Fig 1.2: Inter University Seminar House, designed by Takamasa Yoshizaka in 1963, Tokyo Japan.

Unlike these architects, Yoshizaka's profound impact on Naito is not directly reflected in his works; however, Naito has heartfelt respect for Yoshizaka's multidisciplinary and international mind:

"I don't think I was influenced by his architecture, rather, by his personality and his life. He was an architect who traveled all over the world (as an explorer), and he was

---

<sup>9</sup> Yoshizaka also translated several Courbusier's books in Japanese.

<sup>10</sup> Yoshizaka was not only architect and urban planner, but also was an explorer.

multi-lingual. His background was outstanding in terms of worldliness. However, while his approach was tied to regionalism in Japan, he was a person who had a global sense. I have passable knowledge and experience outside Japan, which I think is necessary. After looking at Japan from the outside, I am choosing Japan as a place to practice my profession. In some sense, his attitude toward regional characteristics influenced my attitude about building location and site design.”<sup>11</sup>

For his thesis project, Naito challenged conservative topics such as museums and theaters; his idea was a building complex to express human life and address the idea of chaos. In the process of the project, Naito explained his concept of about living and life’s complexities in chaotic places, like Tokyo. Yoshizaka criticized Naito’s earlier scheme, pointing out there is the end of the life: “You have to think about death, and then your project will become very clear.”<sup>12</sup> Inspired by his advice, Naito abstracted human life as water flowing and laid out a hospital, houses, a museum, a theater, and a cemetery flowing with the current. Naito recalls Yoshizaka’s teaching: “He didn’t teach design in a literal or special sense; he taught more through general conversation.”<sup>13</sup> Although Yoshizaka discussed details, Naito put time flow in the project. As a result of his effort, Naito received the Togo Murano prize, which is given for the best thesis projects among senior year students.

---

<sup>11</sup> Naito, Hiroshi. Interview by Yoko Kanai at Tokyo University, 24 July 2001. Text contained in the Appendix, pp156-157.

<sup>12</sup> Knabe, Christopher & Noennig, Joerg. R., eds. *Shaking the foundations: Japanese architects in dialogue*. New York : Prestel, 1999, p100.

<sup>13</sup> *Ibid.*, p99

Following his undergraduate study, Naito decided to work on his masters program under the instruction of Yoshizaka. During this period, a Japanese architectural magazine, *Shinkenchiku* [New Architecture], asked Naito to write monthly articles on Japanese modern architecture for a year. In the 1970s, Arata Isozaki had an important role in the development of Postmodernism in Japan, and he presented big projects every month in architectural magazines. In the magazines Naito often wrote articles challenging Isozaki's philosophy: "I was young and rebellious. I wanted to challenge his opinions, polarize, and protest."<sup>14</sup> Naito, probably, felt alienated by Postmodernism, a reaction which helped him seek his own architectural language.

### **Practicing in Spain**

Despite Naito's opposition to Postmodernism, he decided to work for a Spanish architect, Fernando Higueras, who was a major postmodernist in Spain after graduating from graduate school at Waseda University. Naito was inspired by Higueras's works which were featured in *Kenchiku to Toshi* [A+U: Architecture and Urbanism].<sup>15</sup>

---

<sup>14</sup> Knabe, Christopher & Noennig, Joerg. R., eds. *Shaking the foundations: Japanese architects in dialogue*. New York : Prestel, 1999, p102.

<sup>15</sup> *Kenchiku to Toshi* [A+U: Architecture and Urbanism] featured Fernando Higueras on their August issue in 1971.

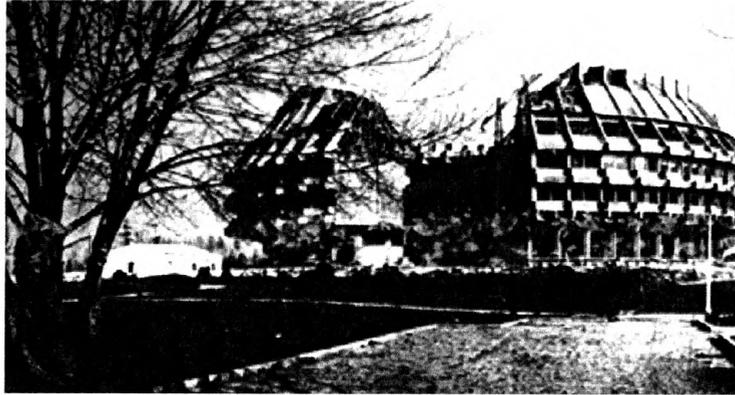


Fig 1.3: National Art and Culture Center, designed by Fernando Higuera in 1971, Madrid, Spain.

According to Naito, even though Fernando Higuera was one of the major postmodernists, he took a completely different approach from Isozaki. He “wanted to pursue a kind of philosophical approach to architecture, putting meaning into it and working with the meaning.”<sup>16</sup> Fernando Higuera, despite his earlier career, is rarely featured any more. In order to know Fernando Higuera, Naito’s description of him gives us a sense of his characteristics:

“In my opinion he is kind of a genius: Fernando had succeeded at a very young age even though it took him eight years to graduate from the University of Madrid. When he was only twenty-three, he won the Spanish First Prize for watercolor painting. He was studying architecture, but at the same time he was drawing and painting. He won the prize the year after that as well! Later he wanted to master the guitar, so he studied and succeeded in this too. His guitar teacher was Andrés Segovia, the famous guitarist, for whom he later designed a house. After that he graduated from university as an architect. He immediately won first prize in the competition for Madrid’s Opera House, although its construction was finally cancelled. His was a real success story as an architect even at a young age.”<sup>17</sup>

---

<sup>16</sup> Knabe, Christopher., & Noennig, Joerg. R. eds. *Shaking the foundations: Japanese architects in dialogue*. New York : Prestel, 1999, p102

<sup>17</sup> Ibid., p102.

Fernando Higuera was a promising architect in the 1960s, and, Naito says, he had the talent to become one of the most important architects in the 20th century. But, Higuera unfortunately fell to victim of politics, and Naito deeply regrets his unfortunate career:

“In the 1970s Spain was ruled and controlled by Franco’s fascist regime. Fernand didn’t like Franco, but at this time architectural journalism, and in particular this magazine *Forma Nuova*, supported Higuera. In 1978, when I went to Madrid, a kind of revolution had taken place: Franco had died and journalistic conditions had changed. The left-wing parties elected the new President of Spain. All the magazines had changed their mind somehow, and Fernand became a victim of old age. He produced some projects but these weren’t published. By the time I arrived in Madrid he was deeply disappointed and didn’t want to work.”<sup>18</sup>

### **Realization of Space, Light and Shadow in Japanese Architecture**

Although he feels that the period while working for Fernando Higuera was not productive in terms of practice, Naito experienced the different qualities of space and light that exist in different cultures. Like earlier Japanese modernists this realization would become important to Naito in understanding the distinctive quality of space, *ma*, and the special role of light and shadow in Japanese architecture.

Naito discovered these differences by comparing the Spanish notions and the Japanese notions of space, light and shadow:

“I strongly felt that the notion of space is completely different to Westerners after six months of living in Spain. The meaning of space for Japanese is a sequence of atmospheric moods. But, space is a mass for westerners. It is just like cheese; it can

---

<sup>18</sup> Knabe, Christopher., & Noennig, Joerg. R. eds. *Shaking the foundations: Japanese architects in dialogue*. New York : Prestel, 1999, p102

be cut and divided into small pieces.”<sup>19</sup>

He also mentions that the Spanish divided space with sunshine and shade; it means that light is a tangible element that makes a boundary of space. This conception is opposite from the notion of space in traditional Japanese architecture.

Japanese space is often described as “time and space”, *ma*. It is not defined by physical factors; it is defined by feeling, imagination, and the occasion which brings people together in space. In this sense, Japanese *ma* only exists in reality: the spatial experience relies on each moment of time. Light is also mentioned in the interview:

“In the afternoon, the Spanish wear sunglasses, but I didn't need them. I was wondering why they need sunglasses. Then, I realized that they feel brightness and darkness differently from Japanese. Black eyes and light-colored eyes feel light differently. The differentiation of sense of light between Japanese and Spanish made me recognize that the way we (Japanese) see light in cathedral and space are totally different from Spanish.”<sup>20</sup>

It is true that Japanese seldom need to wear sunglasses other than for fashion purposes. But basically, Spanish light and Japanese light have different qualities; Spanish light makes color and shade clear; on the contrary, Japanese light that contains moisture makes color and shadow soften. The use of light to perceive spaces is a Westerner's idea. Historically, Japanese architecture did not intend to introduce light to interior spaces, they rather created gradual shadows inside buildings. Tadao Ando intends to use light to reveal the existence of shadow. But, Naito seems to prefer to introduce shadow into his architecture. Because of his experience in Spain, Naito is convinced that the quality of Japanese light is suitable to create

---

<sup>19</sup> Naito, Hiroshi. Interview by Yoko Kanai at Tokyo University, 24 July 2001. Text contained in the Appendix, p161.

<sup>20</sup> Ibid., p162.

gradual darkness inside buildings.

Naito also recalls browsing through pages of a book of aerial photographs while living in Spain, *Desde Techo España* [*From the Spanish Sky*], with Fernando Higuera and gaining a new awareness of regionalism: regional architecture grows from its context and “there is no unnecessary design in vernacular architecture; it is ultimate functionalism.”<sup>21</sup> This was the starting point that Naito has of being conscious of the importance of climate and region in architecture.

Most often studying or working outside Japan is a chance to reevaluate and understand Japanese culture and Japanese architecture with fresh eyes, and it is often used to express “Japaneseness” even in the abstract.

### **Starting His Own Career**

Upon returning from Spain, Naito worked at Kiyonori Kikutake, one of the Metabolists of the 1960s, for two years.<sup>22</sup> Kikutake disregarded well-known solutions and created original architectural expressions. For Naito, Kikutake’s approach was always surprising and Naito saw in it an aggressive use of cutting edge technology. Although Naito did not totally agree with Kikutake’s approach, it was a time to gain knowledge and to be trained as an architect.

---

<sup>21</sup> Naito, Hiroshi. Interview by Yoko Kanai at Tokyo University, 24 July 2001. Text contained in the Appendix, p159.

<sup>22</sup> It was Professor Yoshizaka’s advice to work at Kikutake’s office.

At the age of 31, in 1981, Naito established his own office in Tokyo. Architects carry their ideas from one work to the next. Through his major projects, beginning with his own house, *A House for Living Together*, completed in 1984, Naito developed ideas which he could carry to future projects. From the design of his house, Naito realized that a space's uses will change over a long period so that the architecture should be flexible for the changes; he carried that notion through to the Sea-Folk Museum, in 1992. The quality of space in the Sea-Folk Museum is similar to the Makino Museum of Plants and People, in 1999. Until the Sea-Folk Museum won the Japan Architecture Association Prize in 1992 Naito's practice was difficult; involving a lack of opportunities and struggles to find his architectural approach:

“When I began the work at the office I still didn't know how to create architecture. I couldn't find my way, so I set myself the task of trying to understand my work between the ages of thirty and forty. I tried out many different types of architecture and building.”<sup>23</sup>

Naito's struggle becomes clear when one sees two earlier projects before the Sea-Folk Museum. In 1984, Naito completed two projects that would be his starting points: 1) *A House for Living Together*; and 2) *Gallery Tom*. Although completed in the same year, these projects appear totally different. It was reasonable for Naito, whose priority is not architectural form and expression, for these two projects, which have different functions, purposes and requirements, to have drastically differing forms.

---

<sup>23</sup> Knabe, Christopher., & Noennig, Joerg. R. eds. *Shaking the foundations : Japanese architects in dialogue*. New York : Prestel, 1999, p103.

*A House for Living Together* was a design for his own family in Kamakura. Four generations, his grandmother, parents, younger brother, Naito, his wife, and two daughters, were the original members of the house. Naito states the fundamental concept of the house in his book, *Toward the Beginning of Architecture*:

“I think a house is not a temporary place for people to live, it should foster human life and death under the roof. It is the basic aspect of houses. [...] when I developed this idea as a concept of the house I felt that the plan of the interior walls should not limit the use of the space [...] so spaces in the house needed to have flexibility in order to meet the needs of family members as they age.”<sup>24</sup>

The project was low-budget, and needed to deal with various requirements from different generations of users. As a solution to these problems Naito came up with a very Japanese scheme: the basic structure is eternal and other walls are temporal. Naito thought that once the basic shelter was constructed; additional factors could be solved with a minimum number of devices. As a result, the structural walls, which provide a shelter, were constructed of reinforced concrete, and the internal spaces were divided by demountable *lauan* plywood walls and movable walls. The idea to put demountable and movable walls inside the house creates flexibility, making it possible for it to be changed to meet user's needs and changing functions over long of periods of time. The idea to create shelter would be one of the basic concepts of the Sea-Folk Museum.

---

<sup>24</sup> Translated by Yoko Kanai from: Naito, Hiroshi. *Kenchikuno Hajimarini Mukatsute* [Toward the Beginning of Architecture]. Tokyo: Okokusha, 1999, p53.

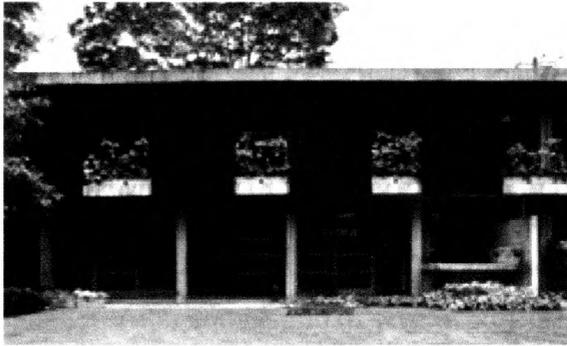


Fig 1.4: The south elevation of the Naito's house



Fig 1.5: Living room

In the same year, 1984, Naito also completed *Gallery Tom*, a mixed-use building of houses and a gallery in Tokyo. The concrete box-shaped building creates a different atmosphere from the house. The main part of this building is a gallery for blind people.

Naito gained an interest in vision and the other senses from this project. He notes his thoughts in *Toward the Beginning of Architecture*:

“Blind people, without being misled by images, measure space by their feet, feel light by their skin, and know the volume of space by sound. Vision only catches the surface. We even can not see 0.1mm under the surface. [...] Buildings are covered with whatever materials for decoration, but it does not mean anything in the world without vision.”<sup>25</sup>

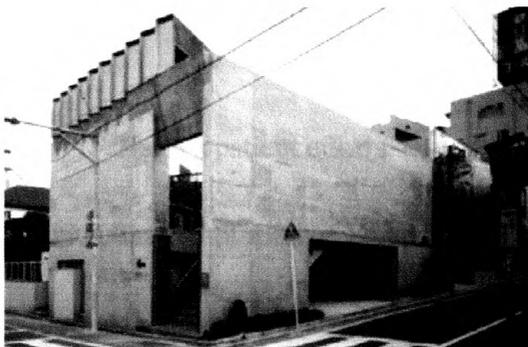


Fig 1.6: The exterior of the Gallery Tom

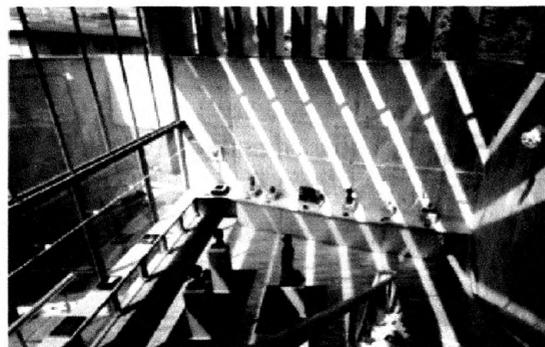


Fig 1.7: Filtered light comes in the gallery space.

<sup>25</sup> Translated by Yoko Kanai from: Naito, Hiroshi. *Kenchikuno Hajimarini Mukatsute* [Toward the Beginning of Architecture]. Tokyo: Okokusha, 1999, p51.

The use of concrete finishing was not intended to follow the architectural trends in the 1980s; it was evidence in this case of Naito's resistance to architectural trends: designing for self-expression. Yet at the same time, Naito wanted honesty to present itself.

After completion of several projects, Naito completed the Sea-Folk Museum in 1992. This project, which engaged him from 1988 to 1992, was Naito's most important during:

“Being involved for a long period of time with a building of a size not too big to fit into the palm of my hand, what lies deep in one's consciousness gradually begins to show itself. It is not something that easily changes, and remains deep inside the brain beyond consciousness, even with the changing times, a kind of protoplasm which continues to surface unchanged.”<sup>26</sup>

During 1980s, Japanese architects enjoyed an economic boom. Naito told me of his suffering during the time: “I wondered why I had to work on one humble project while other architects present fancy projects every month in architectural magazines.”<sup>27</sup> But, Naito strongly felt contempt the tendency to value architecture solely on the basis of superficial architecture images. Without following fashionable architectural expression he kept to his own way.

Naito's patient efforts, however, finally yielded results when he won the prize of Architectural Institution of Japan for design in 1993 for the Sea-Folk Museum. The awarded project was highly recognized as an example of modern architecture that has a traditional

---

<sup>26</sup> Naito, Hiroshi. *Umi no Hakubutsukan* [Sea-Folk Museum]. Translated by Quini Makiko. Tokyo: Naito Architect & Associates, 1993.

<sup>27</sup> The source is from personal conversation with this author.

sense of Japanese architecture, and it became the work that established Naito's reputation as an architect who "accurately depicts the basic characteristics of spiritual and physical fortitude inherent in Japanese culture."<sup>28</sup> In his book, "Sea-Folk Museum", Naito describes the building as a "protoform": "the simple beauty and strength that appears in the primitive forms of architecture."<sup>29</sup> He is convinced that beauty is grounded in the simplicity of an ordinary scene, and the idea of "protoform" is a method of creating authenticity in architecture.



Fig 1.8: The exterior of the main exhibition hall

Once one achieves perfection, it is difficult to go beyond that. It goes without saying that Naito struggled to depart from the forms and ideas of the Sea-Folk Museum. In

---

<sup>28</sup> Naito, Hiroshi. *Umi no Hakubutsukan* [Sea-Folk Museum]. Translated by Quini Makiko. Tokyo: Naito Architect & Associates, 1993.

<sup>29</sup> Ibid.

fact, Naito's projects after the Sea-Folk Museum appear similar in the roof details at a casual glance. However, Naito continued to challenge himself to achieve the best solution for each project. Some observers criticized Naito's approach after the Sea-Folk Museum as a repetition of the same pattern found in that project, and suggest that Naito lacked the energy necessary for new creation. Naito mainly sought solutions in construction technology before the Sea-Folk Museum. But, after completion of that project, he gradually became conscious of environmental technology and the formative effects of the environment itself. This concern can be seen as a reflection of his long-standing opposition to "universal" architecture: architecture which is separated from its surroundings. His projects after the Sea-Folk Museum show his efforts to achieve architecture in harmony with its surroundings.

*A Black House*, completed in 1993, shows an intimate relationship between the interior and its natural surroundings. The location of the house is in a forest. Naito creates the comfortable space in between nature and interior setting by making a wide terrace around the house.



Fig 1.9: The exterior of the Black House.

Chihiro Art Museum Azumino, 1996, shows a wonderful integration of gentle building forms in the scenery against the Japanese Alps.

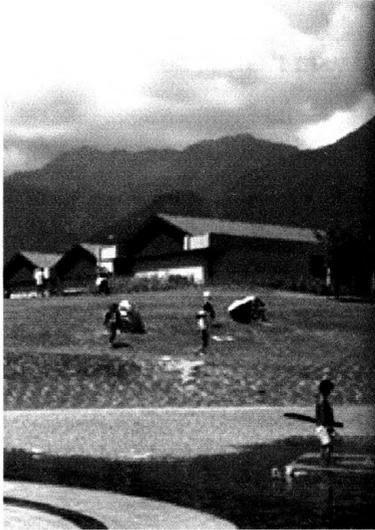


Fig 1.10: The exterior of the Chihiro Art Museum Azumino.

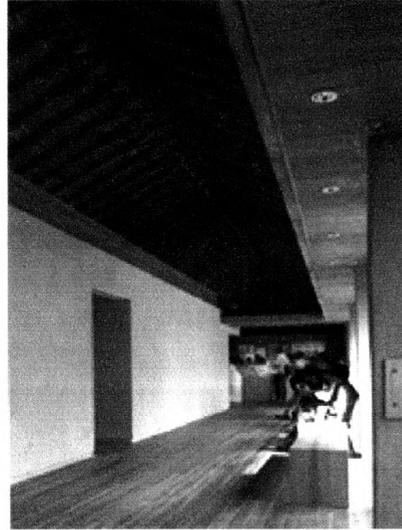


Fig 1.11: The interior of the Chihiro Art Museum Azumino

At the location of the Ushibuka Fish Market, completed in 1997, a beautiful bridge designed by Renzo Piano creates an elegant curve in the sky. Naito positioned the bridge in relation to his buildings as a symbol of the location, but the fish market is developed as a place for people living in the region. The buildings underneath the bridge are laid out perpendicular to the bridge. The low ceilings, the result of set building heights under the bridge, lead the visual line toward the harbor and create an open space integrated with the sea.

In the same year, Naito completed the Tenshin Memorial Goura Art Museum. The site of the museum is located on the edge of the cliff. His challenge was to find a way to put

a building that needs big spaces with moderate appearance at the fairly small site on the edge of the cliff. During the design process, Naito started to have a brief idea of a way to relate architecture to the existing environment: “The whole elevation does not need to be seen; it rather is better not to be seen. It may be appropriate for new architecture in terms of the relation to the environment that it is hidden or buried in environment.”<sup>30</sup> This idea is clearly reflected in the next project, the Makino Museum of Plants and People.



Fig 1.12: The Tenshin Memorial Goura Art Museum.



Fig 1.13: The Ushibuka Fish Market is located under the beautiful bridge designed by Renzo Piano.

### **Transition from the Sea-Folk Museum to the Makino Museum of Plants and People**

After seven years from the completion of the Sea-Folk Museum, in 1999, Naito was awarded another prize for the Makino Museum of Plants and People. The undulating roofs are integral with the small mountain. He achieved an architecture existing within

---

<sup>30</sup> Translated by Yoko Kanai from: Naito, Hiroshi. *Kenchikuno Hajimarini Mukatsute* [Toward the Beginning of Architecture]. Tokyo: Okokusha, 1999, p229.

nature. The project ensures Naito's reputation as an architect who designs with the environment.

His approach to create the Sea-Folk Museum was "a process of introspection, verification, and control."<sup>31</sup> On the contrary, his approach for the Makino Museum of Plants and People was "an aggressive attempt to restore the presence of architecture, which tends to stand isolated in its surroundings, to the larger frame of its environment and scenery."<sup>32</sup> Although, these two major projects take different architectural forms, the internal spaces have similar qualities; it comes from one of his basic working methods, the expression of the "protoform"; it is an authenticity grounded in tremendous amount of works.

Tracing Naito's background reveals that he is a person who develops his own way with strong belief: to be honest with the present. Architects are often classified by their style, by the school they belong to or their teachers, but this is not the case with Naito. In the interview with him, Naito listed four architects who influenced him: Bunzo Yamaguchi, Takamasa Yoshizaka, Fernand Higuera, and Kiyonori Kikutake; none of their works reflect directly on Naito's works; he is simply fascinated by their pioneering spirits and lives, more so than with their architectural achievements. Naito carries forward their pioneer spirit while cultivating truly authentic works rooted in the Japanese region and culture.

---

<sup>31</sup> Naito, Hiroshi. *Makino Tom tarō Kinenkan* [Makino Museum of Plants and People]. Translated by Brian Amstutz. Tokyo: Naito Architect & Associates, 2000.

<sup>32</sup> Ibid.

## CHAPTER 2

### **CASE STUDIES: THE SEA-FOLK MUSEUM AND THE MAKINO MUSEUM OF PLANTS AND PEOPLE**

To further understand Naito's architecture, two projects, the Sea-Folk Museum and the Makino Museum of Plant and People, are introduced and studied in this chapter. Each case study is presented in three parts: 1) A description of the background of the project that includes the character of the location and the climate; 2) A discussion of the design and construction process; and 3) A summary of this author's subjective impressions based on notes from site visits.

The Sea-Folk Museum, completed in 1992, effectively utilized natural features and traditions in the region, and a refined state-of-the-art technology in its structure and construction methods. The Makino Museum of Plants and People, completed in 1999, suggests a way of creating architecture that is integrated with this fecund landscape.

Both buildings address a problem that is central to modern architecture: Is architecture a design object that appeals to the visual sense by means of a fashionable façade, or, as Naito believes, is architecture a container for multi-sensory, embodied experience? By studying two buildings, one comes to realize that Naito's view about the process of shaping buildings is similar to that of a "master builder," Until recently, the particular profession of "architect" was unfamiliar in Japan and absent from the Japanese language. "Architect" in Japanese is *kenchikuka*, and as Tom Henegham explains:

“*kenchikuka* might be more accurately translated as ‘specialist master builder.’ The historic buildings of Japan were created by, “master builders” who pursued their vision from overall form to smallest detail and to the way in which they were experienced: they did not concern themselves merely with novelty of appearance or image- with ‘design.’”<sup>33</sup>

Naito seeks to make a complete work as the best possible solution based on local conditions, similar to the manner of such “master builders.”

Through the case studies, the Sea-Folk Museum and the Makino Museum of Plants and People, it becomes clear that the simple beauty that Naito’s buildings have is achieved by his attention to regional characteristics, topography, and climate, and his efforts to combine wisdom from past and modern technology during his design process.

---

<sup>33</sup> Heneghan, Tom. “Blanco elocuente” [Eloquent White]. in *2G: Revista Internacional De Arquitectura* [International Architecture Review]. No,19 (III/2001), Gustavo Gill/ SA: Barcelona, p24.

## The Sea-Folk Museum: Toward Architecture as “Protoform”

### Background

Located at the bottom of a hill on the beautiful coast of Ise peninsula, in Mie Prefecture, this museum is a showcase of culture and artifacts of fishermen in the region. The client is a private organization for researching, collecting, and exhibiting the tools and materials used by local fishermen. Twenty years after the original museum opened in Toba City, the museum’s collection of materials increased

substantially, so that they decided to move and create their ideal museum on a site in an art village. Since Naito was involved in the basic planning for the art village, he became involved in designing the museum.<sup>34</sup>

Given the client’s requirement to express the characteristic of roof and stone wall, which is seen in fishing villages of the region, Naito was initially critical of vernacularism: “I could hardly accept the idea. Although people experience nostalgia in vernacular design, I feel it



Fig 2.1: The location of the Sea-Folk Museum

---

<sup>34</sup> The Sea-Folk Museum is a part of the facility of the planning of the art village.

has nothing beyond that. It seems to me creating a replica of vernacular design is the same thing as designing Disneyland.”<sup>35</sup> Naito did not want to use materials connected to vernacularism; however, as he visited the site and observed the existing fishing villages in the region he found the vernacular to be comprised of ideas about how to survive severe climatic conditions. The houses around the area are refined and elegant solutions to problems created by salt air, and strong wind. To prevent strong winds, native stones are piled up, and white stucco is used to reinforce *kawara*, the Japanese roofing tile. Vernacular solutions came from both everyday experiences and necessity. In addition, it was an economical approach to resist the climate.

The climate in the region is fairly gentle in winter and humid in summer. The site is close by a small bay with a high saline atmosphere, strong winds, and heavy rainfall that is detrimental for buildings.

Given such severe climate conditions, the budget of the project was tight. Hence, at the beginning of the project time was taken to find a balance among quality, durability, and construction to meet the budget and respond to climate. After taking time to find a middle way, Naito began to find a direction based on traditional construction wisdom interpreted and regenerated with modern construction technology. As a result, he discovered that true beauty is in the simple and rustic beauty of essential and primal building forms, which he calls “protoforms.”

---

<sup>35</sup> Translated by Yoko Kanai from: Naito, Hiroshi. *Kenchikuno Hajimarini Mukatsute* [Toward the Beginning of Architecture]. Tokyo: Okokusha, 1999, p186.



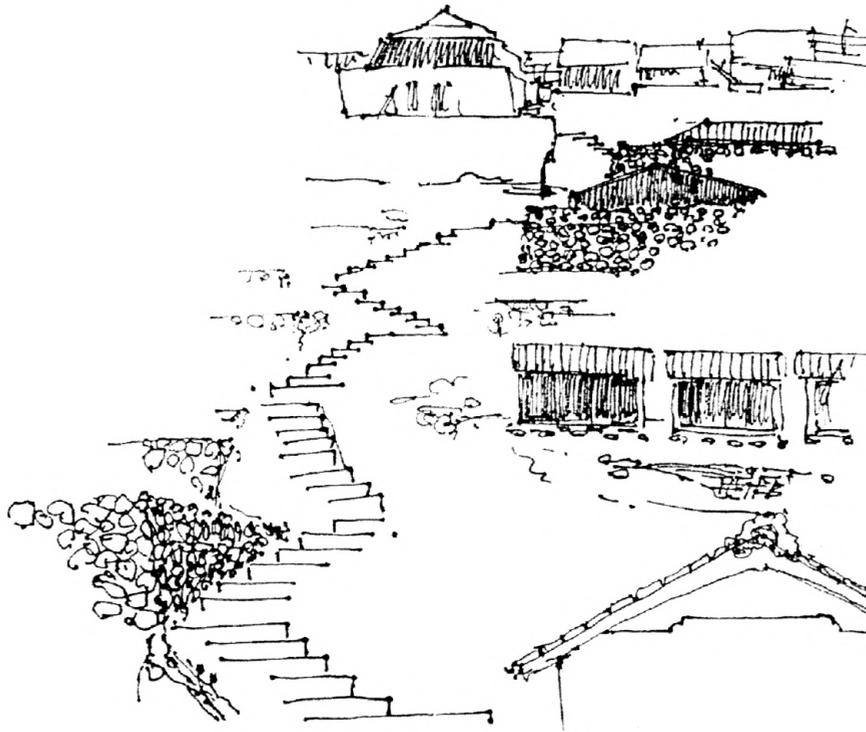


Fig 2.4: Image sketch by Hiroshi Naito

### **Design Process: Repository 1985-1989**

Design started in 1985. The primary function of the repository is to preserve collections and materials, and to make a shelter to protect collections from rain, wind and salt air.

After meeting with clients and several site visits, Naito started to develop the project with physical models. Image sketches of buildings are not Naito's primary method of designing because he does not aspire to "design" built form. He says, "Every creation is a result of a balance of the object and the designer's intention."<sup>36</sup> In order to balance the process, typically two different scale models, 1: 500 and 1:30, are created. Each scale model has a different role in

---

<sup>36</sup> Translated by Yoko Kanai from: Naito, Hiroshi. *Sokei no Kenchiku* [Architecture of Protoform]. Tokyo: Inax Publishing, 1995, p6.

the design process. The 1:500 scale models are used to determine the relationship between buildings and surroundings, and 1:30 models are used for examining structure and details. At the 1:500 scale, overall concepts appear, but the expression is still abstract; it is an articulation of intention. On the other hand, it is necessary to deal with the relationship between human scale and the dimension of structural members in a 1:30 scale model. As design moves forward, the study culminates in a final stage, 1:100 scale models, in order to find the balance between objective and intentional points of view.

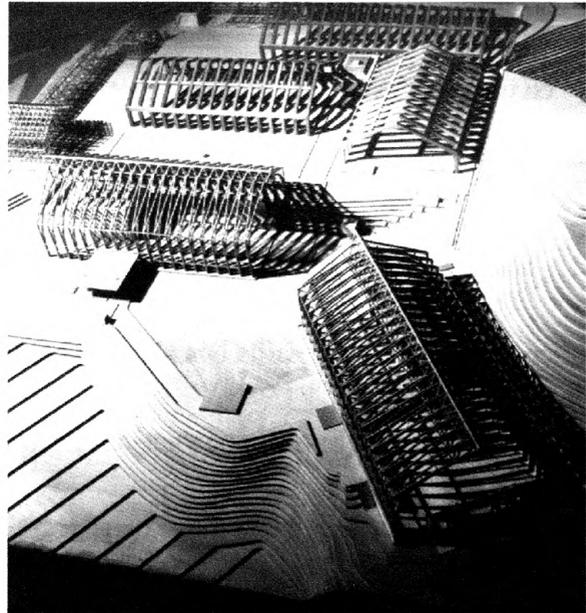


Fig 2.5: The structural model

Since one third of the collections and materials housed at the Sea-Folk Museum are certified as important national properties by the Japanese government, the first design issue was how to preserve stored items that have different requirements for humidity and temperature. The main collection and materials that are preserved in the repository are ships, cloth, paper, and fishing tools. By storing these collections in three separate buildings and choosing suitable natural interior materials for each building, it was possible for Naito to keep constant temperature and humidity without air conditioning. For the repository of ships, those items

which require greater humidity were placed in an area with a hammered soil floor, and for the repository of clothes and paper, which are items requiring dryness, the interior ceiling, walls, and floor were clad with wood. Japanese cedar panels were used for the interior walls for their insect repellent properties. These natural materials are recognized to control certain levels of temperature and humidity, and are used for traditional storage rooms called *kura*. In *Minka no Shizen Energy Gijyutsu* [Sustainable Technology in Japanese Traditional Houses]<sup>37</sup>, which studied the sustainability of traditional Japanese houses, discusses the characteristics of soil floors and wooden panels which are both highly hygroscopic and efficient insulators. The soil floor is efficient in retaining moisture; in addition, the moisture continuously comes up from the ground directly below the soil floor. Therefore, the internal space of the repository of items can avoid being too dry and will keep moisture in the air naturally. Wooden materials insulate efficiently to avoid rapid temperature change. The wood panels also absorb excess moisture from the air when the humidity is high and release it when the humidity is low. The heat at the surface of the wooden panels is dissipated as the wooden panels release moisture, so the surface temperature is kept low; moreover, the under-floor ventilation helps to release moisture and heat during the hot and humid summers. The introduction of traditional wisdom and the use of natural materials thus results in a suitable internal environment for items stored in the each repository.

---

<sup>37</sup> Translated by Yoko Kanai from: Kenichi, Kimura. ed. *Minka no Shizen Energy Gijyutsu* [Sustainable Technology in Japanese Traditional Houses]. Tokyo: Shōkoku-Shya, 1999.



Fig 2.6: The repository of ships.



Fig 2.7: The repository of fishing tool.



Fig 2.8: The repository of paper and cloth.

The second focus was on the durability of the structure whose purpose was to preserve precious cultural artifacts. The basic condition that shaped the built form was structural durability so that the buildings could face the expected damage caused by the briny air. The second issue was how to maintain stable conditions for a long period under these environmental conditions. Naito learned to use pre-cast concrete for the main structure from a previous project, the Arita Ware Museum, designed by Yoshichika Uchida.<sup>38</sup> Based upon this idea the structural details and construction process was examined with a structural engineer. Naito is aware of the unnaturalness of tensile stress in concrete. Naito and his structural engineer, Kunio Watanabe, devised a way to eliminate tensile stress by tensioning piano wire in high precision precast concrete to increase the durability of the building:

“The site assembly method was adapted for the framework. [...] After setting up, the framework was integrated at the same time the post-tension was applied in order to make the stress correction. This method enables construction of the high quality concrete structure with twice the conventional strength. There are a number of

---

<sup>38</sup> The museum that the main purpose is also preservation was completed in 1983. At glance façade of the museum give one bald impression. But gabled roof of the museum has beautiful proportion blended in the background on mountain side.

advantages in this method such as the non-occurrence of cracks, for the framework basically consists only of compressive stress.”<sup>39</sup>

On top of the briny air and humidity, heavy rain is also characteristic of this region. To deal with these conditions, Japanese roofing tiles were chosen instead of metal materials. Roofing tiles place intensive restraints on architectural form. Therefore, standard sized tiles were used for maintenance purposes and a simple roof was designed with the most appropriate pitch for the tiles.

The careful choice of structure, construction method, and interior and exterior materials combine to create a simple, direct beauty in the repository buildings. The primary purpose of creating a shelter to protect collections from rain, wind and salt air, is met in the Sea-Folk Museum in a way that transcends its practical purpose.



Fig 2.9: The construction process of the repository.



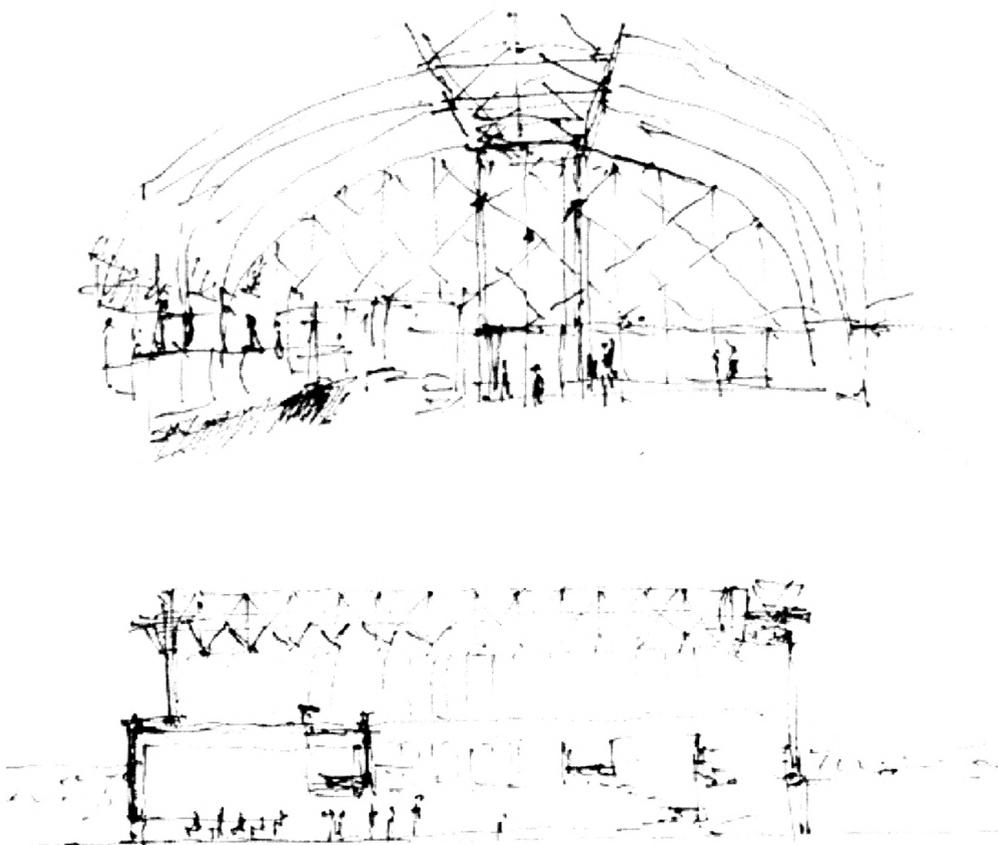
Fig 2.10: The site assembly of pre-cast concrete frames.

---

<sup>39</sup> Naito, Hiroshi. *Umi no Hakubutsukan* [Sea-Folk Museum]. Translated by Makiko Quini. Tokyo: Naito Architect & Associates, 1993.

## Process: Exhibition Hall 1988-1992

The second phase of design for the Sea-Folk Museum started in 1988. During the construction of the repository, Naito began to harbor an organic image for the internal space of the exhibition hall. “The image envisaged for the exhibition hall was an organic structure similar to the bones of a snake, cylindrical, and a horizontal repetition of a single bone shape.”<sup>40</sup> The large wooden frameworks that create the space were introduced not only from the client’s request, but also from this organic image.



— Fig 2.11: The image sketches by Hiroshi Naito.

<sup>40</sup> Naito, Hiroshi. *Umi no Hakubutsukan* [Sea-Folk Museum]. Translated by Makiko Quini. Tokyo: Naito Architect & Associates, 1993.

Compared to the repository, the exhibition hall involves people in many ways. Naito was conscious to create a space in which people would enjoy the exhibits without feeling too surrounded or confined. Since the main exhibits are displayed in independent display platforms. Glass panels are installed in one quarter of the bottom of the walls to make a connection to the outer environment. The top light combines with these low windows to create a sense of openness in the internal space.

The details of the wooden framework were carefully examined and designed with structural engineers by using physical models and drawings. The stresses converge into a crowded spot like a spine at the highest point of the roof, and are gradually dispersed and conveyed to the ground. A diagonal member of the roof's surface and an arch member interdependently convey the stress to form an overall web of structure. The jointed part of the highest point of the structure was the most difficult part to design. By referencing and utilizing conventional Japanese wooden structural methods, Naito decided to use metal members in a supplementary role.

Naito always feels uncomfortable in hermetically-sealed and machine-controlled environments. In air-conditioned environments, people have less chance to experience cool breezes after rain and seasonal changes. He believes that architecture needs to provide environments for people that respond to the variety of the climate and seasons. The internal spaces of the two exhibitions are not machine-controlled. On the top of the gable walls, there

are triangular openings (Fig 2.12) that can control air flow; only natural ventilation is used for cooling. The region has mild winters; there are only a few days in the year, which need local heating for employees.



Fig 2.12: The triangular openings help natural ventilation in the main exhibition and the exhibition halls.

From a narrow range of choices, the external walls of the exhibition halls are of wooden panels treated with a tar-based coating. The traditional roof tiles, *kawara*, were chosen as the best solution to resist the climate conditions. The building thus resembles the houses of the common people in the region, which were originally coated with whale oil.

During the construction, the project continued to face challenges: climate, material choice, structure, and a limited budget. Naito recalls that as more limitation arose, it was easy to see the inner nature of the architecture: architecture becomes real where it is combined with the

labor of the participants of the project, and it becomes a lived place through the user's will. That is well proved by the comment of the director of the museum:

“When I see before my eyes the museum building with its overabundant possibilities, which fulfilled and far exceeded my concept of what a museum should be, I feel the depth and greatness of Mr. Naito's architecture. It might sound strange but it is a rare case in which the construction of a museum is processed through such a fundamental comprehension of its existence as this museum.”<sup>41</sup>

Ten years after completion, the primary purpose of the museum, preservation, is still transcended in buildings of timeless beauty. It is its dignified simple beauty that makes the building memorable to the people who visit it.



Fig 2.13: The construction process of the main exhibition hall.

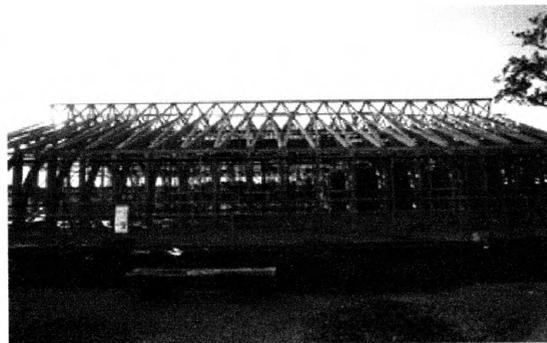


Fig 2.14: The wooden framework of the exhibition hall.

### **Silent Architecture: Notes from This Author's Site Visit**

Walking down a winding street, branching off the main road of Toba-City, the roofs of the clustered buildings contrast nicely, shining against a small bay. Surrounded by trees, the buildings of the Sea-Folk Museum are standing in silence.

---

<sup>41</sup> Naito, Hiroshi. *Umi no Hakubutsukan* [Sea-Folk Museum]. Translated by Quini Makiko. Tokyo: Naito Architect & Associates, 1993.



Fig 2.15: The view of Toba Bay.



Fig 2.16: The clustered buildings of the Sea-Folk Museum.



Fig 2.17: The entrance path to the main exhibition hall.

Along with a stonewall on the right-hand side of the approach, black walls and *kawara*, Japanese roofing tile, create an imposing presence for the exhibition halls. A refreshing pond, surrounded by two exhibition halls, presents sculptures that look like ships and leaves are

arranged as if they are floating on the sea (Fig 2.18). The stone masonry columns, which support the canopy of the entrance, create abstracted mountains; while the lower steel canopy, with its wave-pattern, provides us with pleasurable shading at the entrance (Fig 2.19). When one looks at the pond from underneath the canopy, one may feel that all of these elements unify and create an abstracted, timeless presence of nature on the site.

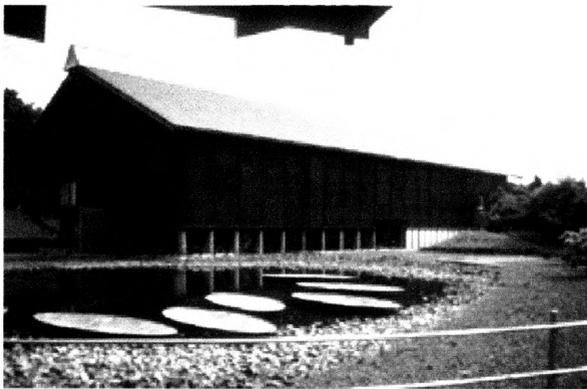


Fig 2.18: Looking at the pond from underneath of the entrance canopy.

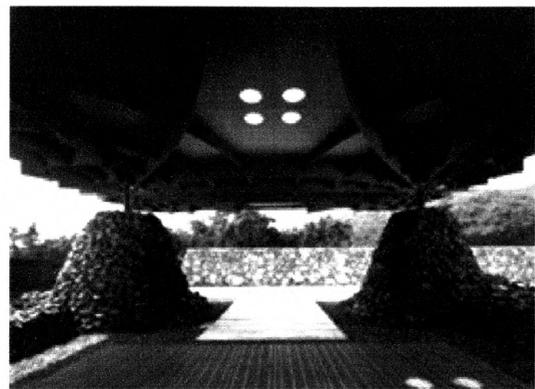


Fig 2.19: The entrance canopy.

Stepping into the main exhibition hall, huge open and natural spaces catch one's eye. There is no feeling of being hemmed in, as is often felt in huge wooden structures. Rather, the parabolic wooden framework provides an open and natural atmosphere for the space. The framework looks like the inside of the body of a whale, giving the illusion that it is gradually coming down. Or alternately, one has the feeling of being held in the womb of an inverted ship. Light streams through the skylight, creating shifting patterns of shadows. A long horizontal opening under the wall and the large wooden framework above consisting of curved lines made

of glue-laminated timber, all create a wondrous feeling of varied rhythms and an atmosphere of deep familiarity. Combined with the column-free structure, there is a sense of unrestrained freedom. Time seems to flow slowly in this museum.



Fig 2.20: The interior space of the main exhibition hall.



Fig 2.21: The light from the low windows creates a rhythm of light and shadow in the interior space.

In order to move from one exhibition hall to the other, it is necessary to take a path along the pond to the next building. In good weather, the plaza is peaceful; however, on rainy days, the water springs forth from a small hill where the two exhibition wings and three repositories meet, and flashes out to form a small waterfall which creates a water plaza.

To gaze at the gabled side of the exhibition hall from the path, the entrance doors, the form of the building, and the gable roof express a dignified presence. The red-painted steel entrance

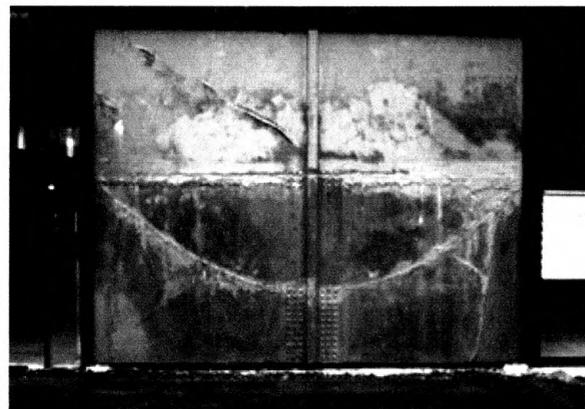


Fig 2.22: The entrance door of the exhibition hall.

doors, which face toward the plaza and the black walls, are weathered by rain and wind communicating a sense of rustic beauty and the passage of time.

Moving through the steel doors and into the exhibition hall, one encounters a full-scale wooden ship, which is displayed in the middle of the open space. The second exhibition hall has the same structural pattern as the main exhibition hall. The space is naturally open to the surroundings and allows people to enjoy the exhibits freely. The southeast side of the second exhibition hall faces the small bay. On the edge of the southeast side of the building, a terrace allows visitors to step outside and enjoy the view toward the small bay (Fig 2.24).



Fig 2.23: The interior of the exhibition hall.



Fig 2.24: The view of the small bay from the south side of the exhibition hall.

By mounting the stairs to the second floor that dominates the northwest corner of the exhibition hall, the wooden structural framework comes into full view. Closer investigation of the framework reveals that each structural member was carefully designed with regard to its dimension and details. The second level of the exhibition space is connected to the hill where all

the buildings meet. Going up the hilltop, one can see the small bay with its indentations. The museum's pond makes a nice contrast with, as well as a connection to, this natural body of water.

The approach to the repository is surrounded by white walls. The rhythmical repetition of diagonal cuts is impressive. The internal walls of the entrance hall have narrow openings on the bottom. Slight penetrations of light from the slit illuminate the small space. The floor has an irregular pattern of natural materials, soil and stone, and brings about a feeling of softness in the entrance hall.



Fig 2.25: The entrance path to the repository.



Fig 2.26: Toward the entrance of the repository



Fig 2.27: The entrance hall of the repository.

Compared to the entrance hall, which is a gentle and open space, the internal space of the repository that stores ships has a tense and restricted atmosphere, yet at the same time it feels is somewhat familiar. Wrapped by a precast concrete structural framework, and with a soil floor, the internal space is dark and moist. Although artificial lights are hanging from the ceiling, the internal space of the repository is obscured by shadows. What strikes visitors in the repository is the combination of the powerful forms of the structural framework and the old ships. The structural framework itself looks like the



Fig 2.28: The interior space of the repository of ships.

keel of a vessel and conflicts with the form of ships and to create an aura of tension. Here too, the space is quiet and time seems to be stopped. There appears to be a similar concept between the structure of Japanese ships and wooden framed buildings. Although the basic structure is made of concrete material, the deep shadow and monochromatic color that the space has creates a memorable feeling for visitors.

Ten years after completion, the buildings are wonderfully acclimatized to the environment. The black walls of the exhibition halls and the *kawara* roofs harmonize with the regional light and appeal to good taste. The museum is synchronized with Naito's thinking about architecture: architecture is just like a human being. After construction, it is the time for the architecture to grow and age. As the building ages it matures but at the same time it inevitably degenerates. But, an aged building has a sense of beauty that can only be expressed by marking the passage of time. The walls and doors of the exhibition halls, the soil floor of the repository, all of these elements have that kind of beauty. The ample space created by the large-scale structural framework and simple elevations, both of which reject unnecessary ornamentation, is particularly attractive. The Sea-Folk Museum strikes me as beautiful beyond expectation. The museum suggests that true beauty, in the Japanese sense, is in a kind of simplicity which rejects unnecessary ornamentation, and allows for, even encourages the signs of weathering and the passage of time.

## The Makino Museum of Plants and People: Architecture within Nature

### Background

Kochi prefecture is located on the northeast coast of Shikoku Island in Japan. Eighty percent of its land is covered by woods, and Kochi is known as a rich area for timber. The project for the Makino Museum of Plants and People was envisioned as one of a series of projects in order for the people of Kochi to reaffirm the greatness of wood and maintain the identity of Kochi as the “culture of wood prefecture.” The museum also seeks to

honor an achievement of a Kochi native botanist, Dr Tomitaro Makino, who is an eminent scholar and father of Japanese botany. The design of the project began in 1995.

Located next to existing botanical gardens at the Makino Botanical Park, the Makino Museum of Plants and People spreads over the gentle and small mountain, Mt. Godai, outside Kochi City. Although the mountain is small, it still remains rich with nature. Given the complexity of land ownership, the functions of the museum were divided into two buildings.



Fig 2.29: The location of the Makino Museum of Plants and People.

The main museum has an entrance hall, restaurant, museum shop and gallery on the upper floor, and a research laboratory, management office and library on the lower floor. The annex has a café, temporary gallery and exhibition hall, and outdoor lecture hall. A 170m-long corridor, configured in an s-shape angle, connects these two buildings.

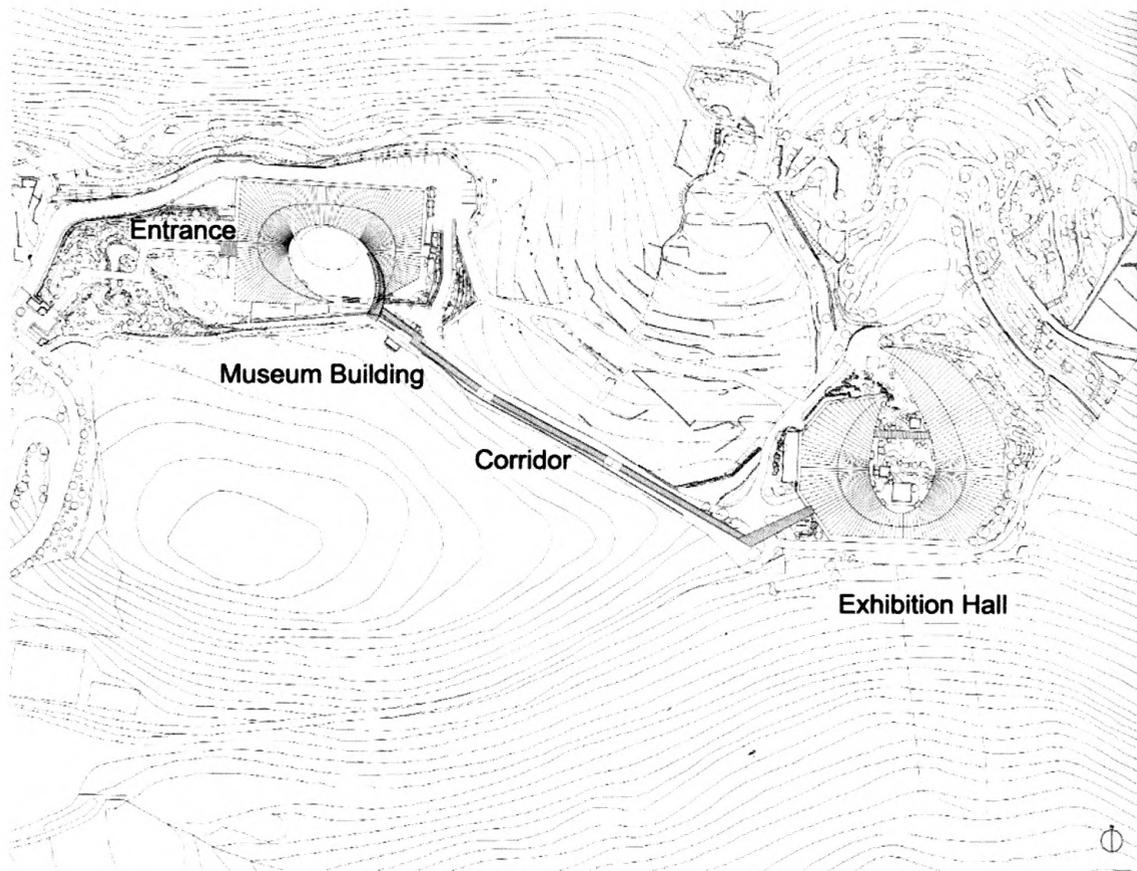


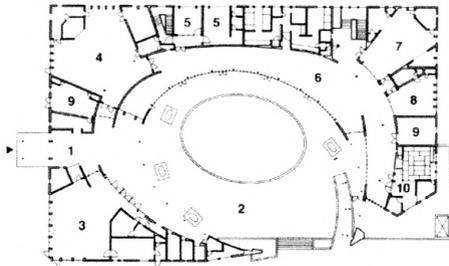
Fig 2.30: The site plan

Based on a previous project, the Tenshin Memorial-Goura Art Museum, Naito started with the idea of architecture-within-nature, and he developed it to express the idea of the Makino Museum of Plants and People. To destroy the natural environment as little as possible,

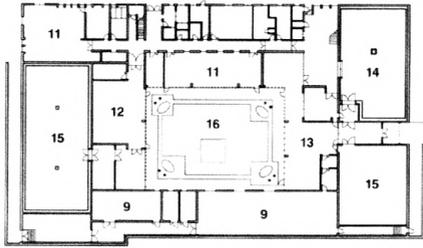
the height of the museum was designed not to exceed the height of the trees around the site. The buildings, which are low and sinuous, were arranged to follow the gentle topography of the mountain contours so they seem almost part of the mountain. In addition, this roof form protects the buildings from strong wind, which is severe in this mountaintop location. The organic form of this museum was developed out of Naito's organic ideas and the climatic conditions in the region.

The climate in Kochi, where the location is facing the Pacific Ocean, is temperate in winter and sultry in summer. Kochi is a prefecture under the perpetual assault of typhoons. For a project which stands atop the mountain, extra precaution was needed in response to the occasionally severe rains and winds. Similar to the Sea-Folk Museum the site is near the sea, so it was also necessary to choose materials to resist the salt air. Through trial and error Naito achieved expressive organic forms. These buildings are a celebration of both the elegance and power of trees and botanicals. This museum is impressive not only because of the way in which the organic forms are integrated with nature, but also because the built forms are so well suited to their architectural objectives.

**Museum Building**

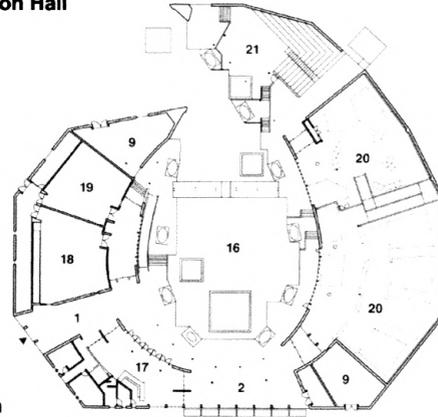


**2nd Floor Plan**



**1st Floor Plan**

**Exhibition Hall**



**Plan**

- |                                     |  |
|-------------------------------------|--|
| <b>1 Main Entrance</b>              | <b>12 Laboratory</b>                     |
| <b>2 Deck</b>                       | <b>13 Library</b>                        |
| <b>3 Museum Shop and Restaurant</b> | <b>14 Stack Room</b>                     |
| <b>4 Audio- Visual Hall</b>         | <b>15 Storage</b>                        |
| <b>5 Meeting Room</b>               | <b>16 Courtyard</b>                      |
| <b>6 Godai-san Gallery</b>          | <b>17 Cafeteria</b>                      |
| <b>7 Studio</b>                     | <b>18 Gallery</b>                        |
| <b>8 Study Room</b>                 | <b>19 Botanical Illustration Gallery</b> |
| <b>9 Machine Room</b>               | <b>20 Permanent Exhibition Hall</b>      |
| <b>10 Japanese Room</b>             | <b>21 Outdoor Lecture Hall</b>           |
| <b>11 Office</b>                    |  |

Fig 2.31: The plan of the museum building and the exhibition hall.

**Museum Building**



**North Elevation**



**Section**

**Exhibition Hall**



**North Elevation**



**Section**

Fig 2.32: The elevation and section of the museum building and the exhibition hall.

## Design Process: 1995-1999

Naito believes that designing architecture is similar to translating one language to another.<sup>42</sup> The architect translates intangible elements such as climate, the latent power of scenery and place, and the character of the times, into tactile forms of reality apparent to everyone.<sup>43</sup> The object of the translation, in this project, was “something emanating from the land in this region known as Kochi.”<sup>44</sup> When he visited the site on Mt. Godai for the first time, Naito was impressed by the power of nature and conceived the idea of buildings that would be integrated with this abundant landscape and foster an awareness of this remarkable environment.

The design started with this idea as an elemental concept. The organic form which characterizes the museum was inspired by a feather-veined leaf form Naito observed during one of his site visits:

“At times, something that one might overlook in ordinary circumstances will present itself as a revelation to the designer. I had created dozens of models as I sought, through trial and error, the appropriate building for the site. Then, one day, as I walked the site in the drizzling rain, my mind rambling from this thought to that, my glance fell on some damp fallen leaves, clinging flat to a large rock that stood in the forest. As I looked, I became absorbed in the beauty of their veins, which stood out clearly against the stone surface. Around the same time, I had been mesmerized by the skeleton of a flatfish on display in a museum. Its bones extended in a flat manner from the spine, interconnecting with a row of more delicate bones two thirds of the way out, in a skeletal structure of grace and supple beauty. Damp fallen leaves represent a state of organic life on the verge of decomposing and returning to nature. A flatfish skeleton

---

<sup>42</sup> Naito, Hiroshi. *Azumino Chihiro Bijyutsukan* [Chihiro Art Museum Azumino]. Translated by Brian Amstutz. Tokyo: Naito Architect & Associates, 1999.

<sup>43</sup> Naito, Hiroshi. *Makino Tom tarō Kinenkan* [Makino Museum of Plants and People]. Translated by Brian Amstutz. Tokyo: Naito Architect & Associates, 2000.

<sup>44</sup> *Ibid.*

represents decomposing and returning to nature. A flatfish skeleton represents a state of self-concealment by lying prone on the sandy ocean floor. Common to both is a state of hugging the ground. Taking my intuited glimpse of their beauty as my point of departure, I began working toward the figure of the building. In actual terms, this did not entail the tracing of their forms. Architectural form belongs to an entirely different dimension. Still, my realization of the rationality and beauty existent in a structure that embraces the ground was perhaps more significant than anything. If, by providing a sturdy spine, I could transmit the framework from there and construct a flexible system that responded closely to the land form, a building might result that conformed to the topography of Mt. Godai and the harsh temperament of nature in Kochi.”<sup>45</sup>

Based on the idea of “the structure that embraces the ground”, design of the structural framework proceeded by repeatedly creating big and small scaled study models, meanwhile adjusting the position of the ridge relative to the plan so as to avoid producing discontinuous surfaces or parts. By locating a “keel” of steel pipe at the ridge and at the position of the sash, the guidelines in organizing the complex building frame were settled upon, and laminated timber roof beams were designed to span between these points.

Over 400 laminated timber beams are used, each with a different length, angle, and method of connection to the steel roof ridge. To manage this level of custom design, constant study was done using both physical and CAD models. In order to allow some response to angle variation with the joint itself, cast metal joints were employed to connect the steel roof ridge to the laminated timber beams. Concurrent with the trial and error method of designing from an aesthetic point view, wind-tunnel tests, simulating the effects of a severe typhoon, were carried out. Two models, 1:1000 and 1:150 scales, were prepared for the experiment. The 1:1000 scale

---

<sup>45</sup> Naito, Hiroshi. *Makino Tom tarō Kinenkan* [Makino Museum of Plants and People]. Translated by Brian Amstutz. Tokyo: Naito Architect & Associates, 2000.

models were used to determine the flow of wind on the site, and how the buildings would be affected by the wind flow. The 1:150 scale models were used to examine how much wind load is taken by each part of the buildings.

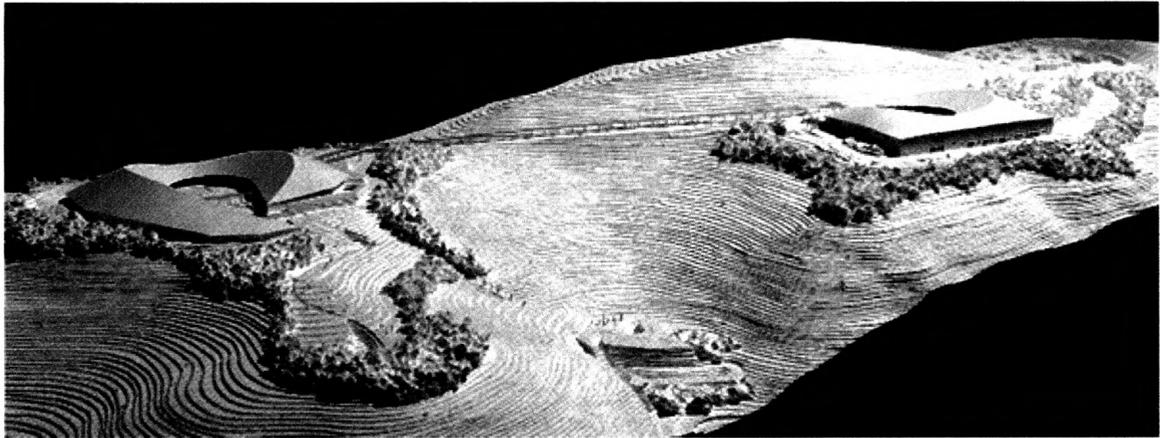


Fig 2.33: The site model of the Makino Museum of Plants and People.

The results of these experiments clearly showed that the wind flows follow the topographic features, and some parts of the buildings have a ton of load per square meter. Since wood is the primary structure, which is influenced by wind easily because of its lightweight, preservation of surrounding trees and topographical features as much as possible was considered to be essential. Based on the results from the wind tunnel tests, the plans, building form and structural frame of each building were adjusted. Moreover, in order to reduce wind load onto the building parts, the entrances of both museums and two parts of the annex have open spaces to let air through. Combining all of the environmental conditions, the form of the

buildings was developed: A courtyard open to outdoor space wrapped by a building with deep eaves and a reinforced concrete exterior circumference.

Kochi's uncommon rain and wind were among the most critical factors in the design of the roof details. Considering the salty air, zinc and stainless steel laminated panels were chosen for the roofing material, and entire surface was fastened with adhesive and screws at small intervals to resist wind loads. In order to deal with heavy rain, a three-channel gutter system was installed between each roof panel.<sup>46</sup>

Since winter is gentle in Kochi, Naito focused on the internal environment during summer. Like the Sea-Folk Museum, only natural ventilation and air flow by fan is used for cooling. Deep eaves, water pots, and ponds are used as supportive devices for cooling. Kochi-grown Japanese cedar was used for interior walls and ceilings. The buildings also use Kochi-grown Japanese cypress for exterior decks. Wooden materials, which absorb moisture, help to control the level of humidity, so wood is suitable for the hot and humid summer in Kochi.

The complexity of the construction created difficulties in adjusting the details. But, as Naito mentioned, the consistency of all stages of production was achieved by a superb alliance between the precision of advanced technology and the hand work of the seasoned craftsmen. Combining all efforts, the museum's success suggests the presence of architecture within nature:

---

<sup>46</sup> Naito, Hiroshi. *Makino Tom tarō Kinenkan* [Makino Museum of Plants and People]. Translated by Brian Amstutz. Tokyo: Naito Architect & Associates, 2000.

“So many years from now, Kochi’s lush greenery will likely cover and conceal this building. As the wounds left by construction heal and this extravagant event of building erection ends, the mountain will return to its original state of repose. The building will be buried in the forest, leaving only its central court and interior spaces, encompassed by roof. At that time, this foreign element, a building, will be restored to its larger framework of environment and scenery, finding reconciliation with the flow of time it disrupted. Only then will the translation we set out to achieve truly be complete.”<sup>47</sup>

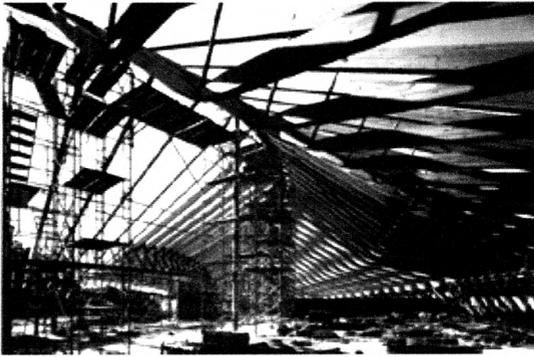


Fig 2.34: The roof structure looks like the veins of a leaf.

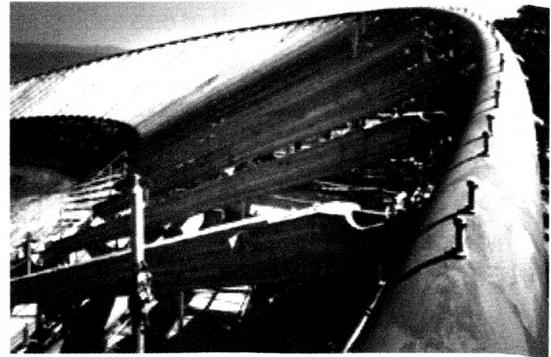


Fig 2.35: The construction process of the exhibition hall.

---

<sup>47</sup> Naito, Hiroshi. *Makino Tom tarō Kinenkan* [Makino Museum of Plants and People]. Translated by Brian Amstutz. Tokyo: Naito Architect & Associates, 2000.

## Architecture within Nature: Notes from the Author's Site Visit

Two years after completion, the buildings of the Makino Museum of Plants and People is starting to become a part of Mt. Godai. From the bottom of the mountain, the silver roofs of the museum are invisible from time to time. As the mountain gently slopes to the gate of the museum the woods become thicker and throw deep shade on the road. Passing through the gate at the top of the mountain, a winding path among trees guides one to the entrance. Through the trees, extensive prospects of Kochi City can be seen. Midway to the entrance, a small stream creates refreshing coolness, and waterside plants are a pleasure to the eye. Turning at the last corner to the museum, the roof of the main building appears in its organic form.



Fig 2.36: The museum buildings are seen from the bottom of the small mountain.



Fig 2.37: The view of the Kochi city from the entrance path.

The main entrance opens onto a central deck, so the framed view of the deck can be seen through the opening (Fig 2.39). Unlike its cool external appearance, the building's underside has a warm atmosphere. Upon stepping into the entrance hall the first impression one has is the roof frame, which has an elegant curved line along the ridge and a flowing

arrangement of wooden beams that give a relaxed sense of security. Unlike the masculine frameworks seen in the Sea-Folk Museum, the structure at Makino appears absolutely elegant and soft in the misty atmosphere of Kochi. On the right side of the open entrance hall, a restaurant and museum shop is placed, and on the left side the audio-visual hall, gallery, and activity rooms are arranged along an elliptical deck. The deep eaves throw a curved shadow on the deck, and create a comfortably shaded outdoor space. On the deck, an old couple enjoys walking under the shaded space, and some other visitors sit comfortably reading their books. A boy is looking into a water pot situated on the deck parallel to the eave. In the middle of the deck, a hole provides light to a courtyard on the ground floor. Bamboos, growing vigorously from the courtyard, wave in the wind, and cool the deck.



Fig 2.38: Toward the museum building



Fig 2.39: The main entrance of the museum



Fig 2.40: The deck of the museum building

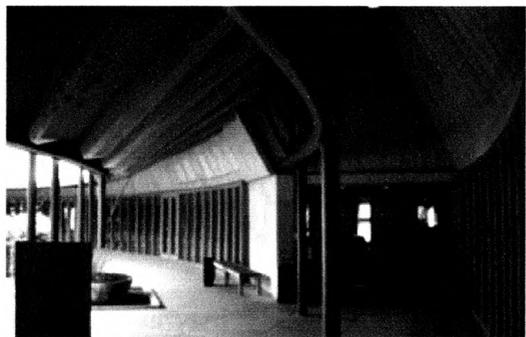


Fig 2.41: The deep eave create comfortable semi-exterior space under the eave.

In the gallery, the sinuous interior space is wrapped with a continuous curving roof to create a genre and wondrous atmosphere. Through glass doors, interior space is visually connected to the outdoor space (Fig 2.42). The rainwater that gathers in the water pots reflects the sunshine and illuminates the underside of the wooden frames of the eaves. The contrast of the shadows on the deck and illumination from the water create rhythms of light and dark in the gallery space. Looking out through the gallery, a wooden pergola, arranged along the edge of the roof, guides visitors to the connecting corridor to the annex.



Fig 2.42: The view of the deck from the gallery in the museum building



Fig 2.43: The wooden pergola to connect between the two buildings.

The corridor, which is covered by a wooden pergola, curves following the topography (Fig 2.43). Light penetrating through the pergola paints striped shadows in the corridor. Walking down this gentle circulation space, the smooth silvery forms of the roof emerge from vegetation little by little. Similar to the main museum, the entrance to the annex opens up to an extended deck and the sinuous plan wraps around a central courtyard. The left side of the

museum entrance is a gallery for special exhibitions, while the right wing houses a café, outdoor deck, permanent exhibition hall, and outdoor lecture hall. The form of the building hugs the gentle slope of the mountain, and both sides of the building gently decline; both edges of the flowing curved roof seem almost integrated into the mountain slope. Floor level differences are adjusted with steps, and each level has seating spaces, so that one can enjoy the courtyard from different points of view.

In the courtyard, various kinds of Kochi native trees and plants are planted, and people delight in encountering the small nature while pacing about a small meandering path in the courtyard. As I look on, a group of people is walking slowly on the narrow path and stop to confirm the names of the plants. Trees are growing rapidly; the tallest tree has almost reached the height of the roof, and within a few years, the trees will make a thick forest. Water ponds and stream are arranged in a natural setting and refresh visitors walking slowly around the courtyard. People seem to enjoy the wonderful interconnections among the interior, semi-exterior, and exterior spaces of the buildings. The semi-exterior space under the eave has a constantly varying character, and provides sensory pleasures for visitors. There is an ever changing variation of the sensations of coolness on the skin coupled with the intermittent exposure to shade and wind. Sitting on the bench under the eave, one can feel the gentle breeze and hear the sound of trembling leaves. The short distance to the plants gives one a sense of intimacy with nature along with a feeling of being projected by the eave. Even on rainy days,

the semi-exterior space is an enjoyable place from which to watch and listen to the sound of raindrops.



Fig 2.44: The water pots under the eave cool in summer.



Fig 2.45: Variety of trees and plants are planted in the central courtyard.



Fig 2.46: The edge of the building is integrated into the mountain slope.



Fig 2.47: The building form follows the topography.

The atmosphere of the internal space of the exhibition hall is undoubtedly magical. Entering from the open deck, which is on the south side entrance to the exhibition hall, the visitor is struck by the sudden change from daylight to an architecturally created nocturnal ambience. The countless beams of the continuous curved roof and the somewhat gloomy open space make a profound impression on the imagination and the sensitivity of visitors to the space. The wooden framework has the same sense of elegance and the power that the botanicals have.

The ceiling of the exhibition hall is higher than the other spaces, but the space feels open and natural. The wooden structural framework is not oppressive; rather, it makes people feel comfortable, and the reddish internal space wraps one with warmth. The high ceiling and reddish wooden color make the space feel subdued but not oppressive or gloomy. Under these conditions, time seems to flow slowly and people feel tranquility in their mind.

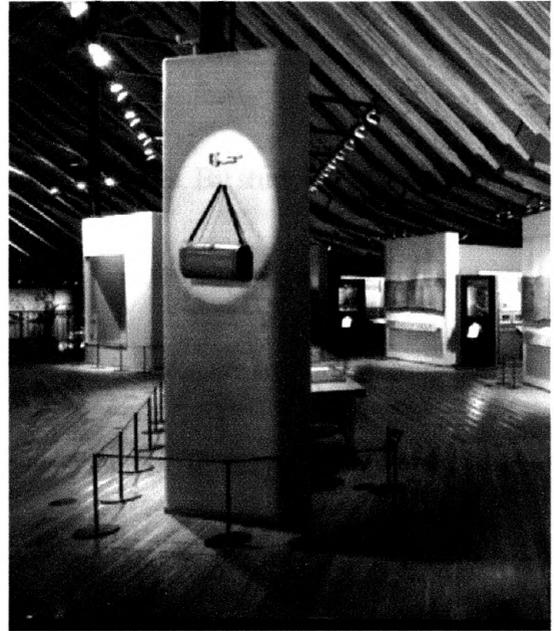


Fig 2.48: The interior space of the exhibition hall.

Structure and function in the Makino Museum of Plants and People effectively interact to bring out the best of each. There are no excessive decorations or anything insufficient, in not only the entire area, but also among the details. The semi-exterior spaces under the eaves create wonderful encounters with sensory pleasures. The primary purpose of honoring plants and forests is perfectly achieved not only by the organic form of the museum, but also the distinctive experience of interior and semi-exterior spaces.

The beauty of Naito's architecture lies not only in the end form, but also in the process of its making and the necessity that calls it into being.

## CHAPTER 3

### **SIX DESIGN PRINCIPLES OF HIROSHI NAITO**

Every architectural work is founded upon design principles. By studying Naito's two works, the Sea-Folk Museum and the Makino Museum of Plants and People, it becomes easy to see his design principles. In Chapter 4, therefore, Naito's principles are explored through interviews, articles, and the case studies of the previous chapter. The primary process to determine his principles are: 1) the interview with Naito and the articles by him are analyzed to find conditions that Naito regards highly; and 2) the elements from the first analysis are compared to the two case studies, the Sea-Folk Museum and the Makino Museum of Plants and People, in Chapter 2. Based on these steps, Naito's design principles discussed in this chapter are:

- 1.) Response to Landscape
- 2.) Response to Climate
- 3.) The Architectural Protoform
- 4.) Tectonics and the Human Body
- 5.) Architecture for Experience and Multi-Sensory Perception
- 6.) Mediation between Modern Technology and Traditional Wisdom

In addition, one of the important, but intangible elements of Naito's approach to design, his inheritance of Japanese culture and tradition, is also discussed as a part of this consideration of his design principles. Naito does not comment about direct influences from Japanese culture and tradition. However, in Japan culture is part of one's daily life and embodied existence;

therefore, the influence often emerges without one's being conscious of it. Naito says, "Architects have their own experiences, and we pick up something from experience during the design procedure."<sup>48</sup> As he mentions in the interview with this author, the influence of Japanese culture and tradition come from his own experience, but unconsciously.

### **1.) Response to Landscape**

An architecture that expresses the character of place can become a positive force. It gives people a sense of belonging and intimacy. This is something that has long been a part of the Japanese architectural tradition. Since Japanese cities are frequently destroyed by earthquakes and other disasters, Japanese people have cultivated an idea that the land and the character of place are passed on to the next generation more so than architecture is. Following this notion, Japanese cities and buildings have always been constructed and reconstructed based on the character of the naturally occurring place.

An approach that emphasizes the interpretation of place is no doubt very important in Naito's works. His buildings are generated out of the character of place, and integrate with their surroundings. Every one of Naito's projects is directly related to and expressive of a specific site.

---

<sup>48</sup> Naito, Hiroshi. Interview by Yoko Kanai at Tokyo University, 24 July 2001. Text contained in the Appendix, p156.

There are mainly two qualities that foster the site specific approach that we can see in Naito's works: Topographical Contextuality and Integration with Nature.

Topographical Contextuality

Topographical contextuality is clearly seen in both the Sea-Folk Museum and the Makino Museum of Plants and People.

The Sea-folk Museum is located at the bottom of a gentle hillside facing a small bay. Preserving the natural topography as much as possible, Naito used existing site contours to separate the program's two different functions:

storage and exhibition. Buildings for the storage of artifacts are sited on the upper level of the contours and buildings for exhibition are on the lower portion of the site. The ground level of the repositories is the same level as the second level of the two exhibition halls. Therefore, visitors can



Fig 3.1: The exhibition hall and repository buildings.

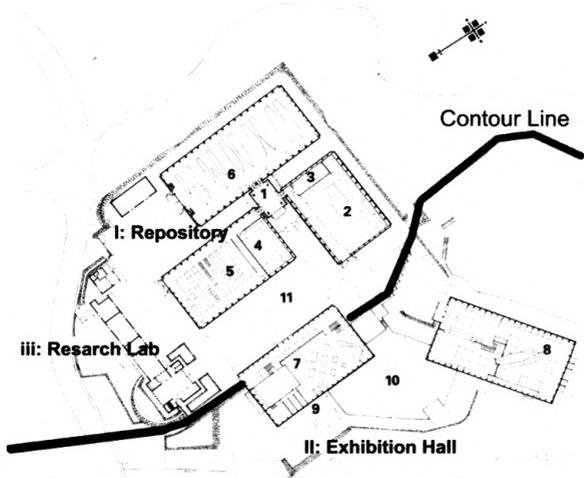


Fig 3.2: The two functionally different buildings are arranged on two levels of the site.

have a circular tour from the main exhibition hall to the exhibition hall annex through a plaza, and to the repository from the second level of the exhibition hall to a path on the hill. In this way, the natural slope of the site is well integrated with the program, and creates wonderful transitions from one function to another.



Fig 3.3: The section of the site.

Naito's consciousness of topographical contextuality is more clearly articulated at the Makino Museum of Plants and People. Since the locations of the two buildings of this complex are on the top of the small gentle mountain which has rich natural environment, Naito avoids destroying the natural features of the mountain as much as possible. As a result, the buildings are arranged to follow the natural topography and to embrace the mountain's contours. In each case Naito makes the greatest possible efforts to keep the natural topography.



Fig 3.4: The roof of the exhibition hall from the lower level.

## Integration with Nature

Naito's architecture has a distinctive and simple beauty; it becomes integrated with its surroundings and becomes part of nature. One of the reasons people feel a sense of deep intimacy with his architecture is that it suggests ordinary scenes and moods with which Japanese people are already familiar. Naito thinks that architecture should arise naturally from within the region; hence, as time passes the building naturally becomes part of the scene. "We have lost our sense to praise the beauty of the ordinary [...] I think architecture does not have to be interesting and exciting, expressing the architect's individuality."<sup>49</sup>

Naito preserves the native environment as much as possible. He believes that architecture should exist in harmony with its surroundings. Describing the Makino Museum of Plants and People he says:

"I hope the buildings will have no elevations; so only trees can be seen. I want the building exist only as interior space. It is wonderful. As the surroundings mature, the architecture becomes more resistant to typhoons. It is ideal for architecture to stand with the environment. Modern architecture stands alone. I don't think modern architecture gets power from the earth. It is hard to see architecture standing alone. For architecture, it is better to exist with its surroundings. I think architects are starting to think about this issue."<sup>50</sup>

---

<sup>49</sup> Translated by Yoko Kanai from: Naito, Hiroshi. *Kenchikuno Hajimarini Mukatsute* [Toward the Beginning of Architecture]. Tokyo: Okokusha, 1999, p157.

<sup>50</sup> Naito, Hiroshi. Interview by Yoko Kanai at Tokyo University, 24 July 2001. Text contained in the Appendix, p166.

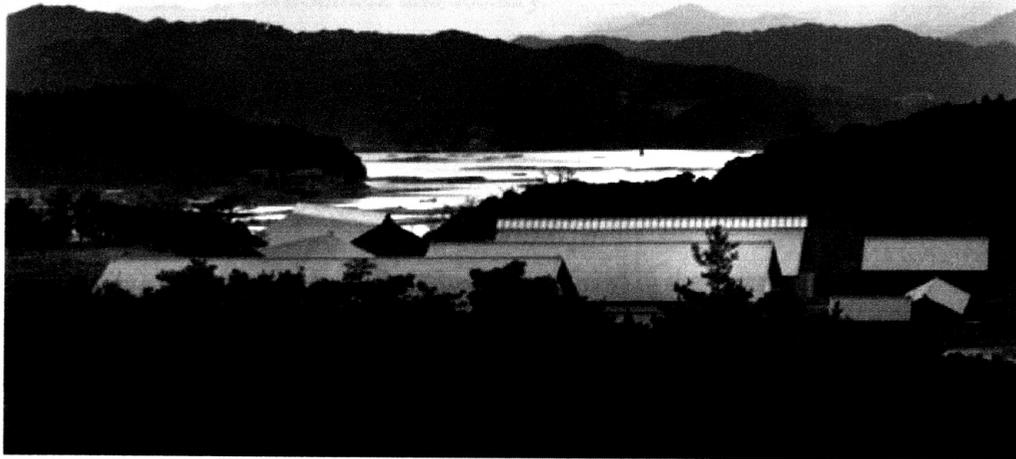


Fig 3.5: The overview of the Sea-Folk Museum.

In the Sea-Folk Museum, we can see the intimate relationship between buildings and surroundings. Looking down to the museum from the street branching off the main road, only clusters of long and narrow roofs are seen among the hills along the coast. The shapes of the roofs are chosen not only to follow regional precedents, but Naito also found that the gable roof minimizes the volume of the buildings and helps them to exist in harmony with their surroundings.

His attempt at integrating buildings with their surroundings is more clearly articulated by the Makino Museum of Plants and People: “My endeavor this time was an aggressive

attempt to restore the presence of architecture, which tends to stand isolated in its surroundings, to the larger frame of its environment and scenery.”<sup>51</sup>

From the bottom of the mountain, the roofs of the museum seem to be integrated with the natural features of the mountain. The surroundings are preserved as much as possible, and as trees around the site grow, the built form becomes buried in the mountain. “I’m so happy to see that the building will be buried in the forest, leaving only its central court and interior spaces, encompassed by the roof,”<sup>52</sup> Naito says. Although it is two years after completion, the trees of

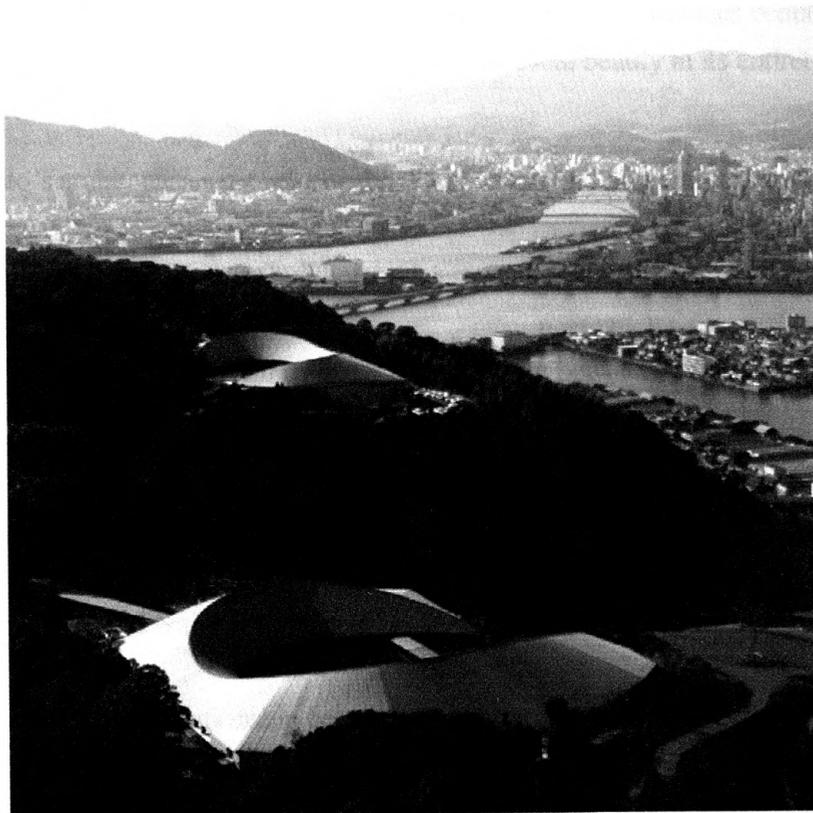


Fig 3.6: The overview of the Makino Museum of Plants and People

<sup>51</sup> Naito, Hiroshi. *Makino Tom tarō Kinenkan* [Makino Museum of Plants and People]. Translated by Brian Amstutz. Tokyo: Naito Architect & Associates, 2000.

<sup>52</sup> Naito, Hiroshi. Interview by Yoko Kanai at Tokyo University, 24 July 2001. Text contained in the Appendix, p166.

the surroundings are growing and starting to cover the elevations of the museums just as Naito hoped they would.

For Naito, the form of architecture is an extension of an ordinary scene. The importance he gives to natural and ordinary beauty is similar to the traditional Japanese sense of beauty.

Soetsu Yanagi discusses this Japanese sense of beauty in his book, *The Unknown Craftsman*:

“The sense of beauty is born when the opposition between subject and object has been dissolved, when the subject called “I” and the object called “it” have both vanished into the realm of Non-dual Entirety, when there is no longer anybody to transfer or anything to be transferred. Neither the “I” that faces “it” nor the “it” that faces the “I” can attain reality. A true awareness of beauty is to be found where beauty watches beauty, not where “I” watch “it”. The “I-it” relationship cannot reveal beauty in its entirety, but only a small part of it.”<sup>53</sup>

In Naito’s architectures the relationship “I-It” is the building and its surroundings. As time passes, the separation between building and surroundings vanishes, creating what Yanagi refers to as a “non-dual entirety,” a new sense of wholeness between architecture and nature.

## **2.) Response to Climate**

From the study of Naito’s works in Chapter 2, it becomes clear that his response to climate fosters an intimate relationship between interior and exterior spaces, buildings and their

---

<sup>53</sup> Yanagi, Soetsu. *The Unknown Craftsman; A Japanese Insight into Beauty*. Tokyo: Kodansha International Ltd, 1972, p152.

surroundings. Naito criticizes the approach of modernism that creates a disconnection between the interior and its surroundings<sup>54</sup>:

“Naturally, internal ambient space is somewhere connecting to surroundings. It is strange to treat internal space as a separate space cut-off from its surroundings by building walls. It is a phenomenon that modernists have as a precondition of their work, the building as a ‘closed box’.”<sup>55</sup>

Under these conditions, the built environment becomes less affected by climatic changes.

Hence, built form can be free from climatic conditions, and the pre-made flat roof can exist in any region of the world.

Naito opposes that idea; to him climate is a major determinant of built form and the choice of materials. Naito understands that climate is the physically manifested reality to which architecture has to respond. It is beyond the control of humans and so an architect has to consider it when designing. He says that his design methods are similar to translation of one language into another:

“Through words we ponder and understand phenomena. Nature, or the land, however, although a garrulous talker, does not possess words. The labor of architectural design, I

---

<sup>54</sup> Naito takes Farnsworth House designed by Mies van der Rohe as an example of an approach of modernism in his article: “Jūryoku to Kaze” [Gravity and Wind]. In *Shinken-chiku* [New Architecture]. Dec 1999.

<sup>55</sup> Translated by Yoko Kanai from: Naito, Hiroshi. “Jūryoku to Kaze” [Gravity and Wind]. *Shinken-chiku* [New Architecture]. Dec 1999, p83.

find, takes place in the interval between. One relies on intuition to capture that invisible quality, then delivers it into a form readily apparent to everyone.”<sup>56</sup>

One of the “invisible qualities” is obviously climate.

The idea of responding to climate was cultivated while Naito worked in Spain: “I thought that as we consider climatic differences, for example, as basic considerations in the creation of architecture, I assume that the way of creating architecture in the east and west would also be different.”<sup>57</sup> Using this as a starting point, Naito gradually learned that the best possible solution in each project will of necessary be different.

#### Climate as a Major Determination of Built Form and Materials

By studying Naito’s design process, we learn that each of his projects has been formed by climatic conditions. Heavy rain and salty air were a primary concern for the Sea-Folk Museum. As a result, gable roofs were chosen as the best possible solution to deal with these climatic conditions.

The Makino Museum of Plants and People was also formed largely as a response to climatic conditions. The presence of typhoons with their strong winds and heavy rains was critical for this project; the form of the buildings facilitates wind movement through and over

---

<sup>56</sup> Naito, Hiroshi. *Makino Tom tarō Kinenkan* [Makino Museum of Plants and People]. Translated by Brian Amstutz. Tokyo: Naito Architect & Associates, 2000.

<sup>57</sup> Naito, Hiroshi. Interview by Yoko Kanai at Tokyo University, 24 July 2001. Text contained in the Appendix, p162.

them. Thus, the continuously curved roofs were located to follow the topography. Deep eaves were adopted to prevent heavy rains from entering through the building envelope, and as a way to create shaded, rain protected semi-external spaces.

Materials were also chosen to respond appropriately to climate in both case study buildings. The roofing tile used for the Sea-Folk Museum, *kawara*, was introduced to resist salt air and sea breezes, following the example of the fishermen's houses in the region. The interior materials of the repository buildings, tamped soil floors and wooden panels of Japanese cedar, were used to help control humidity without air conditioning. These ideas were informed by traditional building wisdom, and Naito adapted them using modern construction methods.

Naito's works, even at a casual glance, have a "Japanese character," but this is not a result of self-conscious mimicking of a "traditional architecture vocabulary" in its details. Since the forms of traditional Japanese architecture evolved in response to the climate of the country, deep eaves, gable roofs, and open-style plans were logical characteristics. Given Naito's design philosophy it is almost inevitable that such devices would be employed in his works, thereby creating a quality of "Japaneseness" which he does not seek intentionally.

#### Use of Rain as a way to Respond to Climate

Japan is a country which has a rainy season and typhoons. Consequently, the evolution of traditional architecture and garden design has a deep connection to rain. In addition, "rain

also affects Japanese perception of nature, belief, and taste.”<sup>58</sup> The relation to rain is important for culture as well as architecture and garden art. However, as the idea of “universal” design is introduced in Japan, rain becomes hidden from our cities and daily life. Steven Holl criticizes the modern city: “One of the tragedies of modern urban life is that a complex of urban construction often puts us out of touch with the poetry and unpredictability of the everyday change in the weather.”<sup>59</sup> Naito also has a similar idea: “Modern architecture puts rain out of sight. Rain collects in a built-in gutter, goes through a curtain wall, and disappears down a drain. We have no chance to see it personally; I don’t like the idea.”<sup>60</sup>

While on my research trip in July 2001, Japan was at the end of the rainy season. On both of the sites I experienced both sunny and rainy days. It was absolutely wonderful to experience how Naito uses rain for a realization of the poetry of climate changes in both buildings. In an interview with him, Naito admits to the intentional use of rain to oppose the “universal” approach to architectural design: “Basically, the role of the water is to make it easier to explain natural phenomena; how water reaches people. I could use wind as well, but using water is understandable for people (because it is visible). It is a primary consideration for

---

<sup>58</sup> Translated by Yoko Kanai from: Kobayashi, Toru. *Utsuroi no Fūkeiron* [Perception of Landscape-five senses, words, and climate]. Tokyo: Kajima Publication, 1993, p108.

<sup>59</sup> Holl, Steven, Pallasmaa, Juhani, Perez-Gomez, Alberto. “Question of Perception, Phenomenology of Architecture.” *Kenchiku to Tosh* [A+U: Architecture and Urbanism], July 1994, p83.

<sup>60</sup> Naito, Hiroshi. Interview by Yoko Kanai at Tokyo University, 24 July 2001. Text contained in the Appendix, p165.

architecture.”<sup>61</sup> From the second level of the main exhibition hall of the Sea-Folk Museum, I could see rain running down the roof of the repository and collecting in the eave gutter. Then the collected water created a waterfall by running through a gutter outlet (Fig 3.7). The waterfall’s splashed over a stone circle (Fig 3.8) and disappeared into a hidden channel, and flowed from there into water pond (Fig 3.9 and 3. 10). In this way Naito created a microcosm of the entering hydrological cycle on the site of the Sea-Folk Museum.



Fig 3.7: The rain running through the holes of gutter creating water fall.



Fig 3.8: The stone circle



Fig 3.9: The rain water creates a small stream running into the pond.

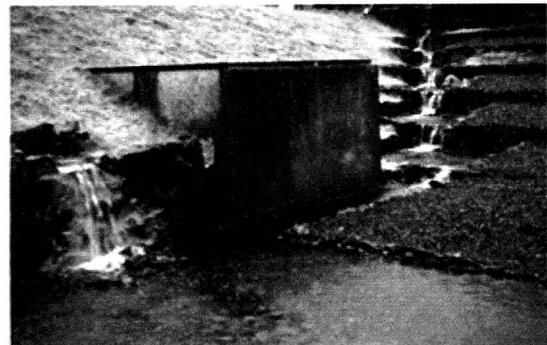


Fig 3.10: The rain water running down from the upper hill.

<sup>61</sup> Naito, Hiroshi. Interview by Yoko Kanai at Tokyo University, 24 July 2001. Text contained in the Appendix, p166.

The idea of making the movement of water visible is also used at the Makino Museum of Plants and People. The water pots and water plants, placed parallel to the eaves, evoke a sense of coolness on sunny days (Fig 3.10). On rainy days, the water pots catch waterfalls from gutter outlets (Fig 4.11). The ground under the water pots is covered with loose stones, so the overflowing water from the pots flow into a catch drain under the stone pavers. Naito uses rain poetically in this way to evoke sensory pleasure.

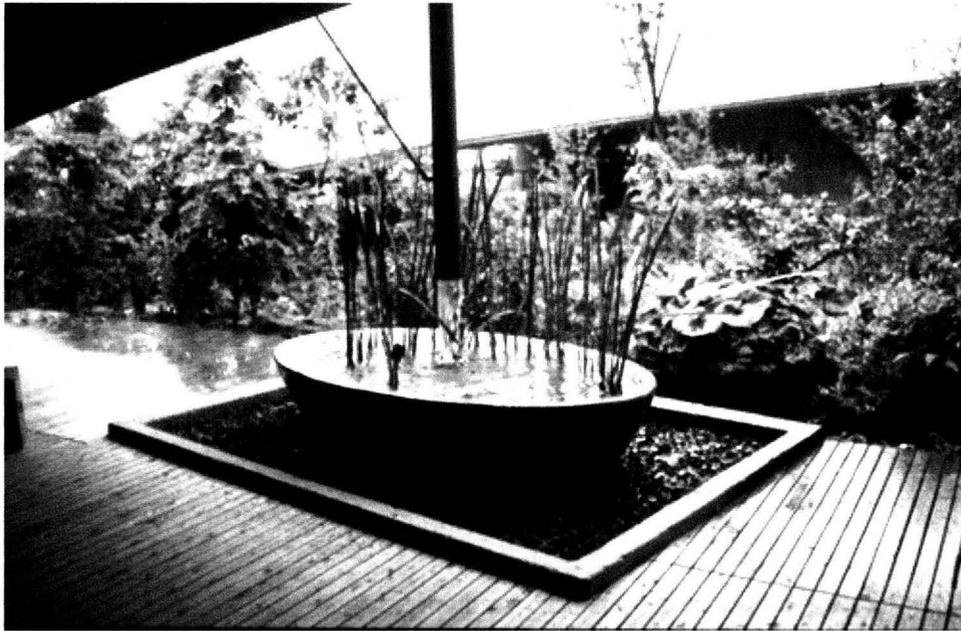


Fig 3.11: The rain water running into the water pot.

### The Idea of Open Space

The other way Naito's work responds to climate is by means of natural ventilation. In air-conditioned environments, people have less chance to feel seasonal changes, since the

interior space is artificially controlled. As mentioned earlier, Naito opposes the idea of using air-conditioners, and closed internal spaces clad with climate independent walls. Therefore, both the Sea-Folk Museum and the Makino Museum of Plants and People do not rely on artificial air conditioning.

Under the big roofs and deep eaves, the spaces of both museums are open. Like traditional Japanese houses, air flow occurs naturally. Even in late July, on hot and humid summer days, the interior spaces are cool enough to stay in inside. When I was visiting the Sea-Folk Museum, I could feel wind flowing through the open space occasionally, bringing a refreshing feeling as well as a sense of direct connection to the outside environment. In traditional Japanese architecture as well as Naito's museums, natural ventilation is used as method to get rid of humidity and get "coolness" into the interiors.

### **3.) The Architectural Protoform**

Through Naito's works, a new order emerges between space, the structural system and the architectural form. In the realm of the modern architecture, the notion of internal space is a byproduct of the built form. However, in Naito's architecture, formal order is not applied. His approach is the opposite; based on the internal space and the structural system, the form of the architecture is determined. For Naito, an architect is no longer a person who creates the outer

form of architecture from his other imagination; architects need to be inventors of original structural systems and internal spaces for each project in response to varied physical conditions.

Thus, Naito uses the idea of “protoform” to explain his approach to design:

“Protoform, shelter, something like a storehouse. . . These terms I have used repeatedly in order to talk about architecture, ever since finishing the Sea-Folk Museum, might appear a string of words without logical connection. But their order has never changed. The protoform is in the obscure reaches of the consciousness, and the terms that follow are expedients for bringing it closer to think about it. This way of visualizing abstractly something not consciously identifiable seems to help flesh it out. Of course, one could just say it is out of reach in the subconscious and let it go at that. But this way of putting something like a storehouse on the chopping block helps cast it in a different light. We can replace these terms protoform, shelter, and something like a storehouse, in their logical sequence, with the words idea, means, and phenomenon. While not conscious of it, myself, this may be a process I use to externalize things latent within me. If so, it would mean a line of reasoning that begins with the protoform (in the first-person singular), then adopts shelter (second-person singular) as a means of producing a phenomenon that appears in a way unknown to me in the eyes of someone else (third-person singular).”<sup>62</sup>

Above is Naito’s statement of his ideology of the “protoform”; he often describes his architecture as “protoform”. The idea of “protoform” emerged in his mind during the design process for the Sea-Folk Museum. As it is mentioned in Chapter 1, the time Naito was involved with the Sea-Folk Museum was the most important time for him to form his design principles. The Sea-Folk Museum was a project that had a tight-budget and severe climate conditions. In addition, the program of the buildings specified that they be durable and designed to meet

---

<sup>62</sup> Naito, Hiroshi. *Azumino Chihiro Bijyutsukan* [Chihiro Art Museum Azumino]. Translated by Brian Amstutz. Tokyo: Naito Architect & Associates, 1999.

the increasing needs of an expanding collection. Naito was struggling to find the best possible solution to fulfill all conditions. During that time, he started to think about the relationship between time and the architectural solution:

“These days, architects do not link time to architecture. The absence of time leads to a variety of forms and spaces. For example, if the building needs to exist only a year, all kinds of spaces and forms will work out. By comparison, if the building needs to exist one-thousand years, even supposing the introduction of state of the art technology, the possible solution is only one or two.”<sup>63</sup>

In the design process, as the choices are narrowed down Naito starts to see the best possible solution according to the fundamental role and nature of architecture. One of

architecture’s fundamental roles is to protect people from rain; so to speak it is a shelter.

Modern architecture tends to be discussed as form and the inner part of the building, structure, is a subordinate matter. But, looking at ruined a temple, for example, only the basic structure remains after the original form of the building has degenerated. For architecture, ruins are the place where time is condensed, and the structure is the fundamental element which exists from beginning to the end.

Based on these ideas, Naito’s explorations about the nature of architecture became a real method to design buildings as architectural structures. Naito started to call the tectonics of the best possible solution a “protoform.” What Naito expressed by the notion “protoform” is

---

<sup>63</sup>Translated by Yoko Kanai from: Naito, Hiroshi. *Kenchikuno Hajimarini Mukatsute* [Toward the Beginning of Architecture]. Tokyo: Okokusha, 1999, p136.

that the architecture will remain constant despite moving from one century to the next. It is his tacit warning for modern architecture, focused as it now is on treating buildings merely as architectural fashions.

#### **4.) Tectonics and the Human Body**

One of the spectacular experiences in Naito's works is the well detailed and crafted wooden structural frameworks. Although the exhibition halls of the Sea- Folk Museum are huge, it has an atmosphere that makes people feel secure and warm; it has a feeling like being wrapped in a womb. Architect, author, and educator Juhani Pallasmaa says: "Understanding architectural scale implies the unconscious measuring of the object or the building with one's body, and of projecting one's body scheme into the space in question. We feel pleasure and protection when the body discovers its resonance in space."<sup>64</sup> Similarly, Kent C. Bloomer and Charles W. Moore in their book, *Body, Memory and Architecture*, say: "We require a measure of possession and surrounding to feel the impact and the beauty of a building. The feeling of buildings and our sense of dwelling within them are more fundamental to our architectural

---

<sup>64</sup> Pallasmaa, Juhani. *The Eyes of Skin*. London: Academy Editions, 1996, p47.

experience than the information they give us.”<sup>65</sup> One of the “reasonance” discoveries of our spatial experience is that space and structure are measured by the human body and senses.

These days, there are a large number of buildings that have huge atriums with steel structural enclosures, but they merely suggest security or intimacy. Typically; however, they do not provide us “reasonable” dimensions and a hierarchy of distances connecting with our bodies. As a result, people lose a sense of direction and embodied existence. As Pallsamma argues in his book *The Eyes of the Skin*, we need to measure a space with our bodies to “feel” a building and to confirm the spatial experience as real. That is fundamental for our architectural experience rather than the merely visual information architecture gives us. Naito thinks, “if architecture doesn't have a hierarchy of scales, (between people and space) the architecture is failing as architecture.”<sup>66</sup> He gives an example, the Tokyo International Forum designed by Rafael Vinoly:

“I think the crucial failing for the building is that the structure on the top of the atrium doesn't come down to the sense of human scale. The big atrium space, therefore, becomes a somewhat Hollywood-like space. In reality, Vinoly's intention to make space was good, but people should be able to perceive the spatial scale. It is truly a delicate matter; however, it is an architect's responsibility; maybe it's a talent that allows architects to do. [...] Come to think of it, significant architecture, traditional or modern, definitely relays from scale to scale; it works perfectly at any dimension. [...] Of course, it takes a lot of energy to make it. If an architect starts to get tired, it might be difficult to do it. [...] That is why architects tend to be confused as they start working on large-scale

---

<sup>65</sup> Bloomer, K. C. & Moore, C. W. *Body, Memory, and Architecture*. New Heaven: Yale University Press, 1977, p36.

<sup>66</sup> Naito, Hiroshi. Interview by Yoko Kanai at Tokyo University, 24 July 2001. Text contained in the Appendix, p164.

buildings. When architects work at a big scale, we need to work on the scale carefully, like untangling a knotted thread carefully. It cannot be achieved without persistent effort.”<sup>67</sup>



Fig 3.12: The atrium space of the Tokyo International Forum.

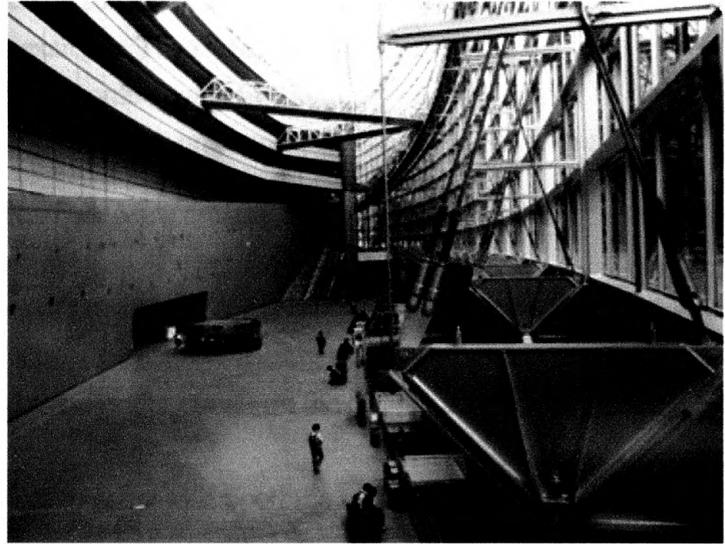


Fig 3.13: The huge structure has no association to the human scale in the atrium space.

As might be expected from the above quotation, Naito pays close attention to design details of structural frameworks so that they convey a sense of scale: “I am particular about creating space to connect from scale to scale, and to connect architecture to people. I don’t think logically about it.”<sup>68</sup>

During my interview with Naito, I asked him whether or not his intention in both museums was to avoid the huge scale of buildings. His answer made the intention clear:

---

<sup>67</sup> Naito, Hiroshi. Interview by Yoko Kanai at Tokyo University, 24 July 2001. Text contained in the Appendix, pp163-164.

<sup>68</sup> Ibid., p165.

“Both the Sea Folk Museum and Makino take a collective form, but I was really concerned about the relationship between the human being and space. I mean, as I was thinking about the whole composition of the architecture, it became clear that each element needed to be perceived by the people in the building. I think it is a quite important thing. There are many ways to do so: reduce the scale through the structure, etc. If the structure is a key element, it should be connected to the next level of scale: details of doors and windows for example. Then it needs to reach people in the architecture. If the connection doesn't come down in scale to people, they cannot understand the space well. I consciously work on connecting one scale to the next.”<sup>69</sup>

In the exhibition hall in the Sea-Folk Museum, the members of the wooden trusses look as if they gradually disperse the forces of gravity and conveyed them to the ground step by step.

A member, which supports the roof draws slender curves on the ceiling, and joins two thinner

members. These members join a thicker member to support the vertical load which is then

relayed to the floor. The natural flow of relaying the loads from one scale to another is

understood unconsciously by measuring the structural elements with one's own body on the

ground. Naito's attention to

architectural detail and human

scale is reflected by the

visitor's sense of security and

intimacy in his buildings.

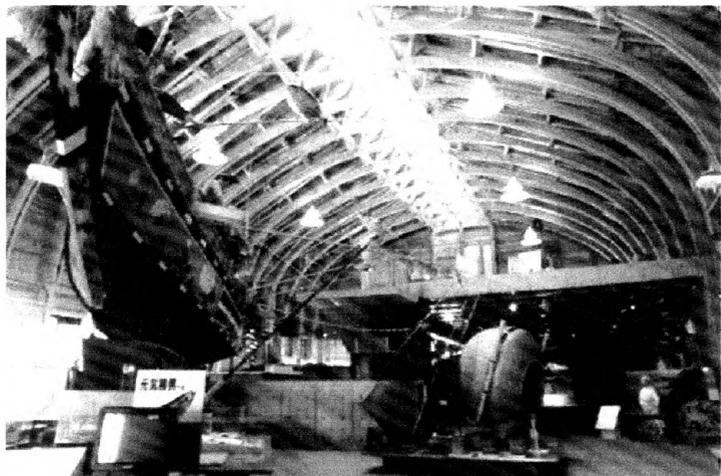


Fig 3.14: The wooden Framework in the Exhibition hall

---

<sup>69</sup> Naito, Hiroshi. Interview by Yoko Kanai at Tokyo University, 24 July 2001. Text contained in the Appendix, p163.

## 5.) Architecture for Experience and Sensory Perception

It is often said that the significance of Naito's architecture is hard to understand through photographs. His architecture is understood only after "feeling" and "touching" the buildings as real embodied experiences. Naito is conscious of human conditions and introduces experiential qualities of a building as opposed to making a visual object. His architecture cannot be discussed without recognizing his understanding of the human body and senses. Naito's critical view of the visually oriented modern architecture reveals this concern:

"What modernists are doing is just visionary things; vision might be easy to understand, and it can communicate worldwide; you can send it anywhere through visual images. But, we have other senses besides vision to experience architecture. I think the body, as a whole, is a local context; it only exists within a place. Basically, I think vision is just a part of our experience. So, my job is to communicate intangible things through architectural expressions, and make it more tangible."<sup>70</sup>

In order to express the experiential quality, no matter how busy he is, Naito checks all drawings and any details finished up by his staff. At the construction site, Naito experiences the construction process using his body and senses. The details are often discussed at the construction site and adjusted immediately.<sup>71</sup> He designs haptically.

---

<sup>70</sup> Naito, Hiroshi. Interview by Yoko Kanai at Tokyo University, 24 July 2001. Text contained in the Appendix, p169.

<sup>71</sup> Since construction workers are experiencing architecture through construction process and their body every day, he often asks opinions from construction workers as reliable advice to decide details on site.

We can clearly see that Naito's works create hapticity as they relate to the use of materials, climate, light and shadow. His elaborate surface textures and details invite the sense of touch, and create an atmosphere of intimacy and warmth.

### Sense of Materials

The use of natural materials is one way to cultivate sensory perception. Especially, natural materials lend a sense of intimacy, and convey the presence of the continuum of time.

Natural materials are also important for our spatial experience, as Juhani Pallasmaa argues:

“Natural materials express their age and history, as well as the story of their origins and human use. All matter exists in the continuum of time; the patina of wear adds the enriching experience of time to the materials of construction. However, the machine-made materials of today- scaleless sheets of glass, enameled metals and synthetic plastics- tend to present their unyielding surfaces to the eye without conveying their material essence or age.”<sup>72</sup>

It is clear that architecture in our era has lost its materiality in an effort to make a building photogenic. The flat metal and glass surfaces of modern Japanese architecture are stylish in photographs, but do not give us the ability to relate our bodies to the buildings; hence, the real experience of architecture is less significant. As Pallasmaa mentions, “the skin reads the texture, weight, density, and temperature of matter.”<sup>73</sup> Our bodies are reading materials through vision; thus, the experience of architecture becomes more real through the use of real materials.

---

<sup>72</sup> Pallasmaa, Juhani. *The Eyes of Skin*. London: Academy Editions, 1996, p21.

<sup>73</sup> Ibid., p40.

Naito introduces natural materials in his buildings; wood, soil, and stone. The use of natural material fosters multi-sensory experience in his architecture. The wood has annual tree rings and grain to give us hints by which to measure distance and dimension. It also absorbs light and sound; hence, the space is enveloped by silence, similar to soil. It is pleasurable to feel the density and texture of the soil floor in the repository of the Sea-Folk Museum. These experiences associated with natural materials make the experience of Naito's architecture healing and pleasurable.



Fig 3.15: The natural materials, stone, wood, and soil, gives a sense of intimacy to the building.

### Use of water and rain

It is natural for the Japanese, whose country has a definite rainy season, to feel at home in the presence of rain and find beauty in rainy landscapes. The way in which Japanese enjoy rain is varied, but it is always associated with human sensibility. Rain makes the landscape vivid and attracts our eyes; the trees and stone pavements intensify their colors and create gentle landscapes. Raindrops draw wakes on the surface of water ponds and in water pots. Rain pours

on the ground, evoking a sense of coolness. The sense of smell becomes sensitive by movement of moist air. Our skin perceives the change of humidity and temperature in the presence of rain. The coolness after a rain is especially gratifying. “Sometimes people are sensitive to sound and view, and the other times people are sensitive to tactile and olfactory perception. So, Japanese enjoy rain as perceived by one or a collaboration of several senses.”<sup>74</sup> As discussed in Chapter 2, Naito is quite concerned with how his architecture responds to rain. Although he does not comment about the correlation between rain and the human senses, the experiences I had in both the Sea-Folk Museum and the Makino Museum of Plants and People were pleasurable. Interdependent with the use of natural materials, Naito’s architecture is designed to attract all the senses in order to enjoy the rainy Japanese landscape.

### Light and shadow

Traditionally, Japanese people valued shadow more than light. An essay written by Junichiro Tanizaki, *In Praise of Shadows*, describes how the Japanese sense of beauty was cultivated in shadow and how graduated shadows enrich spatial experience:

“A light room would no doubt have been more convenient for us, too, than a dark room. The quality that we call beauty, however, must always grow from the realities of life, and our ancestors, forced to live in dark rooms, presently came to discover beauty in shadows, ultimately to guide shadows towards beauty’s ends.”<sup>75</sup>

---

<sup>74</sup> Translated by Yoko Kanai from: Kobayashi, Toru. *Utsuroi no Fūkeiron* [Perception of Landscape-five senses, words, and climate]. Tokyo: Kajima Publication Co., Ltd., 1993, p106.

<sup>75</sup> Tanizaki, Junichiro. *The Praise in Shadow*. Srony Creek, CT. Leete’s Island Books. 1977, p18.

His essay reminds us that the richness of Japanese culture and its beauty cannot be discussed without the presence of graduated shadows. However, the homogeneous brightness of artificial light and extensive glass walls remove shadow from interior space, and the “homogenization of space eliminates the experience of place.”<sup>76</sup>

Naito understands the importance of shadow and darkness to make space richer, and his discussion of shadow and imagination reveals his thinking:

“Darkness is a foundation of our imagination; ordinary senses can be changed in darkness. As information decreases from vision, the senses other than vision, the sense of hearing and touch, become sensitive. The senses, we usually forget, are collaborating and exploring what the space feels like. On the other hand, the eyes, cut off from information, try to see; hence, the imagination becomes active. However, shadows which cultivate our imagination disappear from buildings in modern times. Bright space is dominant everywhere, in the house or workplace. If I say, ‘I want to design for shadow,’ everyone looks at me strangely. For brightness, there is a measurement calls lux. In comparison, darkness, because it is tied to our five senses, is difficult to show with numerical values. From my experience, as the contrast of light and shadow is bigger, the space becomes deeper and richer. For example, the space that is lighted in every nook and corner, like a convenience store in Japan, may be functional, but it eliminates the experience of space.”<sup>77</sup>

The internal spaces of Naito’s have many levels and kinds of shadows. The repository building of the Sea-Folk Museum is dominated by shadow. As Naito mentions, under dim light, the senses other than vision become active. In the shadow, the moist air strengthens the smell of

---

<sup>76</sup> Pallasmaa, Juhani. *The Eyes of Skin*. London: Academy Editions, 1996, p32.

<sup>77</sup> Translated by Yoko Kanai from: Naito, Hiroshi. *Kenchikuno Hajimarini Mukatuste* [Toward the Beginning of Architecture]. Tokyo: Okokusya, 1999, p,136.

the soil floor and the wood of the ships, and during my visit to the building, my skin felt the movement of cool air more acutely. The tension of the space seemed to accelerate in the dim space. It was a memorable experience similar to the experience in my grandparent's old farmer's house. The crafted wooden framework and the light came through the top light to create gradual light and shadow in the open space. Although Naito introduced light in the exhibition hall, the graduation of light and shadow make the space deeper, evoking the feeling of meditative calm.

Likewise, the exhibition hall at the Makino Museum of Plants and People also is dominated by gradual shadow. The reddish colored wooden surface absorbs light and creates a dim space. In the dim space, I felt like something warm and soft surrounded my body. As Pallasmaa says, "the imagination and daydreams are stimulated by dim light and shadow,"<sup>78</sup> my experiences in Naito's buildings reaffirmed the richness of gradual shadow in space.

---

<sup>78</sup> Pallas Juhani. *The Eyes of Skin*. London: Academy Editions, 1996, p32.

## 6.) Mediation between Modern Technology and Traditional Wisdom

Naito understands the importance of tradition, yet at the same time he understands it has limitations in the context of modern society:

“Now we have 6-7 billions of world population. If we only had a quarter of the population, we could return to a traditional way of living, but it is an unrealistic idea. So, we need to rely on modern technology to some degree to support all of the population. The world population in the early the 20th century was 2.4 billion; now we have 6 billion, and we will have 10 billion people at the middle of the 21st century. At that point, only 10-20% of the population will be able to survive without technological support. Thus, technology is a fundamental element in our lives. I think one of my challenges, as an architect, is to employ technology to reveal intangible things.”<sup>79</sup>

To explain his argument clearly, Naito mentions the importance of taking a stance on the relationship between modern technology and traditional skills:

“I admit to the significance of traditional architecture, but we cannot start from the same point anymore because of the social changes that have occurred. Therefore, we need to take good points from both past and present, introducing modern industrial science. At the same time we need to reassess traditional skills. My position regarding modern and traditional architecture is to take the middle point.”<sup>80</sup>

Naito’s stance is seen in his works. His principle of the “middle way” is applied to his works where modern and traditional skills effectively interact to bring out the best of each. In the detail of the wooden framework at the Sea-Folk Museum, by referencing traditional Japanese conventional wooden structural methods, Naito creates a totally new way of making a

---

<sup>79</sup> Naito, Hiroshi. Interview by Yoko Kanai at Tokyo University, 24 July 2001. Text contained in the Appendix, p170.

<sup>80</sup> Translated by Yoko Kanai from: Naito, Hiroshi. *Kenchikuno Hajimaru ni Mukatsute* [Toward the Beginning of Architecture]. Tokyo: Okokusha, 1999, p156.

wooden structure: a parabolic wooden framework was never seen in a traditional Japanese architecture. At a glance, the forms of the exhibition halls of the Sea-Folk Museum have a traditional sense of Japanese architecture; however, Naito deconstructs the traditional form by introducing light into the interior space. The top light on the ridge of the gable roof and the long horizontal openings under the walls introduce light in the exhibition space. Traditional Japanese houses are dominated by gradual shadow. The idea of introducing light in the interior space, especially by top light, is a modern idea for Japanese architecture. The interior spaces of the exhibition halls integrate the traditional and modern, and create a rhythm of gradual shadow in the open space.

Just as is the case with the exhibition halls, the repository buildings of the Sea-Folk Museum also have a sense of traditional warehouses in their forms. However, the structure introduces modern construction methods; precast concrete to meet low-budget, provide durability, and increase the accuracy of construction.

As another example of Naito's preference for integrating tradition and modernity, the deep eaves and openings toward the courtyard, which are typical for traditional Japanese houses, are used at the Makino Museum of Plants and People in order to protect the building from strong winds and heavy rains, while at the same time shading space during hot and humid summers in Kochi. The roof is also designed to reduce wind load on the buildings. Since the

roof has a continuous curve, the roof panels form a double curve and each panel has different dimensions. The elegant curve of the roof was achieved by a superb alliance of the precision of advanced technology and the handwork of experienced craftsman.

Naito starts by introducing traditional wisdom within the sphere of modern technology to find the best possible solution to deal with climate conditions at the Sea-Folk Museum. In the case of the Makino, computer aided metal roof panels were carefully constructed by craftsmen making full use of their experiences and skills. Naito strongly opposes the tendency to take tradition as just an image: Naito says, “Tradition is not the image of reference. If you see tradition as technology you can see the other side.”<sup>81</sup> This principle reveals Naito’s opposition to the conventional, misleading meaning of “tradition”; one ordinarily tends to see tradition belonging to a distant past that is distinct from the questions we are facing now.

---

<sup>81</sup> Knabe, Christopher., & Noennig, Joerg. R. eds. *Shaking the foundation : Japanese architects in dialogue*. New York: Munich, 1999, p106.

## CHAPTER 4

### REGIONALISM-THE CASE OF JAPAN

Based on a careful study of Naito's background, selected buildings, and design principles it becomes clear that his architecture is regionally based. Although Naito admits he is conscious of regional characteristics, his opinion of the term "regionalism" is a negative one: "In my opinion, regionalism sounds too defensive, and it has a sense of limitation."<sup>82</sup> Moreover, he points out the negative implications of regionalism around World War II: "One thing I want to avoid with regionalism is its nationalistic content; regionalism tends to become nationalism; it just like the nationalism Japan had before the World War II."<sup>83</sup>

Regionalism in Japan was used as a political tool to create national unity during the Second World War, and after the War regional elements were often used to cultivate sentimental nostalgia for purposes of tourism. Additionally, as Alexander Tzonis and Liane Lefaivre point out, architects are becoming more conscious of visual image and universal reputation rather than significance of local culture:

"Modern architectural press has an implicit agenda in support of global values by giving preference to projects that follow a few major acknowledged trends around the globe, encouraging and applying universal norms in design practice has its benefits. But it also has a serious negative impact when employed uncritically and without consideration of regional scope and regional values."<sup>84</sup>

Tzonis and Lefaivre's concern about the negative impact of a neglect of "regional scope and regional values" already emerges in the form of an architecture of self-expressive

---

<sup>82</sup> Naito, Hiroshi. Interview by Yoko Kanai at Tokyo University, 24 July 2001. Text contained in the Appendix, p167.

<sup>83</sup> Ibid., p170.

<sup>84</sup> Tzonis, Alex., Lefaivre, Liane., & Stagno, Bruno, eds. *Tropical Architecture: Critical Regionalism in the Age of Globalization*. Chichester, England: Willey-Academy, 2001, p1.

objects and placelessness. Under the circumstances of globalization it is increasingly important to reevaluate regionalism as a strategy for reviving architecture for humans and sense of place.

Despite the importance of regionalism that serves culture, it is often taken as a conservative, sometimes negative, approach among Japanese architects. There are three polarities that make regionalism a negative approach in Japan:

- Nationalism vs. Regionalism
- Vernacular architecture vs. Regionalism
- Globalization vs. Localization

Kenneth Frampton, Alexander Tzonis and Liane Lefaivre raise the issue of regionalism in the post-war time under the term, “Critical Regionalism.” The premise of Critical Regionalism is to maintain regional identity within the sphere of universal culture, and to make a distinction between nationalistic and vernacular expression in order to avoid the misuse of regional elements as was done during the Second World War. Thus, Critical Regionalism reveals a different aspect of regionalism, separate from nationalism and vernacular architecture, that Japanese architects need to recognize as a viable approach to design in the age of globalization. In addition, the goal of Critical Regionalism is similar to Naito’s ideas on regionalism in modern times. Naito recognizes that globalization is unavoidable, however as he states, “I believe that there is an architectural solution by connecting technology and regional characteristics. That is the true meaning of globalism.”<sup>85</sup> So, Naito’s works can be seen as an example of Critical Regionalism in Japan.

---

<sup>85</sup> Naito, Hiroshi. Interview by Yoko Kanai at Tokyo University, 24 July 2001. Text contained in the Appendix, p167.

Therefore, in Chapter 4, the historical background of Japanese architecture after 1868 is traced in order to study the character of regionalism. Likewise, regionalism, especially Critical Regionalism, is studied from articles by Kenneth Frampton, Alexander Tzonis and Liane Lefaivre in order to understand one way to serve regionalism in the era of universal civilization.

### **Modernism and Regionalism-The Case of Japan after 1868**

Historically, the evolution of Japanese architecture took a totally different path from Western architecture.<sup>86</sup> Japan had a period of national isolation for over two-hundred years; the encounter with Western architecture was only after the restoration of Imperial power in 1868.<sup>87</sup> Following government policy on modernization and westernization, Western architecture was introduced as a “style” in order to deal with social needs for new building types, such as office buildings, commercial buildings, factories, schools, and hospitals. Around 1890, however, Japanese architects started questioning whether to copy Western architectural styles and they began to employ a Japanese national style as evidence of Japanese modernization and opposition to Western countries. Probably, that was the beginning of the emergence of nationalism in Japan. But, as Okazaki points out, the nationalism of that period was a little different from the nationalism of World War II,<sup>88</sup> rooted as it was in regional culture. Rather than relying on an imported Western architecture style, this first revival of traditional architecture in Japan was closer to regionalism than to nationalism.

---

<sup>86</sup> Traditional architecture designed and built by master builders, not architects. The term, “architect”, was imported from Europe with introducing Western style architecture around Japanese Enlightenment in 19<sup>th</sup> century.

<sup>87</sup> Japan closed country in 1639.

<sup>88</sup> Okazaki, Kanjiro & Yatabe, Hajime. “Modanizm Saikou” [30 People Who Moved Modernism]. *Kenchikubunnka* [ Architecture Culture]. Vol.55, No.639 (Jan. 2000): pp42-65.

Unlike Western countries, Japan did not have a variety of regionalist movements: such as picturesque regionalism and romantic regionalism.<sup>89</sup> Wajiro Kon conducted a thorough fact-finding study on Japanese traditional houses, *Minka*, of the years before, during and after the Second World War, and this work was taken up by his student, Takamasa Yoshiizaka. But, the study stays in the realm of folklore, and it was not developed beyond a survey study. Regionalism of this period was seen more as a domestic style intended to be antithetical to the Western architectural style.

### **The International Style-1920s**

The introduction of the International Style in the 1920s strongly impacted ambitious young Japanese architects. Yet at the same time, the infiltration of the International Style gave rise to a struggle between local and international cultures.

Under these conditions, some of the young architects made a tour of European countries to study. Among them was, Sutemi Horiguchi,<sup>90</sup> who commented on differences between Western and Japanese architecture as “just one of those things.” He felt that it is beyond an architect’s ability to bridge between Western and Eastern architecture because the architectural expressions come out of the cultures and regions to which they belong. However, Horiguchi’s fluctuation between longing for the International Style and attachment to Japanese culture can be seen in one of his projects, the Okada House.<sup>91</sup> One half of the house is a white box influence by the International Style and the other half has a Japanese traditional style, *Sukiya*. Giving a rather odd

---

<sup>89</sup> See. Tzonis, Alexander., Lefaive, Liane., & Stagno, Bruno, eds. *Tropical Architecture: Critical Regionalism in the Age of Globalization*. Chichester, England: Willey-Academy, 2001, pp4-5.

<sup>90</sup> 1895-1984

<sup>91</sup> Okada House was completed in 1933.

impression, Horiguchi's struggle between two styles can be seen. It is an excessive example, but the longing for the International Style and attachment to Japanese identity is often seen in the works of early modernists in Japan.<sup>92</sup>



Fig 4.1: Okada House

Among them Masafumi Ito<sup>93</sup> tried to search for a balance between the international and regional by introducing technology. However, in the wartime years, regionalism was not regionalism any more and it was absorbed by “deep- rooted” regionalism to become a regressive form of nationalism. It was an inevitable fact for architects in wartime.

### **Kenzo Tange- In between Nationalism and Regionalism**

Kenzo Tange, who helped Japanese architecture become International, is the key person to any discussion of nationalism and regionalism before and after the Second World War.

---

<sup>92</sup> Horiguchi had never allowed anyone to take picture of the entire elevation of the house.

<sup>93</sup> 1896-1960

Compared to the enthusiasm for the International Style among Japanese modernists, Kenzo Tange, born in 1913, was critical of the works of the Japanese International Style, since all the buildings were white; he commented that they look like “sanitary ware.” Tange’s career started during his master’s study at Tokyo University in 1942; he won the competition of the Great East Asia Construction Memorial Building plan. The following year, in 1943, he won a competition for the Japanese Cultural Center in Bangkok (Fig 4.2). It goes without saying that the competitions in war time were controlled by the Japanese government, and Tange’s drawings express a traditional Japanese architectural vocabulary as symbols of a national style. Consequently, Tange used projects to promote nationalism in wartime regardless of his own political preference.<sup>94</sup>

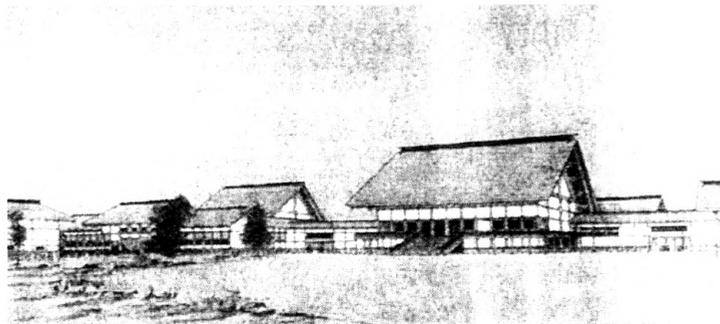


Fig 4.2: The elevation of Japanese Cultural Center in Bangkok.

---

<sup>94</sup> His comment on the projects in wartime is: “...in regard to the projects, I do not repent as much like Hamaguchi did, and I do not think I did something wrong.” (Translated by Yoko Kanai from, Yatsuka, Hajime. “Kenzo Tange.” *Kenchiku Bunka* [Architecture Culture]. Vol 55, No.639: p197.) This comment indicates that Tange is less conscious of nationalism itself, he is rather concerned to explore national identity through architecture in wartime. Yatsuka points out that Tange’s expression during the World War II was not forced from political force, but it was Tange’s expression as an architect in the period.

## Regionalism After World War II

After World War II, Tange completed several projects and proposals for city planning.<sup>95</sup> Among them was the Kagawa government office building, a project which showed that Japanese architecture was becoming “International” after World War II. It also demonstrated a possibility for regionalism in the post-war era. At the CIAM 1959 meeting in Otterlo, Ernesto Rogers praised Tange’s Kagawa Prefecture Office (Fig 4.4):

“A very good example what we have to do [...] a step forward’ which, while affirming the latest technology and the most contemporary institution, democracy, manages to avoid the pitfalls of an inhuman and anonymous technophilia by giving ‘roots’ to these new ideas.”<sup>96</sup>

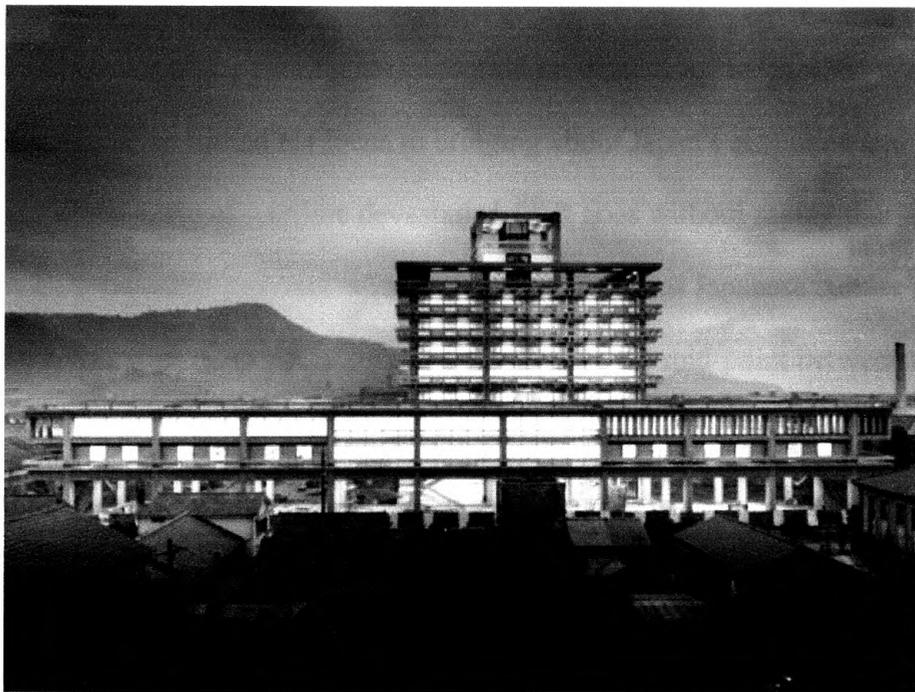


Fig 4.3: The Kagawa Prefecture Office.

---

<sup>95</sup> Especially, he emphasized city planning as one of the most important matters for a newly democratic country, Japan. His Tokyo Plan, in 1960s, is well known.

<sup>96</sup> Tzonis, Alexander., Lefaivre, Liane., & Stagno, Bruno, eds. *Tropical Architecture: Critical Regionalism in the Age of Globalization*. Chichester: England. Wiley-Academy, 2001, p30.

Indeed, his excellent re-interpretation of tradition in combination with modern technology is outstanding. But, Tange's reaction to Rogers's interpretation implies a reluctance to embrace regionalism: "I cannot accept the concept of total regionalism."<sup>97</sup> Tange; however, added his opinion: "Tradition' can be developed through challenging its own shortcomings."<sup>98</sup> Tange rejected regionalism while still having an attachment to it. Tzonis and Lefaivre call Tange's approach "regionalism that is self-examining and self-questioning,"<sup>99</sup> and relate Tange's case to the idea of "Critical Regionalism."

However, Tange, who directly experienced the World War II era, deeply understands the negative connotation of regionalism; it can easily be used as a negative kind of nationalism. Although, Tange presented a project which synthesizes the traditional beauty of the curving roof and modern technology in his 1964 project for the Olympic Arena, he turned his focus to bringing about Japan's economic and social recovery in the wake of wartime devastation.<sup>100</sup> It goes without saying that Tange was the first modern Japanese architect who successfully mediated Japanese culture with modern western civilization. The stance that Tange took was the mid-point between universalism and regionalism; however, Tange, as a leader of Japanese modern architects, tried to become a member of universal society. Hence, the idea of regionalism stood in the way of globalization.

---

<sup>97</sup> Tzonis, Alexander., & Lefaivre, Liane. "Why Critical Regionalism Today?" *Kenchiku to Toshi* [A+U: Architecture and Urbanism]. Vol236, No5, (May. 1990): p29.

<sup>98</sup> Tzonis, Alexander., & Lefaivre, Liane. "Why Critical Regionalism Today?" *Kenchiku to Toshi* [A+U: Architecture and Urbanism]. Vol236, No5, (May. 1990): p29.

<sup>99</sup> Tzonis, Alexander., Lefaivre, Liane., & Stagno, Bruno, eds. *Tropical Architecture: Critical Regionalism in the Age of Globalization*. Chichester: England. Wiley-Academy, 2001, p30.

<sup>100</sup> After the event, his emphasis on regionalism fades from his works little by little. He becomes more interested in introducing modern technology rather than re-interpreting Japanese tradition.



Fig 4.4: The Yoyogi Olympic Stadiums, Tokyo.

### **Regionalism and Nationalism**

The case of Japan around World War II demonstrates that regionalism is two sided. Architect, Harwell Hamilton Harris argues that a distinction can be made between regionalism and nationalism in his article, “Regionalism and Nationalism,” presented at the Northwest Regional Council of the AIA, in Eugene, Oregon, in 1954. First, Harris addresses his idea of two different types of regionalism: a “Regionalism of Restriction” and a “Regionalism of Liberation.” The “Regionalism of Restriction” refers to a conscious preservation of form as it was at one moment in time rather than as a constantly evolving tradition. On the other hand, “Regionalism of Liberation” is described as:

“This is the manifestation of a region that is especially in tune with the emerging thought of the time. We call such a manifestation ‘regional’ only because it has not yet emerged elsewhere. It is the genius of this region to be more than

ordinarily aware and more than ordinarily free. Its virtue is that its manifestation has significance for the world outside itself.”<sup>101</sup>

Based on the difference between the “Regionalism of Restriction” and the “Regionalism of Liberation,” Harris describes the difference between regional and national expressions as follows; “...a regional expression at its highest is the expression of liberation.”<sup>102</sup> By comparison; “a national expression is, at its highest the expression of consolidation.”<sup>103</sup> The “expression of consolidation” is cultivated by appealing to a symbolic architectural language rooted in culture in order to connect to a national identity. Harris points out that national architecture often takes its form from symbolical historical architecture; hence, national architecture calls for people to be consolidated. National architecture, however, does not depart from the symbols and meanings of the past. Harris concluded his argument by stating the importance of making a connection with contemporary science to break through restrictive and nationalistic regionalism.

### **Critical Regionalism**

Similar to Hamilton’s discussion of regionalism, Alexander Tzonis and Liane Lefaivre, along with Kenneth Frampton, have helped raise and spread awareness of the possibilities of regionalism in the age of globalization under the term “Critical Regionalism.”

### **Critical Regionalism- Alexander Tzonis and Liane Lefaivre**

The framework of “Critical Regionalism” was “coined” by Alexander Tzonis and Liane Lefaivre in their article, *The Grid and Pathway*:

---

<sup>101</sup> Harris, Harwell H. “Regionalism and Nationalism.” in *Hawell Hamilton Harris: A Collection of His Writings and Buildings*. Student Publication of the School of Design, North Carolina State University at Raleigh. Vol.14, Nov. 5 (1965): p27.

<sup>102</sup> *Ibid.*, p.29.

<sup>103</sup> *Ibid.*, p.29.

“Regionalism has dominated architecture in almost all countries at some time during the past two centuries and a half. By way of general definition we can say that it upholds the individual and local architectonic features against more universal and abstract ones. In addition, however, regionalism bears the hallmark of ambiguity. On the one hand, it has been associated with movements of reform and liberation; ... on the other, it has proved a powerful tool of repression and chauvinism... certainly, critical regionalism has its limitations. The upheaval of the populist movement- a more developed form of regionalism-has brought to light these weak points. No new architecture can emerge without a new kind of relations between designer and user, without new kinds of programs... Despite these limitations critical regionalism is a bridge over which any humanistic architecture of the future must pass.”<sup>104</sup>

Above all, Critical Regionalism intervenes between universal culture and unique elements in a particular place. However, if the method derives from elements directly, it does not differ from symbolism or nationalism. The character of Critical Regionalism posed by Tzonis and Lefaivre is to derive elements “indirectly” from the particular place.

Later, Tzonis and Lefaivre in their article, *Why Critical Regionalism Today?*, introduce Lewis Mumford’s critical discussion on regionalism in the post- war age to clarify the distinction between Critical Regionalism and simple minded revival of vernacularism:

“...Mumford’s post war regionalism was confrontational with respect to the facadist, anomic, atopic modernism, and the attitude of romantic nineteenth century regionalism was in open rebellion against the ‘imperialist’ spread of the critical cannon. But this does not necessarily make them critical in the more specialized sense we now apply, that is as a regionalism that is self-examining, self-questioning, self-evaluating, that not only is confrontational with regard to the world but to itself.”<sup>105</sup>

The distinct aspect of their argument is that they define the differences between Romantic Regionalism<sup>106</sup>, “the commercial as well as the totalitarian *Heimatsarchitektur*

---

<sup>104</sup> Tzonis, Alexander., & Lefaivre Liane. “The Grid and the Pathway: and Introduction to the work of Dimitris and Susana Antonakakis.” *Architecture in Greece* 15 Athens: 1981.

<sup>105</sup> Tzonis, Alexander.,& Lefaivre, Liane. “Why Critical Regionalism Today?” *Architecture and Urbanism*. Vol.236, No.5. (May. 1990): p29.

<sup>106</sup> See Tzonis, Alexsander., Lefaivre, Liane., & Stagno, Bruno, eds. *Tropical Architecture: Critical Regionalism in the Age of Globalization*. Chichester: England. Wiley-Academy, 2001, p5.

regionalism [...] which spread during the decade before the Second War”<sup>107</sup>(in Europe), and Critical Regionalism. All these styles have a commitment to place, but the definition of place in Critical Regionalism is not based on ethnicity; the idea is clearly against the nationalistic notion of place/region; the boundary of the nation. Romantic Regionalism is an approach that employs “mawkish”, “gushing”, and “sentimental” familialization to easily connect to nostalgia, while Critical Regionalism is place creation that incorporates “strangeness” rather than “familiarity.” Tzonis and Lefaivre describe “strangeness” as: “It sets up a process of the fantasized surrender that follows from familiarization and the seduction that follows from *overfamiliarization*.”<sup>108</sup> In their recent book, *Tropical Architecture: Critical Regionalism in the Age of Globalization*, Tzonis and Lefaivre discuss the idea of “strangeness” under the term “defamiliarization” as a focal point by which to classify Critical Regionalism as distinct from nationalism and vernacular architecture. Using a method to achieve defamiliarization, “by bringing about the special cognitive aesthetic effect on the viewer”, Tzonis and Lefaivre suggest that Critical Regionalism has an ability to create “renewed, versus an atavistic, sense of place” in the present day.<sup>109</sup>

### **Kenneth Frampton’s “Ten points on Critical Regionalism”<sup>110</sup>**

Like Tzonis and Lefaivre, Kenneth Frampton also raises the issue of vernacular architecture and the architecture of Critical Regionalism. By adapting Tzonis and

---

<sup>107</sup> Tzonis, Alexander., & Lefaivre, Liane. “Why Critical Regionalism Today?” *Kenchiku to Toshi*[A+U: Architecture and Urbanism]. Vol.236, No.5. (May. 1990): p29.

<sup>108</sup> *Ibid.*, p31.

<sup>109</sup> Tzonis, Alexander. Lefaivre, Liane & Stagno, Bruno, eds. *Tropical Architecture: Critical Regionalism in the Age of Globalization*. Chichester: England. Wiley-Academy, 2001, p8.

<sup>110</sup> Frampton, Kenneth. “Ten Points on an Architecture of Resistance: A Provisional Polemic”. From Speck. Lawrence, ed. *Center: A Journal for Architecture in America*, Vol. 3 (1987).

Lefavre's term Critical Regionalism, Frampton outlines a theory of Critical Regionalism. His theory attempts to address the global architectural problem i.e, that the phenomenon of globalization results in the neglect of regional characteristics and identity. His theory stems from responses to the question posed by Paul Ricoeur, a philosopher who asked: "how to become modern and to return to sources; how to revive an old, dormant civilization and take part in universal civilization."<sup>111</sup>

In order to respond to the dilemma, Frampton defines Critical Regionalism as: "(that), which appears as a position dedicated to place creation and to the sustenance of an intimate and continuous relationship between the architecture and the local society it serves. The term Critical Regionalism is not intended to denote the vernacular, as this was once spontaneously produced by the combined interaction of climate, culture, myth and craft, but rather to identify those recent regional 'schools' whose aim has been to represent and serve, in a critical sense, the limited constituencies in which they are grounded. Such a regionalism depends, to some degree, on a connection between the political identity of a society and the profession."<sup>112</sup>

Thus, Critical Regionalism is about a cultural strategy of "place creation" and the opposition to the placelessness and culturelessness that is one negative result of globalization. Based on this definition, Frampton sets out a series of criteria in the form of what he calls a "speculative manifesto", for the practice of architecture toward Critical Regionalism.

### *Point 1: Critical Regionalism and Vernacular Form*

Frampton makes a distinction between vernacularism and Critical Regionalism.

Vernacular architecture appeals through form as a style. It tends to give people a sense of nostalgia, but it does not provide a new direction or idea. By comparison, Critical

---

<sup>111</sup> Frampton, Kenneth. "Toward a Critical Regionalism: Six Points for an Architecture of Resistance" In Foster, Hal, ed. *The Anti-Aesthetic: Essay in the Postmodern Culture*. Seattle, WA: Bay Press; 1983, p16.

<sup>112</sup> Frampton, Kenneth. "Modern Architecture and Critical Regionalism." *Transactions 3, RIBA*. Vol.2, No.1(1982): p16.

Regionalism establishes a self-conscious and critical view to the formalistic approach while maintaining a sense of rootedness to the past and region.

*Point 2: The Modern Movement*

Frampton criticizes Modern Movement for neglecting the significance of culture and tradition. It cultivates free-standing objects which have less connection to the physical and spiritual context of the region. These days, we are totally enthralled by and addicted to the highly individualistic form rather than being critical of it. Critical Regionalism seeks to avoid creating free-standing objects, and seeks a profound commitment to the cultivation of a local culture.

*Point 3: The Myth and the Reality of the Region*

Critical Regionalism calls for the limits of the region to be considered from two viewpoints: 1) discourse; 2) client commitment. "Discourse" refers to "schools" rooted in the local culture of the region. Frampton's use of "school" is not limited to the idea of an institution, but also it is a "myth." Any "self-consciously created culture" in a realm of the region can be determined as a "myth" of the region. Hence, the "myth" of the region can be expressed through architecture. Frampton points out that a significant amount of regional architecture does not occur without a committed client. By combining these statuses, the architecture of Critical Regionalism can resist the "universal" force of globalization.

*Point 4: Information and Experience*

Critical regionalism seeks to create experiential architecture rather than a photogenic object. Frampton criticizes modern architecture as a creation of visionary images which highly rely on visual media. Consequently, the tendencies of electronic media dominate cultures and limit our capacity to distinguish between second-hand experience and real experience.

*Point 5: Space/Place*

Critical Regionalism is place creation more than space creation. The meaning of place creation refers to the design of meaningful, culturally rooted, and experientially rich places that oppose placelessness in the universal realm.

*Point 6: Typology/ Topography*

Critical Regionalism is a site specific architecture, “topological architecture”, rather than a universal style of “typological architecture”. “Topological” refers to the reorientation toward “rootedness” itself. On the other hand, “typology” is grounded in a similar style regardless of the character of the site.

*Point 7: Architectonic/ Scenographic*

Critical Regionalism is architectonic rather than scenographic. Architectural form and structure have to be honest to what is observed. “Architectonic”; therefore, means not just structural technology and durability, but also a response to light and climate.

*Point 8: Artificial/ Natural*

Critical Regionalism should respond to nature: light and climate are primary to architecture among other kind of arts. Architecture needs to introduce these elements with a feeling for the passage of time. In this regard, the role of natural light is important for the expression of time in terms of its cyclical nature. Critical Regionalism should also avoid a machine-controlled interior environment in order to respond to climate. Under an air-conditioned environment, people have less chance to feel seasonal changes and the pleasures of temperature change. In order to create comfortable natural internal environments, it is necessary to balance universal modern techniques and traditional wisdom rooted in the region.

*Point 9: Visual/ Tactile*

Critical Regionalism is not an approach aimed at the creation of merely visual objects. The works of Critical Regionalism cultivate multi-sensory experience; they attract not only the sense of vision, but also the sense of “tactility” in spatial experience. The “tactile” experience in this case includes coolness and warmness of air movement, humidity, the aroma of wood and soil, the sound of footfall on the different materials, and scent of natural materials. All of these sensations are experienced as a part of the spatial experience.

*Point 10: Post-Modernism and Regionalism: A Summation*

Critical Regionalism seeks to express regional contexts of a “world culture.” In order to achieve that, Critical Regionalism takes an equal distance between “Neo-Historicists” and “Neo-Avant-Gardists.” Frampton describes an architecture of “Neo-Historicists” as

an architecture opposed to modern technology that pursues the way to “return to tradition”; on the other hand, an architecture of “Neo-Avant-Gardists” uses modern technology for the sake of creating “form for the future.” Critical Regionalism is not categorized on either side; Critical Regionalism is an establishment of a sphere equidistant between the regionalism of the past and technologically advanced modern culture.

Moreover, Frampton denotes the two processes of practice of Critical Regionalism in his article, *Toward a Critical Regionalism: Six Points for an Architecture of Resistance*:

“The case can be made that Critical Regionalism as a cultural strategy is as much a bearer of *world culture* as it is a vehicle of *universal civilization*. [...] In this regard the practice of Critical Regionalism is contingent upon a process of double mediation. In the first place, it has to ‘deconstruct’ the overall spectrum of world culture which it inevitably inherits; in the second place, it has to achieve, through synthetic contradiction, a manifest critique of universal civilization.”<sup>113</sup>

This process is similar to what Tzonis and Lefaivre call defamiliarization.

There are some arguments about rigidly defining criteria for Critical Regionalism since the fundamental concept of Critical Regionalism is an attitude and process of self-evaluation rather than a “style” for ready application. Kristine Woolsey says Critical Regionalism is a method to balance between universal culture and regional identity, not a new style or “ism”; Critical Regionalism is a method by which each architect forms his or her works.<sup>114</sup> Moreover, Tzonis and Lefaivre define Critical Regionalism as a:

---

<sup>113</sup> Frampton, Kenneth. “Toward a Critical Regionalism: Six Points for an Architecture of Resistance” In Foster, Hal, ed. *The Anti-Aesthetic: Essay in the Postmodern Culture*. Seattle, Washington: Bay Press, 1983, p 21.

<sup>114</sup> See Woolsey, Kristine. “Critical Regionalism: A Theory of Process” from Amourgis, Spyros, ed. *Critical Regionalism: The Pomona Meeting Proceedings*. California State Polytechnic University, Pomona, California, 1991.

“movement which has come about as a response to new problems posed by contemporary global development of which it is strongly critical, and that the poetics of this new movement are to a great extent different from, if not antithetical to other architectural regionalist techniques of the past”<sup>115</sup>; thus, “the poetics of critical regionalism does not include a set of design rules of partitioning, motifs and genera as does the definition of classicism, the picturesque or De Stijl.”<sup>116</sup> Critical Regionalism is an action and process to bridge between global and regional culture rather than creating a formula and rules for a new regional style or “ism.” However, unlike classic architecture styles that are distinct by form and style of architecture, the architecture of Critical Regionalism cannot be recognized as well-formed or not based upon an ideal. Hence, Frampton’s criteria are helpful to understand the grounds of Critical Regionalism and to open the issue of Critical Regionalism in real practice.

---

<sup>115</sup> Tzonis, Alexander and Lefaivre, Liane. “Why Critical Regionalism Today?” *Kenchiku to Toshi* [A+U: Architecture and Urbanism]. Vol.236, No.5, (May 1990) p25.

<sup>116</sup> *Ibid.*, p31.

## **Critical Regionalism and Naito's Design Principles**

From the study of Naito's design principles in Chapter 3, it can be seen that Kenneth Frampton's "Ten Points on Critical Regionalism" have a similarity with Naito's own design principles. This section explores how Naito's architecture and ideas fit into each of Frampton's "Ten Points on an Architecture of Regionalism." These points help us to understand the reasons why the experience of Naito's architecture provides deep intimacy and fosters a sense of identity among Japanese people.

### **"Ten Points on an Architecture of Regionalism" in Naito's Architecture and Idea**

#### *Point 1: Critical Regionalism and Vernacular Form in Naito's case*

Naito's architecture has a subdued beauty that gives one a sense of Japan, and people often comment that his architecture evokes memorable feelings. In this light, Naito retains a sense of Japan in modern architecture. The achievement, however, does not come from an expression of vernacular architectural form. Both the Sea-Folk Museum and the Makino Museum of Plants and People have large roofs which are one of the characteristics of Japanese traditional architecture, but Naito deconstructs the traditional Japanese roof to meet the needs of both projects. At the Sea-Folk Museum, the gable roof has a skylight in the top of the roof ridge to provide light and openness inside the exhibition halls (Fig 4.5).

In the Makino Museum of Plants and People, the roof creates deep eaves to provide the same kind of semi-exterior environments that traditional Japanese architecture has (Fig 4.6). But, the continuously curving roof is not seen in traditional Japanese architecture. Both examples of the transformation of the traditional sheltering roof come from Naito's response to climate, and the design to provide memorable places with a sense of shelter, all of which are premises of traditional Japanese architecture. By combining all of these, Naito retains a sense of Japan in his architecture.

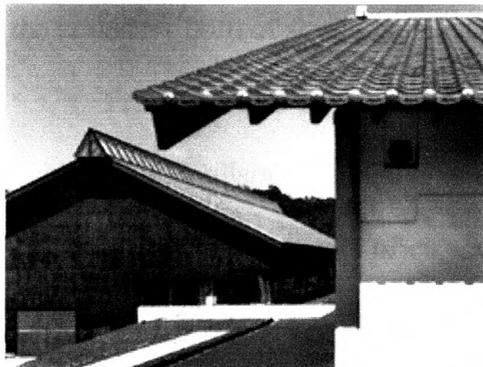


Fig 4.5: The roofs of the Sea-Folk Museum.



Fig 4.6: The deep eave of the Makino Museum of Plants and People.

*Point 2: The Modern Movement in Naito's Case*

Similar to Frampton, Naito also thinks that the Modern Movement eliminates the character of place and human presence from architecture and contributes to the increase of freestanding objects. Naito opposes this phenomena caused by the Modern Movement, and suggests reconstructing the relationship between site and architecture. It is parallel to the later discussion on site specificness, but Naito's architecture does not alienate one, which is often seen in modern Japanese architecture, with the glass box standing in the middle of the field. Both the Sea-Folk Museum and the Makino Museum of Plants and

People integrate with their surroundings, and become even more a part of the scene through time.

*Point3: The Myth and The reality of the region in Naito's Case*

Naito sees the limitation of regionalism. Regionalism is essential for architecture, but Naito thinks there is no originality or departure from the past if architects only follow traditional form and construction. In Naito's case, Frampton's notion of "school" can fit into one of his principles, the mediation between tradition and modernity, to make clear the boundary both of simple minded globalization and regionalism.

Frampton also suggests the commitment to the client as an important aspect of Critical Regionalism. The clients of the Sea-Folk Museum and the Makino Museum of Plants and People comment often and favorably on Naito's works. Yoshitaka Ishibashi, the Director of the Sea-Folk Museum comments:

"Mr. Naito used to be patient with my arguments. When I see before my eyes the museum building with its overabundant possibilities which fulfilled and far exceeded my concepts of what a museum should be, I feel the depth and greatness of Mr. Naito's architecture."<sup>117</sup>

Mr. Daijiro Hashimoto, a client of the Makino Museum of Plants and People and a Governor of Kochi Prefecture, comments: "The space of the new museum has a distinct air that immediately puts one at ease...My wish for Hiroshi Naito is that he will continue to explore the culture of wood materials until he sees himself, at last, as a kind of 'wood spirit.'"<sup>118</sup>

---

<sup>117</sup> Ishibashi, Yoshitaka. "A living Museum". In *Umi no Hakubutsu kan* [the Sea-Folk Museum]. Translated by Makiko Quini. Tokyo: Naito Architect & Associates, 1993.

<sup>118</sup> Hashimoto Daijiro. In *Makino Tomitarō Kinenkan* [Makino Museum of Plants and People]. Translated by Brian Amstutz. Tokyo: Naito Architect & Associates, 2000.

These comments from the clients of each project prove Naito's architecture is highly satisfactory to clients.

*Point 4: Information and Experience in Naito's Case*

Naito is critical of recent architecture that is consciously photogenic. He deeply understands that effectiveness of the appeal to visual images, but he values real spatial experience in architecture. One of the reasons why people feel comfortable in Naito's architecture is that his buildings are experiential rather merely photogenic objects. However, the rich spatial quality in Naito's architecture is difficult to perceive through visual images alone.

*Point5: Space/ Place in Naito's Case*

Naito thinks that architecture should be grounded in the specific place and should not create boundaries to disconnect architecture and place by constructing sealed buildings. The Sea-Folk Museum is clustered at the bottom of the small bay in gentle hills standing in silence. The arrangement of the buildings creates a water plaza on the site and creates enjoyable places in the middle of the site. The Makino Museum of Plants and People is located at the top of the small mountain. The forms of the roofs are integrated into the mountain. The organic forms of the buildings create a center courtyard from which one can enjoy the outdoor environment. For Naito, architecture is not enclosed or disconnected from the surroundings. It is a creation of renewed relationship between the inside and outside environment.

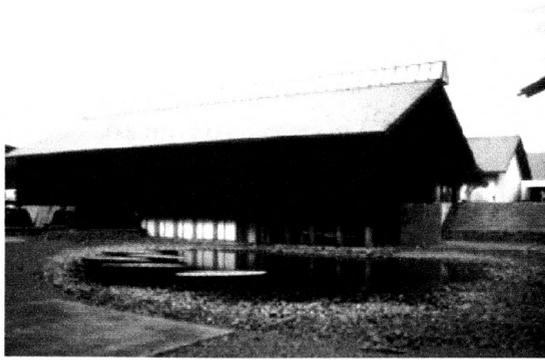


Fig 4.7: The water plaza surrounded by two exhibition halls in the Sea-Folk Museum.

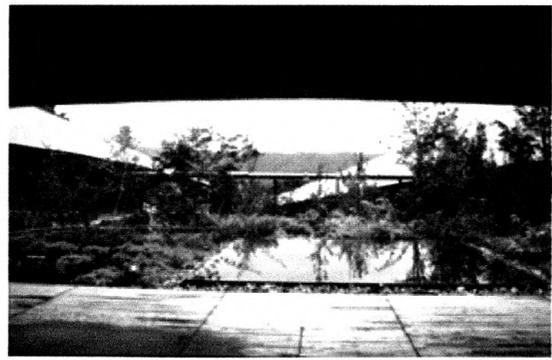


Fig 4.8: The courtyard of the exhibition hall in the Makino Museum of Plants and People.

#### *Point6: Typology/ Topography in Naito's Case*

From the design principles discussed in Chapter 3, it is clear that Naito consciously responds to topographical features rather than creating pre-formed building types. Naito strictly determines the form of his buildings from the character of each place to avoid creating free-standing objects that are totally alienated from a region. At the site of the Sea-Folk Museum, the natural level difference is used to divide different building functions, preservation and exhibit. The arrangement of the buildings harmonized with the gentle hill and creates enjoyable inside and outside relationship on the site.

The buildings of the Makino Museum of Plants and People hug the contour of the mountain to avoid destroying the rich natural environment the site has. From the bottom of the small mountain, the roofs of the museum seem to follow the topography of the mountain. Both museums are determined by the character of each place and cannot fit in somewhere else.

*Point 7: Architectonic/ Scenographic in Naito's Case*

As already noted in Chapter 3, Naito's architecture is architectonic rather than representational. One of the characters of Naito's architecture is the well-crafted wooden structural frameworks. In each project, Naito designs the structural frameworks to respond to the purposes of the buildings and the climate conditions. The wooden frameworks in the Sea-Folk Museum express an atmosphere that gives one a sense of security and comfort as if one is cradled inside the body of a whale. In the Makino Museum of Plants and People, the elegant curves of the roof structure express the power of the plants and provide a sense of warmth and ease for visitors. These feelings, however, are achieved by Naito's attitude toward the detailing. Unlike gigantic structures that do not relate to a realistic human scale, Naito's wooden frameworks allow people to feel and measure space by their body to make the architectural experience real.

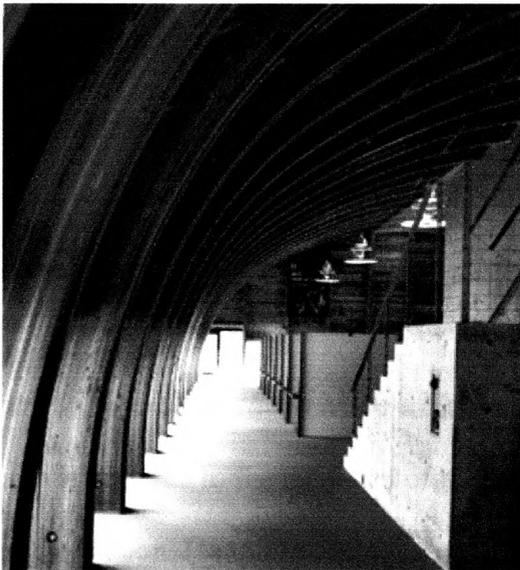


Fig 4.9: The interior space of the main exhibition hall of the Sea-Folk Museum.



Fig 4.10: The roof structure of the Makino Museum of Plants and People draws an elegant curve.

*Point 8: Artificial/ Natural in Naito's Case*

Naito takes great effort to avoid creating homogeneous spaces and artificial internal environments that do not foster climate changes and never give one a sense of nature. Feeling climate change is one of the pleasurable experiences in Naito's architecture. He also thinks artificial brightness eliminates the deepness and richness of internal space in architecture. In the Sea-Folk Museum, the natural light penetrates from the skylight and the windows in the bottom of the walls to create a rhythm of light and shadow in the internal space. In the Makino Museum of Plants and People, the reddish wood of the roof structure adds a feeling of warmth and security for people under the dim light in the main exhibition hall. Naito is critical of the air conditioner as the biggest cause of disconnecting internal space from its surroundings. Under such the conditions, climate change is no longer an important form determinant for architecture. In addition, people have less response to seasonal change. In both of the Sea-Folk Museum and Makino Museum of Plants and People, Naito introduces air movement, natural ventilation, natural materials, and water to foster comfortable internal environments for the humid and hot summers in each region. The experience of Naito's architecture makes people realize that a rich architectural experience is hardly ever perceived in an artificial internal environment.

*Point 9: Visual/ Tactile in Naito's Case*

Naito is opposed to the tendency of modern architecture to appeal almost solely to a sense of vision. He thinks architecture should be felt by the whole body and all senses. He thinks internal space is more important than the form of architecture in terms of real architectural experience. It is already discussed in Chapter 3, but one of Naito's design

principles is “Architecture for Experience and Sensory Perception.” Experiencing Naito’s architecture heightens the senses; natural materials, air movement, ambient temperature and humidity, the smell of soil and wood, and the sound of wind blowing and raindrops falling are all playing a part in the experience of Naito’s architecture. He consciously uses natural materials, light, shadow, and water for sensory perception in both the Sea-Folk Museum and Makino Museum of Plants and People. In the Sea-Folk Museum, the smells of soil floor and wood are enhanced by the rain; the sound of water flow in a pond and gradual shadow in the exhibition halls, all create one multi-sensory perception. In the Makino Museum of Plants and People, the continuous curved roofs create rhythms of shade and sun on the wooden deck; the water pot brings one coolness; the smell of locally grown woods give one a sense of belonging to nature. All of these enrich experience in Naito’s architecture.

*Point 10: Post-Modernism and Regionalism in Naito’s Case*

This last point is also parallel to one of Naito’s design principles, the mediation between modern technology and traditional wisdom. Naito sees regionalism and tradition as essential for architecture, but they both have limitations in this time of globalization. Naito also thinks introducing modern technology is important to support social change, but he is critical of the use modern technology for self-expression and individual aggrandizement. Therefore, he seeks to mediate between local traditions and modern culture. In the Sea-Folk Museum, the traditional gable roof has a skylight that introduces light in the building. Since, gradual shadow in the building is characteristic of traditional Japanese architecture; introducing light is a modern idea. By combining a traditional gable roof and a modern idea of introducing light, Naito is able to create a sense of

“Japaneseness” in modern architecture. In the Makino Museum of Plants and People, the complicated structure of the continuous curved roof is achieved by computer aided wood and metal panel processing, and the machine and hand work of skillful carpenters. The roof creates deep eaves that give one a sense of traditional Japanese houses, but this effect is only achieved by the idea of mediation between modern and tradition.

### **Two Distinctive aspects of Critical Regionalism in Naito’s Architecture**

Naito criticizes the approach of recent Japanese architects as being individualistic and having a “total disregard for global problems.” He questions the true meaning of architecture for the Global Age: “In my opinion, to be on the cutting edge for architects mean how well they can face the problems which are happening in the world.”<sup>119</sup>

Tzonis and Lefaivre say Critical Regionalism should be seen as complementary rather than contradictory to trends in higher technology and a more global economy and culture. It opposes only their “undesirable, contingent by-products due to private interests and public mindlessness.”<sup>120</sup>

Naito criticizes the phenomena of recent large scale modern development in Asian cities as the misuse of technology, but he does advocate introducing modern technology:

“Skyscrapers in Shanghai are expressing modern technology aggressively, but these are useless if an energy crisis comes. It was a big mistake to develop such a huge city. From now on, the focal point must be the design of cities with less

---

<sup>119</sup> Naito, Hiroshi. Interview by Yoko Kanai at Tokyo University, 24 July 2001. Text contained in the Appendix, pp171-172.

<sup>120</sup> Tzonis, Alexander and Lefaivre, Liane. “Why Critical Regionalism Today?” *Kenchiku to Toshi* [A+U:Architecture and Urbanism]. Vol.236, No.5, (May 1990). p25.

energy load. The discussion of mere regionalism cannot be a positive solution. But, there is a way to tie together regionalism and technology...”<sup>121</sup>

Naito’s idea of technology does not indicate the construction of the world is tallest building or most uniquely-shaped buildings; the meaning of technology for Naito is an effort to serve culture, the natural environment, and human comfort.

Based on this brief study of the history of Japanese architecture and Critical Regionalism two distinguishing aspects of critical regionalism are seen in Naito’s practice: 1) defamiliarization; and 2) the mediation of global civilization with local tradition. In regards to defamiliarization, it is helpful to compare Tange’s proposal for the Great East Asia Construction Memorial Building and the Japanese Cultural Center in Bangkok and Naito’s approach. One of the aspects of traditional Japanese architecture is the roof figure. Tange, for the Great East Asia Construction Memorial Building competition, introduced a roof style from the Shinto shrine similar to the Ise Shrine<sup>122</sup> to allude to national identity (Fig 4.11) For the Japanese Cultural Center in Bangkok, Tange employed a roof style from the traditional palace, *shinden-zukuri* (Fig 4.12).

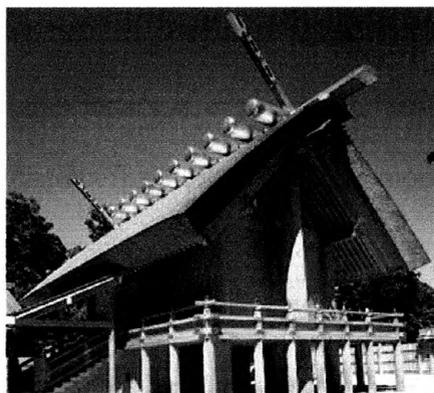


Fig 4.11: Ise Shrine in Ise City, Japan.



Fig 4.12: Kyoto Palace is an example of *Shinden-zukuri*.

<sup>121</sup> Naito, Hiroshi. Interview by Yoko Kanai at Tokyo University, 24 July 2001. Text contained in the Appendix, pp167-168.

<sup>122</sup> Ise shrine is the oldest shrine in Japan used to reserve the soul of ancestors of the Imperial family, and it was a symbol of imperial worship before the Second World War. The first shrine was built about two-thousand-year ago, and it is rebuilt every 20-year.

Based on Harwell Hamilton Harris's analysis of nationalism and regionalism, in both cases Tange expresses a sense of Japanese national identity by directly quoting historical and symbolic Japanese architectural forms. Likewise, Naito also introduced a gable roof with traditional Japanese roofing tile in the Sea-Folk Museum. However, as it is mentioned in Chapter 4, Naito deconstructs the form by introducing top light at the roof and renews the roof with a sense of modernity with regard to structure and the design of the building envelop. The Makino Museum of Plants and People has deep eaves that traditional Japanese houses also have. But, again, Naito deconstructs the form of the roof by shaping it into sensuous compound curves while maintaining the deep eaves. Both of Naito's projects clearly introduce renewed sense of place in modern time.

One of Naito's principles is to strike a balance between universal civilization and regional culture. Since it is already discussed in the previous chapter, it is not repeated here. But, it is parallel to the goal of Critical Regionalism. These distinctive aspects are truly important for Japanese modern architecture, which is facing to culturelessness and placelessness while separating itself from nationalism and globalism. Naito's critical attitude for modern architecture practices and other concerns: climate and site consciousness, experiential, tactile, and contextual, altogether make Naito's architecture distinct from other Japanese modern architects of his generation.

## **Conclusion**

Looking to the past, Japanese architects after the Japanese enlightenment of the 19<sup>th</sup> century, fluctuated between a longing for western culture and an attachment to a Japanese identity. Due to the Second World War, regionalism in architecture and culture

took on a negative connotation. The negative connotation of regionalism and rapid socio-cultural changes after the second World War eliminated the elements of regionalism from architectural practice and architects focused more on “how to become modern.”

Regionalism was once again banished from the mainstream of architecture practice; however, it was revived as a superficial façade in the Post-modern period of the late 1970's and 1980's. Postmodernism in Japan turned out to be a totally misleading of form regionalism that cultivated nostalgia and pseudo-vernacularism. Consequently, the idea of regionalism came to be seen, once again, as negative, conservative, and out of date. As a result, current architecture in Japan tends to neglect the character of place and creates homogeneous environments and a sense of “placelessness” in the present time.

Under these conditions, one way Japanese modern architecture can begin to create architecture of place is by re-examining regionalism while understanding its historical and potentially negative aspects. Especially, Critical Regionalism that has a programmatic agenda offers architects in Japan a way to overcome popular misconceptions about regionalism. In addition Critical Regionalism, by setting a goal to mediate regional identity with universal culture, also has a possibility to create a sense of place in our time by the process of “defamiliarization.” These two points are the most important for Japan, which has a distinct architectural history in modern times that is the result of influences derived from Western culture. That gives to Japan a need to mediate universal and Japanese culture.

The study in this chapter reveals that the contributions of Naito's work point the way toward a method for Japanese architects to create architectural significance within the sphere of universal culture.

## CHAPTER 5

### **CONCLUSION- TOWARD A CREATIVE REGIONALISM**

This thesis explores the elements, vision, and background that foster a sense of place in Hiroshi Naito's works. In this chapter the main findings are expanded upon, looking beyond form and space of architecture into a realm of the problematic aspects of regionalism and critical phenomenon that modern architecture is facing in our age of globalization: placelessness and culturelessness caused by the neglect of regional identity.

Naito retains a Japanese sense of place in modern architecture by being conscious of regional factors and human conditions. His approach and critical viewpoint is similar to the premises of Critical Regionalism; he makes an intimate architecture by balancing and integrating traditional wisdom and modern technology. In this light, Naito is shown as perhaps the architect who is best able to mediate very different stances in Japan: globalization and regionalism.

This concluding chapter will focus on the future direction of Naito's work by presenting his recent project, RINI Institution of Ethics- Fuji RINRI Seminar House, also with a summation of Naito's view, and the lessons that can be gleaned from Naito's architecture. Thus, the first part of this chapter discusses his attempt in his recent project and shows his direction for the future. The second part concludes this study by summarizing Naito's vision of architecture.

## RINRI Institution of Ethics- Fuji RINRI Seminar House

Although Naito has already successfully created a renewed sense of place in our time, he is continuing to challenge himself. Through his most recent project, the RINRI Institution of Ethics- Fuji RINRI Seminar House, which was completed in August 2001, Naito's direction for future can be seen.

The project was featured in *Shinkenchiku* [New Architecture], November 2001, along with his article presenting his recent concerns about architecture. In the article, *Keitai kara Shilumi e* [From Architectural Form to Mechanism]<sup>123</sup>, Naito questions the true meaning of “newness” in architecture by relating his impressions of his visit to the Guggenheim Museum in Bilbao designed by Frank Gehry: “I felt unfulfilled by the inconsequential project. I wondered, but couldn't identify the disappointment and the sense of loss.”<sup>124</sup> Naito, thus, discusses three kinds of “newness” in the article: 1) “newness” based on technological evolution; 2) “newness” to improve inconsequential everyday issues; and 3) “newness” for the sake of being new. Given these categories, he points out that the last form of, undesirable “newness,” is often seen in recent architecture. Despite Naito's desire to pursue something new in his project, he cautions that the recent phenomenon of chasing after fashion and “newness” has neglected the debate about the real problems architecture faces today. All architectural works have different backgrounds and processes, but the essence of architecture, that is architecture as a tool to support our daily life and society, has hardly changed. Naito continues:

“As the essence of architecture is hard to change, architectural design begins to seek the ‘newness’ of appearance because it is an efficient way to appeal to and

---

<sup>123</sup> Naito, Hoirosi. “Keitai kara Shikumi he” [From Architectural Form to Mechanism]. *Shinkenchiku* [New Architecture]. Tokyo: Shinkenchiku Sha. Nov. 2001:pp77-78.

<sup>124</sup> Translated by Yoko Kanai from: Naito, Hoirosi. “Keitai kara Shikumi he” [From Architectural Form to Mechanism]. *Shinkenchiku* [New Architecture]. Nov. 2001:p78.

communicate through visual images. By postponing the debate on the essence of architecture, the trend to create something which looks like it is “new” is infiltrating architecture [...] I am disgusted by the current situation of architecture that plays with forms and facades. The information gained through the eyes is fast and effective, thus, architects need to be careful when designing. As architectural design fawns over the visual sense, architecture itself gives rise to misunderstanding and illusion; additionally, it becomes detached from reality. We have to understand the negative aspects of the recent trend.”<sup>125</sup>

Especially, after witnessing the collapse of the World Trade Center buildings on September 11<sup>th</sup>, 2001, Naito strongly feels the senselessness of playing with architectural form. He says,

“Under the complicated recent situation, what we architects have to do is to ensure small developments of technology based upon the understanding of what is happening in the world. Design has always been involved with trend and fashion; it sometimes turns back to the past as ‘revival.’ But technical innovation is not turning back; it just builds on the past and moves forward. Even if it is a small step, we should build up technical development. Architects need to be braver and have a strong will to improve the situation little by little based on small technical innovations rather than dreaming of being a heroic architect. At least, in my opinion, that is the only thing that architects can do in this complex period of time.”<sup>126</sup>

Naito’s avocation is reflected in his project, the Fuji RINRI Seminar House. In this project, he tried three small but new technical innovations which arise from questions that arose during the design process of the Sea-Folk Museum. These are: 1) the use of complicated timber processed by a CAD/CAM system; 2) introduction of heat-press formed steel; and 3) perimeter zone heat control glass. At a glance these new technical innovations give an impression that Naito has become more committed to technology; however, the technical innovations that he uses here are still in the realm of one of his design principles, the mediation between traditional wisdom and modern technology.

---

<sup>125</sup> Translated by Yoko Kanai from: Naito, Hoirosi. “Keitai kara Shikumi he” [From Architectural Form to Mechanism]. *Shinkenchiku* [New Architecture]. Nov. 2001:pp76-77.

<sup>126</sup> *Ibid.*, p77.

## Background

The Fuji RINRI Seminar House building has an educational and training function which provides overnight use of the seminar house for members of the association.<sup>127</sup> Since people stay in the building for a long time, this project is required to provide a comfortable internal environment. Located on a mountain at the foot of Mt. Fuji, the cold climate and large diurnal temperature fluctuation is a primary concern of the project.

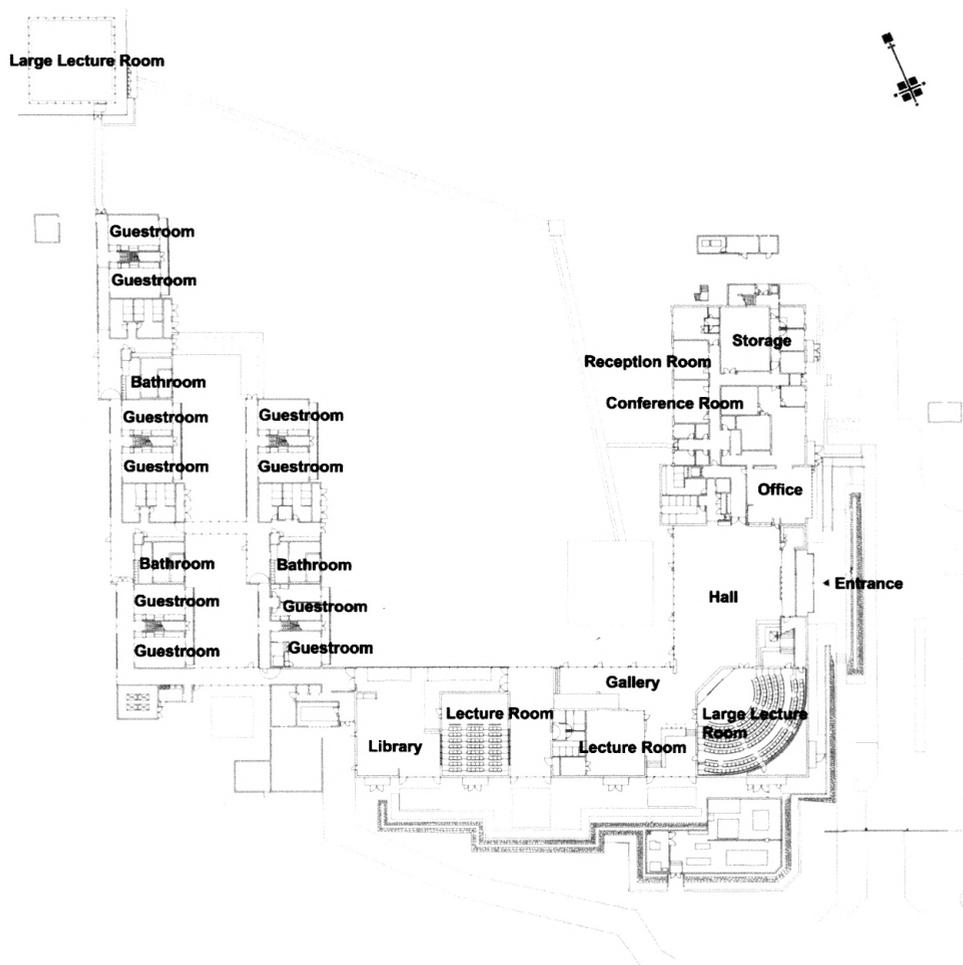


Fig 5.1: The first floor plan.

<sup>127</sup> The client, RINRI Institute of Ethics, is an incorporated association to reintroduce normative ethics in Japanese culture.

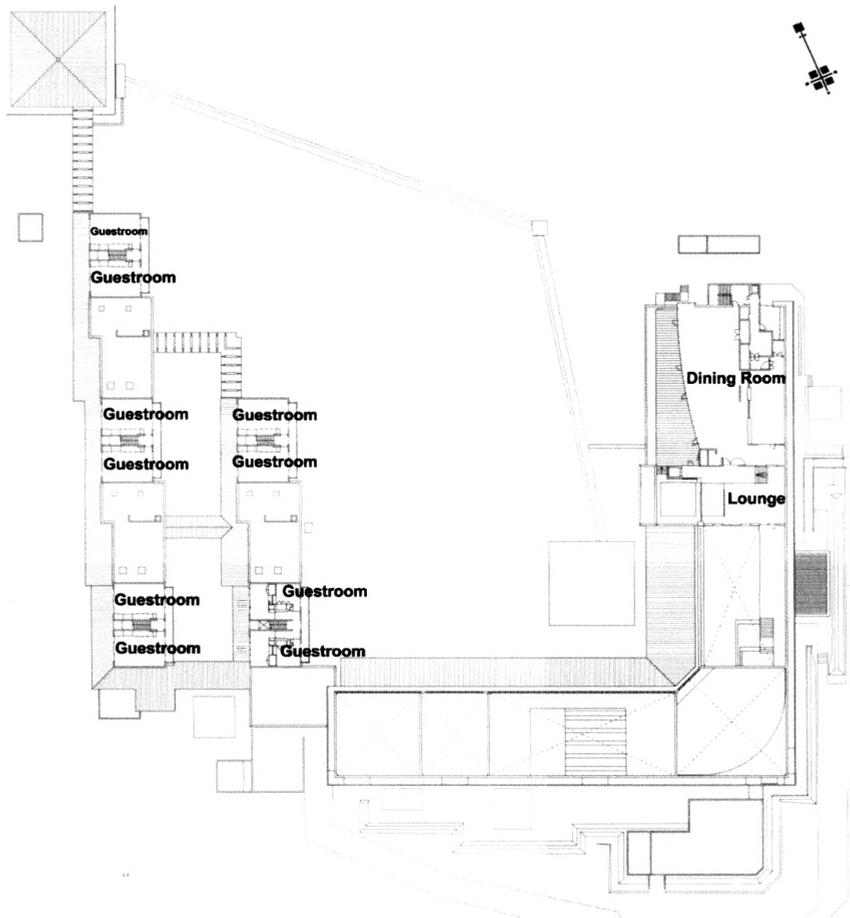


Fig 5.2: The second floor plan.

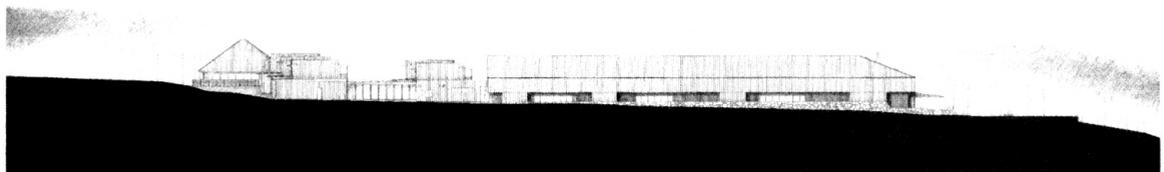


Fig 5.3: The south elevation.

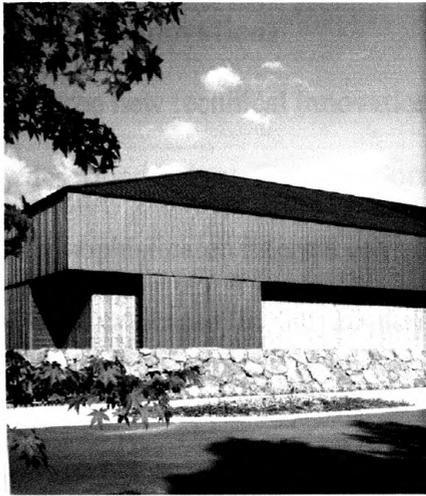


Fig 5.4: The south east corner of the building.



Fig 5.5: The view of the guest rooms from the central courtyard.

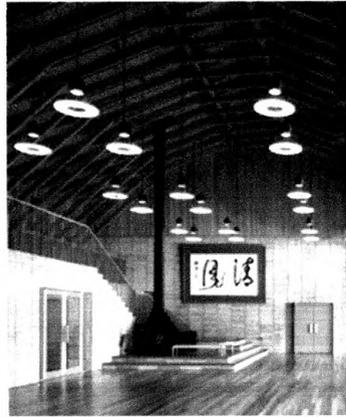


Fig 5.6: The gallery space.



Fig 5.7: The entrance hall.



Fig 5.8: The interior of the large lecture hall.

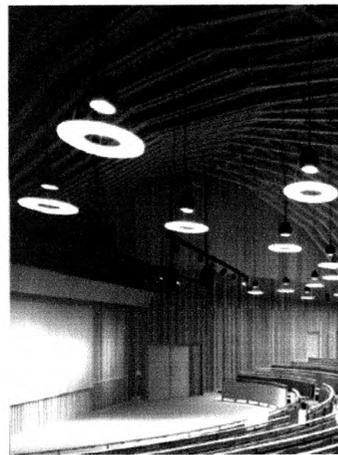


Fig 5.9: The ceiling of the large lecture hall.

### Three Technical Innovations

The three new technical innovations Naito tries in the Fuji RINRI Seminar House are briefly described below. These explorations build on his completed projects and create a more sophisticated internal environment in the new building:

#### 1) The use of complicated timber processing using a CAD/CAM system

The first innovation for this project is the use of CAD/CAM systems to make better use of the nature of trees in sophisticated wooden structural frameworks. The use of CAD/CAM systems for processing wood members was already attempted in the previous project, the Makino Museum of Plants and People. But, this trial advanced to make the joints convey stresses between the fabrics of woods with a minimal use of bolted joints and nails; thus, the form of the joints are detailed and complicated. The distinctive feature of this trial is coordination with 3D solid computer modeling to design the complicated joints and calculate the stresses for each

joint. Then, the data is brought into a joint processing machine via the CAD/CAM system at a wood factory. In this way, the astounding carpentry, which even skilled Japanese master builders have a hard time constructing, becomes possible because of the high level of accuracy and high efficiency of modern computer-based design and fabrication methods.

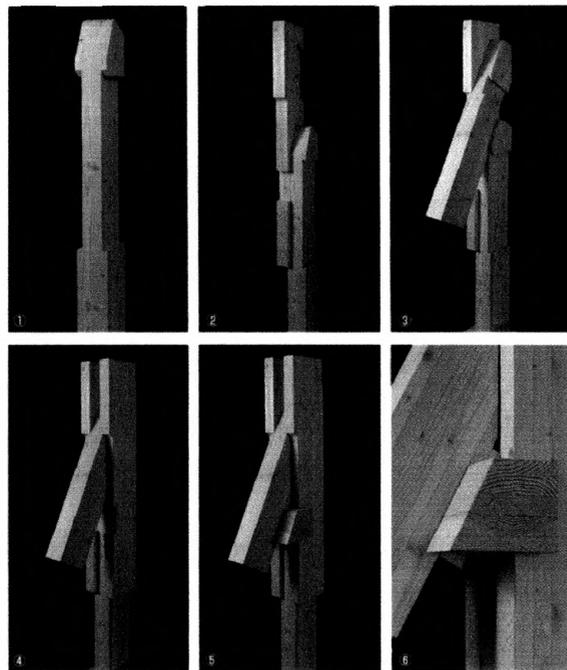


Fig 5.10: The process of construction of part of the wooden roof structure by full-scale model.

## 2) The use of heat-press-shaped steel members

Heat-press-shaped steel is processed steel sheets that form shaped steel by a heat press. A steel member can be freely formed from a steel sheet into a shape to meet the purposes of its use. Such steel was first used at the International Forum designed by Rafael Vinoly, Tokyo Japan, for a part of the curtain wall, and now it is widely used for a part of curtain walls and steel sashes. So far, the use of the heat-pressed-shaped steel is limited to these purposes, but Naito and his structural engineer, Hitoshi Okamura, noted that because of the strength of steel, it is possible to combine functions as a roof support and a reinforcing material for the wooden window sash (Figure 5.12 and 5.13). At the Fuji RINRI Seminar House, the entrance hall and the gallery space that face the central courtyard needs to have a large span in order to create a large space with maximum openness. Based on the lessons learned at the Sea-Folk Museum, Naito introduces a post-tensioned precast-concrete structure for part of the roof construction to achieve a large span structure. By using this method, the opening façade facing the courtyard only needs to consider supporting a perpendicular load. Consequently, Naito obtains the maximum advantages, openness and the avoidance of a heat-bridging via the sash, along with minimal dimension of members.

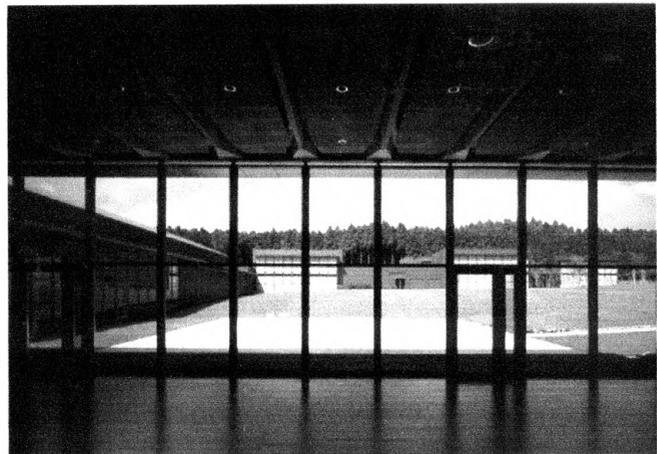


Fig 5.11: The openings in the entrance hall provide view toward the central courtyard.

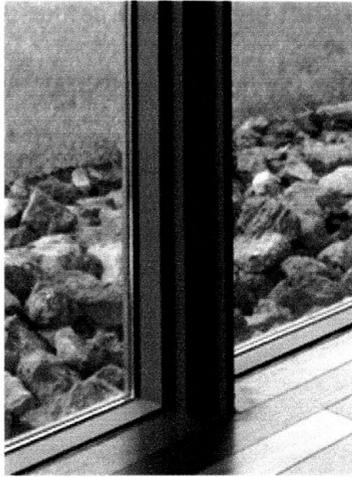


Fig 5.12: The bottom part of the wooden sash and the heat-press-shaped steel member.



Fig 5.13: The heat-press-shaped steel member has a roll to support roof structure as well as a reinforcing wooden such.

### 3) The use of heat generating glass to minimize heat loss

The climate of the location is a cold climate in a mountainous region. The heat loss via glass windows needs to be minimized; thus, the heat generating glass is used for the big openings facing to the central courtyard. The heat generating glass is a metal coated glass<sup>128</sup> that heats the glass surface to around 18- 20 °C by passing a weak electric current through the metal film. It had been only been used in the past for research facilities, but by installing the heat generating glass in this project it was possible to minimize the heat loss from glass and create simple openings.

### Naito's Principles in RINRI Seminar House

In his article, *Keitai kara Shilumi e* [From Architectural Form to Mechanism], Naito only discusses his recent focus on technical innovations, however, the principles

<sup>128</sup> The thickness of the metal film on the glass is 0.3 micron. 1micron=0.001mm

described in Chapter 3 are carried forward into the Fuji RINRI Seminar House.<sup>129</sup>The elevation of the building harmonizes with the surroundings, and the height does not exceed the trees on the site; Naito continues to express the idea of, a building that respond naturally to its environment, from the Makino Museum of Plants and People (Fig 5.14).

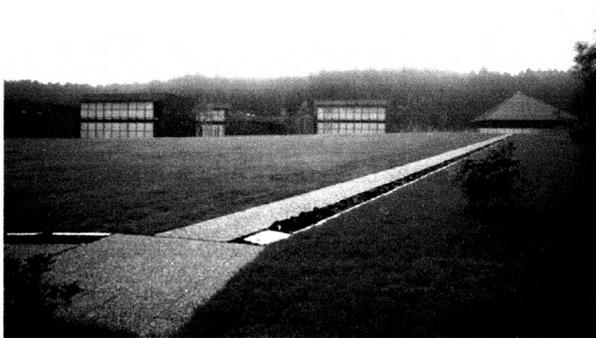


Fig 5.14: The guest house and the large lecture room on the west side of the seminar house.

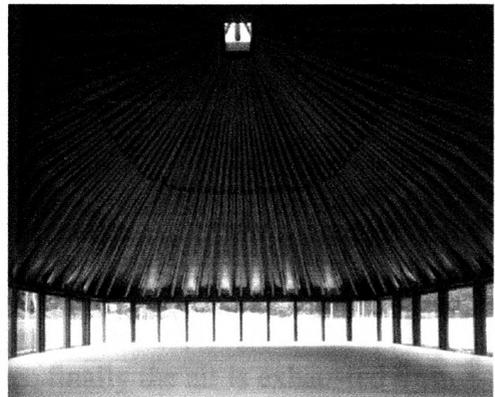


Fig 5.15: The wooden framework of the ceiling in the large lecture room.

Keeping the basic concept of architectural “protoform,” the methodology to compose the structural framework in the Fuji RINRI Seminar House is built upon the idea of frameworks both from the Sea-Folk Museum and the Makino Museum of Plants and People.

By combining the methodology from these museums and introducing new types of members, including heat- press- formed steel, simple and sophisticated internal spaces are created. The principles, tectonics and the human body, are also carried forward from

---

<sup>129</sup> Since this author has not visited the seminar house, the comments on the principle, architecture for experience, is not discussed.

his two major projects to the RINRI Seminar House in the form of the crafted wooden framework of the ceiling (Fig 5.15).

The climatic consideration for this project is how to deal with heat loss in the cold climate; moreover, people stay for a long time in the buildings. Thus, Naito focuses on the internal environment rather than outdoor space in this project. As mentioned, Naito introduces heat generating glass and wooden sash, which is reinforced by heat press formed steel, to reduce heat loss in the entrance hall and gallery space. Additionally, Naito also tries to reduce energy use by use of passive heating and air circulation. During winter, the heat generated by localized radiant heating in the floor is distributed to the large spaces, auditorium, and lecture rooms by fans. Then the part of the heated air in the large spaces is circulated under the floor of the hall to warm up the floor. After that, the heated air is circulated to the corridors and bathrooms; finally the air is exhausted from the building. Thus, the heated air is circulated from the bigger main spaces where people gather and stay for a long time to the smaller and less frequently used spaces, that is the gallery, hall, corridor and bathroom (Fig 5.16, 17). On the other hand, the climate in summer is comfortable in the highland region. Thus, natural ventilation is used to facilitate air circulation during the summer (Fig 5.18). In his major projects, the Sea-Folk Museum and the Makino Museum of Plants and People, Naito also chose to use natural ventilation and materials for internal comfort. However, he extends that prior experience to the cold climate at the Fuji RINRI Seminar House to add energy efficiency and heating for year-round internal comfort. The last principle, mediation between tradition and modern culture, is clearly seen in the process of the timber processing for the roof structure of the Fuji RINRI Seminar House.

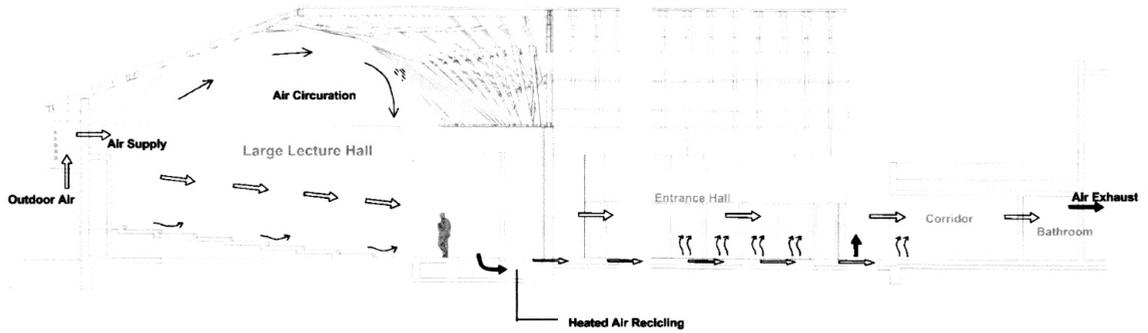


Fig 5.16: The heated air circulates from the large lecture room to the entrance hall, corridor, and the bathroom through under the floor in winter.

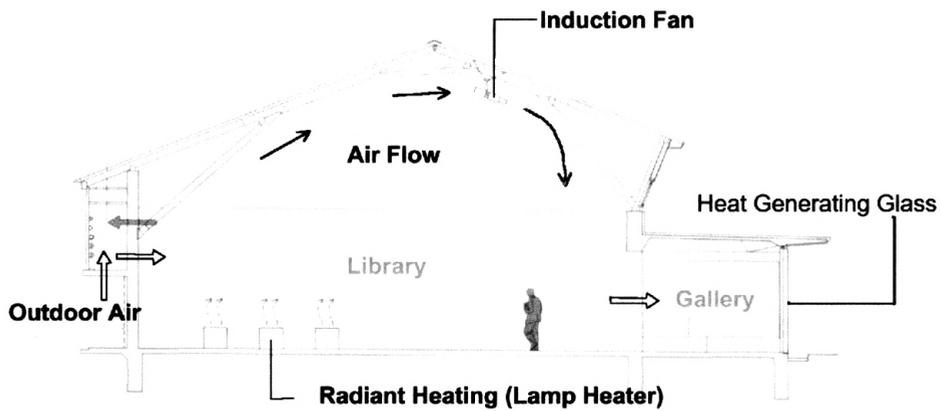


Fig 5.17: The diagram showing air flow in the library in winter.

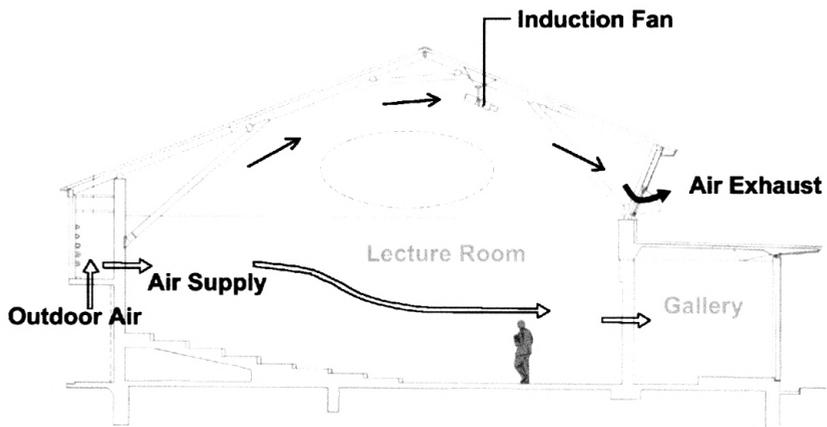


Fig 5.18: The diagram showing the air circulation in the lecture room in summer.

## **Naito's Future Direction**

The Fuji RINRI Seminar House attempts to build upon Naito's efforts in the Sea-Folk Museum and the Makino Museum of Plants and People and introduces new technical innovations. As mentioned, Naito's idea of technical innovation is not to create architecture as a publicity stunt; he makes an effort to use technology to support human comfort in a particular region. This idea makes his architecture distinct from recent high-tech architecture that merely highlights the use of technology as part of a futuristic image.

In addition to the small technical developments such of those we see in the Fuji RINRI Seminar House, Naito also seeks to create environments for sensually pleasurable thermal experience. In the interview with Naito, he mentions that he sometimes carries a thermometer, hydrometer and wind speed indicator with him to record his own thermal experience and determine parameters for human comfort.<sup>130</sup> His own experimental study shows his opposition to completely mechanically controlled environments and the disconnection of internal spaces from its surroundings. In the Fuji RINRI Seminar House, Naito starts by studying internal air movement and the way in which to combine the air movement and heating efficiency. It is not seen in the Fuji RINRI Seminar House, but Naito also says the use of computer technology to design thermal comfort in different regions will be his next attempt at technical innovation: "When it (the use of computer technology to foster regional context rather than creating form of architecture) is achieved, it wouldn't be just regionalism."<sup>131</sup>

Naito's challenges for future projects is built upon the successes of completed projects and the desire to create Japanese modern architecture rooted in regionalism

---

<sup>130</sup> See Naito, Hiroshi. Interview by Yoko Kanai at Tokyo University, 24 July 2001. Text contained in the Appendix, pp168-169.

<sup>131</sup> Ibid., p167.

supported by technological innovation. Naito makes efforts to create architecture with technical innovations for specific places and people. In this sense, he is moving from Critical Regionalism toward his own architectural approach which is based on regionalism and the provision of creative solutions for human comfort through small technical innovation. We might call Naito's approach "Creative Regionalism."

## Lessons from Naito's view and works

### **Naito's View- Summary**

Hiroshi Naito is an architect who always questions, "To what does architecture need to respond?" He does not rely on theories and conceptual frameworks; he values his own experience through everyday life, architectural practice, and the architecture by which he has been inspired. Naito has a critical mind and is barely influenced by fashion; rather, he seeks the true value of architecture in his own way.

### The truth of architecture-It is in necessity

Despite the simple beauty of his buildings, Naito merely explains his architecture from a pragmatic point of view. He deeply understands it is effective to appeal to sight through architectural form, but this approach has no meaning for him. Naito thinks the formal approach, no matter how creative and successful it is in terms of expression, never can lead architecture to its true value. Naito says: "I feel drawn to structures built to meet a necessity and entrusted only with hard facts."<sup>132</sup> For Naito, architecture should come out of ordinary needs, derived from necessity, determined by site, climate, and human factors. It is not a form expressing the architect's personality, but rather, a shelter to fulfill human and social needs "Architecture is composed without facilities and design; the basic composition is structure and a roof to keep out of rain."<sup>133</sup> Designing is not primary for Naito's architecture; the subdued beauty of his building is a byproduct of his effort to encapsulate the needs of each project. Therefore, he is seeking the truth of architecture as an expression of necessity rather than visually "new" architectural form.

---

<sup>132</sup> Naito, Hiroshi. *Azumino Chihiro Bikyutsukan* [Chihiro Art Museum Azumino]. Translated by Brian Amstutz. Tokyo: Hiroshi Naito Architect & Associates. 1999.

<sup>133</sup> Translated by Yoko Kanai from: Naito, Hiroshi. *Kenchikuno Hajimarini Mukatsute* [Toward the Beginning of Architecture]. Tokyo: Okokusha, 1999, p222

The presence of people who experience and use Naito's building is also central to his concerns. In a conversation with an artist, Takaharu Takubo, Naito says: "In order to feel the effects of the scenery, the presence of viewer is necessary. But, I think, the true meaning of scenery is not understood by watching from just the outside; people need to explore into it, and experience with whole their body."<sup>134</sup> His opinion of scenery in this interview is parallel to his vision of architecture; architecture is not an object to watch from the outside, it rather needs to be experienced from the inside by people. Thus, he highly values experiential architecture based on his unforgettable rich spatial experience in Villa Mairea:

"... my impression of the Villa Mairea was completely changed when I put myself in the house. I was ashamed of my ignorance as the door opened and I stepped into the house. Yet at the same time I understood why I could not understand the rich spatial quality and true meaning of architectural experience; the form of architecture is easy to recognize, but the space is not. The message expressed through form is communicable, but the spatial quality is first understood by experiencing it."

He had a weak impression of Villa Mairea before he visiting the site, but the sensation of rich spatial experience Naito had in Villa Mairea changed his view of the true value of architecture: "I realized that we need to feel architecture with our body and senses." He found that the true value of architecture is not to be found in a form of architecture; it is in a real spatial experience.

### Critical View

Naito warns that the current architectural trends not only in Japan but also in other Asian countries Westernized under globalization, threaten to undermine the preservation of cultural identity:

---

<sup>134</sup> Translated by Yoko Kanai from: Interview of Hiroshi Naito and Takaharu Takubo. in *Kenchikubunka* [Architecture Culture]. Vol.52. No. 613 (Nov. 1997): p79.

“In order to survive, we Asian architects need to have our own identity and key elements that Western architects cannot acquire. When Asian architects can acquire that, they will have more confidence, and cultural and regional contexts are going to be employed.”<sup>135</sup>

From this point of view Naito criticizes Asian architects who create high rise glass boxes not rooted in local culture and climate as much as they are touched by the global economy and universal architecture trends. Naito thinks, however, the globalization is inevitable for architects, and he does not oppose the trend toward global culture and the introduction of high technology. But, he questions the way architecture becomes global and introduces high technology. Naito thinks the recent trends toward global culture and high technology fail to foster local culture, thus, creating a condition of placelessness and culturelessness.

One of the leading causes of these undesirable phenomena of globalization is that architecture relies largely on visual images. Because images are an effective way to communicate, architects become interested in creating photogenic objects rather than experiential spaces to enjoy. Regarding high technology, Naito points out that it is often used merely to create unique forms and futuristic images which come from individual interests and expressions of individual personalities. In addition it contributes to standardized internal conditions that treat people as a mass, not as individuals. Naito opposes the current situation, and suggests other views of globalism and high-technology.

Naito’s view of “globalism” in architecture is to create a “universal” culture on the basis of “local” culture of each country. In other words, Naito thinks the true meaning of globalism will be achieved when architects mediate between traditional wisdom and modern technology. High-technology, once again, is not a tool for creating unique objects

---

<sup>135</sup> Naito, Hiroshi. Interview by Yoko Kanai at Tokyo University, 24 July 2001. Text contained in the Appendix, pp172-173.

and standardized internal environments for Naito; it is a tool to foster regional conditions and human comfort while retaining cultural identity in modern architecture.

Through the example of his own architecture Naito shows what Asian architects can do to create regionally and culturally appropriate buildings, which are never achieved by just copying traditional forms or fashionable modern architecture. Naito shows a way Asian architects can acquire “key elements” by responding to regional conditions and human factors, and mediating them with modern technology. Only by recognizing his view, can we appreciate and interpret the subdued beauty and the sense of “Japaneseness” that is be found in his architecture.

## **Conclusion- The Lesson of Naito's Architecture**

The motive to study Hiroshi Naito's work stems from a question during the author's first research trip; what are the distinct factors which make Naito's architecture more intimate and humanly appealing than other Japanese modern architecture? Naito's architecture makes one rediscover the significance of ordinary beauty that exists in our subconscious and folk memories. Juhani Pallasmaa's thought on the purpose of architecture describes why Naito's architecture has a distinct quality that is different from other Japanese modern architecture: "The human task of architecture is not to beautify or humanize the world of everyday facts, but to open up a view into the second dimension of our consciousness, the reality of images, memories and dreams."<sup>136</sup> From the study of Naito's vision and works, it can be said that he is an architect who is good at gathering memorable feelings at a deep level of unconsciousness, interpreting them in an architectural idea, and expressing them in an architectural language based on local factors. Through studying Naito's architecture and viewpoint what we, architects, learn are not just lessons about the simple beauty of his architectural forms and details of wooden frameworks. More importantly, we discover a different method of creating architecture with a sense of place.

The other aspect that makes Naito's architecture different from others is that he can resolve the problems raised by "universal" architecture: the neglect of place and local conditions by design simply following architectural fashion, and creating homogeneous environments with little consideration for human conditions. Hiroshi Naito shows that architecture can overcome mere fashionable design by the use of simple logical reasoning to solve problems. If there are problems, architects have to make the effort to find a

---

<sup>136</sup> Pallasmaa, Juhani. "Tradition and Modernity". in *Architectural Review*, May 1998.p.27.

rational way to solve them. Naito asserts that the solution for the issues of placelessness and culturelessness, cannot be defined by a singular answer. He sees the key to solving these problems in necessity, placeness, and regional factors. Additionally, he finds the solutions in between polarities: inside and outside, the part and the whole, nature and architecture, regional identity and universal ideas. By seeking the best relation of these polarities Naito has found a key approach, to mediate in between these factors in order to answer the problems of each particular building design.

In addition, compared to the notion of modern architecture as the invention of unique formal figures, Naito's architecture suggests the importance of introducing regional factors and human conditions as a ground upon which to create modern architecture with a sense of place. Now as the whole world becomes closer and the meaning of regional identity and culture wanes, the character of place is too often neglected. While this suggests the importance of a rediscovery of architectural regionalism, it must be noted that regionalism is often connected with a conservative approach or nationalism in Japan, Naito's case suggests that regionalism also can be a positive tool to take a balanced outlook to the creation of architecture with cultural identity.

In our era, it is easy to be confused and lose our way amidst the tremendous amount of information, rapidly changing architectural trends, and limited views of the mass media. But, Naito's attitude, to be honest with what we feel, think and see, encourages us to believe in our own vision and find our own way. Naito discovers in himself what he has to do. Hiroshi Naito is a down-to-earth architect who is always critical of architecture that merely serves to promote the architect. There are many others

who strive to acquire an international reputation, but Naito does not desire to become “universal.” Rather he seems to enjoy being, as he says “a domestic architect.” Naito faces up to the inner nature of architecture, and he is constantly true to what he believes and what is important for him. Hiroshi Naito finds his own way and moves progressively toward creative regionalism in the age of globalization.

## BIBLIOGRAPHY

Benedikt, Michael. *For An Architecture of Realiy*. New York: Lumen Books, 1987.

Berendt, Joachim E. *The Thied Ear: On Listening to the World. England*. London: Element Books Ltd, 1988.

Bloomer, Kent C & Moore, Charls W. *Body, Memory, and Architecture*. New Heaven CT: Yale University Press, 1977.

Coates, Gary. *Eric Asumussen, Architect*. Stockholm, Sweden: Byggförlaget, 1997.

Curtis, William JR. "Towards an Authentic Regionalism." *MIMAR, Architecture in Development*, Vol. 19 (Jan-Mar, 1986): 24-31.

Foster, Hal, ed. *The Anti-Aesthetic: Essays in the Postmodern Culture*. Seattle, WA: Bay Press, 1983.

Frampton, Kenneth. "Modern Architecture and Critical Regionalism." *Transactions 3, RIBA*, Vol2, No.1 (1982): 16-25.

Frampton, Kenneth. "Ten Points on an Architecture of Regionalsim: A Provisional Polemic." In Speck, Lawrence, ed. *Center: A Journal for Architecture in America*, Vol.3 (1987): 20-27.

Frampton, Kenneth. "Toward a Critical Regionalism: Six Points for an Architecture of Resistance." In Foster, Hal, ed. *The Anti-Aesthetic: Essays in the Postmodern Culture*. Seattle, WA: Bay Press, 1983.

Fujimori, Terunobu. *Nihon no Kindai Kenchiku* [Japanese Modern Architecture]. Tokyo: Iwanami Shyoten, 1993.

Harris, Harwell H. "Regionalism and Nationalism." In *Hawell Hamilton Harris: A Collection of His Writings and Builsings*. Student Publication of the School of Design, Noth Carorina State University at Raleigh. Vol.14, No.5 (1965): 25-33.

Heneghan, Tom. "Blanco elocuente" [Eloquent White]. in *2G: Revista Internacional De Arquitectura* [International Architecture Review]. No.19, (III/2001): 4-25.

Heschong, Lisa. *Thermal Delight in Architecture*. Cambridge MA: The MIT Press, 1979.

Holl, Steven, Pallasmaa, Juhani, Perez-Gomez, Alberto. "Question of Perception, Phenomenology of Architecture." *Kenchiku to Toshi* [Architecture and Urbanism], July1994.

Kimura, Kenichi. (ed.). *Minkano Shizenn Energy Gijyutu* [Sustainable Technology in Japanese Traditional Houses]. Tokyo: Shōkoku-shya, 1999.

Knabe, Christopher & Noennig, Joerg. R., eds. *Shaking the foundations: Japanese architects in dialogue*. New York: Prestel, 1999.

Kobayashi, Toru. *Utsuroi no Fūkeiron* [Perception of Landscape-five senses, words, and climate]. Tokyo: Kajima Publication, 1993.

Mugerauer, Robert. *Interpretations on Behalf of Place*. Albany, NY: State University of New York Press, 1994.

Koren, Leonard. *Wabi-Sabi: For Artists, Designers, Poets & Philosophers*. Berkeley, CA: Stone Bridge Press, 1994.

Naito, Hiroshi. *Umino Hakubutsukan* [Sea-Folk Museum]. Tokyo: Naito Architect & Associates, 1993.

Naito, Hiroshi. *Sokei no Kenchiku* [Architecture of Protoform]. Tokyo: Inax Publishing, 1995.

Naito, Hiroshi. "Naito Hiroshi: Silent Architecture." In *Kenchiku Bunka* [Architecture Culture]. Vol.52, No. 613 (Nov, 1997).

Naito, Hiroshi. *Azumino Chihiro Bijyutsukan* [Chihiro Art Museum Azumino]. Tokyo: Naito Architect & Associates, 1999.

Naito, Hiroshi. *Kenchikuno Hajimarini Mukatsute* [Toward the Beginning of Architecture]. Tokyo: Okokusha, 1999.

Naito, Hiroshi. "Jūryoku to Kaze" [Gravity and Wind]. in *Shinkenichiku* [New Architecture], December 1999: 80-85.

Naito, Hiroshi. *Makino Tomitarō Kinenkan* [Makino Museum of Plants and People]. Tokyo: Naito Architect & Associates, 2000.

Naito, Hiroshi. "Keitai kara Shikumi he" [From Architectural Form to Mechanism]. *Shinkenichiku* [New Architecture]. (Nov. 2001):pp76-77.

Nesbitt, Kate. (ed.). *Theorizing a New Agenda for Architecture: An Anthology of Architectural Theory*. Princeton, NJ: Princeton Architectural Press, 1996.

Nitschke, Günter. *From Shinto to Ando: Studied in Architectural Anthropology in Japan*. London: Academic Editions, 1993.

Noberg-Schulz, Christian. *Genius Loci*. New York: Rizzoli, 1980.

- Okakura, Kakuzo. *The Book of Tea*. New York: Dover Publications, Inc, 1964.
- Okazaki, Kanjiro & Yatsu ka Hajime. "Modanizm Saikou" [30 People Who Moved Modernism]. in *Kenchiku Bunnka* [ Architecture Culture]. Vol.55, No.639, (Jan, 2000):42-71.
- Pallasmaa, Juhani. "Identity, Intimacy and Domicile- Notes on the Phenomenology of Home." In Benjamin David., and Stera David. eds. *The Home: Words, Interpretations, Meanings and Environments*. Aldershot, England: Avebury Publishing House, 1995:
- Pallasmaa, Juhani. *The Eyes of Skin*. London: Academy Editions, 1996.
- Pallasmaa, Juhani. "Tradition and Modernity." *Architectural Record*, May 1998: 27-35.
- Pallasmaa, Juhani. "The Logic of Image." *The Journal of Architecture*, Vol. 3, Winter (1998): 289-299.
- Pallasmaa, Juhani. "Hapticity and Time." *Architectural Review*. Vol.207, No.1239 (May 2000): 78-84.
- Plummer, Henry. "Light in Japanese Architecture." in *Kenchiku to Toshi* [Architecture and Urbanism], Jun 1995.
- Relph, Edward. *Place and Placelessness*. London: Pion Limited, 1976.
- Seamon, David. *A Geography of the Lifeworld*. London: Croom Helm, 1979.
- Seamon, David. "Phenomenology and Environmene-Behavior Research." In Zube, Ervin H & Moor, Gary T eds. *Advanced in Environment, Behavior, and Design*. Vol.1.1 (1987), New York: Plenum.
- Seamon, David (ed.). *Dwelling, Seeing, and Designing: Toward a Phenomenological Ecology*. Albany, NY: State University of New York Press, 1993.
- Seamon, David. "A Way of Seeing People and Place: Phenomenology in Environment-Behavior Research." In *Theoretical Perspectives in Environment-Behavior Research*. Wapner, Seymour et al., eds. New York: Plenum, 2000.
- St. John Wilson, Colin. *The Other Tradition of Modern Architecture*. London: Academic Editions, 1995.
- Suzuki, Daisetz T. *Zen and Japanese Culture*. Tokyo: Rutland Press, 1959.
- Tuan, Yi-Fu. *Topophilia: A Study of Environmental Perception, Attitudes, and Values*. New York: Colombia University Press, 1974.

Tzonis, Alexander., & Lefaivre Liane. "The Grid and the Pathway: and Introduction to the work of Dimitris and Susana Antonakakis." *Architecture in Greece* 15 Athens: Greece,1981.

Tzonis, Alexander.,& Lefaivre, Liane. "Why Critical Regionalism Today?" *Kenchiku to Toshi* [A+U: Architecture and Urbanism].Vol.236, No.5, (May 1990): 23-33.

Tzonis, Alexander.,& Lefaivre, Liane. "Lewis Mumford's Regionalism." *Design Book Review*, Issue-19, Winter (1991): 20-25.

Tzonis, Alexander., Lefaive, Liane., & Stagno, Bruno. (eds.). *Tropical Architecture: Critical Regionalism in the Age of Globalization*. Chichester, England: Willey-Academy, 2001.

Yanagi, Soetsu. *The Unknown Craftsman; a Japanese insight into beauty*. Tokyo: Kodansha International Ltd, 1972.

Yatsuka Hajime. "Kenzo Tange." *Kenchiku Bunnka* [ Architecture Culture]. Vol.55, No.639, (Jan, 2000): 194-199.

Tanizaki, Junichiro. *The Praise in Shadow*. Trandlated by Harper, Thomas J & Seidensticker, Edward G. Srony Creek, CT. Leete's Island Books, 1977.

Woolsey, Kristine. "Critical Regionalism: A Theory of Process." in Amourgis, Spyros (ed.). *Critical Regionalsim: The Pomona Meeting Proceedings*. Pomona, California: California State Polytechnic University, 1991.

Zumthor, Peter. *Thinking Architecture*. Translated by Oberil-Turner, Maureen. Baden, Switzerland: Lars Müller Publishers, 1998.

## APPENDIX

### INTERVIEW WITH HIROSHI NAITO

**Yoko Kanai:** What made you choose to be an architect?

**Hiroshi Naito:** My father was an engineer: cars, airplanes, and any other mechanical stuff. He was a great engineer, but I think engineers are soon forgotten. I would prefer to leave my own footprints. I think that was the reason why I chose architecture as a profession.

**Y.K:** When did you start to become aware of architecture as a profession?

**H.N:** In my high school days. Come to think of it, however, my motivation was ambiguous. These days, I'm not connected with goals. The important thing I think is to create complete works. It doesn't matter for me to become a well-known architect.

**Y.K:** But you are gaining a reputation in Japan.

**H.N:** It is not important. If I'm hospitalized for five years, people will soon forget about me. Even architects who are popular now, people will forget their names within 10 years of their death.

**Y.K:** That is a severe opinion.

**H.N:** But, it is true. For example, Louis Kahn was unknown to college students for a period. But, now his name has been revived through the power of his architecture.

**Y.K:** The power of architecture?

**H.N:** I mean an individual only lives 70 years. But architecture spans 100 years, 200 years . . . it is longer than human life. So, in that sense, the architecture is more powerful than the architect because it is a tool to communicate things that cannot be communicated orally. That is the power of architecture. However if architecture has no

power, it will soon be abandoned.

**Y.K:** It is a similar story that you told me last time; there are two fundamental things: things that are tangible and easily to communicate, and things that are intangible and difficult to communicate.

**H.N:** Yes. I think there are more important factors contained in things that are intangible. Of course, there are important elements in things that tangible too. But, it is more difficult for us to articulate something intangible. The things we cannot communicate easily might include culture or the meaning of existence. I feel it is really difficult to describe these essential things. Literature, poetry, philosophy, and other arts are attempts of people trying to express the intangible. Of course, architecture is one of these arts. Sometimes, I don't know what I should express through architecture. This may be a reason why I am continuing to create architecture. It is a struggle though.

**Y.K:** I actually visited your projects, the Sea Folk Museum and the Makino Museum of Plants and People. I stood on the site, went inside and sat down: all these experiences were a real delight. What I felt about your architecture was that it was not approaching me, but, rather, was listening to me. It is difficult to explain, but I felt as if I was surrounded by something soft and warm. It is the same spatial quality as I felt in my grandparent's old farmhouse.

**H.N:** That's the first time anyone has said that.

**Y.K:** Modern architecture has a tendency try to get attention; therefore, it always approaches us. Your architecture, on the other hand, stands on the site in silence. But, it attracts the senses. I am wondering what makes that so, materiality... structure...?

**H.N:** I value space. Internal space is more important than forms. The form is

inconsequential. Naturally and accidentally, buildings of the Makino Museum have curved forms. It is no big difference for me (between architecture that has curved form and architecture that has a box-like form). The day before yesterday I went to the Sea Folk Museum for a lecture, and I realized that fundamental elements at the Sea Folk Museum are not different from the Makino Museum elements. Both buildings have the same kind of spatial quality.

**Y.K:** I agree. But, the impression that I got from the space in the preservation wing of the Sea-Folk Museum was different. I usually felt familiarity in your architecture, but there I felt a kind of tension.

**H.N:** Tension? What made you feel so?

**Y.K:** I don't know why. But, I felt the place as a sort of cemetery... a kind of place in which time has been stopped. On top of that, the ships on display have really powerful forms. The ships themselves have power, but the architecture holds them down. Maybe the tension I felt in the space came from that.

**H.N:** The preservation wings were my original project, which was my starting point. I think that space articulates the power of architecture from the beginning, like the Pantheon, for example. As I told you a few minutes ago, there is a power of architecture. If people could move vertically, the space would have some movement. But there is no chance to move around in that space in the repository building of the Sea-Folk Museum. It means the space controls people, physically and emotionally.

**Y.K:** Obviously, time stops in the space.

**H.N:** Did I tell you before? When I supervised the construction of the repository building of the Sea-Folk Museum, the setting sun shone on the west elevation

unexpectedly. It was only one week in wintertime though. There is an entrance door on the west elevation. When the sliding doors were opened, the setting sun came straight from the west through the wind breaking room, and shined on the opposite wall. At that moment, the space was colored in red for about ten minutes. The entire space colored in red. If I did that intentionally, I would be a genius. In reality, it was a coincidence. I was really moved by the scene. Don't you think it was great? Creating architecture allows me to have such great experiences.

**Y.K:** That is why you continue to create architecture. Even though I didn't have such an experience, the place still activates human inspirations.

**H.N:** The museum was completed 10 years ago, and the preservation wing was completed thirteen years ago. During that time the number of displays has been increasing, and the space looks jumbled with displays. Even so, the space retains its original character.

**Y.K:** I talked to people who visited the museum. Most of them told me they had the same impression of the museum, a sense of familiarity. Of course, all of them were not interested in architecture per se. But, I was wondering why they feel like that?

**H.N:** I don't know. I know everybody says they get the same sense as you do: the Makino Museum of Plants and People too. I think the time that flows in the space synchronizes with a feeling of nostalgia.

**Y.K:** In the booklet of your exhibitions in Germany that you gave me before, a German critic writes about time in your architecture. He says that analog time is flowing in Naito's architecture. What do you perceive as the quality of time flowing in your architecture?

**H.N:** There are many ways to explain this idea. For example, I liken time to a spiral.

The central portion of the spiral corresponds to a day. Then the cycle of a week comes next after the day, and the cycle of months comes after the cycle of the week; then a year... a human life span, and universal time. If time is composed like a spiral, then time in architecture has a similar system too. The innermost side of the spiral can be called digital time; time has a short cycle and time is only a brief flash. On the other hand, time has a longer cycle that can be called analog time.

One of the tasks of an architect is culling appropriate cycles from the time spiral for his architecture, and trying to express and transmit a sense of time through space. In my case, the cycle of the time spiral has a longer cycle, similar to the flow of time in nature: one year... ten years... one hundred years. But, time in Toyo Ito's or Kazuyo Sejima's architecture may have a short cycle: digital time.

**Y.K:** I think it can be explained as how long people want to stay in a building. As the cycle of time increases people want to stay in the space longer. For example, not many people are willing to stay or feel comfortable for very long in a metal box. But, people tend to stay longer if they feel comfortable in a space. Your architecture definitely has something which makes people want to stay longer. Analog time is closer to human senses.

**H.N:** It's true, but the analog architecture cannot be popular. First of all, it doesn't photograph well. My architecture's biggest weak point is that.

**Y.K:** Your architecture is scenographic though.

**H.N:** But, it doesn't come out well in photographs. Do you know the negative point for that? The worst part is that it cannot communicate well. It seems like I have a tendency to create something that is difficult to communicate. My tendency is getting stronger, I guess. So, I am becoming a less popular architect.

**Y.K:** But, people have spatial experiences in your architecture that support your work. People find your spaces pleasurable.

**H.N:** The editors of a German architecture magazine support me and want me to be an international architect. But, I don't have any control over that

**Y.K:** I think you and Peter Zumthor have a similar approach. He is becoming a well-known architect in the world.

**H.N:** I should ask him a dozen questions then, since I'm seeing him tomorrow. Maybe I haven't expended enough effort on communication. He's lucky that he is in Europe. Geographically, his projects are accessible from other countries in Europe. People have more chances to experience his spaces. So, it is easier for him to become an international architect. His case and my case are different.

Japan is an isolated island. It isn't easy to come and see architecture for people from the outside. On the top of that, the sites of my projects are far from Tokyo and Osaka. This fact makes it even more difficult for people to experience my projects. I don't mean to complain, but it is important for architecture to be experienced.

These days, people often discuss anti-globalization on TV. It has a connection to what I'm talking about now. It is difficult for people to understand the contents of a place without being there, and architecture magazines cannot convey the contents of a site. But, architecture cannot exist without locations: in terms of location as a land and contents. I think anti-globalism is going to become a regionalism in architecture within ten years.

**Y.K:** Do you think your architectural approach is influenced by your memories from your childhood?

**H.N:** Everyone has some kind of experience. I imagine even Toyo Ito is creating

his architecture based on his experiences: Kazuyo Sejima too. But, they interpret experiences differently from me; they are investigating different layers of experience.

**Y.K:** What is your experience of nature and space?

**H.N:** There are many. I was a lonely child, so I was hanging around a small mountain behind my home. My legs had a lot of scratches. I felt that I looked at everything with cool eyes, somewhat from a distance. Even though we had the same experience, it is a totally different meaning from that of Toyo Ito.

**Y.K:** You are from Yokohama, right?

**H.N:** Yes. I lived in Yokohama till age five, and then we moved to Kamakura.

**Y.K:** Do you have any favorite spots?

**H.N:** I think I have a lot as everyone does, but I don't know something specific. I often walked through bushes, and went to the mountains. The house I lived in until five years old was a big house, and there was a long corridor in the middle of the house. It was a really dark corridor, and I could see light at the end. I remember the scene. I was scared to walk down the corridor.

**Y.K:** The house was a Japanese style house?

**H.N:** Yes, it was. My grandfather built the house. The site was about 200-tusbo (about 1000 square meters). It was a good house. I still remember there is an approach from the entrance gate at the bottom of the hill to the entrance of house. There was a construction company named SOWA- SETSUKEI; it was a fairly big company about the same size as NIHON-SETSUKEI now. Mr. Yoshihara, a founder of the company, designed the house. My grandfather died two years before I was born, and we had to move out of the house to Kamakura.

Architects have their own experiences, and we pick up something from experience during the design procedure. It is a way to design, but some people try to invert the meaning of his or her experiences. Maybe Toyo Ito is an architect like that. Spatial expression in his architecture reflects his experiences. Mr. Isozaki is one of them too. But, Mr. Tange is not in that category; he is a person who is tied to his experiences.

**Y.K:** Could you tell me which architects have influenced you or your connection to the profession?

**H.N:** Bunzo Yamaguchi is a person who introduced me to architecture. His house was next to my grandparent's house. My mother was teaching piano. When she was busy, I often went to my grandparent's home to stay. But, I was in Mr. Yamaguchi's home half of the day. Of course I didn't know he was a famous architect at the time. I asked his opinion when I decided on my scholastic plan for university, and I visited him once every month when I was in Waseda University. Therefore, I was inspired by his home. Other than Mr. Yamaguchi, Takamasa Yoshizaka, Fernando Higueras, Kiyonori Kikutake, and Mr. Nishizawa in Sakakura Architect office are the architects who inspire me.

**Y.K:** In my mind, Professor Yoshizaka was an architect who has a similar approach to nature and architectural design.

**H.N:** I don't think I was influenced by his architecture, rather, by his personality and his life. He was an architect who traveled all over the world (as an explorer), and he was multi-lingual. His background was outstanding in terms of worldliness. However, while his approach was tied to regionalism in Japan, he was a person who had a global sense.

I have passable knowledge and experience outside Japan, which I think is necessary.

After looking at Japan from the outside, I am choosing Japan as a place to practice my profession. In some sense, his attitude toward regional characteristics influenced my attitude about building location and site design.

**Y.K:** How about Fernando Higuera?

**H.N:** I can explain clearly. He isn't a successful person as an architect, or in society either. But, I am simply amazed that there is such a genius in the world. He is the one who is the most talented as an architect. There are architects more famous than him, but I felt like he was totally different than any other architect in the world.

**Y.K:** How did you feel so?

**H.N:** Let's see... he is incredibly versatile; it cannot be understood by ordinary people. He has a human power that I cannot explain well. If he were at a party, the ambience in the room would be changed; even if he is in the next room, the same thing happens. He was an attractive guy, so that all artists in Madrid came to his parties. He had something really special.

**Y.K:** Why did you decide to work for Fernando Higuera?

**H.N:** He, Fernando himself, fascinated me. But, it is really difficult for architects, especially someone who is really talented, to manage his ability. If an architect fails to manage his talent, he cannot be an architect. I think Fernando could not manage himself. Maybe he had more talent than people can handle. He had exceptional talent; he was just like a broken sports car. I deeply regret that. If he could manage his social status and his ability, he would be one of the most important architects in our era. But, he couldn't do that. I think there are many architects like him.

He was also an artist. He was a charming, old and round gentleman. I imagine

people like him feel joy ten times stronger than ordinary people, and he feels sadness and loneliness ten times more than other people. He was a sensitive person. He couldn't put up with solitude. He maybe feels like *I am alone in this universe*. I could see his loneliness while working.

He drew watercolors when he was in the university, and he won a national competition for two years. Once he dreamt of being a painter, but when he saw a surrealist painting by Antonio Lopez Garcia he decided to go back to the study of architecture. After that, he started to play guitar. His master was an Andrea Segovia. Since he has a talent for guitar too, started to have concerts. At the same time, he won an architecture competition; it was not built though. He was age 27 or 28 at the time. Then he started his own practice. It took 8 years for him to graduate from school. But, he had a bright reputation as an outstanding architect in Spain. He got everything at the age of 30.

However, the Spanish monarchy was revived in the 1970's, and political power was shifted from a right wing ideology to a left wing ideology. When that happened, the media also shifted its ideology to the left. Fernando was neutral, but society saw him as a right wing ideologist, and his architectural activities were never showcased. The media did not present his projects. Even though he had good projects, they did not come out in public. This situation continued for 15 years. It was really a regrettable fact, but it was beyond his control. We, Japanese, cannot imagine that revolution would break out in our country; however, European countries have a history of revolutions.

During the time I was working in his studio, Fernando had an aerial photo collection book in Spain published by a government agency, the Tourism Intelligence Agency, which may be similar to the CIA in the U.S. That was a really thick book, and it

covered places all over Spain. That agency kept the aerial photographs as their data, but since they dealt with tourism, they published the book as a public document. When Fernando had nothing to do, he turned the pages and told me everything he knew about the regions, such as climate and building type. For example, *García* province has a lot of rain, so that the roof over the windows needed to have a deep depth, and verandas were installed like that, and so on. The *Andalucía* province, on the other hand, has little rain, so the buildings have flat roofs, and no window roofs. What impressed me was that there is no unnecessary design in vernacular architecture; it is ultimate functionalism. Maybe it has a connection to my approach for climatic and regional design.

Another interesting thing that Fernando told me about was the three categories of architecture. I still question that, but it was easy to understand his thinking. He drew three circles, and told me that there is historical architecture, modern architecture, and popular architecture. Historical architecture, according to Fernando, is represented by the church; architecture that has roots in antiquity. Modern architecture is the son of the 20th century. The last circle is popular architecture, which is a response to regional characteristics and seldom needs to be changed because the building type is appropriate for climate and other regional characteristics. He said that human activities, which haven't changed for hundreds of years, shape the region. I was impressed by the story, and I still remember what he told me and showed me at the time.

**Y.K:** I didn't think that you were influenced by Fernando Higuera that much.

**H.N:** Is that right? Based upon his understanding for these three categories, Fernando wanted to create great architecture. I'm not sure about his position in these three circles. Fernando Higuera was great, but not anymore. I visited him last year, and I felt

sorry for him.

**Y.K:** How about Mr. Kikutake?

**H.N:** His case is clear. When I started to work for his office, his glory days had just passed. But, he has unique talent. He isn't obsessed with ready-made ideas. He has power to pop out of the box. I think (Toyo) Ito and (Itsuko) Hasegawa were also influenced by him: in his spirit of liberty from ready-made ideas. Mr. Kikutake broke stereotypical ideas when he needed to: just like that. (Hit the table top with hands) He also was excellent in collecting information and being creative. In 60s he had an excellent staff that could get up his ideas into architecture. There was a system in his office. But, in 70s he was starting to lose his way, and his approach began not working well. Still, his power to destroy stereotypical ideas was outstanding in the architecture field in the 60s and 70s. One day he came to my desk and asked me: Naito, how about replacing steel columns with tungsten. We can make these columns smaller compared to steel I-beams. I had no idea what he was talking about. So I checked it out in hurry, and found out that tungsten has four times more strength than steel. No one had ever tried it at the time. He came up with ideas no one had thought of before. In his office, I learned a lot. He often gave me jobs to make 30 plans within 3 or 4 hours. I could make 15 plans fairly easily, but it was really hard to make plans after that. Of course, I couldn't complete such a task. So, I finished it with Mr. Kikutake. After that, he asked me to draw all plans, elevations, and sections in three days. It was a big competition, and about 50 drawings were required. It was as if I was tested all the time. But, I became skillful while I worked for him: 2 years. In that sense, it was a great experience. I am seldom phased by anything.

**Y.K:** Did you see Eastern culture with fresh eyes, and find a difference between

eastern and western culture while you were in Spain?

**H.N:** First of all. I could better understand world history. I felt it one month after I started to work. I had a world history book from Japan. As I read the book in Japan, world history was world history. It seemed to me that the things in the book were foreign. But, as I read the same book in Spain it made more sense. I realized that world history was written with Europe as its center; so it is understandable for people in Japan to feel that world history is foreign. So, when I was in Europe I could see history with geographical relationships, and it was easier to understand. Japanese only know world history written from a western viewpoint.

Speaking of Spain, that country is seen as a non-European country by the French. They welcomed me with open arms as an overseas countryman. They said Spain and Japan are the west and east edges of the Silk Road.

**Y.K:** Sutemi Horiguchi said that he felt Japanese architecture was inferior to Western architecture, and that the differences between Japanese and Western architecture comes from our racial differences, so we, Japanese, cannot create the same kind of architecture. Have you ever had the same feeling?

**H.N:** I don't feel like him. Japan's economical status in the world today is totally different from Mr. Horiguchi's generation. I just felt that Japanese culture and western culture are totally different. I strongly felt that the notion of space is completely different to Westerners after six months of living in Spain. The meaning of space for Japanese is a sequence of atmospheric moods. But, space is a mass for westerner. It is just like cheese; it can be cut and divided into small pieces.

**Y.K:** Indeed, space has visible boundaries in western space.

**H.N:** Yes, it is clear. In Spain, the place in the sun is hot even in wintertime, and the place in shadow is cool in summer. That's why the notion of spatial differences between light and shadow is real. In bullrings, there is distinction between *sol* and *son bra*, and seats in the shade are more expensive, regardless of the season. Space and place are more realistic and easy to see. I'm not saying one is superior; I just realized that the Spanish perception of space is different from the Japanese, which is based on a climate of high temperature and high humidity. I thought that as we consider climatic differences, for example, as basic considerations in the creation of architecture, I assume that the way of creating architecture in the east and west would also be different.

**Y.K:** I can see that.

**H.N:** I want to tell you one more thing. In Fernando's office, as it got dark, I turned on the lights because I couldn't see to draw. However, he turned off the light. As I looked around, no one turned on the light. They turned lights on when the room got really dark. I felt it was too dark to draw, don't be so cheap.

In the afternoon, the Spanish wear sunglasses, but I didn't need them. I was wondering why they need sunglasses. Then, I realized that they feel brightness and darkness differently from Japanese. Black eyes and light-colored eyes feel light differently. The differentiation to sense light between Japanese and Spanish made me recognize that the way we see light in cathedral and space are totally different from Spanish.

**Y.K:** It means our physical characteristics make architectural experiences differ.

**H.N:** I think so. But there are not many people who say that. It is surprising for me.

**Y.K:** Last week, I visited the Sea Folk Museum and the Makino Museum of Plants and People. I noticed that this architecture allowed me to perceive a sense of human scale.

These days, there are many mega-structural buildings being completed in Japan. Compared to these buildings, I felt that in your projects it was easy for people to understand the relationship between themselves and the ceiling, for example. I think it is because the spatial composition in your architecture is constructed by human scale. But, other contemporary architecture by other architects merely has the sense of human scale. I thought the other reason why I felt a sense of scale in your projects is that they are a collection of buildings instead of putting everything in a single building.

**H.N:** It is not true. Both the Sea Folk Museum and Makino take a collective form, but I was really concerned about the relationship between the human being and space. I mean, as I was thinking about the whole composition of the architecture, it became clear that each element needed to be perceived by the people in the building. I think it is a quite important thing. There are many ways to do so: reduce the scale through the structure, etc. If the structure is a key element, it should be connected to the next level of scale: details of doors and windows for example. Then it needs to reach to people in the architecture. If the connection doesn't come down in scale to people, they cannot understand the space well. I consciously work on connecting one scale to the next. It may be difficult to understand for structural engineers.

I was asked by an editor of *Shinkkenchiku* [New Architecture] to write about the Tokyo International Forum in Tokyo, designed by Rafael Vinoly, but I didn't do it. I think the crucial failing for the building is that the structure on the top of the atrium doesn't come down to the sense of human scale. The big atrium space, therefore, becomes a somewhat Hollywood-like space. In reality, Vinoly's intention to make the space was good, but people should be able to perceive the spatial scale. It is truly a delicate matter; however, it

is an architect's responsibility; maybe it's a talent that allows architect to do it. It was regrettable, but Vinoly doesn't have the ability to do so.

Come to think of it, significant architecture, traditional or modern, definitely connects scale to scale; it works perfectly at any dimension. If architecture doesn't have a hierarchy of scales, the architecture is a failing as architecture. Of course, it takes a lot of energy to make different levels of scale work together. If an architect starts to get tired, it might be difficult to do it. The other day, I took my students at Tokyo University to Olympic stadium in Yoyogi, Tokyo, designed by Kenzo Tange. As you know, it is supported by a huge structure. But, I didn't feel weird in the space because each part of structure relates one to the other and is connected to people. It is difficult to explain, but you can feel the difference between an architecture, which is successful, does it or not. Unfortunately, there is much more architecture, which is not successful at relaying from the architectural scale to the human scale.

**Y.K:** So, you are trying to communicate with people who are in your architecture by doing that.

**H.N:** Yes, I am. If I don't care to do it, my work is much easier; I only need to expend one-third the energy. It is quite tough to create architecture people can take pleasure in.

**Y.K:** There aren't many architects who have a principle regarding scale like you do.

**H.N:** It's true. It is a shame, but a fairly small number of architects working on their projects keep it mind. That is why architects tend to be confused as they start working on large-scale buildings. When architects work at a big scale, they need to work on the scale carefully, like untangling a knotted thread carefully. It cannot be achieved without

persistent effort.

**Y.K:** I think that there are more spaces that confuse me in Tokyo now.

**H.N:** I am particular about creating space to connect from scale to scale, and to connect architecture to people. I don't think logically about it.

**Y.K:** That is the reason that the spaces in your architecture capture sensory experiences.

**H.N:** My recent work in Gotenba, RINRI Institution of Ethics, is a good job. I think it is better than Makino. It does not have as dynamic forms as Makino, but I am proud of it.

**Y.K:** When will it be completed?

**N:** In late August.

**Y.K:** I'm looking forward to seeing it next time I come back. I had great experiences when I visited your projects; it rained heavily at least a few hours at each site.

**H.N:** Are you sure? I have never experienced that.

**Y.K:** It is true. It was really heavy rain and thunderstorm. Both buildings were nice in the rain too. The water landing on the roof was coming down through the hole in the gutter. It was reassuring to see what rain is.

**H.N:** I have a hard time dealing with water.

**Y.K:** But, I was wondering why you highlighted rain so specifically.

**H.N:** Modern architecture put rain out of sight. Rain collects in a built-in gutter, goes through a curtain wall, and disappears down a drain. We have no chance to see it. Personally, I don't like the idea.

**Y.K:** If it were not raining, I would have never realized why the gutters have holes, and the stones underneath.

**H.N:** Basically, the role of the water is to make it easier to explain natural phenomena; how water reaches people. I could use wind as well, but using water is understandable for people. It is a primary consideration for architecture.

**Y.K:** I like your idea. It is interesting to attempt to allow people to experience nature through architecture.

**H.N:** The environment at Makino is changing. It is totally different from a year ago when it was completed. I am really happy to see that the environment is changing every six months when I visit there. The plants and trees are growing fast. I am really happy to see it.

**Y.K:** It will be completely hidden by trees and plants.

**H.N:** Yes, indeed. I don't mind it. I hope the buildings will have no elevations, so only trees can be seen. I want the building exist only as interior space. It is wonderful. As the surroundings mature, the architecture becomes more resistant to typhoons. It is ideal for architecture to stand with the environment. Modern architecture stands alone. I don't think modern architecture gets power from the earth. It is hard to see architecture standing alone. For architecture, it is better to exist with its surroundings. I think architects are starting to think about this issue.

**Y.K:** Makino has a more intimate relation to nature than the Sea-Folk Museum. Even in the interior space, nature is coming into the space.

**H.N:** I really want to create space close to nature. There are many things I couldn't do at Makino. Internal and external airflows are considered separately. Modern technology required it. I had a lecture in Taiwan talking about regionalism in the future.

**Y.K:** What is your position?

**H.N:** In recent years, computers affect our daily life and architectural works. In the

meantime, architects present blobby shaped forms created by computer as architecture for the computer age; it is a foolish idea. In the next generation of computer technology, we will be able to model complex systems to support regional characteristics. At that time, environmental design based on air quality can be a key.

We have computer structural simulation systems, but there is no software that simulates air quality. Evolutionary computer technology will be developed in the next ten years, and we can possibly get 1000 times more capabilities, and it will be possible for us to use it to simulate air quality in buildings. You told me about the thermal quality before. I think it can be simulated and controlled by computer: Tokyo, Malaysia, and Russia...we will be able to support internal building environments anywhere in the world. I need to explain more. Think about a place in a global scale, and we pick up this region or this place freely, and put conditions, wind speed, airflow, temperature, humidity...then, we can understand and propose appropriate environmental conditions in that place. Not to propose an architectural form for the specific place, just that we will be able to simulate the best internal condition to meet the specific place. When it is realized, it wouldn't be just regionalism. In my opinion, regionalism sounds too defensive, and it has a sense of limitation. I believe that there is an architecture solution by connecting between technology and regional characteristics. That is the true meaning of globalism. Some people say "glocal": global and local. But, I don't like the sound. I gave a lecture at a university in Taiwan about the possibility of using technology in regionalism last month. I also gave a lecture at Beijing University too. I told them that modern development in Shanghai was a complete mistake. Skyscrapers in Shanghai are expressing modern technology aggressively, but these are useless if an energy crisis comes. It was a big mistake to develop

such a huge city. From now on, the focal point must be the design of cities with less energy load. The discussion of mere regionalism cannot be a positive solution. But, there is a way to tie together regionalism and technology together, and I'm interested in using computers to simulate internal air- flow now.

**Y.K:** You read *Thermal Delight in Architecture* written by Lisa Heschong, and you had an interest in the book. I think the story makes more sense for Japanese more than Americans, who are spoiled by the use of air conditioners everywhere in the country. But, Japanese still have a sense to appreciation for pleasant summer breezes in our houses...

**H.N:** That is just addressing our emotional attachment. I basically agree with that, but it is not enough. You influenced me, and I started to take temperature, humidity, and wind indicators with me. I also let my staff do it too. So, I sometimes took measurements. But I'm too busy these days, and I cannot do it often. Basically, architects don't have the slightest interest in the environment itself. I think architects should increase their awareness of the environment more. They are only interested in temperature ranges. If we have knowledge, we can tell people that someplace is a good condition because the temperature is 20°C, humidity is 40%, and wind speed is 0.4meter-hectopascal. Architects cannot discuss anything about internal environmental quality with facility engineers. But, they can discuss structural solutions with structural engineers; "Can these columns be smaller?" They don't order airflow and quality from engineers. So, architects cannot talk to clients about internal comfort levels. But, we need to have a tool to talk to engineers: numbers for example. I think humidity is the most difficult to understand. I felt really hot yesterday, the temperature wasn't high, but humidity was really high. Surprisingly it was 28 °C and 78% humidity. I understood no wonder it was hot. But I thought it was 35°C

yesterday. I didn't expect those numbers. We should know about thermal conditions. It makes sense if I know more about the balance of temperature, humidity, and airflow. When I was hanging around San Marco Plaza in Italy last year, I tried to measure temperature, humidity, and air speed. I think it was before noon, and it was 25°C, 45% humidity, and from 0.4 to 0.9 meter-hectopascal. I also measured in the afternoon. The result was almost the same, but I felt hot. Then I realized that I needed to measure radiation heat too. On the stone pavement, the stone stores heat. So, even though temperature and humidity were the same, the actual feeling could be different. But, we cannot understand if only numbers are shown.

**Y.K:** I see. Temperature and humidity are invisible, and we only measure them by our bodies, unconsciously.

**H.N:** What modernists are doing is just visionary things; vision might be easy to understand, and it can communicate worldwide; you can send it anywhere through visual images. But, we have other senses besides vision to experience architecture. I think the body, as a whole, is a local context; it only exists within a place. But, how much architects know about the body and senses is, as I said, almost nothing. If architects are conscious of the human body and senses, the modern city and architecture wouldn't be as it is; architecture cannot be like Media-Tech in Sendai (designed by Toyo Ito) and (Kazuyo Sejima's projects. Their projects sure attract the eyes, but it cannot go beyond that. These projects are as if the architecture program was based on an assumption that architecture exists without the human body.

**Y.K:** It may be easier to create architecture that appeals egoistically to vision and pull ahead of the existence of the human body; it is difficult to take the opposite approach.

I think it is necessary for architects to create architecture that attracts the human senses.

How conscious are you of the matter of human senses?

**H.N:** Basically, I think vision is just a part of our experience. So, my job is to communicate intangible things through architectural expressions, and make it more tangible. Of course intangible things merely communicate easily; therefore, architects need to strive their best, like Peter Zumthor, to achieve that. But, my current condition is having my hands full with recently completed projects; I need to be more diligent.

One thing I want to avoid with regionalism is its nationalistic content; regionalism tends to be nationalism; just like the nationalism in Japan before World War II. I don't like the idea. In order to avoid it, we need to have technological backups.

Now we have 6-7 billions of world population. If we only had a quarter of the population, we could return to a traditional way of living, but it is an unrealistic idea. So, we need to rely on modern technology in some degree to support all of the population. The world population in the early 20th century was 2.4 billion; now we have 6 billion, and we will have 10 billion people at the middle of the 21st century. At that point, only 10-20% of the population will be able to survive without technological support. Thus, technology is a fundamental element in our lives. I think one of my challenges, as an architect, is to employ technology that deals with intangible things.

It is a cloudy idea, but I think 5 to 10 years from now, some of the things we now call intangible will be more tangible. This includes thermal experience and airflow simulation; something we only could communicate experientially through words before, we will be able to communicate by tangible means. I think if we will achieve it architecture will be changed too.

**Y.K:** So, you are working on your project with that perspective.

**H.N:** That's why I intend to talk about my thinking. Computer technology is the field with the most potential for development. If I talk about software that I'm dreaming to have, and 100 thousand people agree with me, then my dream might come true. If the number of people who agree with my idea is increasing, computer software companies and manufacturing enterprises will start incorporating my idea. In order to lead to that situation, I'm trying to have opportunities to talk about my ideas as much as I can.

**Y.K:** Everyone seems to think that something is wrong with recent architecture, but it is a dim idea for most of us. Therefore, it is important to have a chance to make it clear. Do people often recognize that your architecture is Japanese?

**H.N:** No, I don't think so.

**Y.K:** That's not what I expected. Even Ito's and Sejima's works look Japanese, especially for people outside Japan.

**H.N:** No one has said that about my work. But, as far as I understand, people tend to say that Ito's and Sejima's styles are Japanese-style architecture. It's a shame. Modernism originated in Europe and America, and expanded to become a global style. So, it is inconvenient to incorporate in Japan. So, people talk about modernism and the International Style as one whole world. A typical way to talk about international modernism is "Here is Ken Yeang in Malaysia, and Toyo Ito in Japan..." and then mention something about the culture. I'll pass it; I'd prefer to be pushed aside, like an outlaw... Theirs is a system like grand master and pupil. I don't mean to diminish Ito and Sejima, but I don't think they are avant-gardes at all. At a glance their approaches appear to take on a new aspects; however, it is quite conservative. In my opinion, to be on the cutting edge for

architects' means how well they can face the problems which are happening in the world. Their approaches totally disregard global problems. They are great in terms of self-expression, but nothing in dealing with real problems. I feel they are doing something wrong...

**Y.K:** But, their approaches are representative of modern Japanese architectural style. Your position is quite unique among Japanese architects.

**H.N:** I am a weird guy... an unsuccessful architect. I delivered a keynote speech at a meeting of the UIA (International Union of Architects) held in Korea. It was two years ago. At the speech, I criticized the globalization of architecture. No one talks about it in public, but I did. In Bangkok, two hundred high-rise buildings will be completed in seven years. Social overhead capital is investing in glass architecture: in the equinoctial region. In reality; however, everybody is in trouble with glass architecture. But, politicians have a desire to create new cities that look like American cities... it's all screwed up. Especially, architects who studied outside these countries are asked by clients to do so. They understand the problems, but they cannot refuse the clients' desires. Then, it is turning out in a way beyond our imagination. It just like when Spain conquered the world, they built Colonial-Baroque style architecture. Colonial-Baroque was a combination with an architectural style and Catholicism. That is what is happening now in eastern Asia, creating something that combines colonialism with modernism. Architectural culture, which exists in each country, is colonized by modernism. I think it is necessary to take a stance against this.

In order to survive, we Asian architects need to have our own identity and key elements that Western architects cannot acquire. When Asian architects can acquire that,

they will have more confidence, and cultural and regional contexts are going to be employed. One must be prepared to face every imaginable difficulty as an architect. It is fine to end up in the gutter.

**Y.K:** It sounds like your words. Do you think architecture makes place or that place makes architecture?

**H.N:** Both. I mean there is a permanent stream of time for each place. It is just like a river. To make architecture is similar to putting a leaf in the river. If it flows well ... 100 years and 200 years... it will succeed to the next generation.

It can be said that place creates architecture too. In that sense, architecture has a role to connect people and place... both of the cases occur. It doesn't matter which comes first.

**Y.K:** There is a case where architecture kills place.

**H.N:** Indeed. Unfortunately, it may be a real situation in our generation.