



Politecnico di Milano

Faculty : I Facolta di Architettura MI

Course of Studies : ARCHITETTURA - MI

Track : AEe Concentration - Landscape Architecture

**Far East Pavillion in Milan Expo 2015
-Appreciation of Food through Slow Lifestyle-**

Thesis Supervisor : Remo Dorigati
Politecnico di Milano

Authors: Virna Lulhi
Matr.736194

Yichen Wang
Matr.737126

Yu Yoshii
Matr.735143

A.A. 2009-2010

Far East Pavillion in Milan Expo 2015
- Appreciation of Food through Slow Lifestyle -

Final Thesis
Master in Landscape Architecture
Faculty of Architecture and Society
Politecnico di Milano
AY 2009/2010

Professor : Remo Dorigati
Students: Virna Lulhi 736194
Yichen Wang 737126
Yu Yoshii 735143

Genji & Heike

The sound of the Gion Shoja bells echoes the impermanence of all things;

The color of the sala flowers reveals the truth that the prosperous must decline.

The proud do not endure; they are like a dream on a spring night;

The mighty fall at last, they are as dust before the wind . . .

Author and Date Unknown

(Translated by McCullough, *Genji & Heike*, p. 265)

平家物語

祇園精舎の鐘の聲、
諸行無常の響あり、
沙羅雙樹の花の色、
盛者必衰の理をあらはす。

驕れる人も久しからず、
ただ春の夜の夢の如し。
猛き者もつひには滅びぬ、
ひとへに風の前の塵に同じ。

作者・成立不明

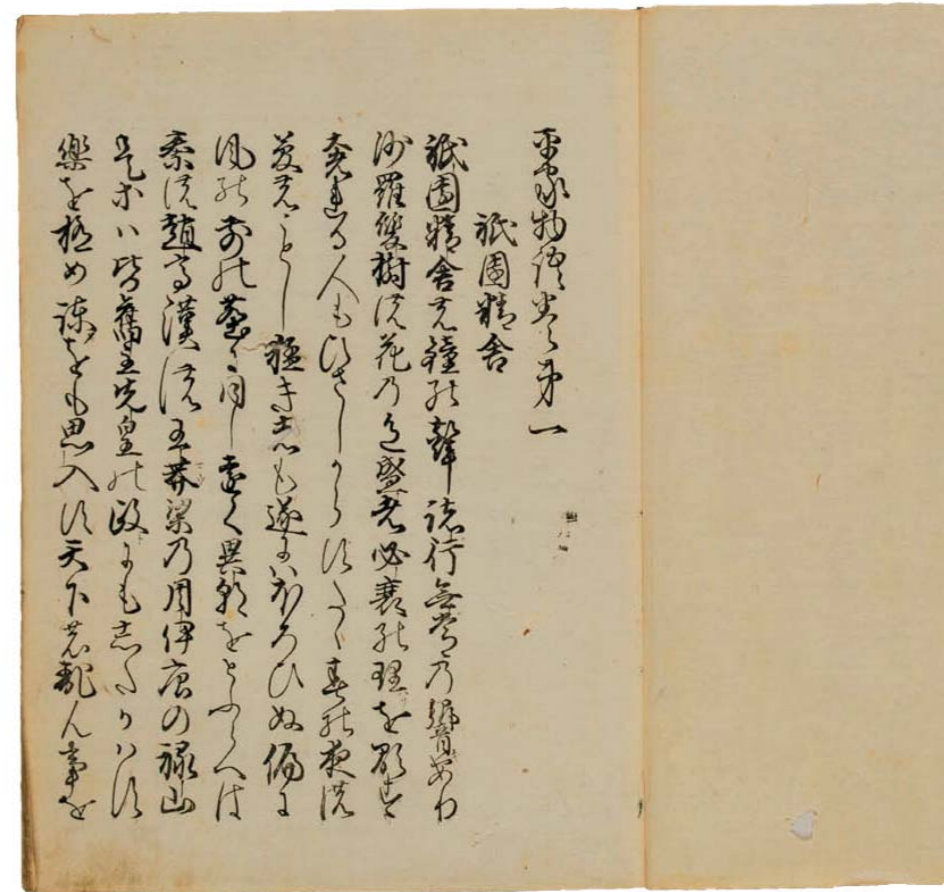


fig. 0.1 Genji & Heike print 1200 (Japanese National Diet Library)

CONTENTS

Page	Title	Page	Title
2	Opening Poem	27	Rice and Appreciation
5	Figure Index	28	Rice Products
8	Table Index	29	Chapter Three. Sequential Spaces in Far Eastern Architecture and Landscape
9	Abstract in English and Italian	30	Slow Movement
10	Chapter One. The Attempt: From Fast Lifestyle to Slow Lifestyle	31	Slow Movement “Stepping Stones”
11	EXPO 2015 Milan	32	Slow Movement “Classification of Stepping Stones”
12	The Risk : Fast and Unhealthy Food	33	Slow Movement “Rhythm of Stepping Stones”
13	Solution_ Slow Food, Slow Movement	34	Slow Movement “ Functions and Speed of Stepping Stones in Japanese Garden”
15	Fast and Slow Lifestyle	35	Appreciation of Nature in Buddhist Belief
16	Slow Lifestyle of Chinese people	36	Sacred Space in Japanese Culture (Shinto Shrine)
17	Chapter Two. Rituals and Lifestyle of Far Eastern Rice Culture	37	Sequences of Functions in Shinto Shrine
18	Project Theme_ Rice	38	Sequences of Behaviours in Shinto Shrine
19	Rice and Ritual	39	Sacred space in Japanese House
20	Rice and Lifestyle in Far Eastern Culture	40	Ritual Space in Japanese Culture “Tea House”
21	Rice and Time in Chinese Culture	42	Principle of Wabi-Sabi
22	Rice and Time in Japanese Culture	43	Tea House and Garden
23	Rice and Art in Chinese and Japanese Culture	44	Size of a Tea House
24	Rice and History	45	Sequence of Behaviours in Tea House
25	Rice and Religion in Chinese and Japanese Culture	46	Traditional Japanese Kitchen
26	Rice and Landscape	48	Traditional Japanese Toilet
		49	Kitchen and Toilet in Traditional Japanese Culture
		50	Sacred Space in Chinese Culture (Offering Table)
		51	Offering Table in Temple of Ancestor’s (Spatial Organization)
		52	Sequences of Behaviours in Temple of Ancestors
		53	Chapter Four. Studies of Views of Ritual Spaces and Behaviors of Far Eastern Culture

Page	Title	Page	Title
54	Study of Views of Landscape from Contemporary Movies	90	Layers of Restaurant
55	Study of Views of Landscape from Paintings and Contemporary Movies	91	Details
58	Study of Ritual Behaviours Related to Far Eastern Culture	92	Restaurant Outer Layer Façade Materials
61	Study of Views of Sacred Spaces in Far Eastern Culture	93	Kitchen Plan
63	Landscape in Chinese Painting	94	Kitchen Section
64	Landscape in Japanese Painting	95	Restroom Plan and Section
		96	Thanking Two Pavillion Plan
65	Chapter Five. Design of Far East Pavillion	97	Secion
		98	Details
66	Concept of Master Plan	99	Thanking Two Pavillion Inner Columns
67	Slow Movement / Rhythm / Function of Master Plan	100	Thanking Two Pavillion Outer Surface Material
69	Slow Movement / Stepping Stones	101	Pavilion Structure Materials of Thanking One and Thanking Two
70	Sub Concept: Isolation of Nature	102	Pavilion Structure Materials of Restaurant and Restroom
71	Sub Concept: Human Interaction	103	3D Visual of Master Plan and Pavillions
72	Seasonal Changes of Master Plan		
73	Project		
74	Master Plan	109	Chapter Six. Maquette
75	Sections		
79	Concept of Pavillion Keyword: Elevation		
80	Concept of Pavillion Keyword: Fog / Incense	115	Bibliography
81	Images		
82	Thanking One Pavilion Plan	117	Acknowledgements
83	Sections		
84	Details		
85	Acoustic Analysis		
86	Thanking One Pavillion Inner Surface Materials		
87	Thanking One Pavillion Facade Materials		
88	Ritual Eating Pavillion Plan		
89	Sections		

FIGURE INDEX

Page	Figure	Page	Figure
2	[0.1] Genji & Heike print	29	Chapter Three
9	Chapter One	30	[3.1] Movie “ Memories of a Geisha” still, Rob Marshall 2005
11	[1.1] Milan Expo, Conceptual Master Plan”Expo Board” Expo Official Website, Media Gallery 8 September 2009	31	[3.2] Stepping Stones in Mirei Shigemori Garden Museum
12	[1.2] Fast and Unhealthy Food	32	[3.3] Images of Tobi-ishi
13	[1.3] Slow Food Photo	32	[3.4] Images of Endan
14	[1.4] Photo of Rice Bowl	32	[3.5] Images of Reihai Seki
14	[1.5] Photo of the Equipments	32	[3.6] Images of Kutsunugi Ishi
15	[1.6] Diagram of Fast and Slow Lifestyle, author made	33	[3.7] Japanese Calligraphy of Ichigo Ichie
16	[1.7] Diagram of Slow Lifestyle of Chinese people, author made	33	[3.8] Plan of Mirei Shigemori Garden Museum, author made
17	Chapter Two	34	[3.9] Circulation through Stepping Stone inside of Mirei Shigemori Garden Museum, author made
18	[2.1] Rice in Chinese Character	34	[3.10] Slow Movement of Diagram Stepping Stones, author made
18	[2.2] Photo of Rice Plant	35	[3.11] Tibetan Wheel of Life
19	[2.3] Chinese Lunar Calendar and Festivities	36	[3.12] Outer Sanctuary of Inari Shrine
20	[2.4] Chinese Painting “ Cultivation and Read to Bequeath to the Family”	37	[3.13] Inari Shrine Plan of Shrine, author made
21	[2.5] Chinese Scroll “ A Gentleman Farmer’s Life Through the Four Seasons.	37	[3.14] Inari Shrine Section 1:200, author made
22	[2.6] Japanese Painting “Rice and Cultivation Through Four Seasons” circa 1700-1725	38	[3.15] Borders of Shinto Shrine, Sequence of Behaviours, author made.
23	[2.7] Chinese Painting “ MinNong”, unknown painter, unknown date	39	[3.16] Picture of Tokonoma
23	[2.8] Japanese Print “ Hundred Poets” Part one. Publisher Ebisu circa 1840-1842	39	[3.17] Diagram of Butsudan with Scroll and Offering
24	[2.9] Map of Archeological Sites of Rice Production	40	[3.18] Image of the Entrance to the Tea Garden
25	[2.10] Japanese Painting “Yuniwa no inaho” Kakei Konno	40	[3.19] Image of the Entrance to the Tea House from the Inside.
25	[2.11] Rice Symbol, author made	41	[3.20] Image of Tea Room “Teigyokuten”
26	[2.12] Patterns of Rice Fields, author made	41	[3.21] Image of Tea Equipments
27	[2.13] Rice Bowl in the Darkness	41	[3.22] Image of Tea Room
27	[2.14] Lacquered Rice Bowls	42	[3.23] Image of “Wabi Sabi”
28	[2.15] Rice Products, author made	43	[3.24] Plan of Tea House Ennan
		43	[3.25] Diagram of Tea House and Garden
		43	[3.26] Image of Water Basin in Tea Garden
		43	[3.27] Image of Tea House Ennan

FIGURE INDEX

Page	Figure	Page	Figure
43	[3.28] Image of Bamboo Gate in Tea Garden	59	[4.10] Movie “The Last Samurai” still, Edward Zwick, 2003
43	[3.29] Image of Waiting Benches in Tea Garden	59	[4.11] Movie “Memories of a Geisha” still, Rob Marshal, 2005
44	[3.30] Diagram of Different Sizes of Tea houses	60	[4.12] Movie “Memories of a Geisha” still, Rob Marshal, 2005
44	[3.31] Diagram of Functions Related to Tatami mats	60	[4.13] Movie “Memories of a Geisha” still, Rob Marshal, 2005
45	[3.32] Diagram of Sequences of Behaviours in Tea House	61	[4.14] Movie “Memories of a Geisha” still, Rob Marshal, 2005
46	[3.33] Diagram of Sequences of Behaviours in Tea House	62	[4.15] Movie “Memories of a Geisha” still, Rob Marshal, 2005
47	[3.34] Image of Traditional Japanese Kitchen	62	[4.16] Movie “Memories of a Geisha” still, Rob Marshal, 2005
47	[3.35] Image of Kamado (stove)	63	[4.17] Painting “The Historian Sima guang in His Homemade Pavillion”, Qui Ying, Circa 1510-1551
48	[3.36] Image of Japanese Traditional Toilet	64	[4.18] Print “Peasant and Travelers in Autumn Landscape”, Katsushika Hokusai, 1760-1849 (Edo Period)
49	[3.37] Plan of House of Kourin Ogata		
49	[3.38] Typical Plan of Traditional Townhouse in Kyoto	65	Chapter Five
50	[3.39] Ancestral Hall in the Ancient Village of Langzi		
50	[3.40] Image of Temple of Ancestors with the Offering Table and Incense	66	[5.1] Movie “Megane” still, Naoko Oigami, 2007
51	[3.41] Plan of Ancestor’s Temple	67	[5.2] Organization of Pavillions on Master Plan, author made
51	[3.42] Isometric View of Temple of Ancestors	68	[5.3] Diagram of Slow Movement, author made
51	[3.43] Image of Ancestors Hall	69	[5.4] Diagram of Speed through Stepping Stones, author made
52	[3.44] Diagram of Perception of Offering Table through Columns in Temple of Ancestors	69	[5.5] Master Plan, Partly, author made
53	Chapter Four	70	[5.6] Isolated Rice Cultivation Shown on Master Plan, partly, author made
54	[4.1] Movie “The Last Samurai” still, Edward Zwick, 2003	70	[5.7] Diagram of Isolated Nature, author made
55	[4.2] Movie “The Last Samurai” still, Edward Zwick, 2003	71	[5.8] Interaction Between Human and Rice shown on Master Plan, Partly, author made
55	[4.3] Movie “The Last Samurai” still, Edward Zwick, 2003	71	[5.9] Diagram of Interaction between Human and Rice Throughout Four Seasons, author made
56	[4.4] Movie “Memories of a Geisha” still, Rob Marshal, 2005	72	[5.10] Diagrams of Seasonal Changes on Master Plan
57	[4.5] Painting “Tall Mountain River”, Chen chun zhong, unknown date.	73	[5.11] Layers of Far Eastern Pavillion, author made
57	[4.6] Painting “Magnificent Mountains” Chen chun zhong, unknown date.	73	[5.12] Axonometric View of Far East Pavillion, author made
57	[4.7] Movie “Red Cliff”, John W, 2008	74	[5.13] Master Plan
58	[4.8] Movie “Memories of a Geisha” still, Rob Marshal, 2005	75	[5.14] Section A-A, author made
58	[4.9] Movie “The Last Samurai” still, Edward Zwick, 2003		

Page	Figure
75	[5.15] Section B-B, author made
76	[5.16] Section C-C, author made
76	[5.17] Section D-D, author made
77	[5.18] Section E-E, author made
77	[5.19] Section F-F, author made
78	[5.20] Section G-G, author made
78	[5.21] Section H-H, author made
79	[5.22] Image of Monk Meditating in Nature over the Elevated Platform
79	[5.23] Image of Elevated Platform from Japanese Architecture
79	[5.24] Diagram of Elevated Platform in Nature, author made
80	[5.25] Representation of Purification, author made
80	[5.26] Representation of Incense, author made
80	[5.27] Detailed Section and Plan of Evaporator, author made
81	[5.28] 3D Visuals of Thanking One Fog, author made
81	[5.29] 3D Visuals of Thanking Two Incense
82	[5.30] Thanking One Plan, sc: 1/50, author made
83	[5.31] Thanking One Section A-A, sc:1/50, author made
83	[5.32] Thanking One Section B-B, sc:1/50, author made
84	[5.33] Thanking One Details A, sc:1/20, author made
84	[5.34] Thanking One Details B, sc:1/20, author made
84	[5.35] Thanking One Details C, sc:1/20, author made
85	[5.36] Diagram of Acoustic Analysis of Thanking One, author made
86	[5.37] Painting “Koto Music” Keiko Yurimoto, early 1950s
86	[5.38] Image of GuZheng
86	[5.39] Image of Kiri Wood
87	[5.40] Image of Shinano Akiyama House
88	[5.41] Ritual Eating Pavillion Plan, sc: 1/50 , author made
89	[5.42] Ritual Eating Pavillion Section A-A, sc:1/50, author made
89	[5.43] Ritual Eating Pavillion Section B-B, sc:1/50, author madeFigure

Page	Figure
90	[5.44] Outer Facade, sc:1/50, author made
90	[5.45] Inner Facade, sc:1/50, author made
91	[5.46] Ritual Eating Pavillion Details A, sc:1/20, author made
91	[5.47] Ritual Eating Pavillion Details B, sc:1/20, author made
91	[5.48] Ritual Eating Pavilion Details C, sc:1/20, author made
92	[5.49] Image of Rice Straw Fence and Rice Straw, author made
93	[5.50] Kitchen Plan, sc:1/50,
94	[5.51] Kitchen Section A-A, sc:1/50, author made,
94	[5.52] Kitchen Section B-B, sc:1/50, author made
95	[5.53] Restroom Plan sc:1/50, author made
95	[5.54] Restroom A-A, sc:1/50, author made
95	[5.55] Restroom B-B, sc:1/50, author made
96	[5.56] Thanking Two Plan, sc: 1/50, author made
97	[5.57] Thanking Two Section A-A, sc:1/50, author made
97	[5.58] Thanking Two Section B-B, sc:1/50, author made
98	[5.59] Thanking Two Details A, sc:1/20, author made
98	[5.60] Thanking Two Details B, sc:1/20, author made
98	[5.61] Thanking Two Details C, sc:1/20, author made
99	[5.62] Images of Rice Straw Knitted Lanterns
100	[5.63] Images of Straw Clay on Traditional Japanese Farm House
101	[5.64] Isometric View of Thanking One Pavillion, author made
101	[5.65] Thanking One and Thanking Two Materials
101	[5.66] Isometric View of Thanking Two Pavillion, author made
102	[5.67] Restaurant and Restroom Materials, author made
102	[5.68] Isometric View of Restaurant , author made
103	[5.69] The Entrance of Site, author made
103	[5.70] The Entrance of Thanking One Pavillion, author made
104	[5.71] Inner View of Thanking One, author made
104	[5.72] Isolation of Rice Cultivation, author made

TABLE INDEX

Page	Figure
105	[5.73] Common Path Between Eating Pavillions, author made
105	[5.74] The Relation of Kitchen with Common Path, author made
106	[5.75] Inner View of Restaurant, author made
106	[5.76] Interaction between Human and Rice, author made
107	[5.77] The Relation of Thanking Two Pavillion with Common Path, author made
107	[5.78] The Entrance of Thanking Two Pavillion, author made
108	[5.79] Inner View of Thanking Two, author made
108	[5.80] The Exit of the Site, author made
109	Chapter Six
110	[6.1] Photograph of Maquette Process 01, author made: July 2010
111	[6.2] Photograph of Maquette Process 02, author made: July 2010
111	[6.3] Photograph of Maquette Thanking One Pavillion, author made: July 2010
112	[6.4] Photograph of Maquette Process 03, author made: July 2010
112	[6.5] Photograph of Maquette Process 04, author made: July 2010
113	[6.6] Photograph of Maquette Process 05, author made: July 2010
113	[6.7] Photographs of Maquette of Restaurant Pavillion, author made: July 2010
114	[6.8] Photographs of Maquette Process 06, author made: July 2010

Page	Table
16	Table 1.1 Tiangan
19	Table 2.1 24 Solar Terms Table
85	Table 5.1 Diagram of Sound Propagation in Different Forms of Rooms without Diffusing Treatment

ABSTRACT

This thesis studies the theory of cultural features related to slow food theme in the context of Far East Asia (Japan & China) and tries to transform the abstract cultural identity into architectural language.

Expo 2015 Milan enables us to rethink the importance of preservation of biodiversity for safeguarding the food quality through slow manners of eating. We give an overall theoretical research on ritual manners of Far East culture and landscape in order to emphasize the importance of “ slow ” for the appreciation and respect to the food .

Furthermore, we explored a new concept for transforming the abstract idea of slow manners into physical form, by making a deep research over the elements of Far Eastern architecture and landscape , such as Japanese garden , sacred spaces like temples , ritual spaces like tea house - which are inducing slow manners and ritual of behaviours and contributing to the feelings of people- .

Chapter 1 presents the risk of fast lifestyle and attempts to introduce the slow manners of Far Eastern culture as a solution.

Chapter 2 explores the importance of the rice as a ritual food for Far Eastern people which represents the slow lifestyle.

Chapter 3 implements the theory to architecture by using the research made over the time based , sequential spaces in Far Eastern architecture and landscape.

Chapter 4 gives a study about contemporary movies , paintings and poems about landscape , ritual spaces and behaviours of the Far Eastern culture .

Chapter 5 introduces the master plan and pavillions design related to the research made over Far Eastern culture.

Chapter 6 shows the maquette making process.

Our Far East Pavillion for Expo 2015 Milan is an harmonization between human and nature .

Keywords

Slow , Ritual , Time , Food , Space , Analysis , Synthesis

ASTRATTO

Questa tesi studia la teoria delle caratteristiche culturali legate al tema del cibo lento nel contesto dell'Estremo Oriente (Giappone e Cina) e cerca di trasformare l'identità culturale astratto in linguaggio architettonico.

Expo 2015 Milano ci permette di ripensare l'importanza della conservazione della biodiversità per la salvaguardia della qualità alimentare attraverso maniere del mangiar lento. Facciamo una ricerca teorica complessiva sulle maniere rituali della cultura dell'Estremo Oriente e del paesaggio per sottolineare l'importanza di “lento” per l'apprezzamento e il rispetto per il cibo.

Inoltre, abbiamo esplorato un nuovo concetto per trasformare l'idea astratta di maniere lento in forma fisica, facendo una ricerca approfondita sugli elementi di architettura e del paesaggio dell'Estremo Oriente, come il giardino giapponese, spazi sacri come i templi, gli spazi rituali, come la casa di tè - che stanno inducendo maniere lento e rituale di comportamenti e di contribuire ai sentimenti delle persone.

Capitolo 1 presenta il rischio di stile di vita veloce e tentativi di introdurre il maniere lento della cultura dell'Estremo Oriente come una soluzione.

Capitolo 2 analizza l'importanza del riso come alimento rituale per persone dell'Estremo Oriente che rappresenta lo stile di vita lenta.

Capitolo 3 implementa la teoria di architettura utilizzando le ricerche fatte nel tempo sulla base, spazi sequenziali in architettura e paesaggio dell'Estremo Oriente.

Capitolo 4 fornisce uno studio sul cinema contemporaneo, dipinti e poesie di paesaggio, spazi rituali e comportamenti della cultura dell'Estremo Oriente.

Capitolo 5 introduce il master plan e disegni padiglione legate alle ricerche effettuate sulla cultura dell'Estremo Oriente.

Capitolo 6 mostra la maquette processo decisionale.

Il nostro padiglione dell'Estremo Oriente per l'Expo 2015 Milano è una armonizzazione tra uomo e natura.

Parole chiave

Lento, Rituale, Tempo, cibo, spazi, analisi, sintesi

CHAPTER ONE .THE ATTEMPT : FROM FAST LIFESTYLE TO SLOW LIFESTYLE

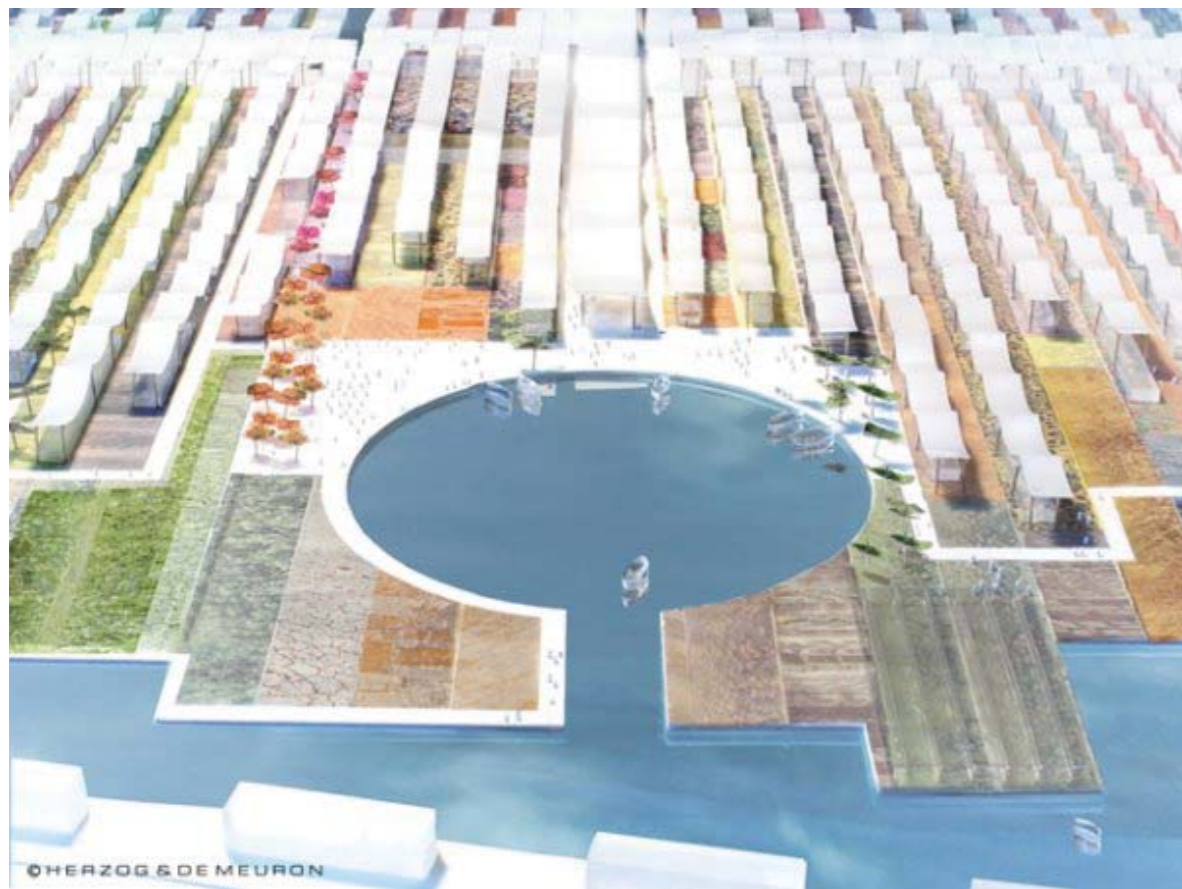


fig . 1.1

EXPO 2015 MILAN
THEME _FEEDING THE PLANET , ENERGY FOR LIFE

The food related theme of Expo 2015 concentrates on the preservation of biodiversity and protection of the environment as agriculture's ecosystem by safeguarding food quality , safety and reliability in which the value of cultural heritage in culinary traditions has a specific key role in the slow consumption and appreciation of food. [1]

When we face the danger of fast food consumption amount and unhealthy food production techniques which are used all over the world ,we noticed the importance of preserving the slow eating manners and traditions of Far East culture to provide the respect and appreciation for the cultivation of the healthy and secure food which is necessary for feeding the whole planet.

Through slow eating manners and traditional cultivation techniques it is possible to defend the biodiversity.

Slow eating manners of Far Eastern people can be introduced as a solution for maintaining the healthy and secure food for feeding the planet because slow eating manners provides people *a time gap to appreciate the food.*

In the dining manners of a traditional Japanese family ; it is an important tradition *to thank for the agricultural product (plant) itself* , before eating it and *to thank for the farmers who cultivated the agricultural product* , after eating it .

The slow eating manners and rituals of behaviours of Far Eastern culture are the main two topics in which we made a deep research for the conceptual design of our pavillion.

1.Milan Expo official website theme page



fig . 1.2

A blog diary about fast food and its negative impact on environment and culture

*March 20, 2010 -5:13 am by Border Jumbers
Nourishing the Planet*

Fast food and fast life create a gap between us and our food. There is less time to savor the tastes of the seasons and the joy of food shared in company. We eat to fill our stomachs, without thinking of the implications.

Slow Food works to create a broad cultural shift in the relationship people around the world have with the food they eat.

Pleasure is important to our daily food rituals. Responsibility without pleasure does not encourage us to enjoy mealtimes, to preserve our cultural traditions, or to value and appreciate our food. Pleasure without responsibility, however, is negligent.

Our disconnection with food results in a negative impact on environment, economy, culture, and health.

The concept of making pleasure and responsibility inseparable permeates all of Slow Food's programs—from raising awareness through workshops and connecting consumers directly to food producers, to supporting small-scale farmers in creating a sustainable product that also has great taste quality and preserves culture, to teaching children that the sweetest carrot they have ever tasted comes not from a plastic bag in the supermarket, but right from their own garden.

Blog : Meet Shayna Bailey, Slow Food International by Border Jumbers

Crossposted from the Worldwatch Institute's Nourishing the Planet



fig . 1.3

The idea to preserve the biodiversity through slow food , slow eating manners and slow movements have been our main concepts to achieve the goal of respect for food.

In order to correspond our theme of study with the theme of Expo 2015 we tried to explore the cultural heritage , traditions and lifestyles of Chinese and Japanese people which they generally implement the term “ slow ” into many types of fields , like art , literature , architecture . If it is needed to tell more about the term “slow” for Far East culture , we can easily say that culturally “slow” means sequences of human behaviours , ritually ”slow” means respect and appreciation , architecturally ”slow” means the sequences of functions that leads people to wait or to approach the main focus point in time -not suddenly-.

To represent the idea of slow food we chose the theme of “rice” and we analysed the relation of rice and human in the sense of cultural meaning for Asian people.



fig . 1.4



fig . 1.5

Article : Slow Food official website , Slow Food Manifesto

Our century, which began and has developed under the insignia of industrial civilization, first invented the machine and then took it as its life model. We are enslaved by speed and have all succumbed to the same insidious virus:

Fast Life, which disrupts our habits, pervades the privacy of our homes and forces us to eat Fast Foods. To be worthy of the name, Homo Sapiens should rid himself of speed before it reduces him to a species in danger of extinction.

A firm defense of quiet material pleasure is the only way to oppose the universal folly of Fast Life. May suitable doses of guaranteed sensual pleasure and slow, long-lasting enjoyment preserve us from the contagion of the multitude who mistake frenzy for efficiency.

Our defense should begin at the table with Slow Food. Let us rediscover the flavors and savors of regional cooking and banish the degrading effects of Fast Food. In the name of productivity, Fast Life has changed our way of being and threatens our environment and our landscapes.

So Slow Food is now the only truly progressive answer. That is what real culture is all about: developing taste rather than demeaning it.

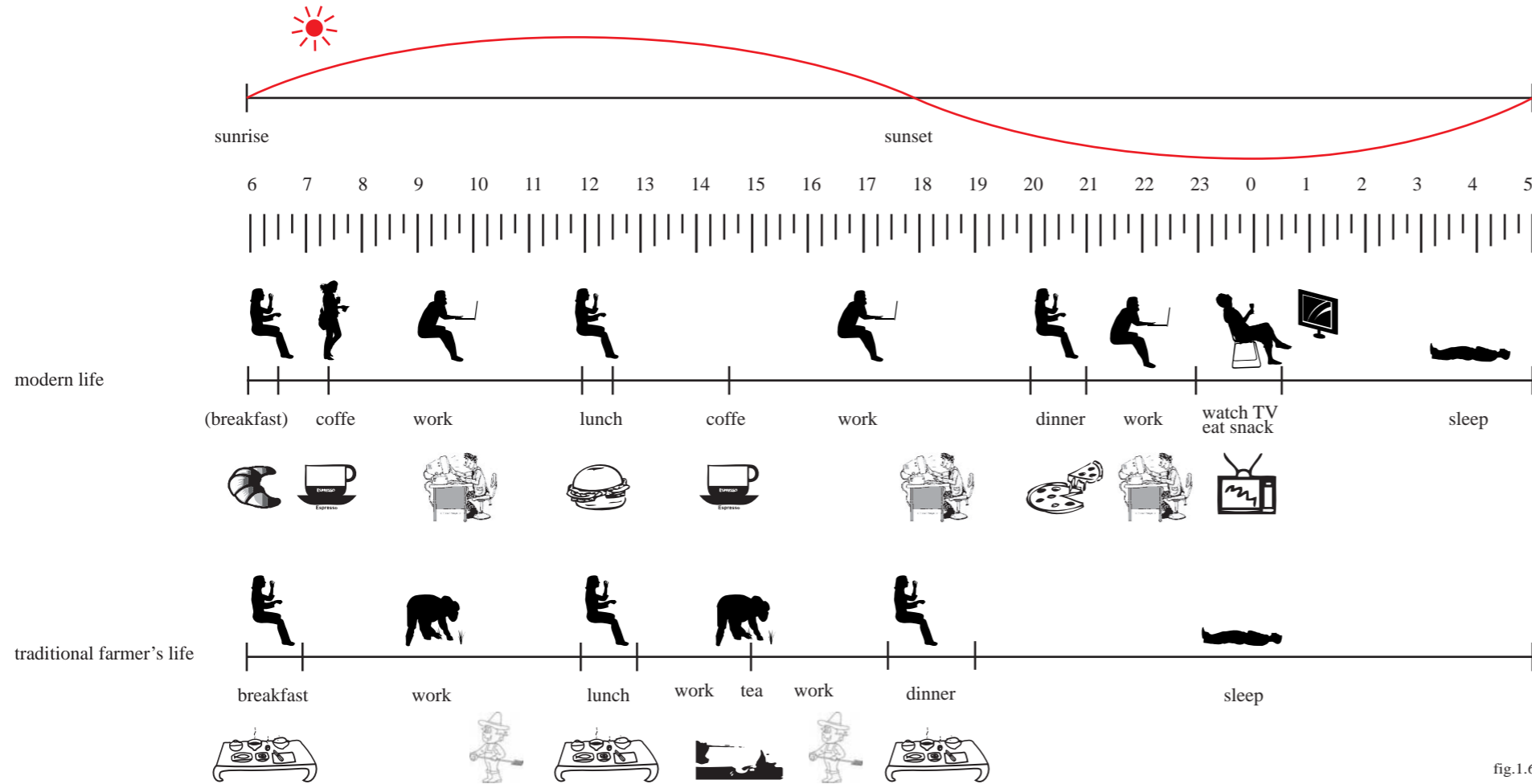


fig.1.6

FAST MODERN LIFE

Lifestyle of people changed as the technology evolved. Convenient way of living gave us possibility to work after the sunset, mass production made possible to obtain the food in the fast way. As a result, lifestyle of modern people became fast, and many activities were concentrated in short amount of time. This fast way of living is causing the disorder of circadian rythm in daily life and thus the quality and health condition of people are at risk.

SLOW TRADITIONAL LIFE

Lifestyle of people in the past depend more on the nature. Since there were no technologies available to make possible for people to work in the dark, the lifestyle of people depended on the solar hour and was more regular and simple. But it was matching with the circadian rythm of human and was making you live more healthy life and work more efficiently.

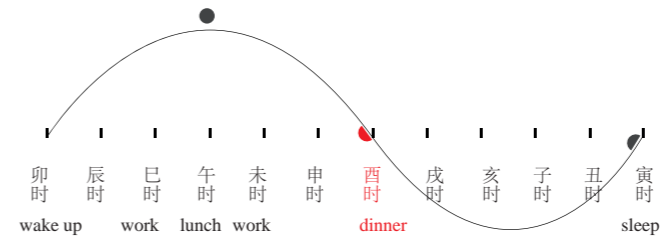
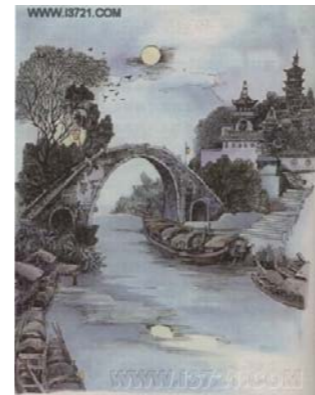
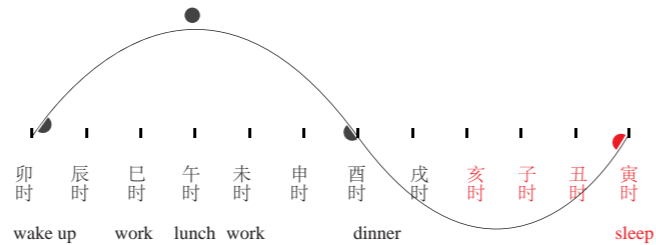
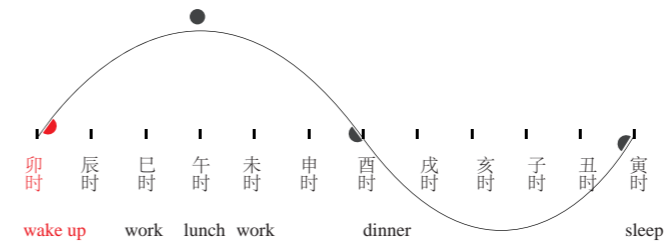
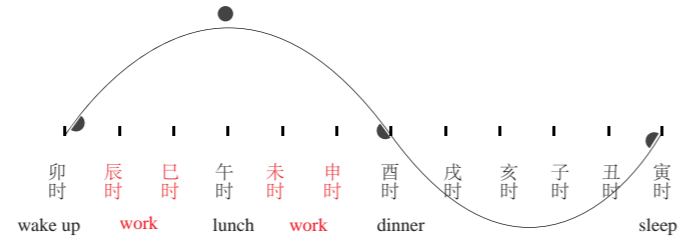
SLOW LIFESTYLE OF CHINESE PEOPLE

Unlike modern people, Chinese divide the time of one day into 12 parts instead of 24. The circadian rhythm of people depends more on solar hours. As the divisions is less, the lifestyle of people is more simple.

Tian Gan 24 - Hours Clock

子时	23:00 - 01:00
丑时	01:00 - 03:00
寅时	03:00 - 05:00
卯时	05:00 - 07:00
辰时	07:00 - 09:00
巳时	09:00 - 11:00
午时	11:00 - 13:00
未时	13:00 - 15:00
申时	15:00 - 17:00
酉时	17:00 - 19:00
戌时	19:00 - 21:00
亥时	21:00 - 23:00

table 1.1 Tian Gan



CHAPTER TWO . RITUALS AND LIFESTYLE OF FAR EASTERN RICE CULTURE

稻

fig . 2.1

For more than half of humanity, rice is life. It is the grain that has shaped the history, culture, diet, and economy of billions of people of Asia. Many of them sleep on rice straw, drink rice liquor and offer rice to their gods. The growth stage of the rice crop marks the passage of time and season. In the languages of China, Japan and many others, the day begins with "morning rice" and ends with "evening rice." In this part of the world, rice is not just a cereal; it is the root of civilization.

Rice is the only crop that farmers arrange to give 'blessings' at every stages of its life, from planting to harvesting. It is done to boost morale and reduce worries, with the hope that the produce will be abundant and will ultimately bring joy, happiness and stability to the farmers, their families and the community as a whole. Thus, the various rituals of rice are closely related to both the communal way of life and their religious beliefs. They emphasize the need to live together in harmony and to be mutually supportive.

What we want to deliver to the visitors is the idea of respect and appreciation for food by using the cultural manners of Chinese and Japanese people through the theme of rice which is the chief source of food for Asian people.

Article : Rice, the Grain of Culture presented by Dr. Kwanchai A. Gomez (Board Member of Thai Rice Foundation), 20 September 2001.



fig . 2.2

RICE & RITUAL

The 24 solar terms

A solar term is one of 24 points in traditional East Asian lunisolar calendars that matches a particular astronomical event or signifies some natural phenomenon.

JAPANESE CALENDER	CHINESE CALENDER	GREGORIAN CALENDER
睦月 Harmony	立春 Start of Spring	February 3rd - 5th
	雨水 The Rain	February 18th - 20th
如月 Changing Clothes	惊蛰 Awakening of Insects	March 5th - 7th
	春分 Vernal Equinox	March 20th - 22th
弥生 New Life	清明 Clear and Bright	April 4th - 6th
	谷雨 Grain Rain	April 19th - 21th
卯月 Plant Rice	立夏 Summer begins	May 5th - 7th
	小满 Grain buds	May 20th - 22th
皐月 Rice Sprouts	芒种 Grain in ear	June 5th - 7th
	夏至 Summer solstice	June 21th - 22th
水無月 Watering Month	小暑 slight heat	July 6th - 8th
	大暑 Great heat	July 22th - 24th
文月 Month of Letters	立秋 Autumn begins	Aguest 7th - 9th
	处暑 Stopping the heat	Aguest 22th - 24th
葉月 Falling Leaves	白露 White dews	September 7th - 9th
	秋分 Autumn Equinox	September 22th - 24th
長月 Autumn Long Month	寒露 Cold dews	October 8th - 9th
	霜降 Hoar-frost falls	October 23th - 24th
神無月 Month without Devine	立冬 Winter begins	November 7th - 8th
	小雪 Light snow	November 22th - 23th
霜月 Falling Frost	大雪 Heavy snow	December 6th - 8th
	冬至 Winter solstice	December 21th - 23th
師走 Monks Run	小寒 Slight cold	January 5th - 7th
	大寒 Great cold	January 20th - 21th

table.2.1 The Twenty-Four Solar Terms Table

Spring Festival (or lunar New Year) Eve dinner. On this occasion, Chinese families make New Year's cake (steamed sponge cake from flour turned from glutinous rice) People eat these cakes in the hope of a better harvest and higher status in the New Year.



Qingming Jie

The Qingming festival falls 15days after Vernal Equino, named Qingming. Its name denotes a time for people to go outside and enjoy the greenery of springtime



The Dragon Boat Festival

on the 5th day of the 5th lunar month, people eat zongzi made of glutinous rice on this day to remember Qu Yuan an official of the Chu State (about 340 BC - 278 BC), who commited suicide by jumping into the Miluo River.



“Double Nine” festival cakes on the 9th day of the 9th lunar month each year. As people have just harvested their crops during autumn they can make these cakes with fresh new rice



8th day of the 12th lunar month. It is said that Sakyamuni attained Buddhahood on this day, drinking chyle presented to him by a shepherdess, which he believes led him to enlightenment. As a result, people bathe Buddha statues and eat porridge on this day.

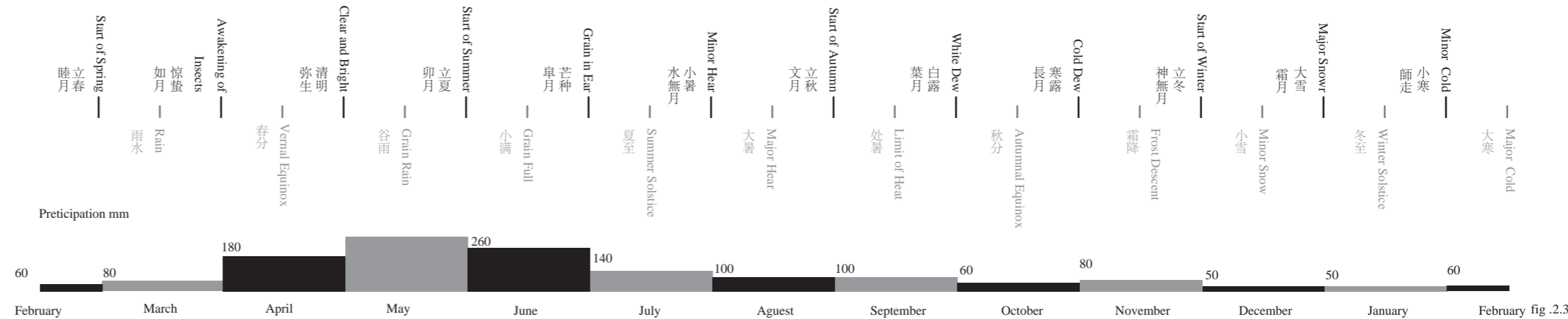


fig .2.3



fig.2.4 Chinese painting "Cultivation and read to bequeath to the family"

Cultivation for Far Eastern people is not only a labor , but it is a lifestyle.

耕读传家

人生在世，惟读书、耕田二事是极要紧者。盖书能读得透彻，则理明于心，做事自不冒昧矣。用力田亩，则养赡有赖，俯仰无虑...若不读书，何以立身、行道、显亲、扬名？若不耕田，何以仰事父母？何以俯畜妻子？”

The thought of "Cultivation and read to bequeath to the family"

“In human’s life, the only two critical things are plowing and reading. Without self-education, there is no way to support himself, to let parents feel proud of him and achieve his life goal; without practicing cultivation, there is no way to take care of his parents, wife and children.”[1]

1.Quotation :From Shi Chen Jin , from the period Qin Dynasty

RICE & TIME IN CHINESE CULTURE

In Far East the representations of landscape and subsistence activities are temporal representations.

Flooded rice fields, like rice-planting songs, are the most familiar sign of spring or early summer, the time of birth and growth. Rice harvesting scenes, including sheaves of rice stalks, represent fall and its joyful harvest, the end of the growing season. What is striking from the perspective of representation is that these cycles of rice growth became markers of the seasons for all Japanese. For urbanites, fishermen, and all other non-agrarian people, their lives were marked by rice and its growth.

In addition to the representation of the seasonal cycle, rice and rice paddies symbolize the past. As in many cultures, the pristine past embodying a distinct and sacred Japanese identity, uninfluenced by foreign influences and modernity, represented by the city, is symbolized in the reconstituted agriculture and the rural.

Article: Rice as Self, Japanese Identities Through Time by Emiko Ohnuki-Tierney



winter

spring

summer

autumn

fig . 2.5 Chinese Scroll “ A Gentleman Farmer’s Life Through the Four Seasons”

RICE & TIME IN JAPANESE CULTURE



spring

When the spring comes, it is the time for planting the seedlings. It is also the time the cherry blossoms bloom. People enjoyed the cherry blossom viewing under the cherry trees. It was an important moment that people recognize as the beginning of the year.

summer

In summer, the rice plant grows until the waist of human. It is the season full of life that all plants become fresh green. The rice plant needs extra care to get rid of the insects and other plants that grow in the rice field.



autumn

Autumn is the season for harvesting rice. It is also the time when all the maple leaves turn red. People used to enjoy the maple viewing in the same way they appreciated the cherry in the spring. They recognize nature as their friend and to grow the richness of their heart.

winter

In winter people start to cull the newly harvested rice of the year. They make a bag out of rice straw, they use the rice straw as the roofings of their house. People knew that the rice straw is a very good insulation material and thus they used it for several purposes. No part of rice is wasted on the process.

fig.2.6 Japanese Painting "Rice Cultivation Through the Four Seasons", circa 1700-1725



悯农

锄禾日当午，
汗滴禾下土。
谁知盘中餐，
粒粒皆辛苦！

-李绅

“In midday sun, hard at earth,
Thou sweat the bran 'n' soil b'low.
Who over dishes careth to know,
Every grain to toil they owe.”

- Li Shen

fig .2.7 Chinese Painting“Min nong”,
unknown painter , unknown date

A poem called “Min nong” in China , translated by Del.
Its meaning is to sympathy the peasant.



秋の田の かりほの庵の 苦をあらみ
わが衣手は 露にぬれつつ

詩:天智天皇

“Coarse the rush-mat roof
Sheltering the harvest-hut
Of the autumn rice-field;
And my sleeves are growing wet
With the moisture dripping through.”

Poet: Emperor Tenchi (circa626~671)

fig .2.8 Japanese Print “The Hundred Poets”, Part I
(Hyaku-nin isshu, 百人一首内) Publisher: Ebisu c. 1840-1842

RICE & HISTORY

Origin of rice dates back 8000 to 7000 years ago in southern part of China .Oldest archeo-logical site in Zhejiang province estimated to be of 7000 years ago.

Wet-rice agriculture was introduced from somewhere in Asia to Japan around 400 BCE, and gradually supplanted the previous hunting-gathering subsistence economy which began with the first occupation of the archipelago around 200,000 BCE. Wet-rice agricul-ture provided the economic foundation for the Yamato state and what later became the imperial family.

The first emperor was a farmer qua shaman who had an exceptional ability to communi-cate with the deities to secure a good rice harvest. For this reason, the Japanese imperial rituals are almost all about rice—planting to harvesting rituals. Rice and rice farming began as an upper class affair, and remained so even with the so-called caste system dur-ing the Edo period in which the two on top were warriors (shi), who were rice consumers without being rice producers, and farmers (no~).

Article: Rice as Self , Japanese Identities Through Time by Emiko Ohnuki-Tierney

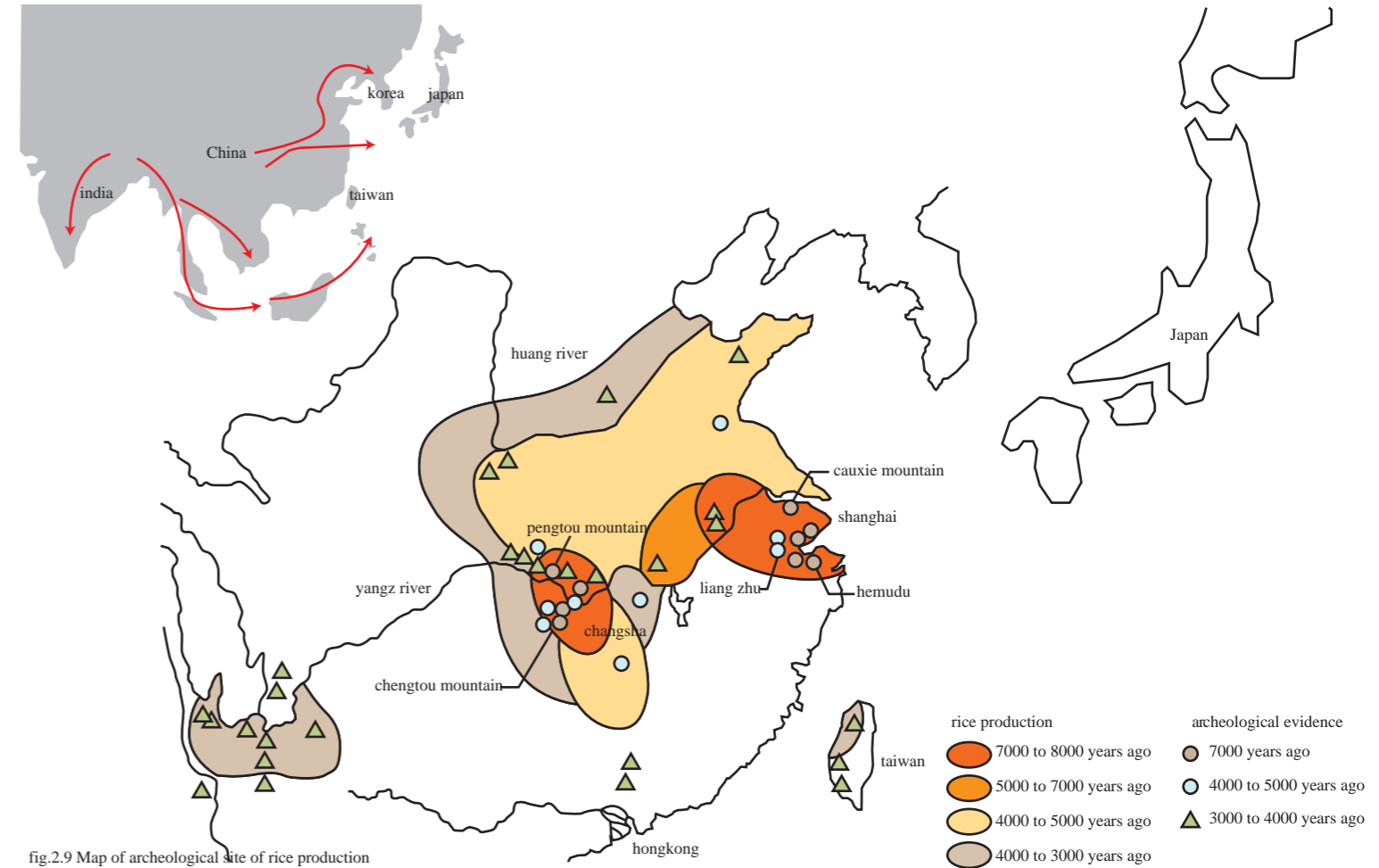


fig.2.9 Map of archeological site of rice production

In the eighth century myth-histories of the Kojiki and the Nihonshoki—the first written documents of Japan—the Sun Goddess (Amaterasu) is the mother of a grain soul whose name bears reference to rice stalks.

The legendary Jimmu Emperor, the so-called “first” emperor, is the son of the grain soul or the grandson of the Sun Goddess, who sends him to rule the earth. At the time of his descent, the Sun Goddess gives her grandson the original rice grains that she has grown in two fields in Heaven (Takamagahara) from the seeds of various types of grains given to her by the Deity in charge of food (Ukemochi no Kami). The grandson’s mission was to transform the Japanese archipelago from a wilderness into a land of succulent ears of rice (mizuho) nurtured by the rays of the Sun Goddess.

In other words, the rice grain embodies the Japanese deity. Most deities have dual qualities and powers. The Deity of the Rice Paddy has only the nigimitama or peaceful soul, and, drought or flood, which destroys rice paddies, is considered an act of the Mizu no Kami (Water Deity) rather than an expression of the aramitama (violent spirit) of the Deity of the Rice Paddy.

Thus, rice grain represents the peaceful soul of the deity.



fig . 2.10 Japanese Painting "Yuniwa no Inaho", Kakei Konno

Grain (粮食- fēn mǐ)
(rice grain; literal: rice powder.)

Grain represents the emperor's capacity to feed its people, thus prosperity and fertility.

Rice (水稻; mǐfàn)
(fertility, luck, wealth)

Rice symbolizes a link between Heaven (Gods) and Earth (Men).

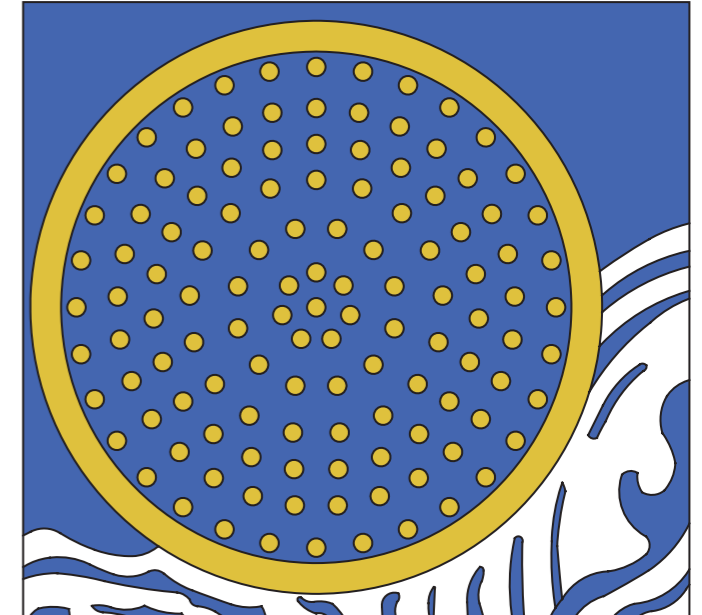
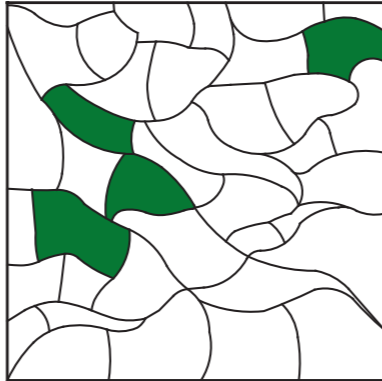
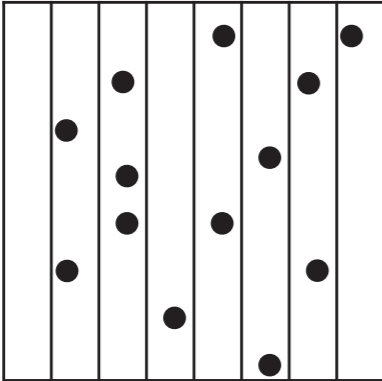
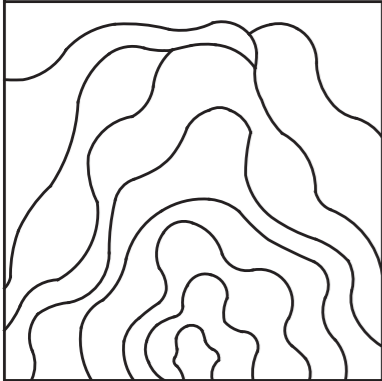


fig . 2.11 Rice symbol



There are two broad categories of Asian rice-production landscapes:wet and dry rice cultivation. Irrigation and water management is a key issue in both types of cultivation. The typical, lowland rice paddied landscape is commercially viable, producing most of the Asian requirement for rice.

Paddy fields can be built adjacent to otherwise natural areas such as rivers or marshes. They can be constructed, often on steep hillsides with much labor and materials. The fields require large quantities of water for irrigation. Flooding provides water essential to the growth of the crop.

The Asian rice culture and its terraced landscape should be seen as a component in a wider series of those landforms transformed by human action through agricultural practices. The entire Asia-Pacific region is characterized by the technique of pond-field agriculture, which modifies and shapes the landscape.

Paddy fields that can be constructed on mountainous areas are the most spectacular terraces where the difficult terrain demands a very laborious method of construction.

Blog: Asian Rice Culture and its Terraced Landscape , Manila (Philippines) 28 March to 4 April 1995

fig .2.12 Patterns of Rice Fields

RICE & APPRECIATION

Rice grains, both raw and cooked, are beautiful.

The most important characteristics are the related qualities of luster, purity, and whiteness.

In his *Inei Raisan* (In Praise of Shadows), twentieth-century novelist Tanizaki Junichirō extols the beauty of cooked rice:

“When cooked rice is in a lacquer container placed in the dark, shining with black lustre, it is more aesthetic to look at it and is more appetizing. When you lift the lid [of the lacquer container], you see pure white rice with vapor coming out of it. Each grain is a pearl. If you are a Japanese, you certainly appreciate rice when you look at it this way (in a lacquerware container placed in the dark).”[1]

1. Quotation :From the book ‘In Praise of Shadows(陰翳礼賛)’
Junichiro Tanizaki,1933



fig .2.13 Rice Bowl in the Darkness



fig.2.14 Lacquered Rice Bowls

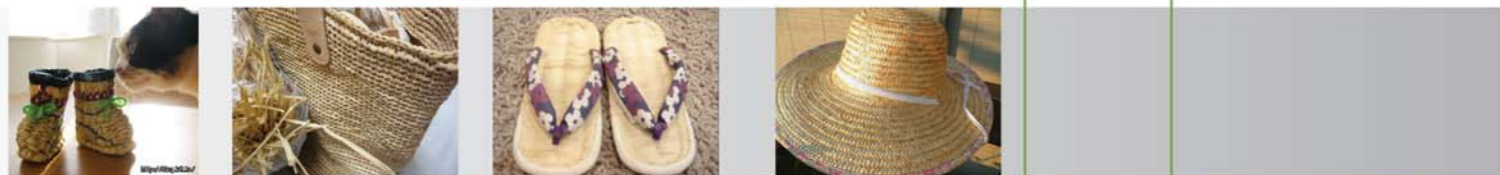
RICE PRODUCTS

稻草 rice straw

稻壳 rice husk

米粒 rice grain

衣
clothing



食
eating



住
architecture



芸
artcraft



食 food
baked / boiled / fried rice
dumplings
noodles

酒 wine
chinese rice wine
a wine produced from
the fermentation of rice
that is soaked in water

建筑 architecture
Byeotjib (Rice Straw) Roof
byeotjib protects dwellers from the
sun in summer and keeps them warm
in winter, because it is empty inside.
Moreover, rain falls down well and
hardly soaks through a roof because
it has a relatively smooth surface

Insulation materials
made from rice husks

Furniture
chairs / stool
made of rice husks

Carpets / mattresses
made of rice straws

布 cloths
are made from rice straw
hat
shoes / sandals / boots
cloak
bags

大米膠 rice glue
is made by boiling ground rice

宣紙 rice paper
it evolves from the pith of the rice
paper tree grown in Asia

手工 hand craft
art works
made by rice straws
boxes
lanterns
made of rice paper

rice straw



rice husk



rice grain



fig. 2.15

CHAPTER THREE . SEQUENTIAL SPACES IN FAR EASTERN ARCHITECTURE AND LANDSCAPE



fig.3.1 Japanese garden
Movie image from 'Memoirs of a Geisha', Rob Marshall, 2005

SLOW MOVEMENT _ JAPANESE GARDEN

When we want to deliver to the visitors of Expo 2015 by our master plan design is the idea of appreciation and respect for food .

To emphasize the appreciation idea through architectural language ,we noticed the importance of quietness and tranquility of the space .

The way to appreciate the nature or landscape can be provided by a concept of slow movement . Seeing the every scene of nature , listening to the music of nature , smelling the fragrances of natural elements and interacting with nature with five senses can be practiced just by slow approach .

Time is the key issue for the design concept of our master plan. For that reason ; Japanese garden has been our starting research point.

In Japanese garden rhythm is created through repetition of elements (stones , bridges , lanterns ,plants , trees .)

The spacing between the stepping stones and the dimensions of them create the slow movement in the garden.



fig .3.2 Stepping Stones in Mirei Shigemori Garden Museum

SLOW MOVEMENT _ JAPANESE GARDEN _ STEPPING STONES

Stones are amongst the most important elements of a Japanese garden.

The grouping of the stones can either be done randomly or even in triangular shapes.

Stones can be incorporated in a number of different ways in a Japanese garden.

In Japan, garden stones were used for paths, but also as a representation of actual mountains.

The garden stepping stones were often placed in groupings similar to that of the surrounding mountains; then, the groupings were usually viewed from a multiple location and meditated upon.

When one witnesses these gardens firsthand, it is very easy to see why garden stepping stones were used in this way.

The calm, meditative sensation garden stepping stones help to create a wonderful way to connect with nature and feel completely at peace.

According to Japanese tradition the stones are always positioned in odd numbers.

SLOW MOVEMENT _ JAPANESE GARDEN _ STEPPING STONES
 CLASSIFICATION OF STEPPING STONES

Step Stones (飛石)

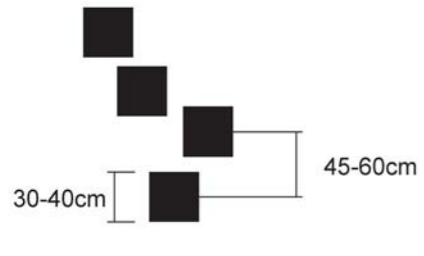
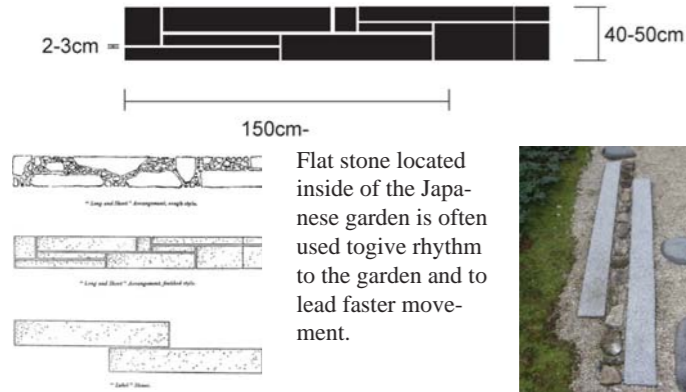


fig. 3.3 Images of Tobi-ishi

Most common used stone in Japanese garden which is designed to step with one foot inviting people to slow down and to pay attention.

Endan _ Long Stone _ (演壇)



Flat stone located inside of the Japanese garden is often used to give rhythm to the garden and to lead faster movement.



fig. 3. 4 Images of Endan



Reihai Seki _ Worshipping Stone_(礼拝石)

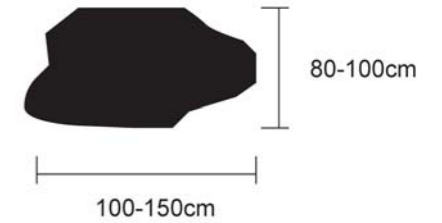


fig 3.5 Images of Reihai Seki

Worshipping stone is located in front of the garden or pond often for the purpose of meditation rather flat and big in dimension.



Kutsunugi Ishi _ Shoe Stone_(沓脱石)

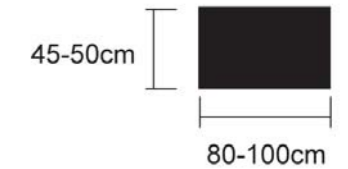


fig 3.6 Images of Kutsunugi Ishi

A flat-surfaced stone placed at the entrance or adjacent to the veranda facing the garden. It is a stone where one puts on or takes off one's shoes.



fig.3.7 Japanese calligraphy of Ichigo Ichie



fig.3.8 Plan of Mirei Shigemori garden museum

Speed , Rhythm , Function

We tried to analyse the stepping stones in terms of speed , rhythm and function . The locations , shapes and sizes of the stepping stones are the features that effect the 'slow movement' . In order to regulate the sequences of behaviours ; we as architects have to design spaces which function in sequences . In our plot ; the speed of vistors has been regulated by the rearrangement of stepping stones .

Analysis 1 _ Rhythm

The step-stones of traditional garden have certain rhythm in their organization. The pattern of which is similar to those of traditional calligraphy. It stresses beginning and the end of each line/axis when there is change of direction or language.

SLOW MOVEMENT _ JAPANESE GARDEN _ STEPPING STONES _
FUNCTION AND SPEED

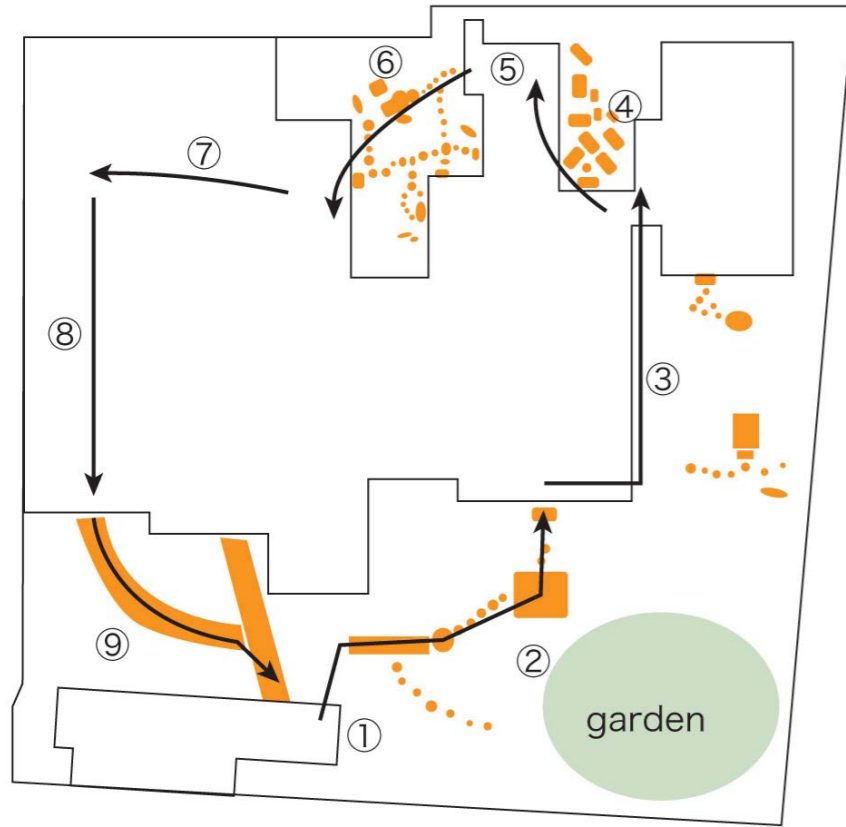


fig. 3.9 Circulation through stepping stones inside the Mirei Shigemori garden museum

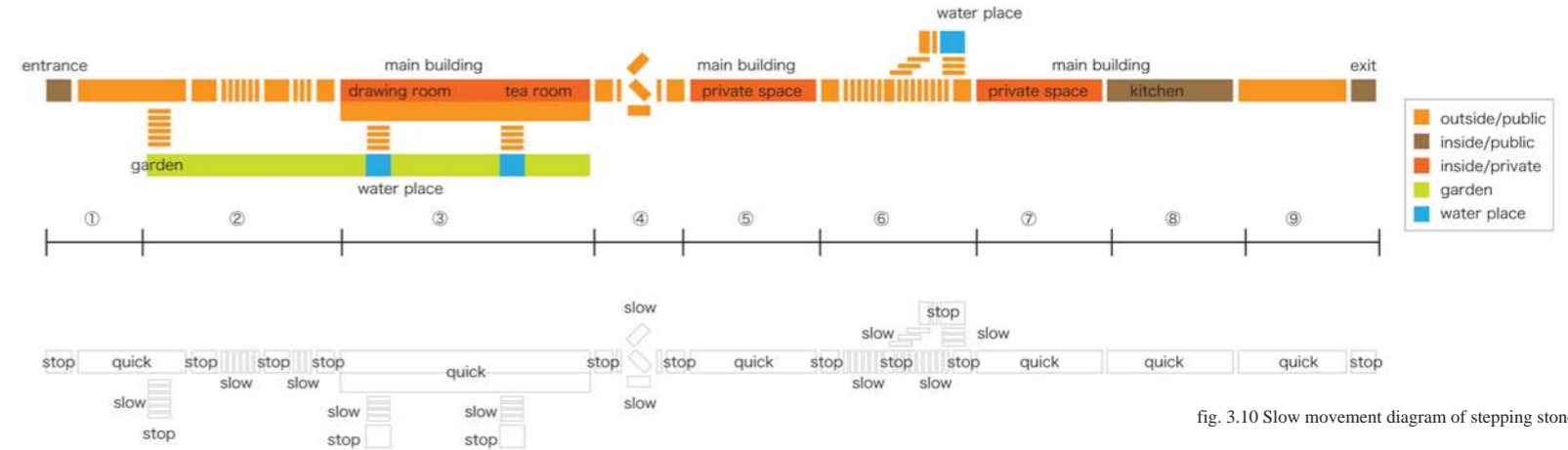


fig. 3.10 Slow movement diagram of stepping stones

Analysis 2 _Speed and Function

The step-stones of traditional garden have certain rhythm in their organization. The pattern of which is similar to those of traditional calligraphy. It stresses beginning and the end of each line/axis when there is change of direction or language.

APPRECIATION OF NATURE IN BUDDHIST BELIEF

'Everything is in transition - Nothing and no one remains the same from one moment to the next -' Buddhist belief

The appreciation of the year's cycle and the natural world has its roots in some of the most deeply held beliefs in Japanese culture. The sacredness of the landscape in Shinto belief is one of the primary contributors to this profound connection with nature.

In Shinto, mountains, trees, waterfalls, and rocks are considered the home of native deities or kami. The Buddhist concept of impermanence has also had an impact on Japanese views of nature. In Buddhist belief, everything is in transition—nothing and no one remains the same from one moment to the next. While the ultimate goal is to accept impermanence and resist attachment to things of this world (which is believed to be the core cause of suffering), the Japanese have taken the idea of the transitory nature of all things and imbued it with aesthetic values and strong emotion.

This awareness of impermanence brings a profound emotional quality to the experience of seasonal change.

The following poem by the courtier Fujiwara Teika (1162–1241) entitled "Autumn Hut" evokes this sense of melancholy:

*I gaze afar
And ask for neither cherry flowers
Nor crimson leaves:
The inlet with its grass-thatched huts
Clustered in the growing autumn dusk.
(Brower and Miner, Japanese Court Poetry, p. 307)*

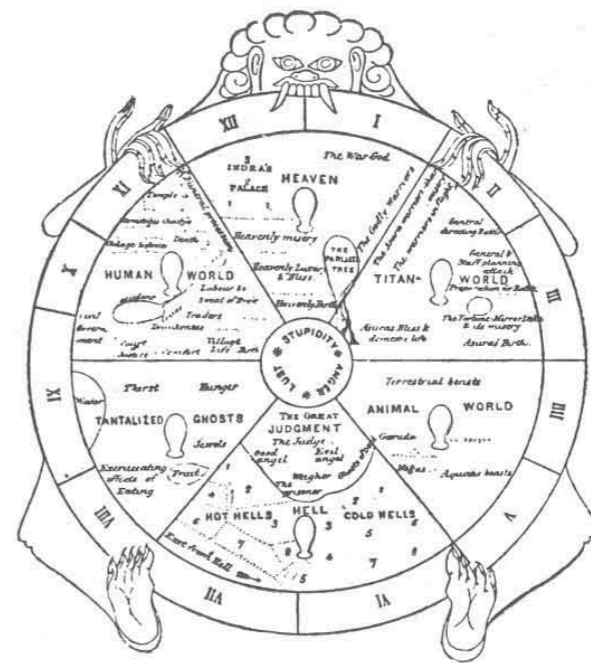


fig.3.11 Image of Tibetan Wheel of Life

Article : Arts of Japan , A Teacher's Guide
Project Director and Writer: Elizabeth Benskin

The Tibetan Wheel of Life symbolizes the Buddhist perspective on life. The creature who turns the wheel of life and holds it in his clutches is Yama, a wrathful deity, symbolizes the impermanence of all things.



fig.3.12 Outer Sanctuary of Inari Shrine

The idea of appreciation of rice is delivered to our plot visitors through pavillion designs. Our pavillions are spaces that people interact with rice by five different senses. Rice is the element that we used to represent the ritual of behaviours in our pavillion design.

The space that encloses the rice has been planned carefully and the way to reach and interact with rice has been specialized by the right design approach . Slow movement , the sequences of functions and sequences of movements are the main topics which we tried to analyse during our design process. We used the conceptual and spatial design features of Shinto shrine as a reference to understand the idea of ritual of behaviours in the sacred spaces.

Rice represents the God in the sacred space and acts as the main focus point for the visitors. To emphasize the importance of rice in the first pavillion (thanking 1) we put a single rice plant in the very end of our pavillion , the way to reach to the rice has been underlined by the sense of hearing which is an important metaphor used in Shinto shrines by the usage of bells before you arrive to the space of divine for praying.

SACRED SPACE IN JAPANESE CULTURE
 SEQUENCES OF FUNCTIONS IN SHINTO SHRINE

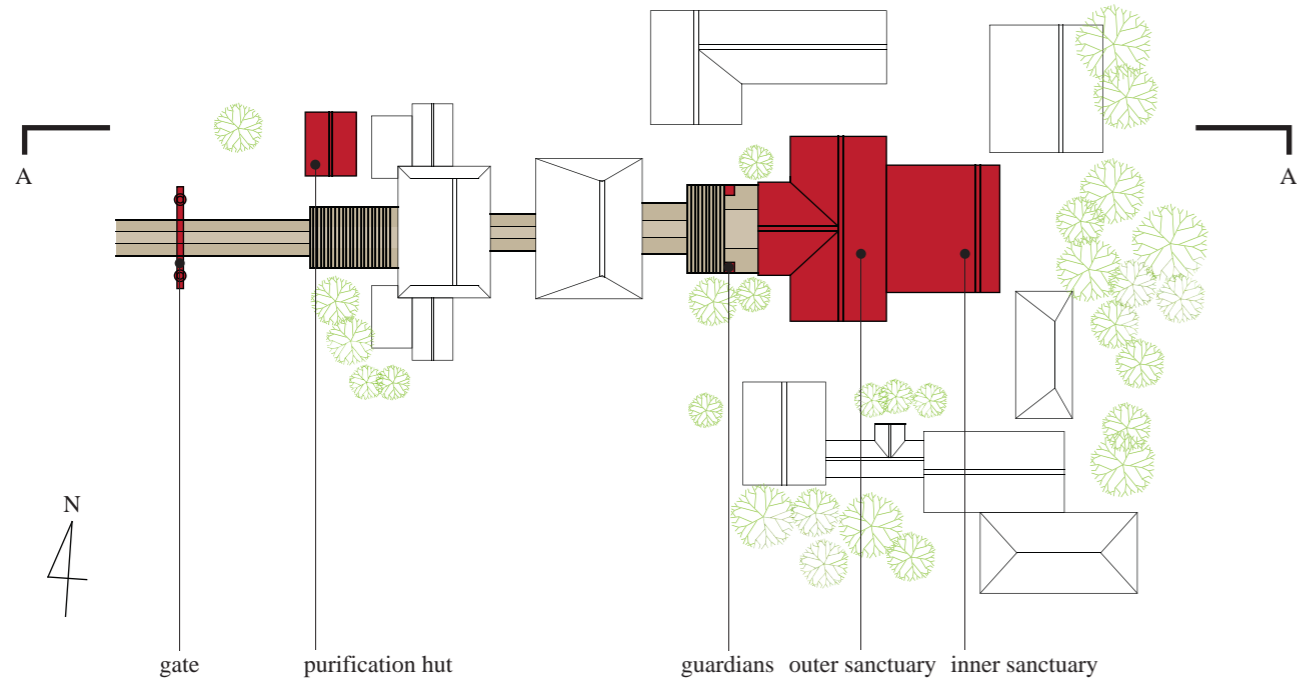


fig.3.13 Inari Shrine Plan 1:600

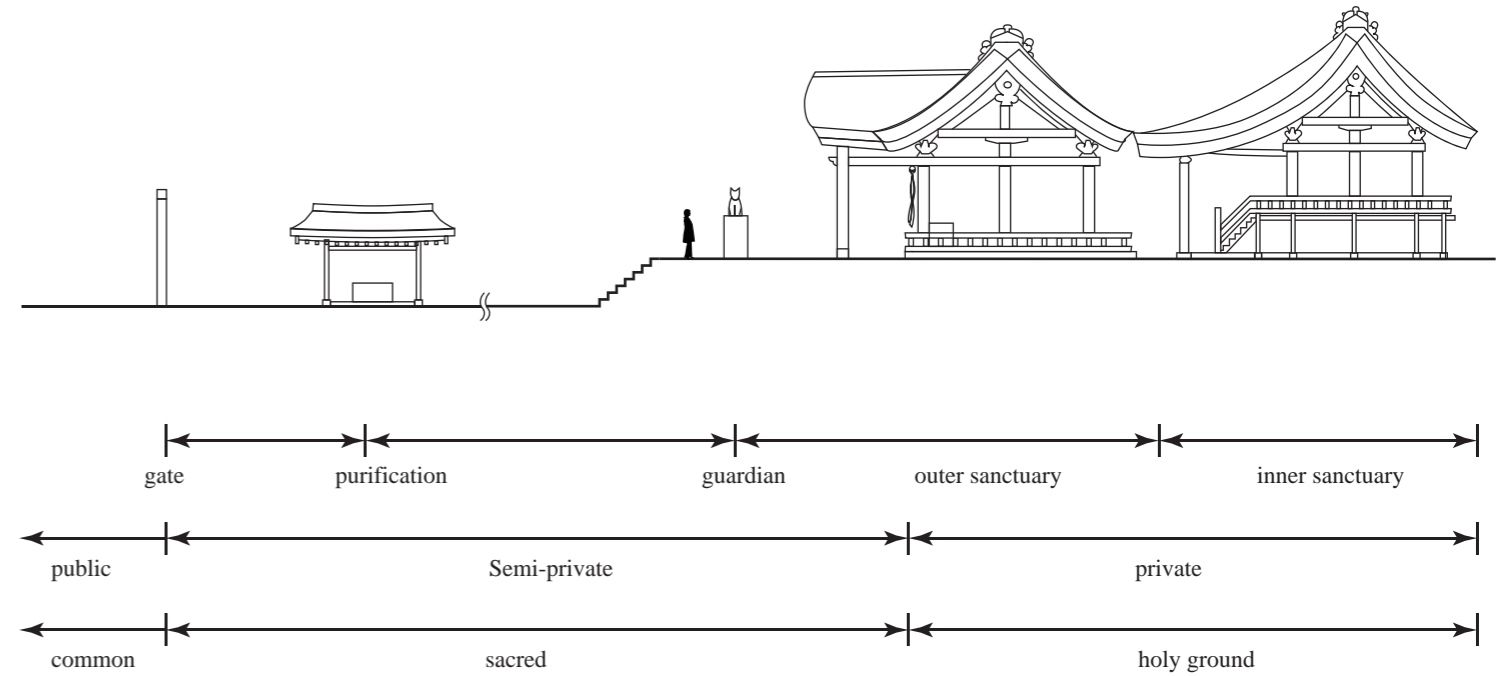


fig.3.14 Inari Shrine Section 1:200

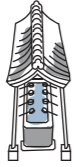
SACRED SPACE IN JAPANESE CULTURE
SEQUENCES OF BEHAVIOURS IN SHINTO SHRINE

1. Torii (鳥居)



First boundary appears in shrine architecture. it functions as a separation of common world and indicates visitors should act accordingly.

2. Chozuya (手水舎)



A purification hut where people purify their hands and mouth. It is obligatory if you come to pray to purify yourself first.

4. Shin-shi (神使)



They are considered to be messenger of divine, at the same time the guardian of the shrine.

4. Hai-den (拝殿)

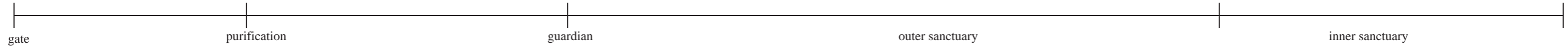


Hall of worship. Shinto divines don't have form. Admirers believe that divines live in the deepest and untouchable part of the nature. They consider it is a space divine "visits".

5 HON-den (本殿)



Inner Sanctuary is banned entry of visitors. It is a space only for divine. They often locate treasury which is considered to become body of got when divine comes down. some shrines do not have inner sanctuary because they believe the divine is the nature itself.



bow when entering



purify yourself
left hand - right hand - mouth



walk on the side
(center of the path is considered as path of divines)



ring the bell



toss a coin



bow twice



clap twice



bow once

fig.3.15 Borders of Shinto Shrine , Sequences of Behaviours in Shinto Shrine

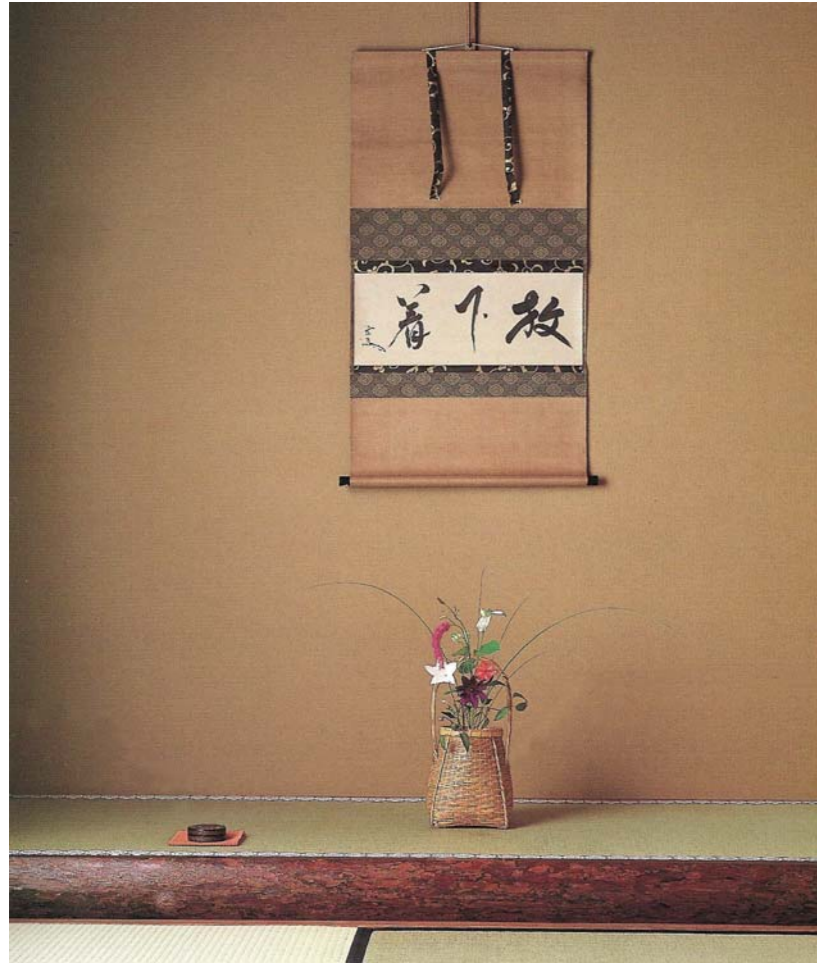


fig.3.16 Picture of Tokonoma



fig.3.17 Diagram of Butsudan with Scroll and Offerings

Tokonoma (床の間) is a one of distinctive sacred space in Japanese architecture . It is found in temples , ceremonial spaces , as well as normal human dwellings.

Tokonoma is simply a type of alcove that displays flowers , paintings and calligraphy. The space has a religious origin . It was originally an offering space in Zennism architecture : so-called Butsu-dan (仏壇) was a space where monks offer to the God flowers , insence , and a candle light. Behind of this offering table there is usually a painting of landscape or a calligraphic art .They both tell the ideographic scene or belief of their religion.

The usage of Tokonoma evolved once connected to powers and authority . In Muromachi period it was used to differentiate the space for generals (床) and of his follower .It was then the space for the God was called Tokonoma to differentiate from the sitting space of generals.

When the popularity of the Tea Ceremony arose , it was also introduced in Tea houses , it was much more simplified and became a space to display scrolls and Cha-bana (茶花: a type of simple flower arrangement) as the nature of Tea Ceremony is related to the philosophy of Wabi-Sabi (Wabi : a philosophy of achieving something sophisticated with simple material .Sabi : a philosophy tells about beauty in the feeling of loneliness therefore connected to minimalistic idea) .



fig.3.18 Image of Entrance to the Tea Garden

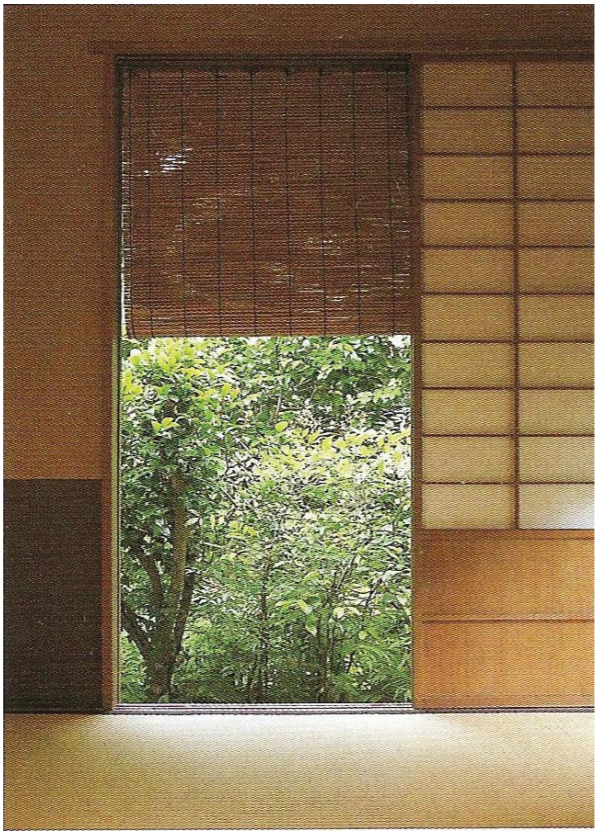


fig.3.19 Image of the Entrance to the Tea House

The idea of appreciation of nature is delivered to our plot visitors through eating pavillion design. As we mentioned before , eating is a ritual of behaviour for Far Eastern people .The space where you eat a bowl of rice or drink a bowl of tea has to be pure enough to show the gratitude towards the rice you are eating or tea you are drinking . To get pleasure from the food that you are eating , the space you are eating the food in , should be harmonized with nature and the speed you are consuming the food should be slow to appreciate the food.

We used the conceptual and spatial design features of Japanese tea house as a reference to understand the idea of ritual of behaviours in dining spaces. Japanese tea house , which is located in the garden consists of double layers from the point of architectural composition .

Outer layer is made of natural elements like bamboo fences that are surrounding the garden and the inner layer is usually made of combination of wooden frames and paper . Outer and inner layer from the material point of view are quite different from each other. On the outer layer the surface is semi - transparent , on the other hand inner layer has opaque surface.

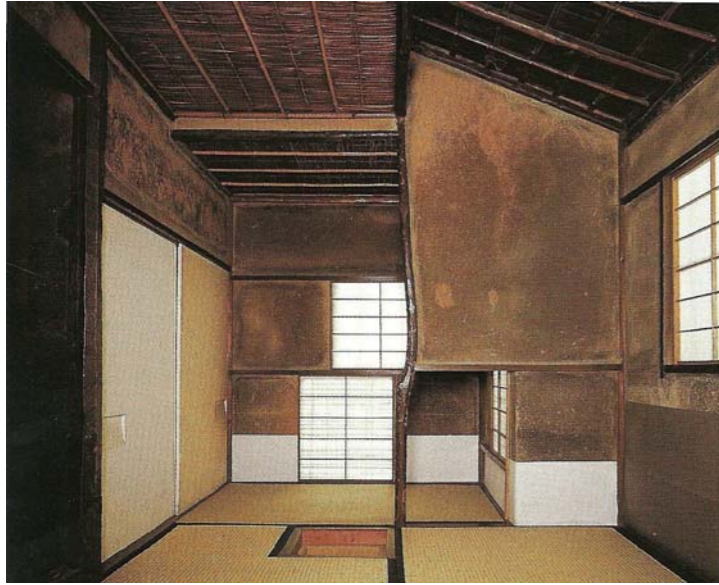


fig.3.20 Image of Tea Room “Teigyokuten”

“—Teaism is a cult founded on adoration of beautiful among the sordid facts of everyday existence. It inculcates purity and harmony, the mystery of mutual charity the romanticism of the social order. It is essentially a worship of the Imperfect, as it is a tender attempt to accomplish something possible in this impossible thing we know as life.” [1]

1. Quotation : From “The Book of Tea” ,1994 ,Tenshin Okakura



fig.3.21 Image of Tea Equipments



fig.3.22 Image of Tea Room

The tea room (the Sukiya数奇屋) does not pretend to be more than mere cottage. —a straw hut, a call it.—The original ideographs for Sukiya mean the Adobe of . —the term Sukiya may signify the Adobe of Vacancy or the Adobe of Unsymmetrical. — in as much as devoid of ornamentation except for what may be placed in it to satisfy some aesthetic need of the moment. It is and Adobe of in as much as it is consecrated to the worship of the Imperfect, purposely leaving some imagination to complete.[2]

2. Quotation : From “The Book of Tea” ,1994 ,Tenshin Okakura

TEA HOUSE
PRINCIPLE OF WABI - SABI

The two dominant principles of Chinese and Japanese art and culture are wabi and sabi. Wabi refers to a philosophical construct, a sense of space, direction, or path, while sabi is an aesthetic construct rooted in a given object and its features, plus the occupation of time, chronology, and objectivity. The term wabi sabi is derived from two characters shared by Japanese and Chinese. Originally, Wabi 侘 means 'despondence', and sabi 寂 means 'loneliness' or 'solitude'. These are words for feelings, not for physical appearance of objects.

The term wabi-sabi suggests such qualities as impermanence, humility, asymmetry, and imperfection. These underlying principles are diametrically opposed to those of their Western counterparts, whose values are rooted in the Hellenic worldview that values permanence, grandeur, symmetry, and perfection. ...

While sabi works are the objectification of wabi in space, here space refers to proportion and perspective. Nothing is wasted yet there is ample space around the object, conveying a holistic philosophy wherein all elements intertwine and are essential to the whole. Scale becomes an economy of space (the tea hut, bonsai), but empty space conveys the nature of the universe (the bowl or cup, archery, the Zen garden).

Article : Wabi and Sabi: The Aesthetics of Solitude
from <http://www.hermitary.com/solitude/aesthetics.html>



fig.3.23 Japanese Calligraphy of 'Wabi-Sabi'

Born of the tea ceremony, wabi is an aesthetic of finding richness and serenity in simplicity. This was epitomized by the single wild flower and everyday plainness which decorated the tea house of tea masters. Sabi was a term for the beauty of haiku and it speaks of a quiet grandeur enjoyed in solitude. Both wabi and sabi are closely linked to the Zen striving for enlightenment through nothingness.[1]

'The Japanese view of life embraced a simple aesthetic that grew stronger as inessentials were eliminated and trimmed away.' Tadao Ando

1. From the blog <http://blog.japannium.com/aesthetic/wabi-sabi-kanji.html>

RITUAL SPACE IN JAPANESE CULTURE
TEA HOUSE AND GARDEN

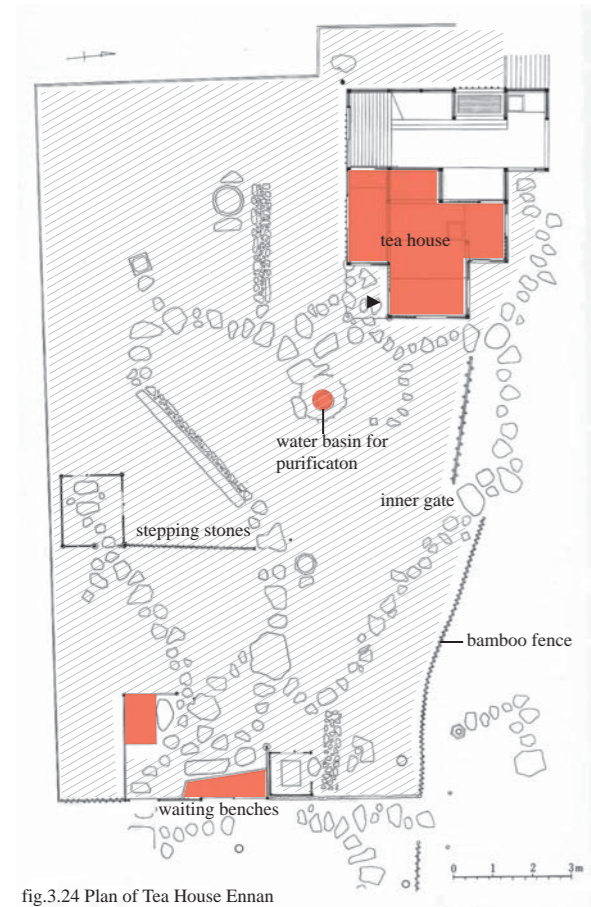


fig.3.24 Plan of Tea House Ennan

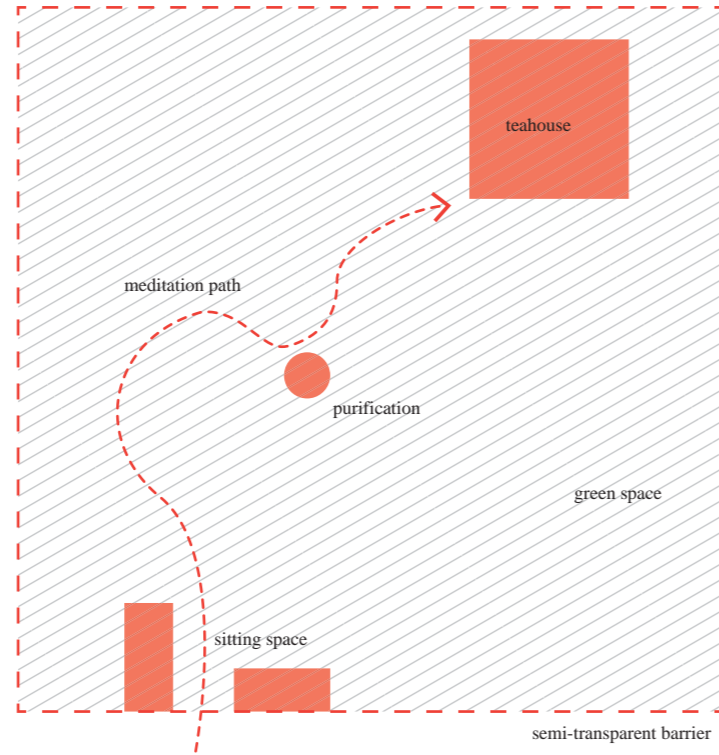


fig.3.25 Diagram of Tea House and Tea Garden



fig.3.26



fig.3.27



fig.3.28



fig.3.29

fig.3.26 Image of Water Basin in Tea Garden

fig.3.27 Image of Tea house Ennan

fig.3.28 Image of Bamboo Gate in Tea Garden

fig.3.29 Image of Waiting Benches in Tea Garden

RITUAL SPACE IN JAPANESE CULTURE
 SIZE OF A TEA HOUSE

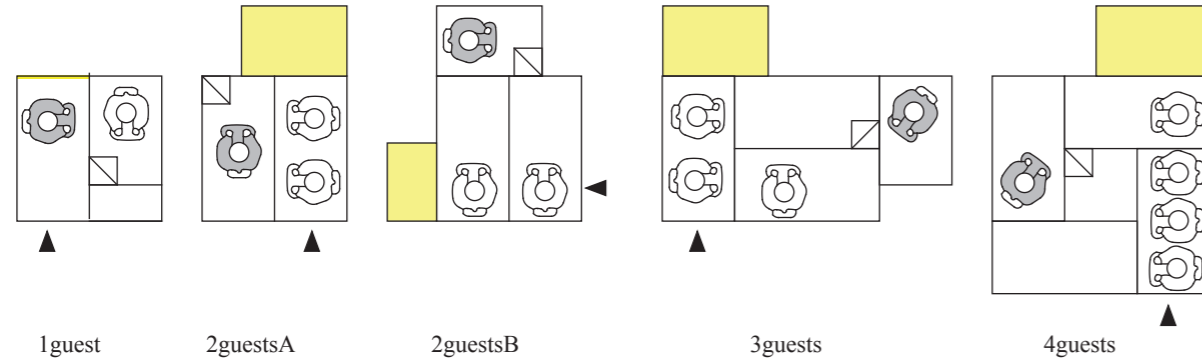


fig.3.30 Diagram of Different Sizes of Tea Houses

Size of a tea house differs according to how many guests the host is intending to have .
 As seen in the figure above , all tea houses are composed of 4 important elements ;

- 1.Guest seat
- 2.Host seat
- 3.Stove
- 4.The alcove (it is considered to be sacred space where the host places a hanging scroll and a flower).

In our restaurant pavillion design we used different sizes of eating spaces by taking reference the tea house size and the number of guests who are being hosted in the tea house .

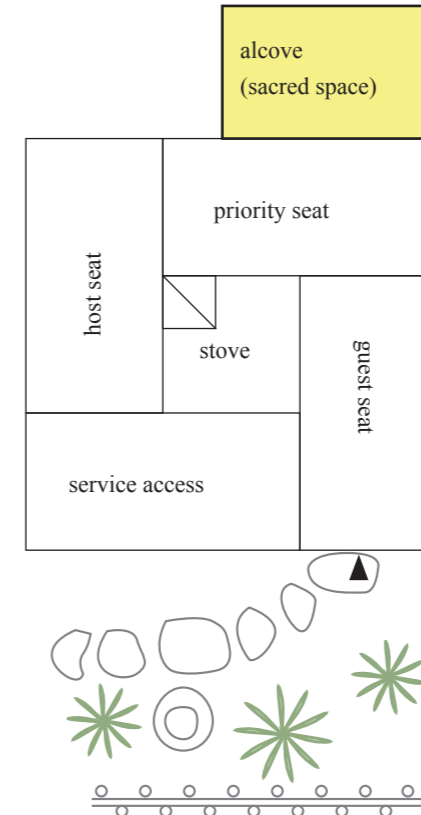


fig .3.31 Diagram of Functions Related to Tatami Mats

The figure on the left is considered to be the most standard shape of a tea house . It's composed of alcove , priority , seat , guest seat , host seat , stove and service access. Each tatami has its own role ; the guest and the hosts should act according to these boundaries.

Entrance to the tea house may come through an exceptionally low door ,deliberately designed so that one has to bow to get in. Shoes are left outside ; participants sit on thick tatami mat and drink from exquisitely shaped vessels obviously crafted by hand.

As the tea master serves the guests , there is time to contemplate the subtle juxtapositions of texture , material and surface that compromises the room's interior, which are intended to promote reflection that will achieve inward simplicity and tranquility of mind.[1]

1.Quotation: From the book 'World History of Architecture'' by Marian Moffett , Michael W.Fazio , Lawrence Wodehouse

RITUAL SPACE IN JAPANESE CULTURE _ SEQUENCES OF BEHAVIOURS IN TEA CEREMONY

phase 1
purify

phase 2
entree

phase 3
appreciating

● the position of the guest

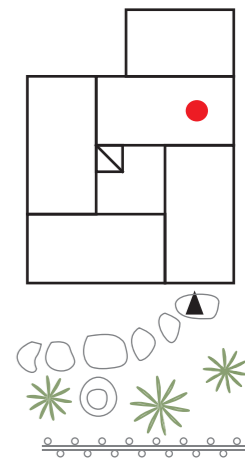
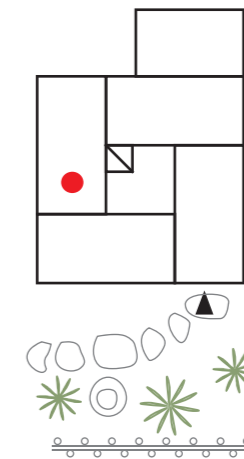
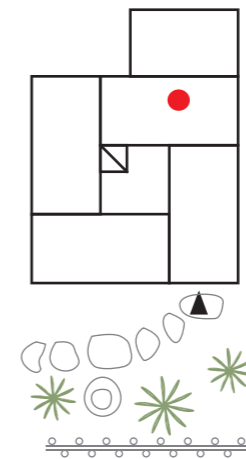
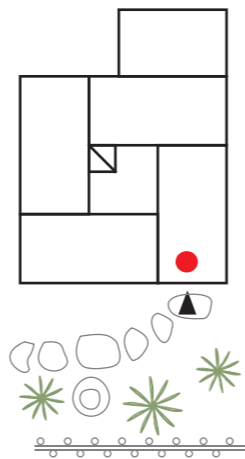
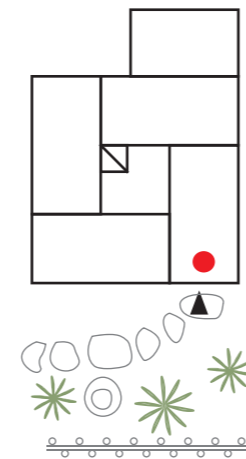
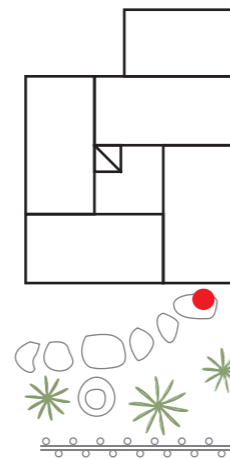
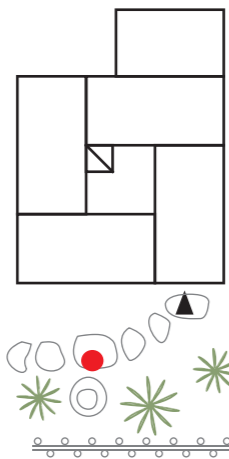
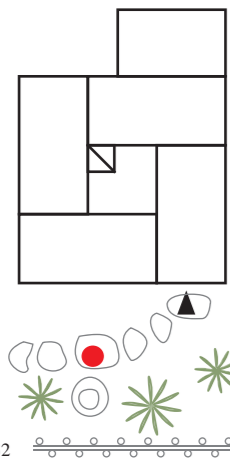
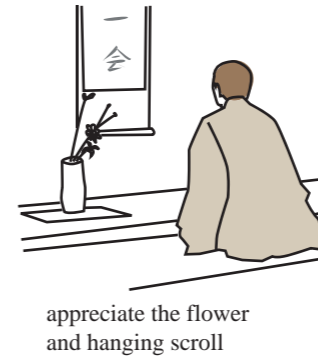
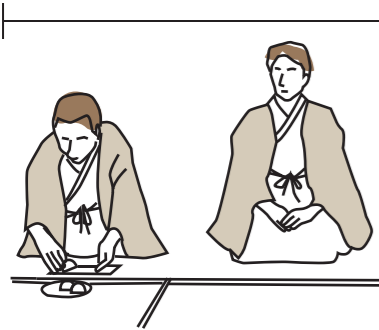


fig .3.32

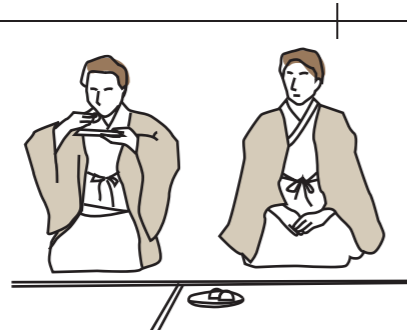
RITUAL SPACE IN JAPANESE CULTURE _ SEQUENCES OF BEHAVIOURS IN TEA CEREMONY

phase 4

accepting sweets

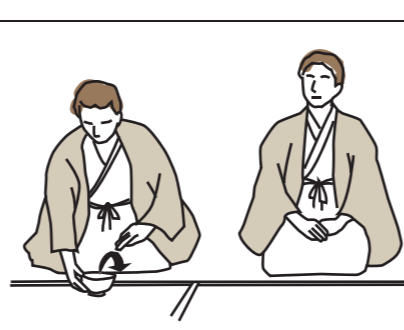


take the sweets crossing over the edge of tatami

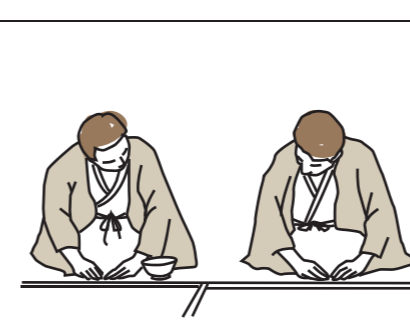


eat the sweets before the tea is served

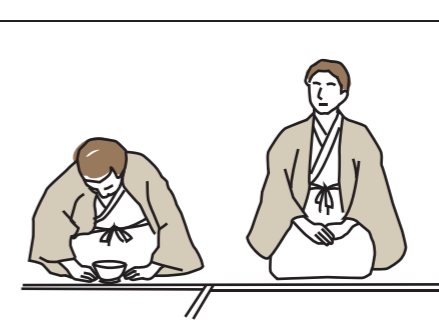
phase 5
accepting tea



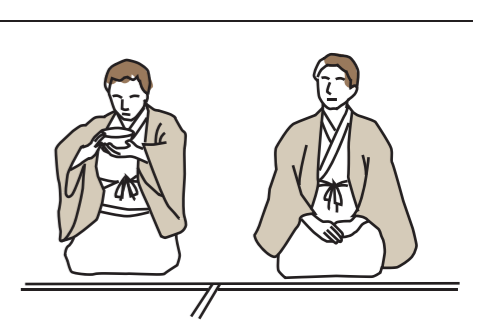
take the tea crossing over the edge of tatami



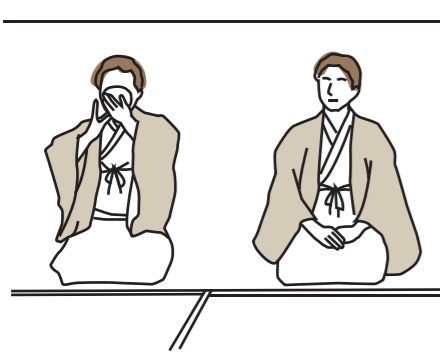
bow to the other guests
“Excuse me.” “After you.”



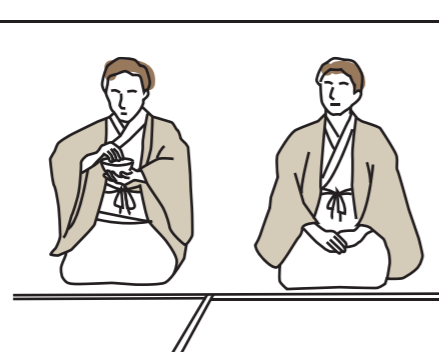
bow to the host.
“I accept your artistry.”



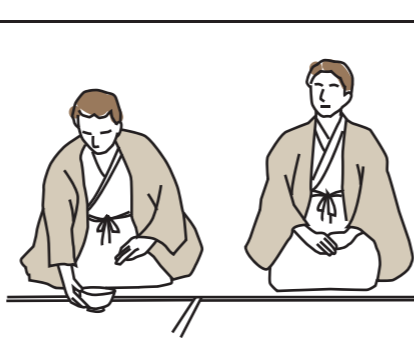
Turn the cup to the side.
(avoiding the front)



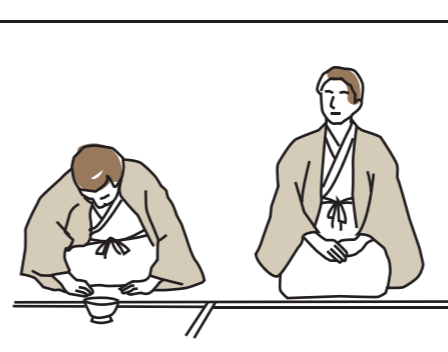
drink the tea slowly with gratitude



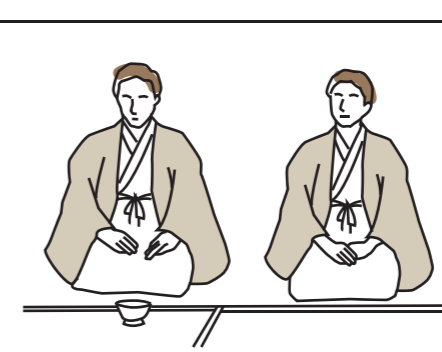
wipe the cup



turn the cup back to the front and return the cup over the edge of tatami



appreciate the tea cup



return to original position

fig.3.33 Diagram of Sequences of Behaviours in Tea House



fig.3.34 Image of Traditional Japanese Kitchen



fig.3.35 Image of Kamado (Stove)

Daidokoro (台所; lit. "kitchen") is the place where food is prepared in a Japanese house. Until the Meiji era, a kitchen was also called kamado (かまど; lit. stove) and there are many sayings in the Japanese language that involve kamado as it was considered the symbol of a house. The term could even be used to mean "family" or "household".

In the Kamakura period (1185–1333), the kitchen was gradually absorbed into the house. Until then, a kitchen was built as a separate house whenever possible to avoid smells and smoke, and to prevent possible kitchen fires from spreading to the primary residence.. Kamakura era kitchens did not include essential kitchen furnishings, such as a sink or even a well in a kitchen.

The earliest dwellings in Japan used an open fire hearth for cooking. The stoves from Kofun Period, called kamado were typically made of clay and sand. Also the kitchen floor material was earth-floored (doma 土間) in order to protect the whole building from the fire.

Fire was a part of a kitchen from the start but water was late in becoming a part of a Japanese kitchen. In the Yayoi period (300 B.C. to A.D. 250), the cultivation of rice became widespread, and villages would be constructed near a marsh and a lowland. The water was muddy and Asaido (浅井戸 lit.) shallow wells, were constructed.[1]

The idea of being separated from the main living unit has been taken as a reference for the design of our kitchen pavillion. We designed an open kitchen by placing the stoves near the common pathway in order to attract visitors by the nice smell of boiling rice. As a flooring material we used straw-clay method which is a fire - proof material.

1. Article: 'Japanese Kitchen' from http://en.wikipedia.org/wiki/Japanese_kitchen and from JAANUS official website

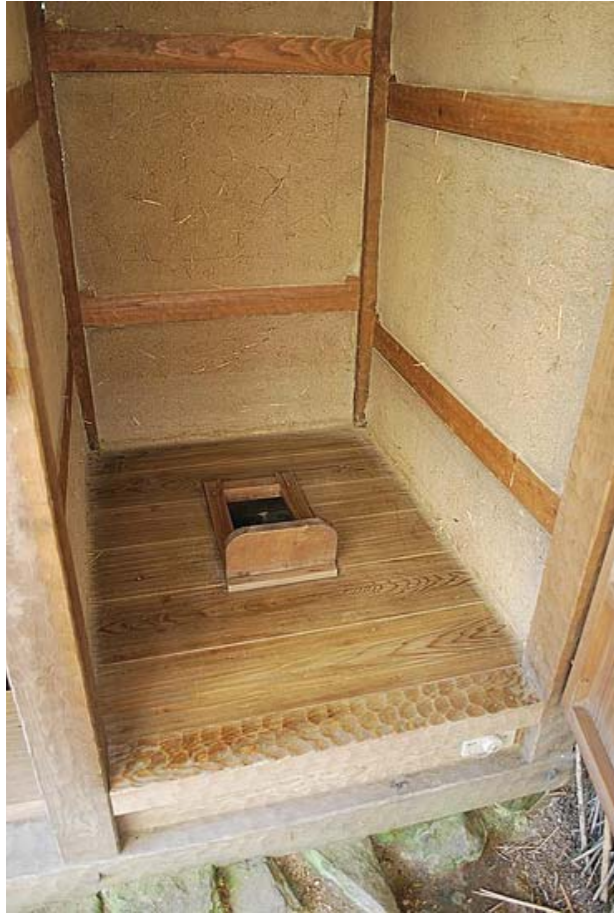


fig.3.36 Image of Japanese Traditional Toilet

The Japanese toilet truly is a place of spiritual repose. It always stands apart from the main building, at the end of a corridor, in a grove fragrant with leaves and moss. No words can describe that sensation.

As one sits in the dim light, basking in the faint glow reflected from the shoji, lost in meditation or gazing out at the garden. The novelist Natsume Soseki counted his morning trips to the toilet a great pleasure, /A physiological delight" he called it. And surely there could be no better place to savor this pleasure than a Japanese toilet where, surrounded by tranquil walls and finely grained wood, one looks out upon blue skies and green leaves.

As I have said there are certain prerequisites: a degree of dimness, absolute cleanliness, and quiet so complete one can hear the hum of a mosquito. I love to listen from such a toilet to the sound of softly falling rain, especially if it is a toilet of the Kantc region, with its long, narrow windows at floor level; there one can listen with such a sense of intimacy to the raindrops falling from the eaves and the trees, seeping into the earth as they wash over the base of a stone lantern and freshen the moss about the stepping stones. And the toilet is the perfect place to listen to the chirping of insects or the song of the birds, to view the moon, or to enjoy any of those poignant moments that mark the change of the seasons. Here, I suspect, is where haiku poets over the ages have come by a great many of their ideas. Indeed one could with some justice claim that of all the elements of Japanese architecture, the toilet is the most aesthetic.

Anyone with a taste for traditional architecture must agree that the Japanese toilet is perfection[1].

The concept of being separate unit from the main living building has been applied for the design of toilet pavillion .We wanted to create a spiritual space for visitors and we harmonized the natural beauty with simple architecture ,we created inner garden inside the toilet pavillion and we enclosed the toilet by surrounding it with tranquil walls.We opened narrow openings in the lower part of the toilet in order to provide for our visiors the pleasure of listening the sound of raindrops and smelling the nice odours of nature.

1. Quotation: From 'In Praise of Shadows' by Tanizaki Jun'ichiro ,1993

KITCHEN AND TOILET IN TRADITIONAL HOUSING

Figures on the left are the typical plans of traditional housings in Japan. Parts marked in orange shows the location of service functions, the kitchen and the toilet.

Service functions in traditional housings are clearly differentiated from the main ones. Usually they have a service corridor on the side of the main building. They are differentiated by the floor finishing typically earthen floor and at the same height with the ground, where main functions of the house is usually elevated approximately forty five centimeter from the ground. It is designed so that people can have a direct access to service functions from outside.

Kitchen and toilets are located alongside the corridor. You can see clearly the separation with the main function by the level difference. Alternatively some toilets can be located at the same level as the main function of the building but they are still located on the axis of the service path and is often detached from the main building.

The composition of the house works very well also for preventing the smell and dirt to enter the main function. Kitchens usually have relatively high ceilings compared to the other functions in the house and have an individual ventilating system to let the smoke escape without entering to the main building. As the floors of the main building are located higher than those of service functions, it can shut out the dirt of the ground to enter. For the parts located at the ground level, they can easily sweep out the dirt as they often do.

For the design of kitchen and toilet we applied the same idea by locating them apart from the main function of restaurant. Kitchen and toilet also have direct access from the common passage where the eating spaces have indirect approach from the path.

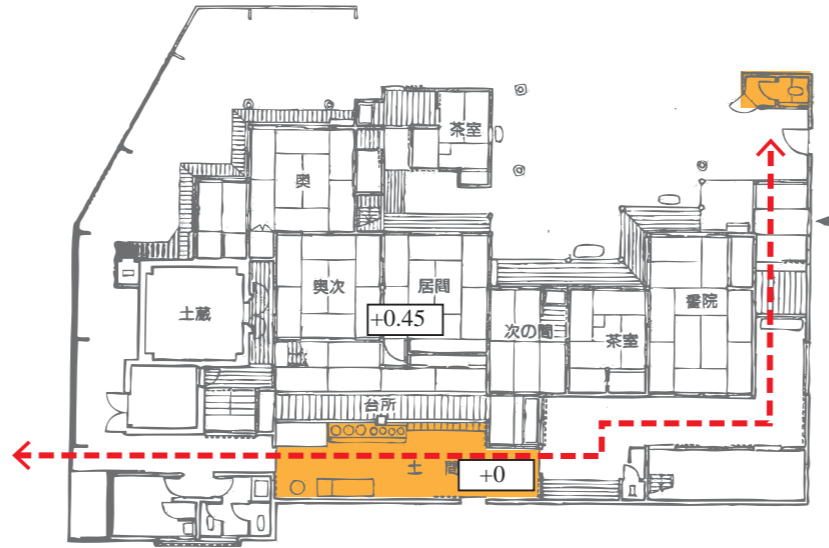


fig.3.37 Plan of House of Kourin Ogata

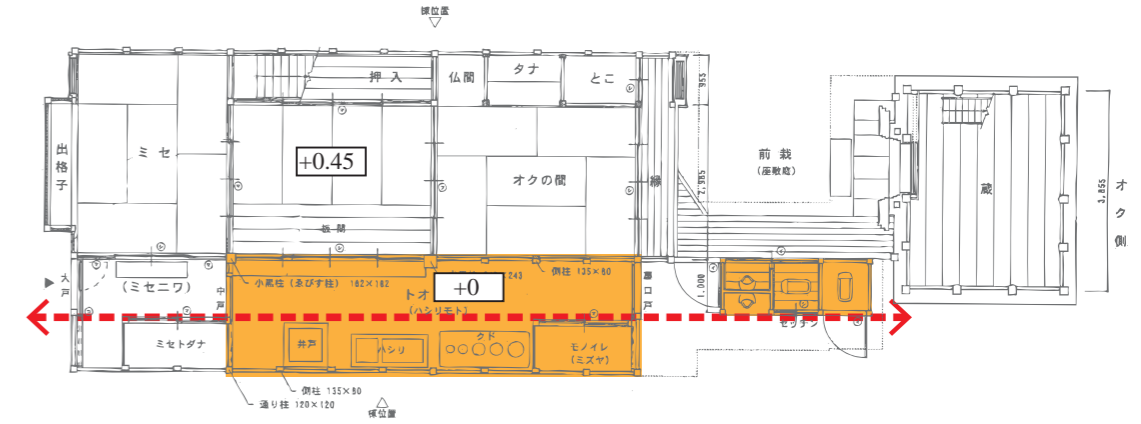


fig.3.38 Typical Plan of Traditional Town House in Kyoto

SACRED SPACE IN CHINESE CULTURE
OFFERING TABLE IN TEMPLE OF ANCESTORS



fig 3.39 Ancestral Hall in the Ancient Village of Langzi



fig.3.40 Image of Temple of Ancestors with Offering Table and Incense

The idea of appreciation of rice is delivered to our plot visitors through pavillion designs. The other type of pavillion that we designed is taking the Chinese offering table in temple of ancestors as a reference for conceptual and spatial composition of the pavillion.

The Chinese believed that the life of human beings comes from the combination of two parts, one called hun , spirit from Heaven , and the other called po , soul from the earth. When a person was born two parts were combined and life began. When a person dies they depart , hun goes to Heaven and po goes to the earth. To start the worship of ancestors , the descendant should first revoke separately these two parts of the spirit . The soul of the ancestors would be recalled back from their spiritual world and would return to their home , residing in their tablets and receiving the sacrificies from their descendants. Sacrifice to ancestors was a great offering . According to the provisions in the Book of Rituals ,the main offering in the ceremony consisted of three domestic animals : a bull , a sheep and a pig. Among them cooked millet and rice was the major offering in the southern part .[1]

To emphasize the importance of rice in the second pavillion (thanking 2) we put an offering table in the very end of our pavillion so that people can offer rice , the way to approach to the offering table has been underlined by the sense of incense smell located outside the pavillion and the randomly distributed columns inside the pavillion which are used as light sources . The feeling of visitors are controlled by day and night view of the interior columns .

1. Quotation: From the book ' Themes in Religious Studies , WORSHIP ' , edited by Jean Holm with John Bowker

SACRED SPACE IN CHINESE CULTURE
OFFERING TABLE IN TEMPLE OF ANCESTORS _ SPATIAL ORGANIZATION

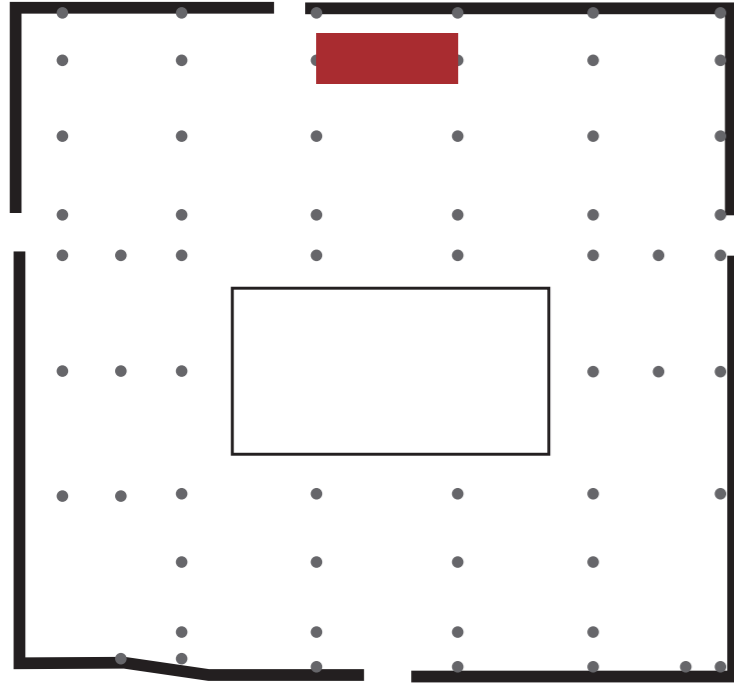


fig.3.41 Abstract Plan of Temple of Ancestors

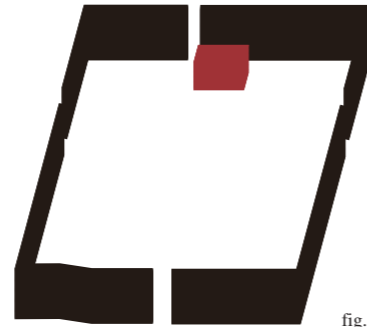


fig.3.42 Isometric View of Temple of Ancestors

● column ■ offering table

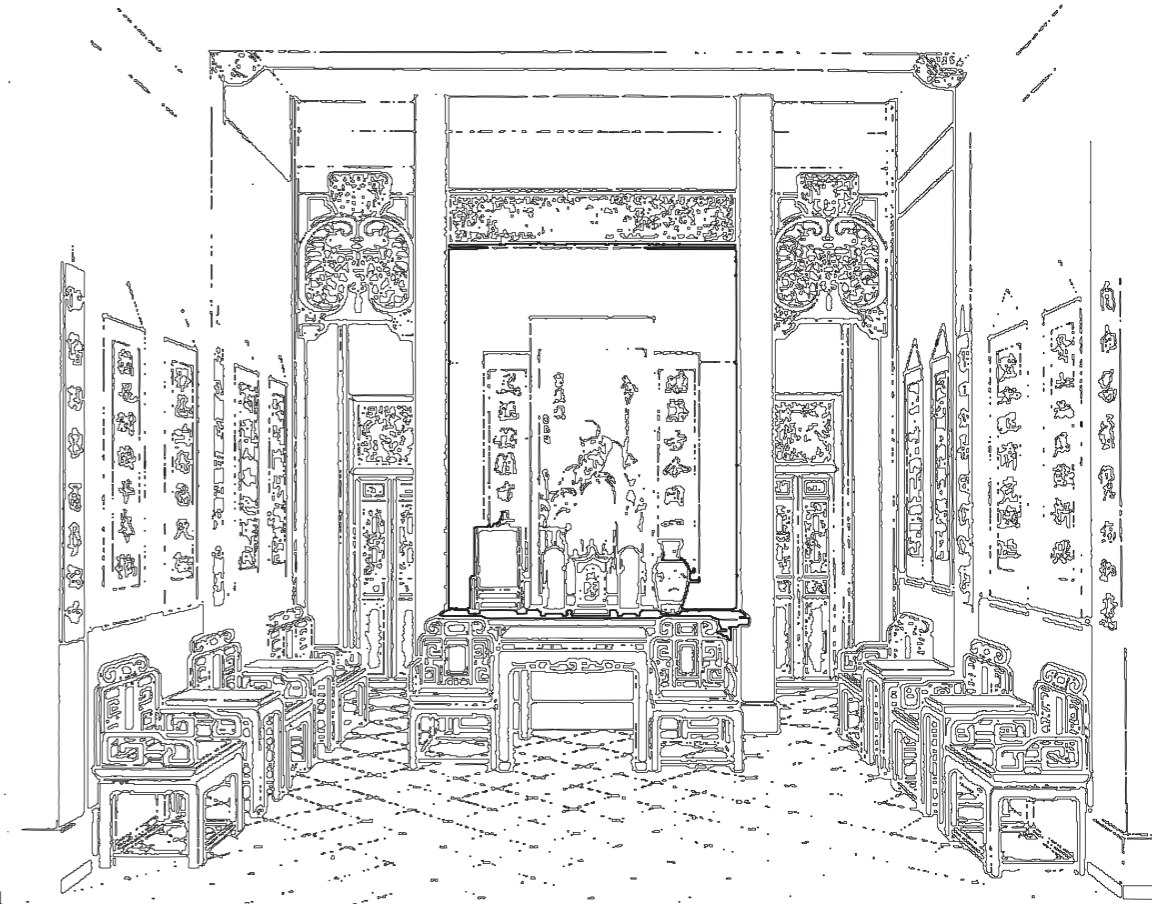
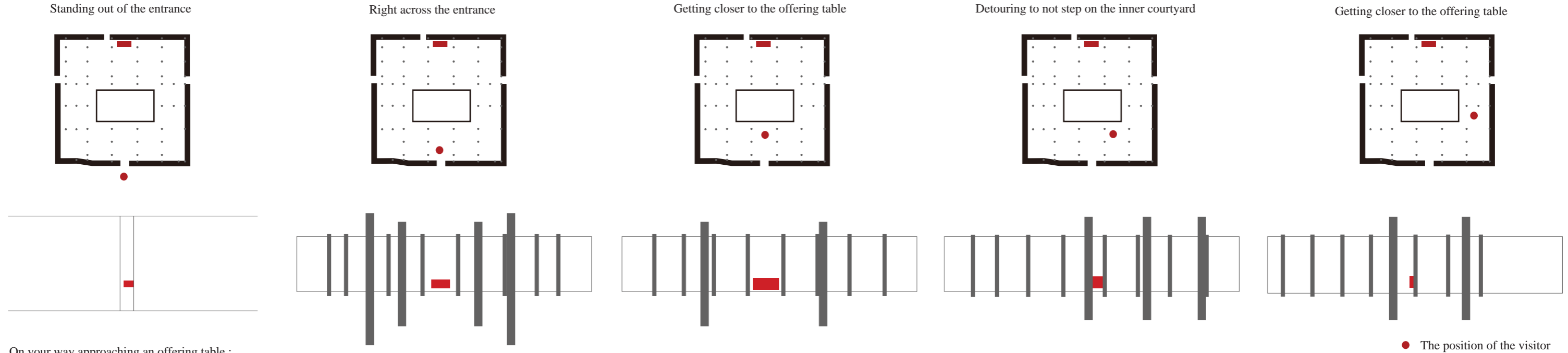


fig.3.43 Image of Ancestral Hall

SACRED SPACE IN CHINESE CULTURE
 PERCEPTION OF OFFERING TABLE IN TEMPLE OF ANCESTORS _ SEQUENCES OF BEHAVIOURS



The location of the columns let the visitors to focus on the offering table when they are trying approach it and allow them sense the space with the intervals of columns.

Usually, the offering table is located in the temple for ancestors. Chinese people show their respect through such architectural solutions by putting the offering table at the farthest end to the entrance which forces people to reach it with greatest effort, and the way how those columns stand makes this space sacred.

fig.3.44 Diagram of Perception of Offering Table Through Columns in Temple of Ancestors

CHAPTER FOUR . STUDIES OF VIEWS OF RITUAL SPACES AND BEHAVIOURS OF FAR EASTERN CULTURE

STUDY OF VIEWS OF LANDSCAPE FROM CONTEMPORARY MOVIES

We studied the contemporary movie scenes to understand the relation between human and nature and the importance of appreciating the natural elements for Far Eastern people in a better way .

Nature is a meditation space for Japanese people .They can appreciate the beauty of nature through its calmness and tranquility . So our approach was to represent our design concept by collecting the contemporary movie snapshots and use them as references for our master plan and pavillion design for Expo 2015 Milano.



fig.4.1 Movie image from ' The Last Samurai', Edward Zwick, 2003



fig.4.2 Stepping Stones and Bridges in Japanese Garden
Movie image from 'The Last Samurai', Edward Zwick, 2003



fig.4.3 Stepping Stones, Lanterns and Cherry Blossoms in Japanese Garden
Movie image from 'The Last Samurai', Edward Zwick, 2003

Quote :

Beauty

In order to comprehend the beauty of a Japanese garden,
it is necessary to understand - or at least to learn to
understand - the beauty of stone.

Lafcadio Hearn

Movie Image :

Stone Bridges in Japanese Garden
image movie from ' Memories of a Geisha'
Rob Marshall , 2005



fig.4.4 Stone Bridges in Japanese Garden
Movie image from ' Memories of a Geisha', Rob Marshall , 2005,

STUDY OF VIEWS OF LANDSCAPE FROM PAINTINGS AND CONTEMPORARY MOVIES

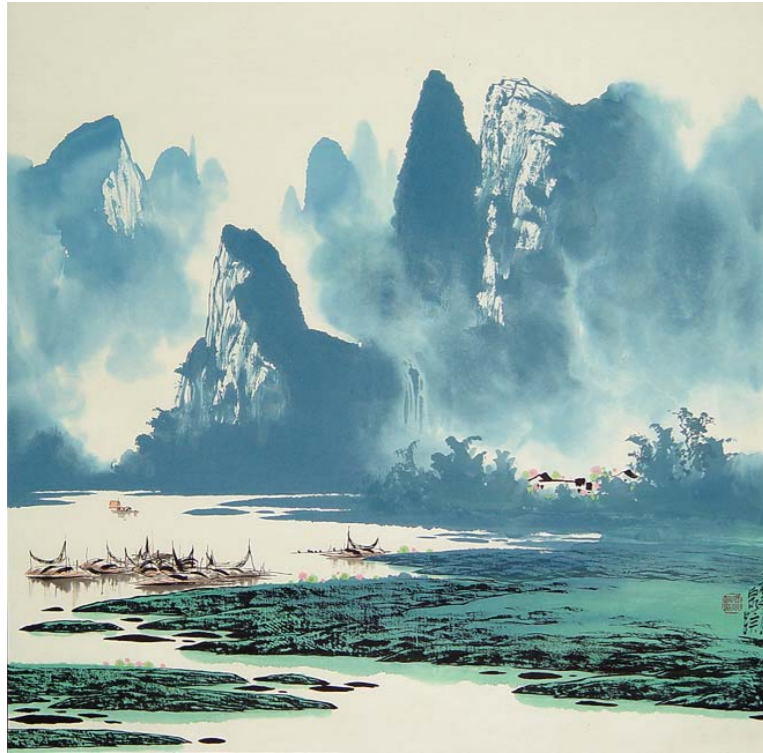


fig.4.5 Painting of the Fog in Chinese Landscape
Title: Tall Mountain River , Chen Chun Zhong , Unknown Date

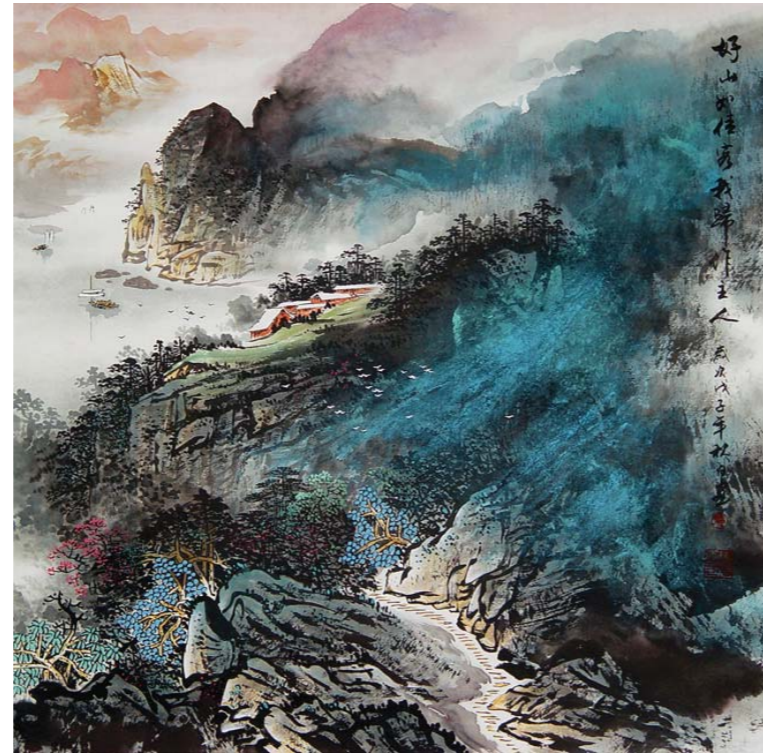


fig.4.6 Painting of the Fog in Chinese Landscape
Title : Magnificent Mountains, Chen Chun Zhong , Unknown Date



fig.4.7 Fog
Movie image from ' Red Cliff' , John Woo , 2008

STUDY OF RITUAL OF BEHAVIOURS RELATED TO FAR EASTERN CULTURE FROM CONTEMPORARY MOVIES

For Far Eastern people , eating and drinking are ritual of behaviours , and have deeper meaning than they have for Western people.

When Japanese people are eating, it's important to say "itadaki-masu" before a meal and to say "gochisou-sama" after a meal. These phrases indicate the beginning and the ending of a meal and express appreciations for the meal as well. [1]

Japanese and Chinese people use chopsticks while they are eating rice , they hold the rice bowl in one hand and the chopsticks in the other hand. They eat each grain of rice slowly with chopsticks and appreciate each grain by finishing the whole rice in the bowl .To eat a bowl of rice or soup, they lift the bowl with one hand. It's proper to sip Japanese soup out of the bowl directly.

Drinking tea and preparation of the tea requires sequences of behaviours which lead to the process of tea ceremony .*The Japanese tea ceremony, also called the Way of Tea, is a Japanese cultural activity involving the ceremonial preparation and presentation of matcha, powdered green tea. Tea ceremonies and rituals contain "artificiality, abstractness, symbolism and formalism" to one degree or another [2] . A Japanese tea ceremony is a celebration of the senses. It provides a brief respite from the stresses of contemporary life because its focus is all on beauty found within nature, the seasons and of the space that the host holds the ceremony in.*

- 1.Article:'Table Manners' from <http://japanesefood.about.com/od/tablemanners/ht/howtoeatjfood.htm>
- 2.Article:'Tea Ceremony' from http://en.wikipedia.org/wiki/Tea_ceremony



fig.4.8 Slow Eating Manners
Movie image from ' Memories of a Geisha', Rob Marshall, 2005



fig.4.9 Slow Eating Manners
Movie image from 'The Last Samurai', Edward Zwick , 2003



fig.4.10 Tea Ceremony
Movie image from 'The Last Samurai', Edward Zwick, 2003



fig.4.11 Tea Ceremony
Movie image from 'Memoirs of a Geisha', Rob Marshall, 2005



fig.4.12 Tea Ceremony
Movie image from 'Memoirs of a Geisha', Rob Marshall , 2005



fig.4.13 Tea Ceremony
Movie image from ' Memoirs of a Geisha' , Rob Marshall , 2005

STUDY OF VIEWS OF SACRED SPACES IN FAR EASTERN
CULTURE FROM CONTEMPORARY MOVIES

We studied the contemporary movie scenes to understand the features of conceptual and spatial composition of ritual spaces related to Far Eastern architecture . The ritual spaces which we are inspired by are shrines , tea houses and offering spaces.

The delicateness and beauty of materials used in the spatial organization of ritual spaces are deeply searched and used as references for our three types of pavillion designs. Light , materials and and the composition of natural elements are the physical factors that effect the feelings of vistors.For that reason we mainly focused on the physical elements to deliver the feeling of ritual space through architecture.

In Expo 2015 , visitors will experience the beauty of architecture through the re-interpretation of ritual spaces of Far Eastern culture. In our project Far East identity is represented by landscape and architecture .



fig.4.14 Shrine and bells
Movie image from 'Memoirs of a Geisha', Rob Marshall, 2005



fig.4.15 Entrance gate 'Torii' to shrine
Movie image from 'Memories of a Geisha', Rob Marshall, 2005



fig.4.16 Worshipping space in Shinto shrine
Movie image from 'Memories of a Geisha', Rob Marshall, 2005



fig.4.17 Painting ' The historian Sima Guang in his home-made pavilion' , by Qui Ying, c.1510-51

LANDSCAPE IN CHINESE PAINTING

The Chinese landscape painting is a product of imagination. It is a picture of a peaceful place where one can enjoy tranquility and be close to nature. It doesn't show a specific mountain, valley, house or tree.

Since the Tang Dynasty, pine tree, bamboo, plum blossom and orchid have been favorite subjects for Chinese artists and scholars. This is because people can gain a great deal of enlightenment from them. The characters of bamboo are straight which means upright. Pine tree, plum blossom and orchid symbolize stainless, tough and indomitable. They are also considered "four gentlemen of moral integrity". These are the qualities that Chinese intellectuals advocated.

Although water and mountains are essential elements of Chinese landscape, without a ting, says one authority, it can hardly be called a garden. [1]

The difference between western painting and Chinese painting is:

Firstly, in Chinese painting nature dominates human in structure, and on the contrary, in western painting, the man-made environment is frequently shown.

Secondly, the viewer has to use imagination in the appreciation of Chinese painting while the artist provides a complete picture in western painting.

Article : 'Traditional Chinese Landscape Painting' from China Unique Tour Website

1. Quotation: From the book 'The Chinese Garden', Maggie Keswick, Charles Jencks, Alison Hardie



fig.4.18 Print of Lifestyle of Workers in the Rice Fields
 'Peasants and Travelers in an Autumn Landscape', Katsushika Hokusai, 1760–1849, (Edo Period)

LANDSCAPE IN JAPANESE PAINTINGS

The Japanese place great emphasis on observing, appreciating, and interacting with the natural world and pay particular attention to the distinct four seasons that occur throughout much of Japan. Traditional Japanese architecture which emphasizes visual and physical access to the outdoors illustrates this deep interest in nature.

Moreover, the time of year is often echoed in the art displayed, such as hanging scroll paintings depicting plants and flowers of the seasons, arrangements of seasonal flowers, the use of specially designed utensils, and foods associated with the time of year. This is true as well in Japanese visual art, which maintains a long tradition of depicting the four seasons using motifs and symbols.

The Japanese rice village thinks in cycles. Since our own way of thinking is based on documented history and a linear process of change, we often have difficulty in grasping cyclic thought. For the Japanese it legitimates the here and now. In this sense the importance of a past event, of a beginning, is preserved in rites and festivals (matsuri). Otherwise it is the seasonal changes that predominate in the calendar of festivals, in which all ritual actions -always the same as in the past - are repeated again and again.

From this system a central principle emerges: in cyclic time every new beginning merges with the past beginning.

The then and the now are one, and always new.

Article: 'Arts of Japan, A Teacher's Guide', by project Director and Writer :Elizabeth Benskin
 Article: 'Japanese Rice Culture', 'The Misunderstood Philosophy of the Agrarian Past' by Nold Egenter

CHAPTER FIVE . DESIGN OF FAR EAST PAVILLION

CONCEPT OF THE MASTERPLAN_
APPRECIATION OF FOOD IN JAPANESE CULTURE

Meals in Japan traditionally begin with the phrase itadakimasu (いただきます。) It literally means, "I humbly receive". It is said to express gratitude for the life sacrificed and becomes our energy to survive, according to Buddhist belief.

Upon finishing a meal, Japanese also use the polite phrase Gochisousamadeshita (ごちそうさまでした。) Gochisousama is based also on the Buddhist belief where chisou (馳走) means running with efforts to bring food on the table. To join one's hands in the namasté gesture while saying these words is good manners.

Traditional Japanese eating manner shows gratitude towards life, divine, and hardwork by going through these rather slow processes each time they eat in order not to forget how fortunate we are to be able to receive a meal.

SCENE 1

いただきます。
“itadakimasu”

showing gratitude to the life taken and
thanking for becoming the energy for life



space and time for thanking

SCENE 2

(食事)
(receiving meal)

eating with gratitude, you should remain
silent and not play with food while eating



space and time for eating

SCENE 3

ごちそうさまでした。
“gochisousamadeshita”

thanking for the people who brought the
meal to the table (both farmers and cooks).



space and time for thanking

fig.5.1 Movie images from “Megane”, Naoko Oigami , 2007

We divided the 150 m length of the plot into three main parts relating them with the main concept of Japanese eating tradition 'thinking before eating , eating and thanking after eating' which is the abstract way to show the idea of appreciation of food .

In the first division of our plot we located the 'thinking 1' pavillion which is referring the idea of thanking before eating .In the thanking before eating manner Japanese thank mainly to the life(food) as it is a resource of energy for the body . In 'thinking 1' pavillion thanking relates more to the appreciation of the rice plant and cultivation process,for appreciating the rice cultivation we created an isolated rice cultivation part surrounded by stepping stones which do not let people to touch the rice but give chance to see them from a distance.

In the second part of the plot we have the ritual eating spaces and common spaces (restaurants ,kitchen and toilet) which are representing the eating manners of Far Eastern people . The table and sitting manners of Asian people differ quite a lot from Western people .All the manners of Asian people are applied to the spatial organization of the eating pavillion designs.

In the third part of the plot we located the 'thinking 2 ' pavillion which is referring the idea of thanking after eating .In the thanking 2 after eating manner Japanese thank to those who brought the food on the table , especially farmers and the cook. In 'thinking 2' pavillion thanking relates more to the interaction between human and rice that's why we used rice cultivation boxes in between the stepping stones in the third part of our master plan.

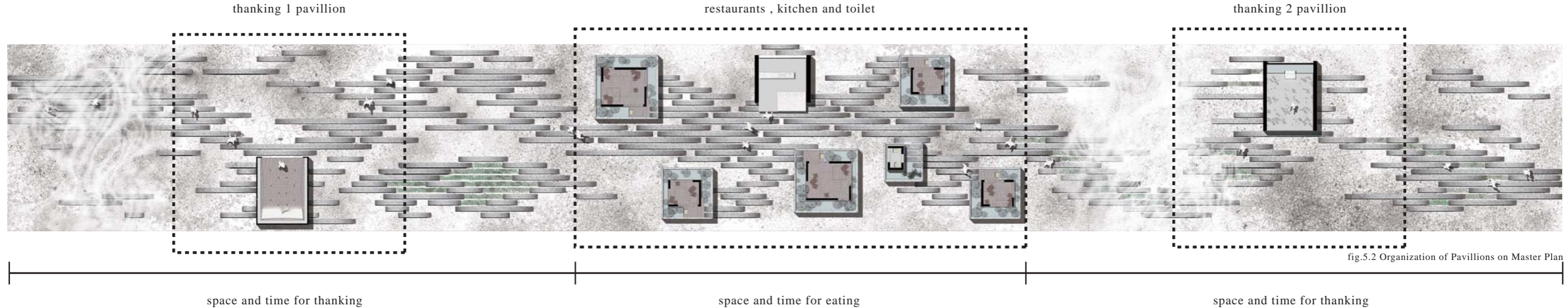


fig.5.2 Organization of Pavillions on Master Plan

SLOW MOVEMENT / STEPPING STONES

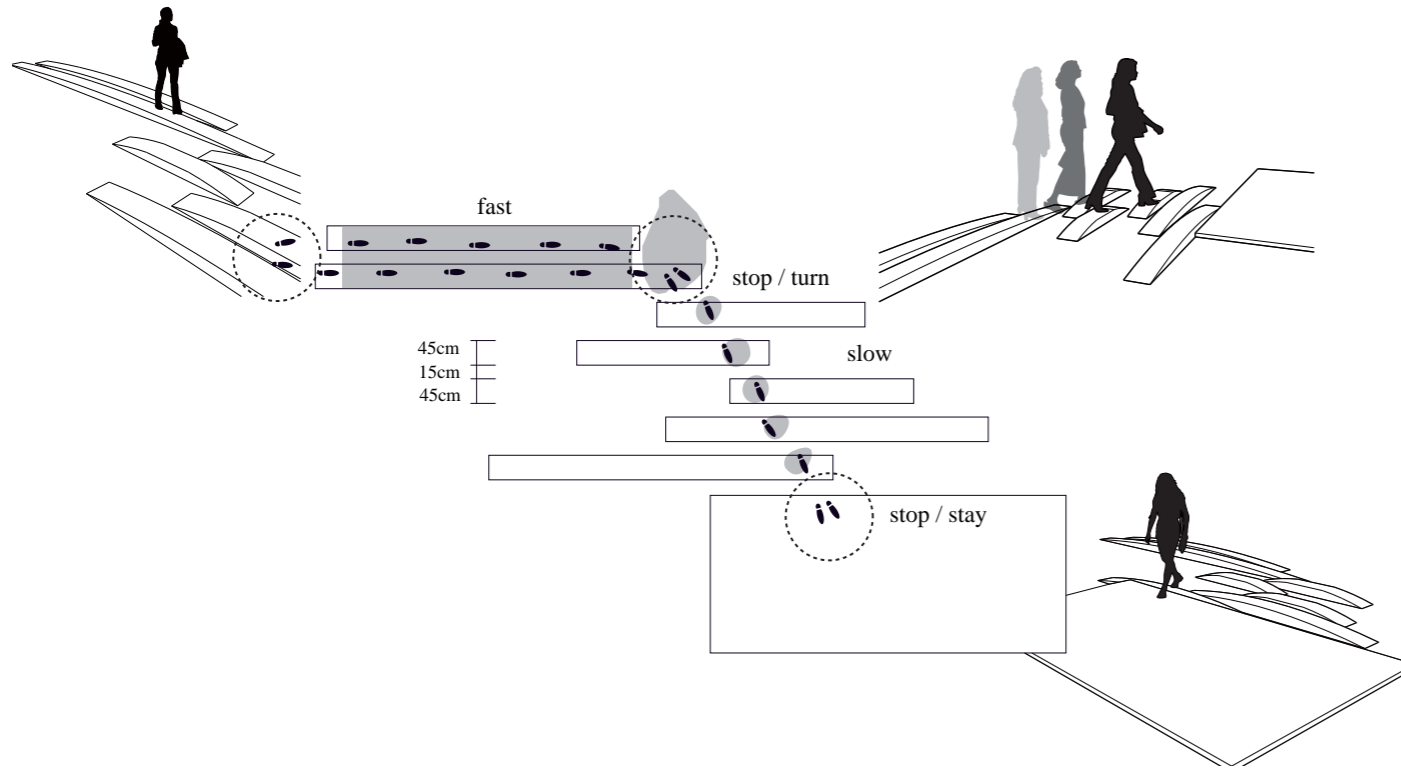


fig.5.4 Diagram of Speed Through Stepping Stones

In our master plan the common pathway is created by stepping stones.

The movement speed over the plot is controlled by location, distance, dimension and frequency of stone usage.

Movement direction is specified by different sizes of stones.

When the visitors are approaching the pavillion they need to slow down and they come to the entrance they need to stop.



fig.5.5 Master Plan, Partly

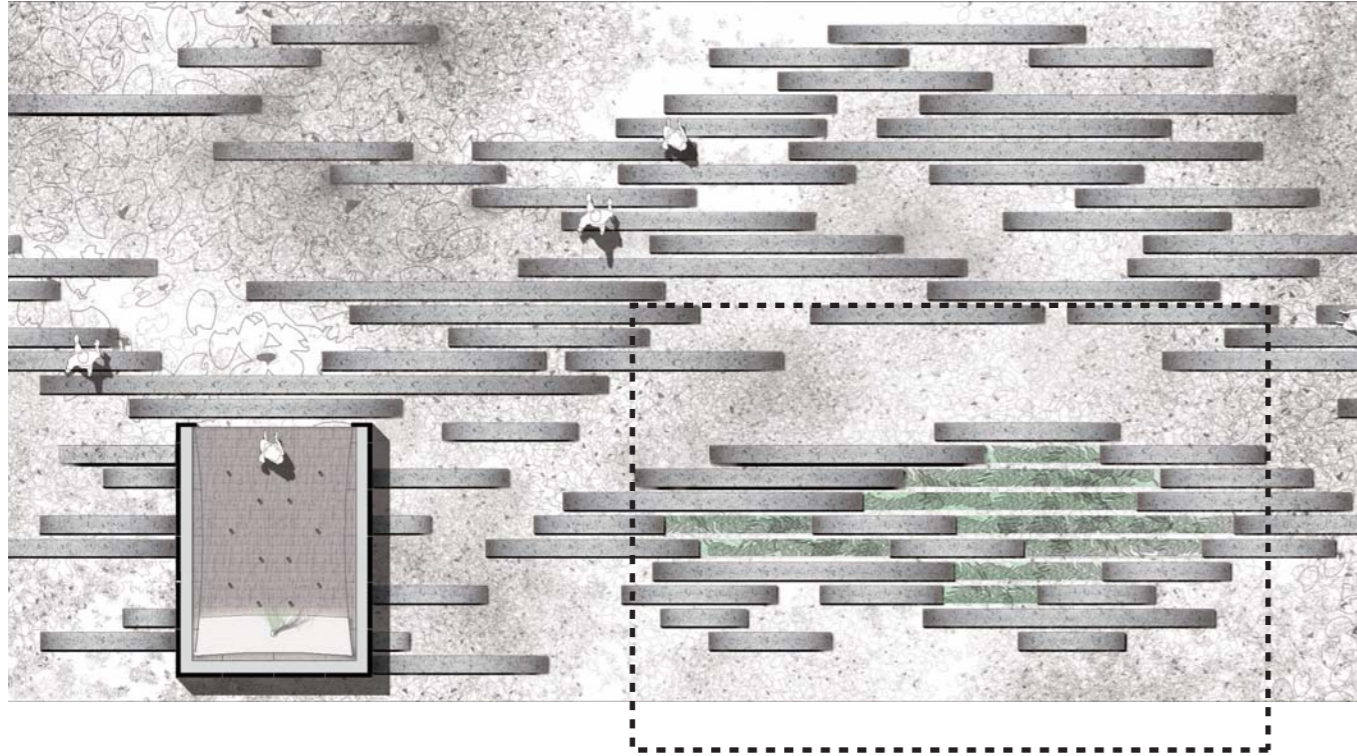


fig.5.6 Isolated Rice Cultivation Shown on Master Plan , Partly

In the first part of the plot, we used the concept of isolation of the rice cultivation in order to provide visitors to appreciate the process of cultivation ,beauty of rice plant in different seasons .

We put certain amount of rice cultivation boxes in between the stepping stones.

Appreciation of nature in Far Eastern culture requires distance and time . That's why the visitors can appreciate the cultivation by seeing it from a distance but they can not touch it because the location of the stepping stones act as obstacles for visitors .



fig.5.7 Diagram of Isolated Nature

SUB-CONCEPT : HUMAN INTERACTION WITH NATURE

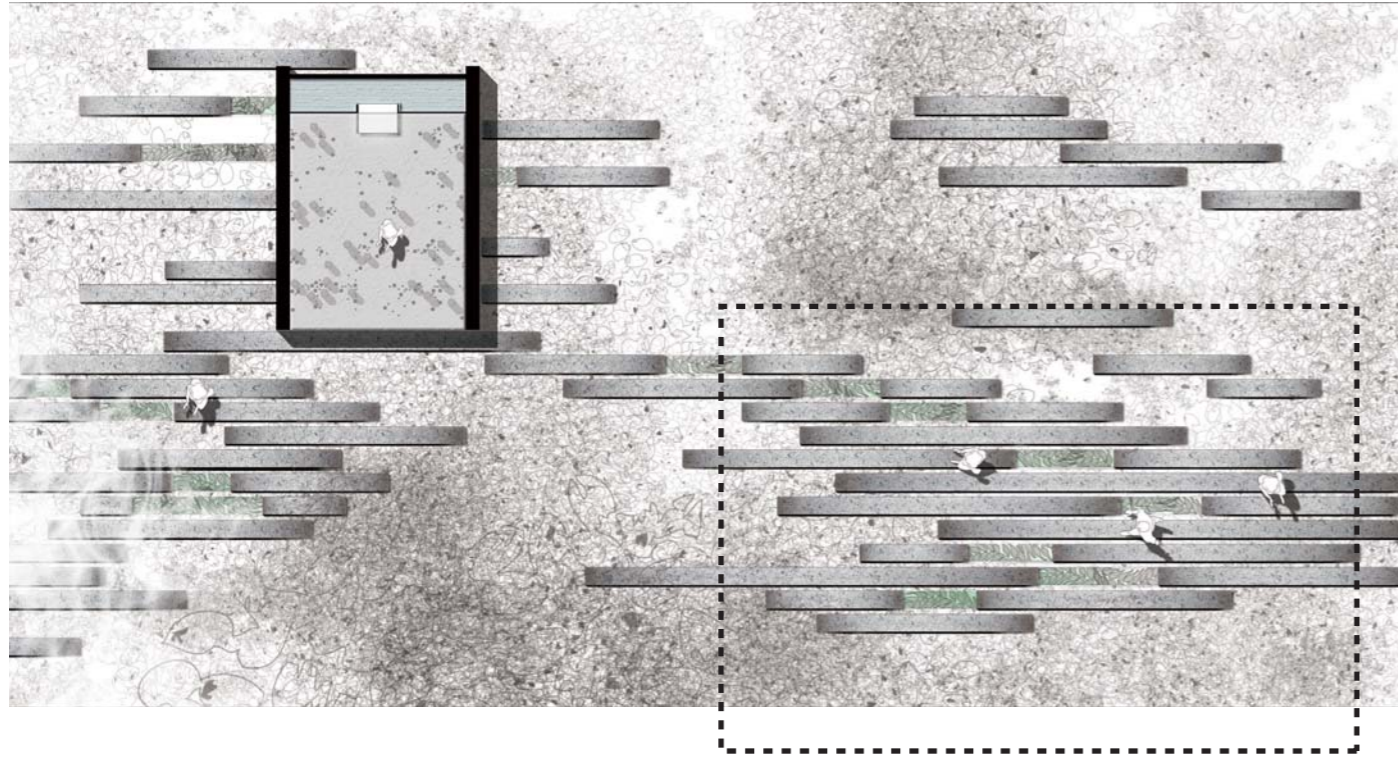


fig.5.8 Interaction Between Human and Rice Shown on Master Plan , Partly

In the third part of the plot, we used the concept of interaction between human and rice in order to provide visitors to appreciate the process of cultivation ,beauty of rice plant in different seasons .

We spread rice boxes in between stepping stones , so we intended the visitors to touch , to smell the rice plant in different seasons. Rice is being appreciated through the five senses of human by interaction concept.

In different seasons rice has different height and it is in different phase during the four seasons .Third part of our plot will be seen in four different colours during every four seasons.

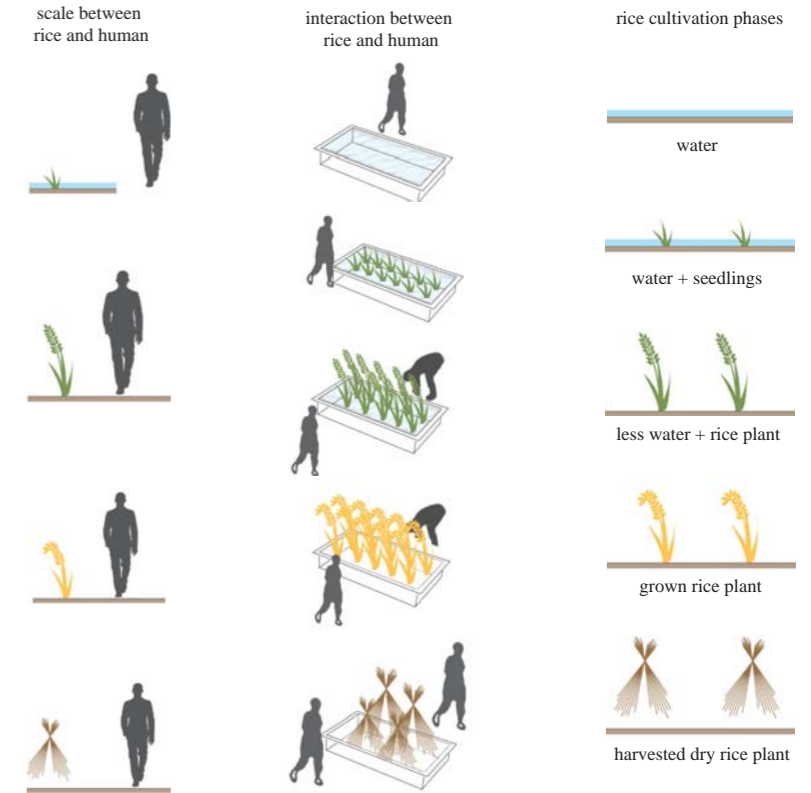
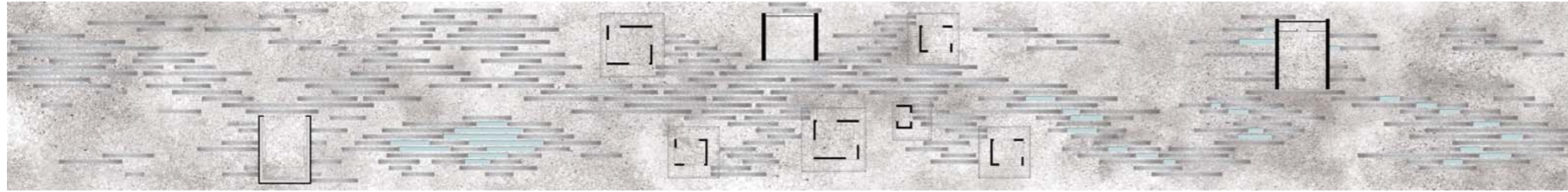
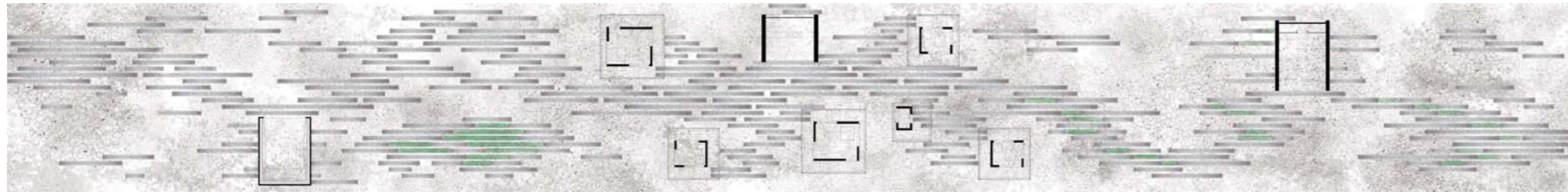


fig.5.9 Diagram of Interaction Between Human nad Rice Throughout Four Seasons

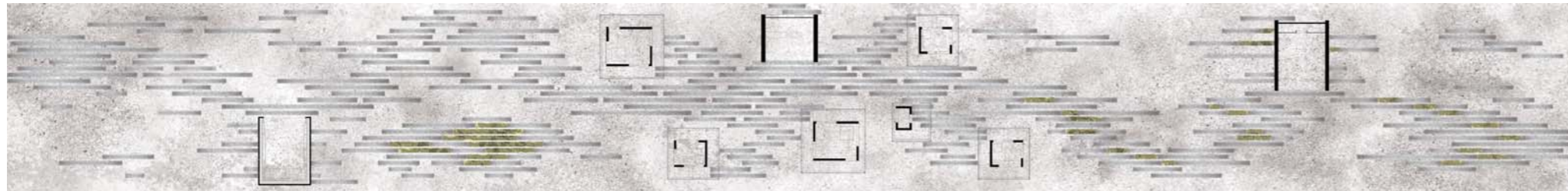
SEASONAL CHANGES OF MASTER PLAN



spring



summer

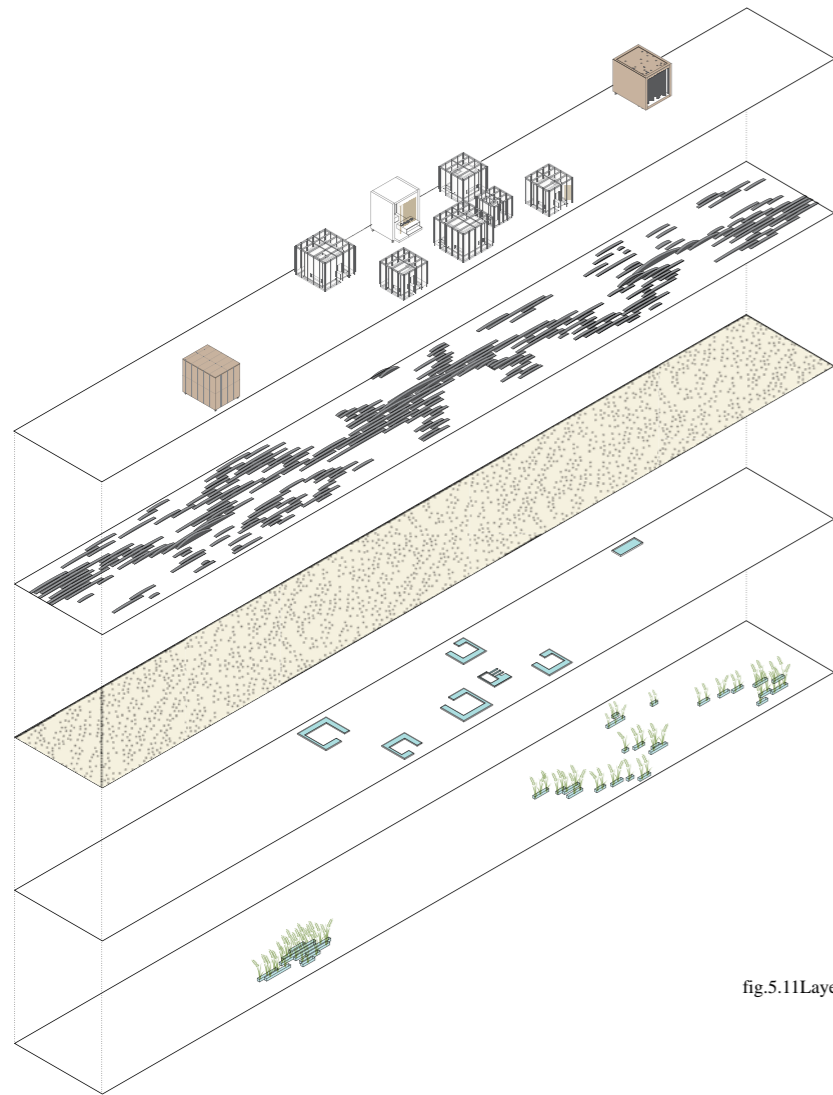


autumn

fig.5.10 Diagrams of Seasonal Changes on Master Plan

Figure on the left shows the seasonal change on our plot during the Expo 2015 Milan period. Since everything is in transition according to Buddhist belief, we wanted to show our visitors the cycle of life which is changing each moment.

In each season, the colour of the rice is changing and giving a new look to the master plan. Daily changes are shown by the movement of rice husk, husk is an unstable element, in different weather conditions the overall look of the master plan will change. In windy weather, some husks will change positions and move around; by the movement of husk the edges of the stones will be blurred and will disappear, so some stones will be visible and some will be invisible during different weather conditions.



pavillions

stepping stones

rice husk

water

rice cultivation

fig.5.11 Layers of Far East Pavillion

PROJECT

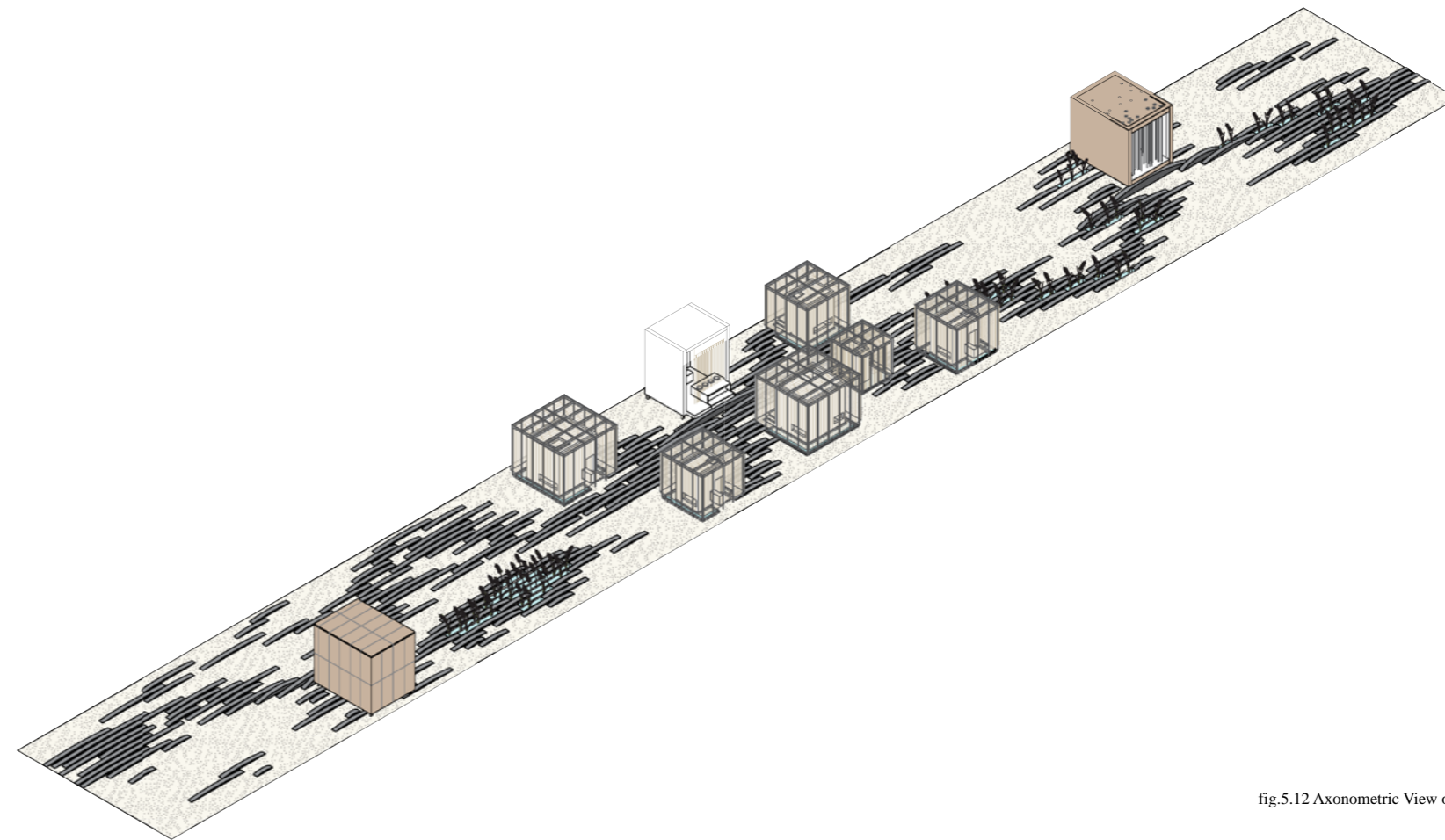
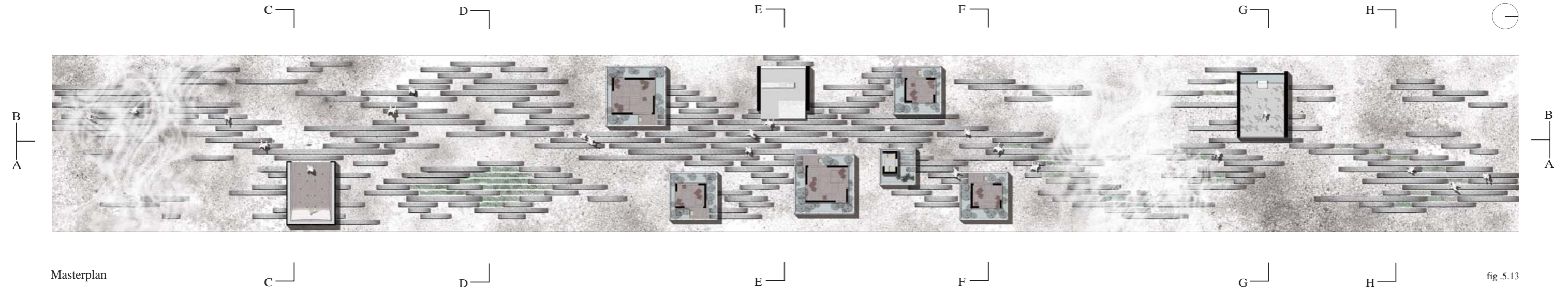


fig.5.12 Axonometric View of Far East Pavillion

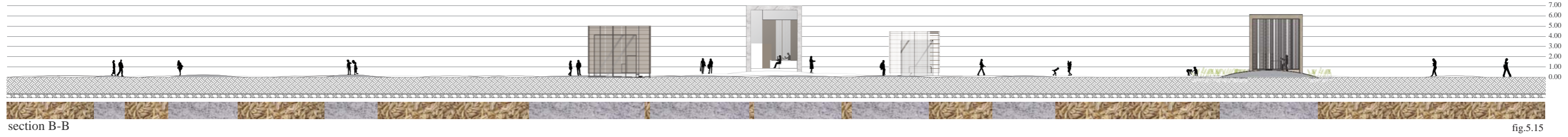
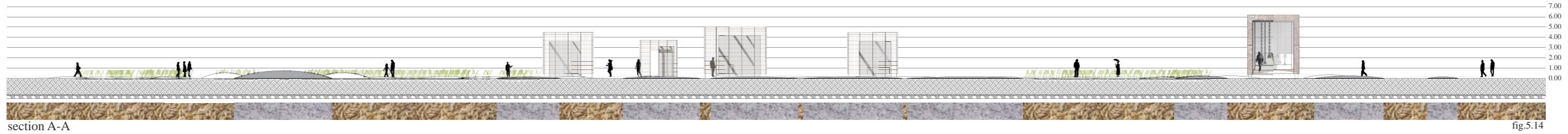
MASTERPLAN

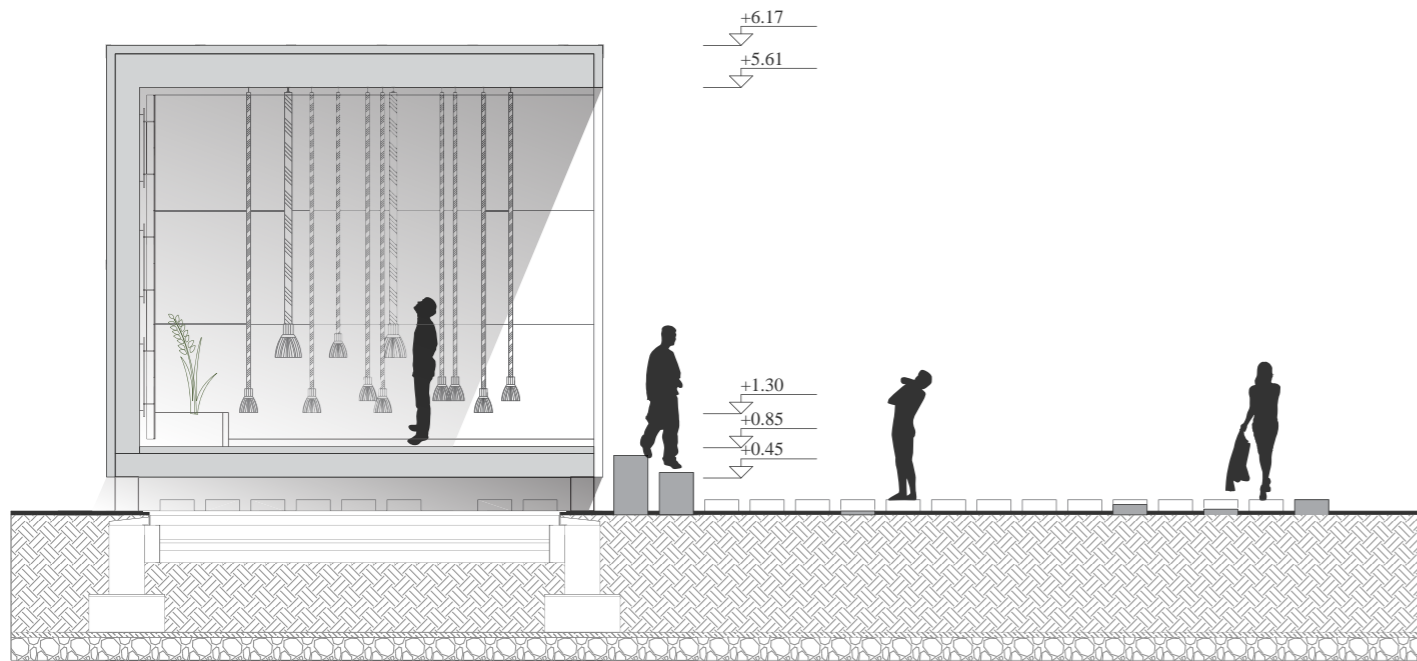


Masterplan

fig .5.13

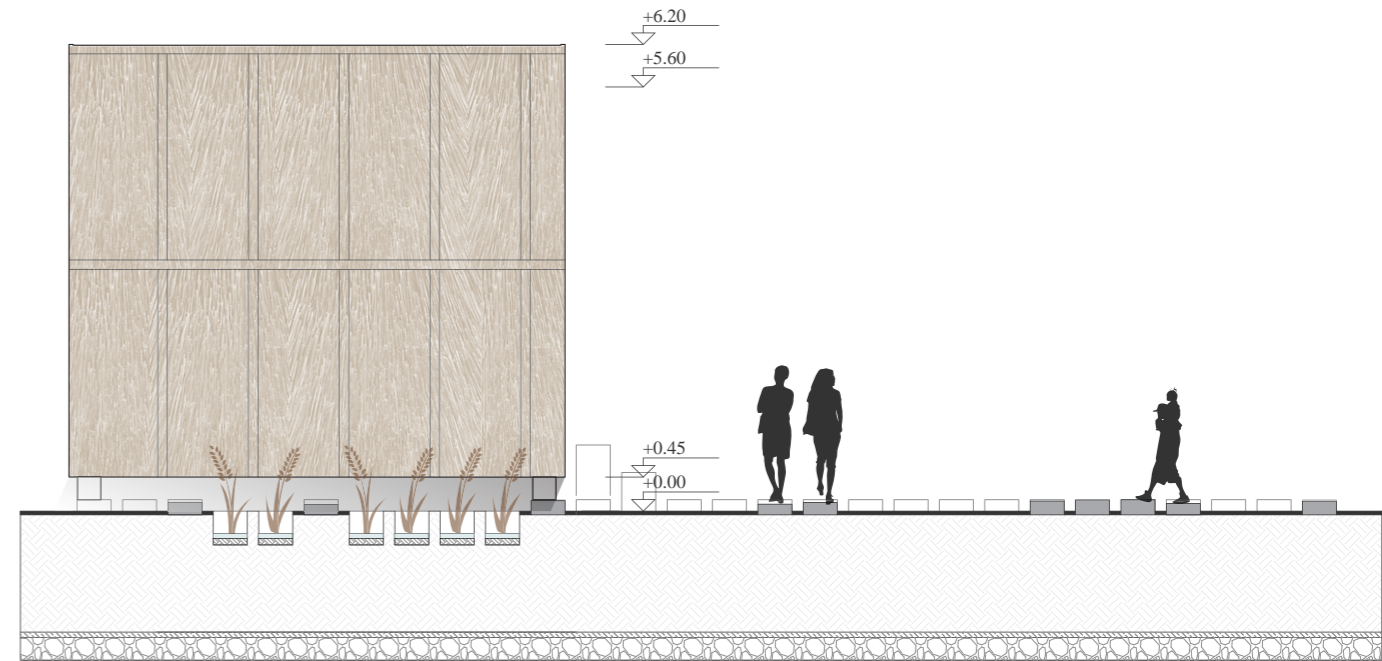
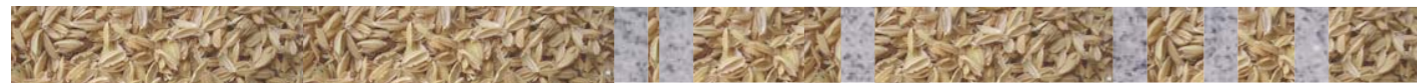
SECTIONS





section C-C

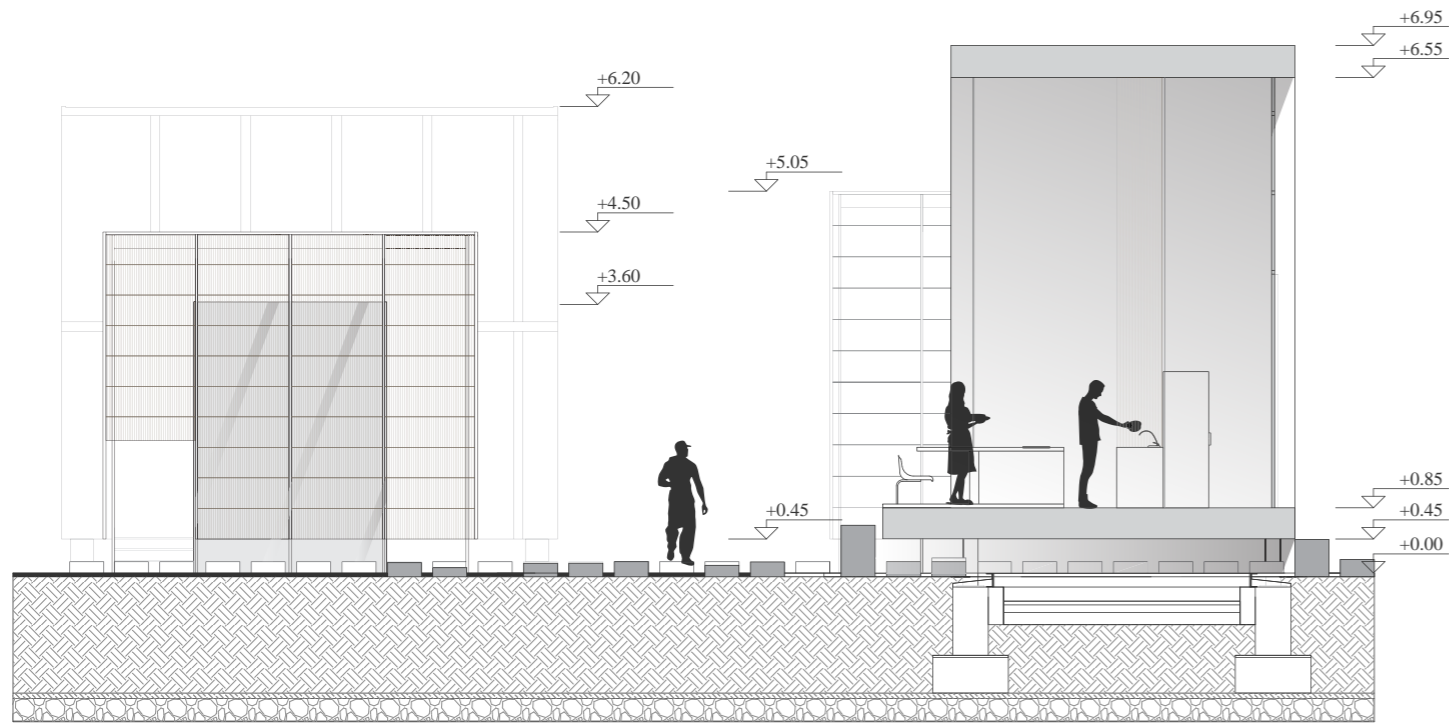
fig.5.16



section D-D

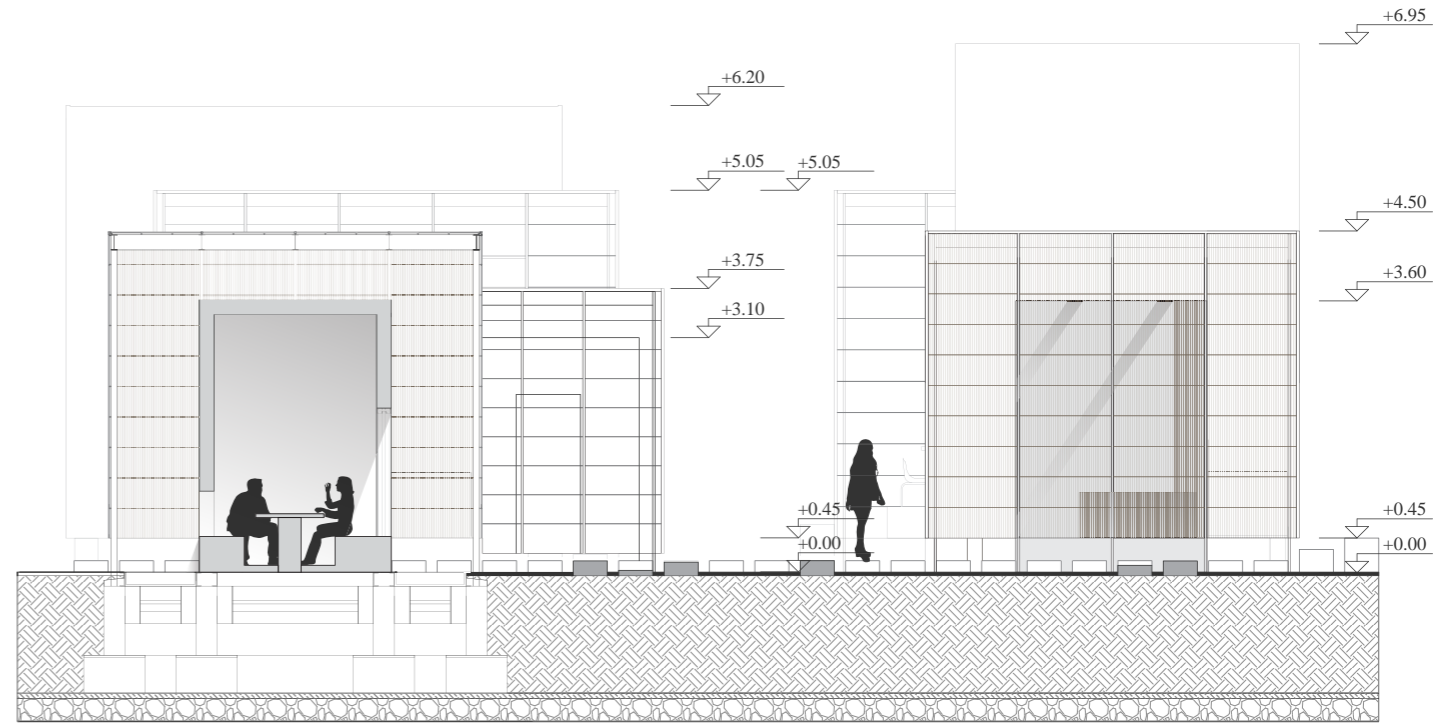
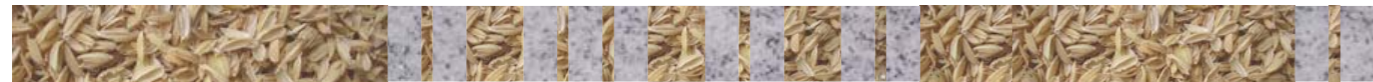
fig.5.17





section E-E

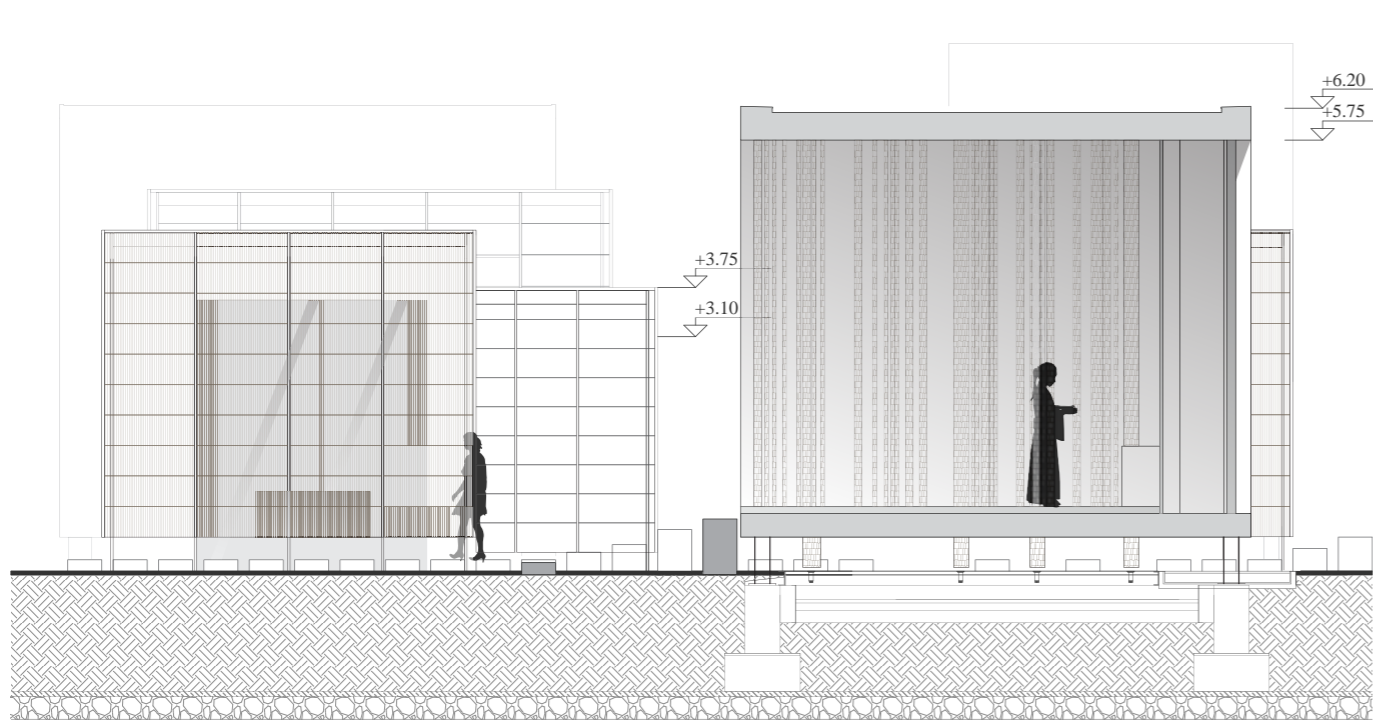
fig.5.18



section F-F

fig.5.19





section G-G

fig.5.20



section H-H

fig.5.21

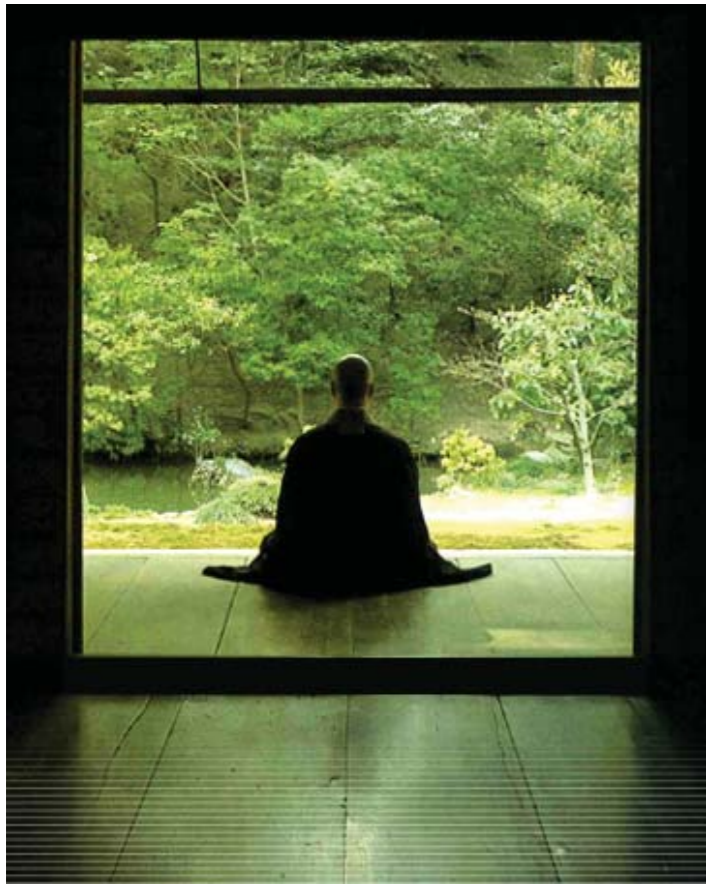


fig.5.22 Image of Monk Meditating Over the Elevated Platform



fig..5.23 Image of Elevated Platform from Japanese Architecture

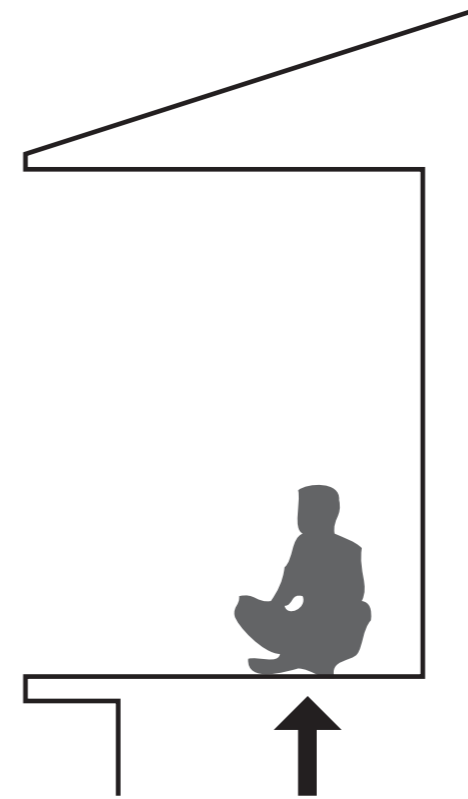


fig.5.24 Diagram of Elevated Platform in Nature

CONCEPT OF THE PAVILLIONS
KEYWORD : ELEVATION

The way to appreciate nature in Far Eastern culture is represented by keeping the object of admiration far away from the viewer . You need time and a pure , calm , sheltered space to appreciate nature .

In Japanese culture , meditation platforms in temples are architectures which are built in the sense of appreciation of nature .They are located in peaceful surroundings . The architecture is elevated from the ground level and floats over the nature.

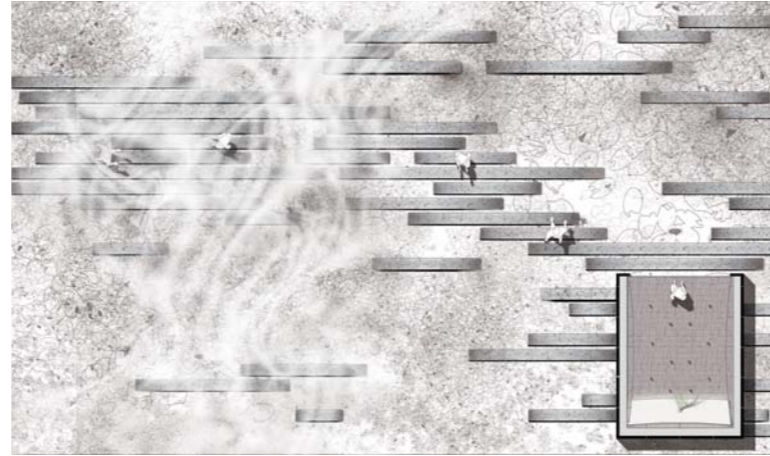
In some cases, the elevation idea can be shown a slight gap in level and it can represent a border between two spaces.

Using the elevation idea as a reference we designed our pavillions not just because we wanted to seperate the border between common and sacred world , we also tried to show the respect for rice by giving a level difference to our pavillions from the ground level which is covered by rice husk (the wasted part of rice,usually thrown away after harvesting the rice).

The rice is the main admiration object for the visitors ,they need to see it but they should not step on it ,even the architecture should not touch to the rice covering the surface of the plot .The stepping stones are the elements we can walk on but the rest of the plot is covered by rice husk which is intended not to step on.

**DRY MIST
FOR THANKING 1 PAVILLION**

On the main pathway to approach the thanking 1 pavillion, we created a void with the dry mist. The mist creates a sort of blank space in order to clear the minds of visitors and prepare them to enter a ritual space. The idea of using water came from the typology of Shinto Shrine where visitors need to purify themselves before entering a sacred space. In our design we spreaded the water as mist so that visitors can purify themselves while proceeding to the pavillion.



**INSENCE EVAPORATOR
FOR THANKING 2 PAVILLION**

On the main pathway to thanking 2 pavillion, we created another space of void with insence evaporator that works same principal with the dry mist. The evaporator emits the smell of insence so that it will raise visitors awereness of approaching to another ritual space. We took the idea of from the Chinese Temple of Ancestors as they offer insence to the ancesstors when they pray. On our site, it works like a filter before approaching to the offering space.

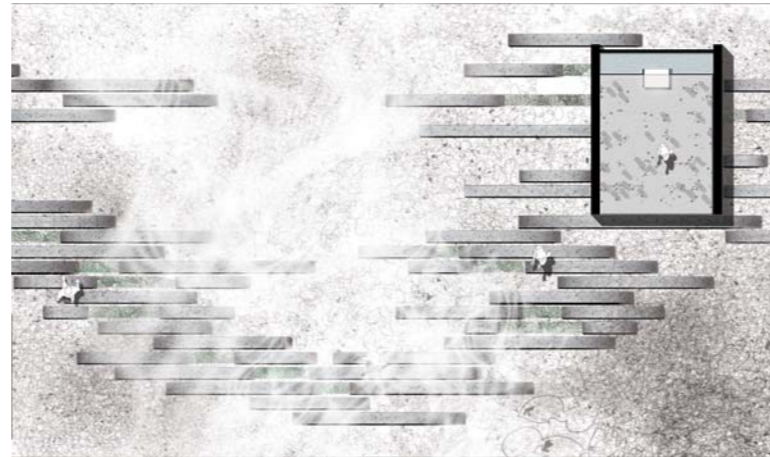
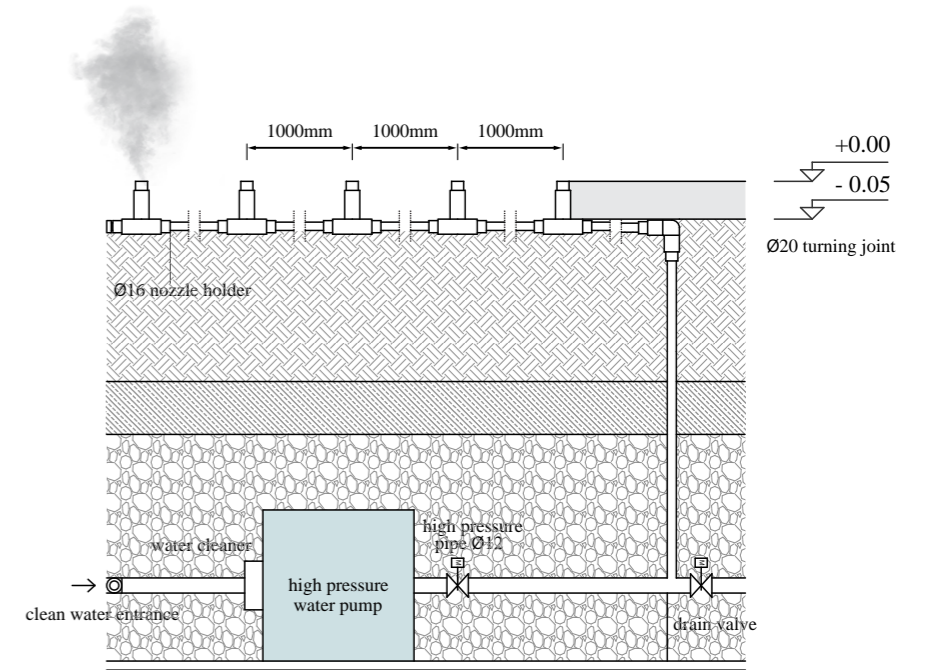
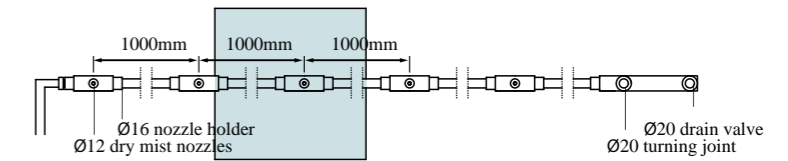


fig 5.25 Representation of Purification

fig 5.26 Representation of Incense



section



plan

fig 5.27 Detail Plan and Section of Evaporator



fig. 5.28



fig. 5.29

THANKING 1 PAVILLION

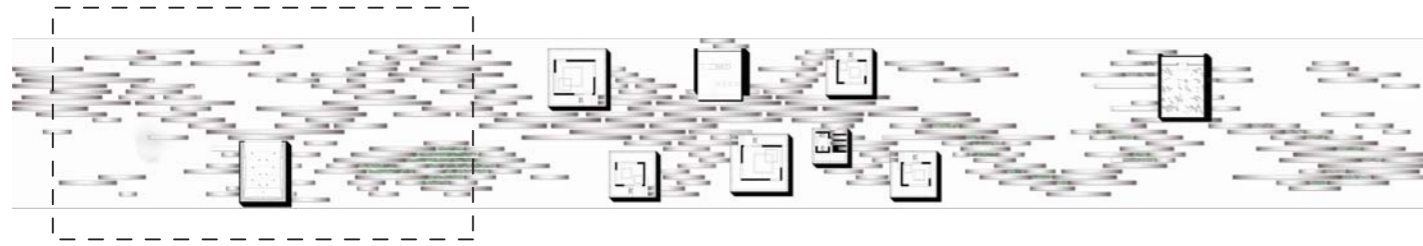
Design of thanking 1 pavillion is inspired by the sequence of behaviours in Japanese Shinto shrine architecture. It is a ritual space designed for the visitors to pray for the life of rice that provides us with energy and strength each day.

Behaviours in Shinto shrine always starts with purification. In their culture, it is a necessary step in order for people to clear their mind and body to proceed to a sacred space. In our site, we applied the system of mist to purify before entering this pavillion.

Another notable feature of shinto shrine is that they pray individually. Each person rings the bells in front of sanctuary before praying. They believe their prayer will be conveyed to the devine by doing so.

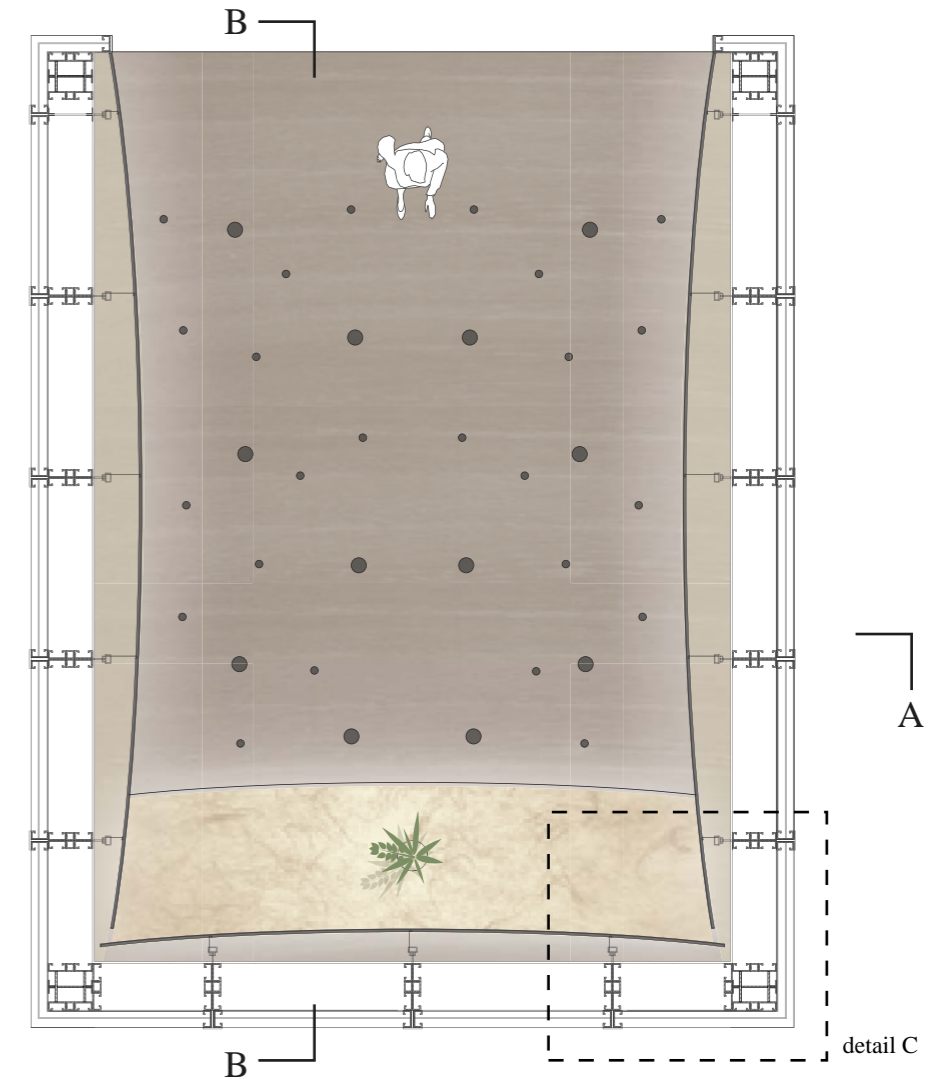
In our pavillion design, single rice plant is located at the end of the pavillion as an object of admiration. We placed several bells along the way so that each visitor can have a bell to ring when praying. The ropes are in different sizes and length so that one of them will match the size of hands and height of the visitor.

The inner wall of the pavillion is made of kiri wood panels. They are curved and is located in the way that they will enhance the achoustic affect and distribute the sound of bells inside and outside of the pavillion.



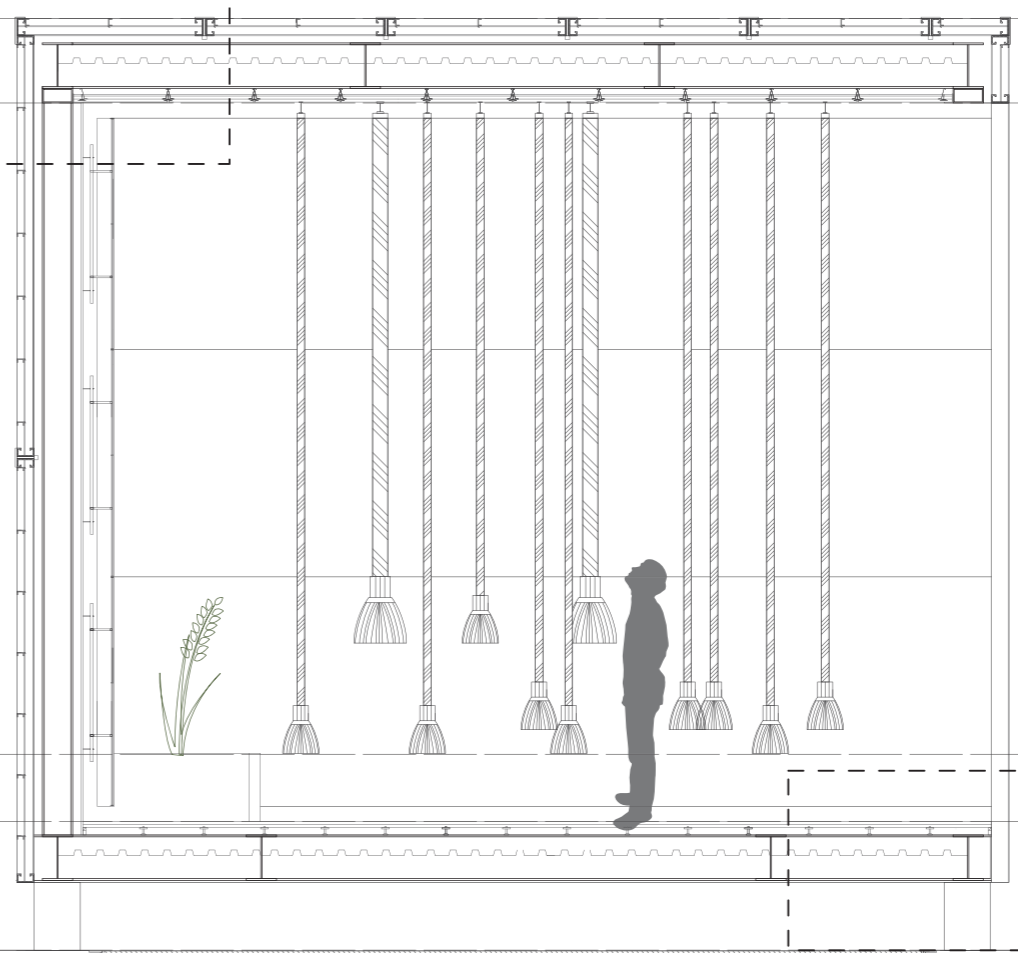
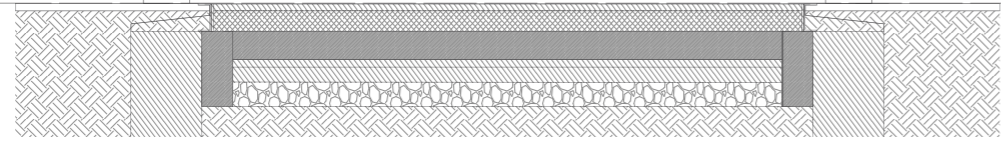
plan , sc : 1/50

fig. 5.30

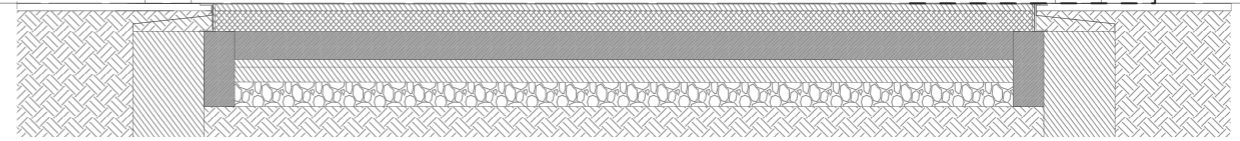




section A-A , sc:1/50
fig.5.31

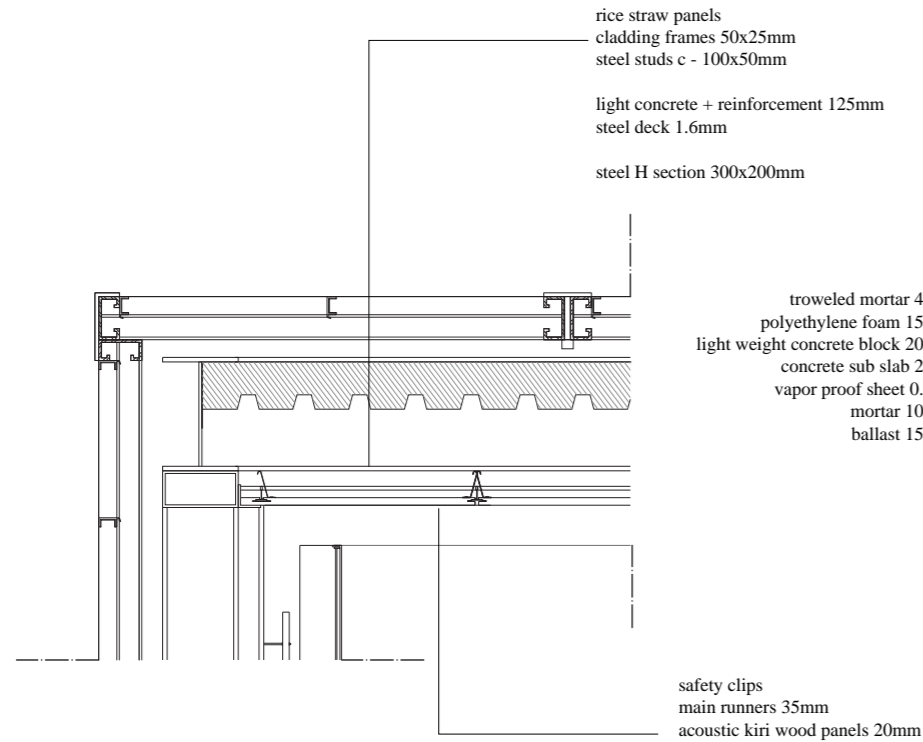


section B-B , sc:1/50
fig.5.32

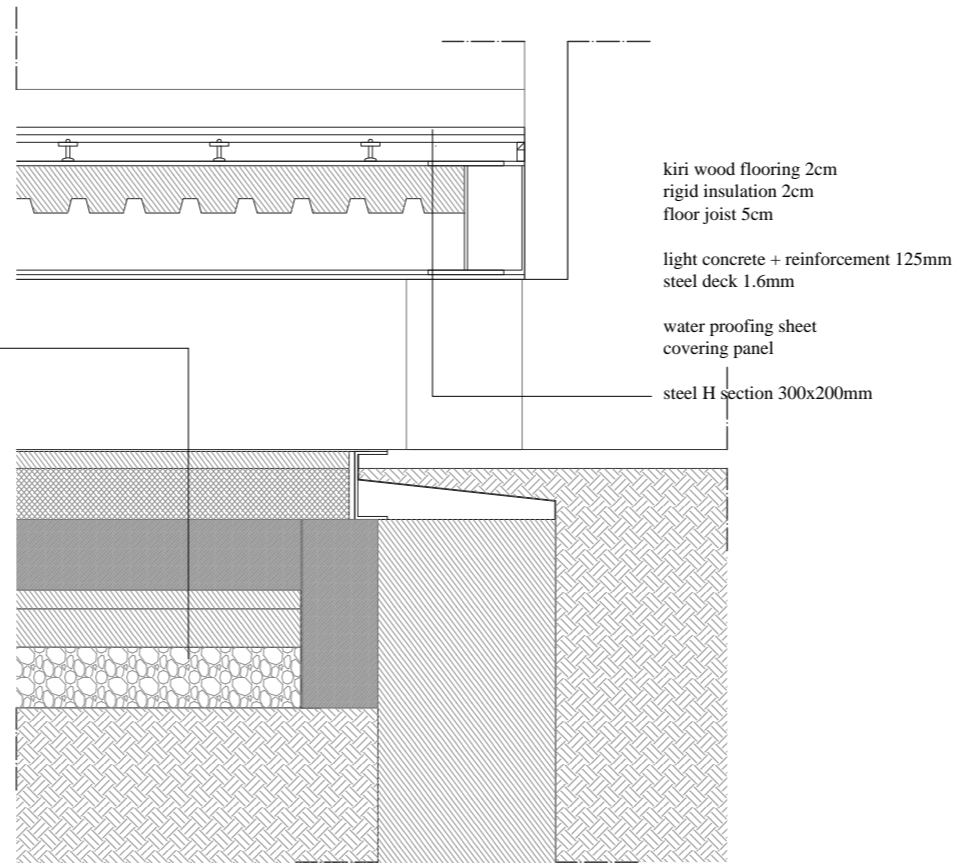


+6.20
+5.60
+1.30
+0.85
+0.00

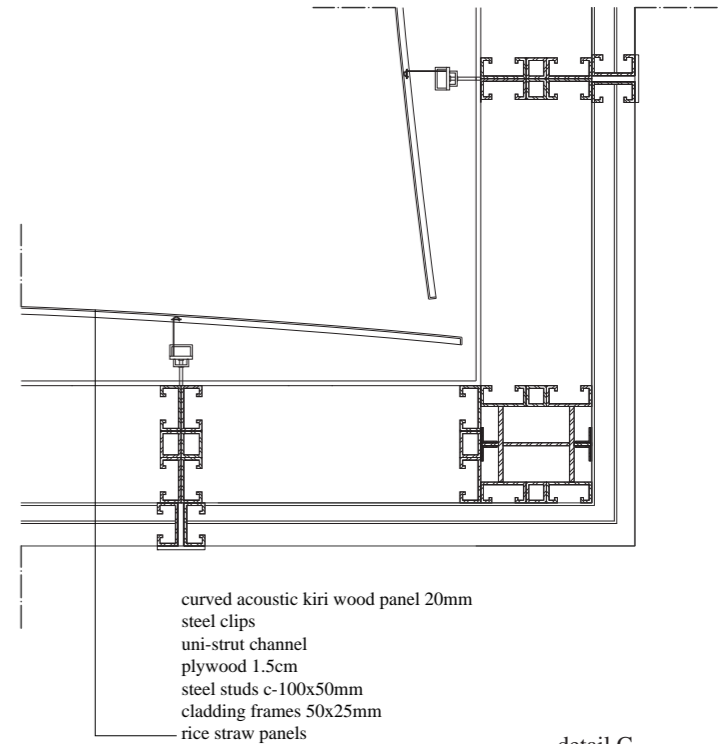
THANKING 1 DETAILS (sc: 1/20)



detail A
fig .5.33



detail B
fig .5.34



detail C
fig .5.35

ACOUSTIC ANALYSIS

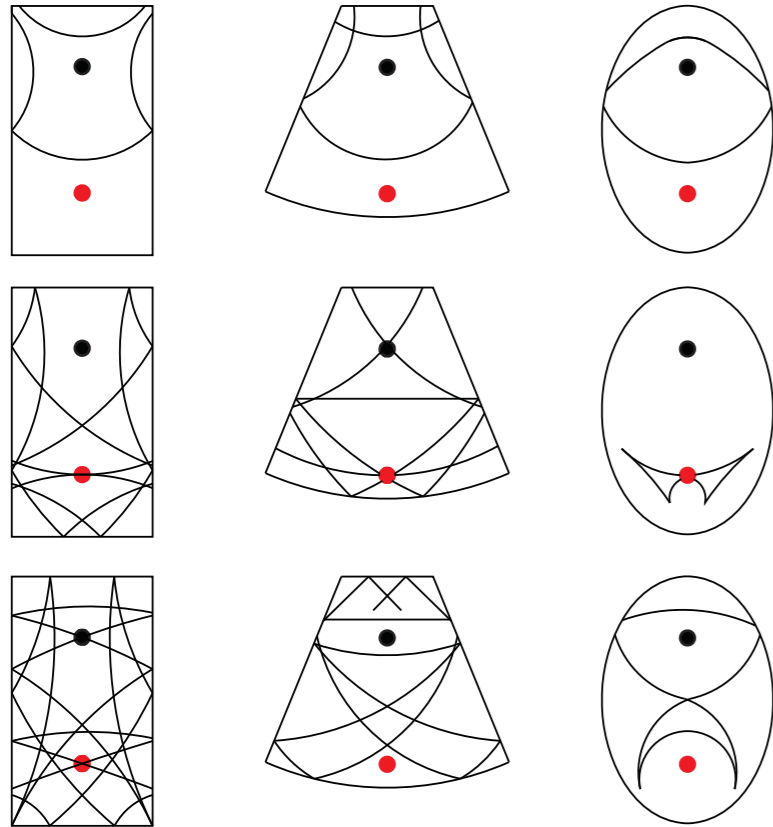


table 5.1 Diagrams of Sound Propagation in Different Forms of Rooms without Diffusing Treatment

● the source position
● the receiving position

Comparison of these figures reveals that the propagation of the wave front is much different in each hall.

In the case of the rectangular room, it is clear-seen that the number of wave front increases with the progress of time, whereas in the cases of the fan-shaped and elliptic rooms, a tendency that the wave front defects and concentrates is seen.

Especially, in the case of the elliptic room, it is clearly seen the wave front focuses at around the source position and its symmetrical point alternately.

The reflections are dense and smoothly diminishing in the case of the rectangular room, whereas the reflections are scattered and uneven in the fan-shaped and the elliptic rooms.

In concert halls and theaters, wall and ceiling are often made irregular to increase sound diffusivity. With diffusion treatment it is clearly seen that the distinct wave fronts have been much diminished and scattered in all of the three rooms.

Thesis: 'Visualization of Sound Propagation and Scattering in Rooms' by Takatoshi Yokota, Shinichi Sakamoto and Hideki Tachibana

In our pavillion design (Thanking 1) we used a rectangle room as a form in order to increase the number of waves front with the progress of time. We have randomly distributed bells (source) in the pavillion and the visitors (receiver) are also moving all around the bells to ring them ;that's why the position of receivers are always changing, they are not stable as in the idea of concert hall or theatre. We used the dense reflections around the bells which are smoothly diminishing. Also we used curved wooden panels on the walls to diffuse the sound to the entrance of the pavillion ; so that visitors will be invited to the pavillion through the sound of bells reaching till the common pathway of the plot.

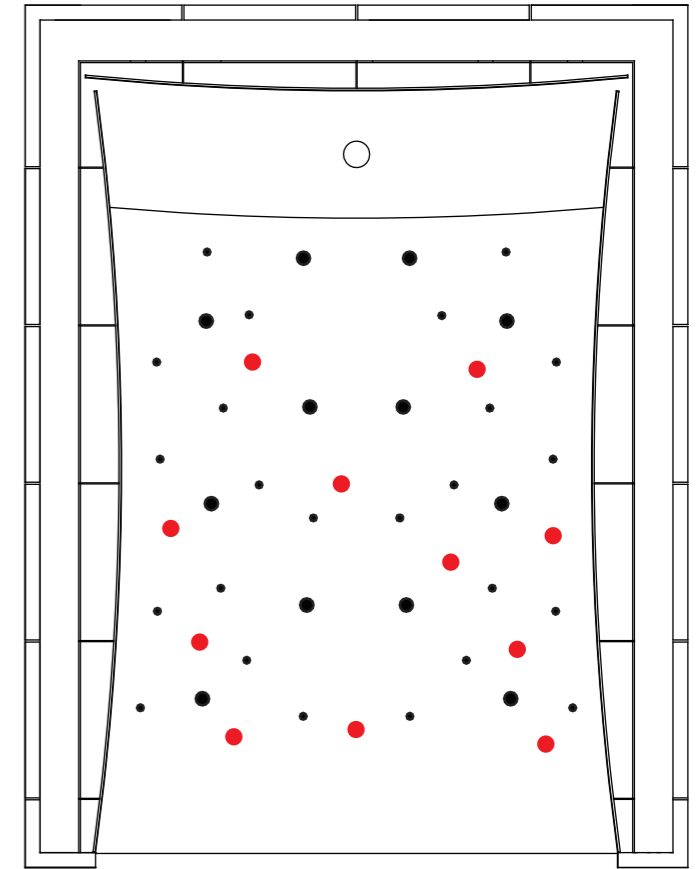


fig.5.36 Diagram of Acoustic Analysis of Thanking 1 Pavillion



fig.5.37 Painting 'Koto Music' by Keiko Yurimoto, early 1950s from Ohmi Gallery



fig.5.38 Image of Guzheng

琴 or 箏 Koto _ Traditional Japanese Instrument

The koto (琴 or 箏) is a traditional Japanese stringed musical instrument, similar to the Chinese *guzheng*.

The koto is the national instrument of Japan. Koto are about 180 centimetres wide, and made from *kiri wood* (Paulownia tomentosa). It came to be played by Buddhist monks, and eventually, reached the general populous. The koto is comprised of 13 silk strings, which are stretched across a body made of hollowed out Paulownia wood.

古筝 Guzheng _ Traditional Chinese Instrument

The guzheng, also spelled gu zheng or guzheng (Chinese: 古筝; pinyin: gǔzhēng, with gu 古 meaning "ancient"); and also called zheng (箏) is a Chinese plucked zither.

The origin of the guzheng can be traced back to two other Chinese plucked zithers, the se. The guzheng has existed since the Warring States Period and became especially popular during the Qin dynasty.

Paulownia is known in Japanese as *kiri* (桐), specifically referring to *P. tomentosa*; it is also known as the "princess tree".

Paulownia wood is very light, fine-grained, soft, and warprisant and is used for chests, boxes, and clogs (*geta*). The wood is also important in China, Korea, and Japan for making the soundboards of stringed musical instruments such as the guqin, pipa, koto, and kayagum. The wood of paulownia is soft, lightweight, ring porous straight grained, and mostly knot free wood with a satiny luster. Carving the wood of Paulownia is an art form in Japan and China. The wood is burned to make charcoal for sketching and powder for fireworks, the bark is made into a dye, and the leaves are used in vermicide preparations.

Paulownia tomentosa can survive wildfire because the roots can regenerate new, very fast-growing stems. It is tolerant of pollution and it is not fussy about soil type. For this reason it functions ecologically as a pioneer plant. Its nitrogen-rich leaves provide good fodder and its roots prevent soil erosion.

Paulownia has also proved to increase food production when used for intercropping and to prevent soil erosion. A large reforestation project in China increased food production in the China Yellow River and Yangtse flood plains and halted erosion on approximately 3.15 million ha of land.



fig.5.39 Image of Kiri Wood

THANKING 1 PAVILLION OUTER SURFACE MATERIAL - RICE STRAW THATCHING

*Thatching is the craft of building a roof with dry vegetation such as straw, water reed, sedge (*Cladium mariscus*), rushes and heather, layering the vegetation so as to shed water away from the inner roof. It is a very old roofing method and has been used in both tropical and temperate climates.*

Thatch is a versatile material when it comes to covering irregular roof structures. This fact lends itself to the use of second-hand, recycled and natural materials that are not only more sustainable, but need not fit exact standard dimensions to perform well. Thatching materials range from plains grasses to waterproof leaves. It is the most common roofing material in the world, because the materials are readily available.[1]

Before World War II, there used to be many thatched-roof residential houses in Japan because thatching works are conducted by the community. After World War II, the Japanese people rebuilt their lives that led to the country's rapid economic growth. Old traditional houses were transformed into Western-inspired houses. What used to be a thatched-roof was changed into galvanized iron roof or brick-roofs.[2]

The picture on the right shows an example of a house from central Japan in Shinano. It was built in the mid -18th century. Thatching is used on the walls and the roof in order to protect the house from rain and snow.

In our first pavillion design (thanking 1) we used the thatching with the rice straw for the outer walls and roof in a closed up way. By reinterpreting the usage of traditional material we created a new and sustainable design for Expo 2015 Milan.

1. Article: ' Thatching' from <http://en.wikipedia.org/wiki/Thatching>
2. Kumagai master thatchers website , http://www.kayabukiya.com/thatch_en.html



fig.5.40 Image of Shinano Akiyama House

RITUAL EATING PAVILLION

The idea of design for the Ritual Eating Pavillion came from the idea of Tea Garden and Tea House in Japanese Culture. It serves as a space to receive food with gratitude and respect.

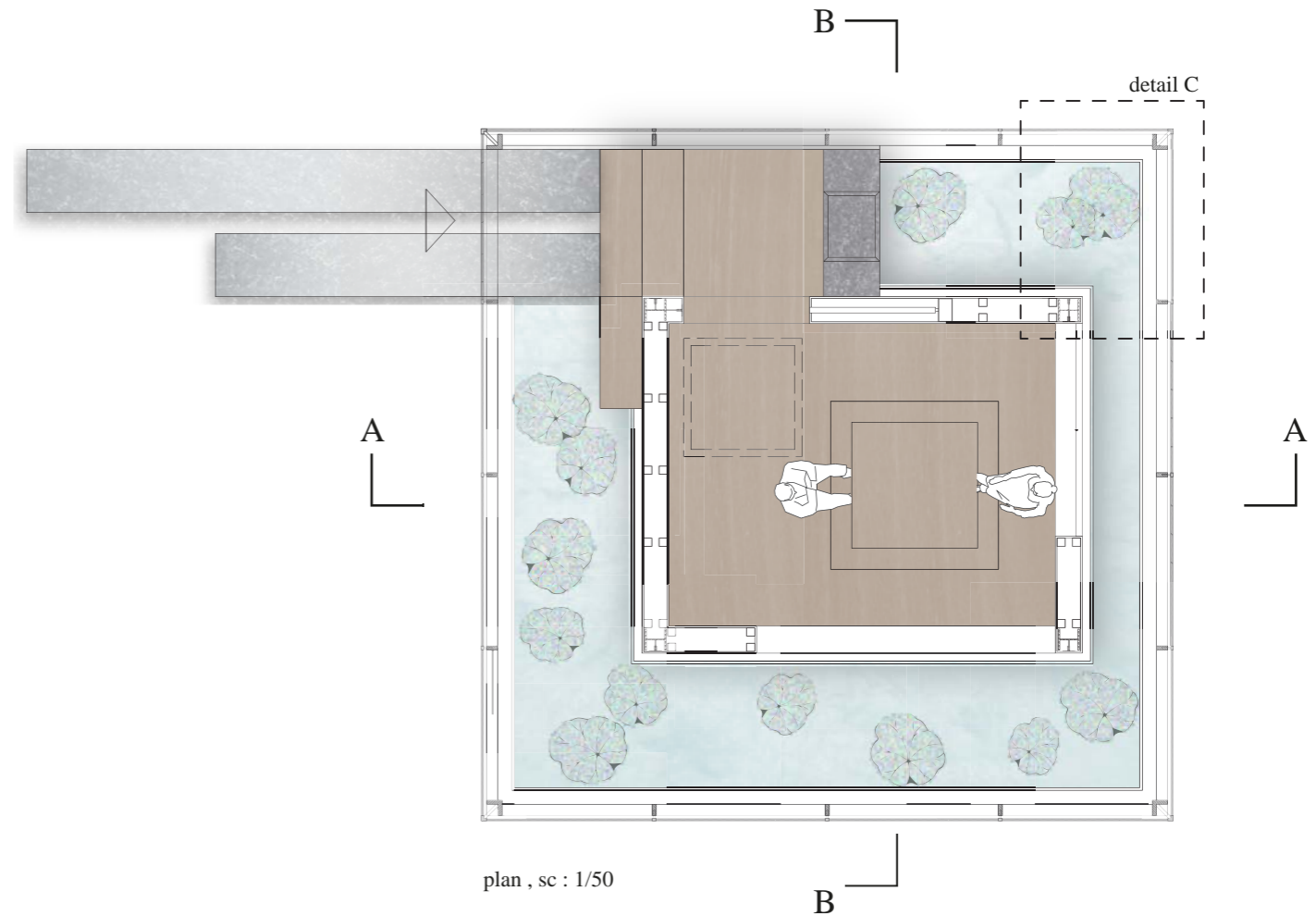
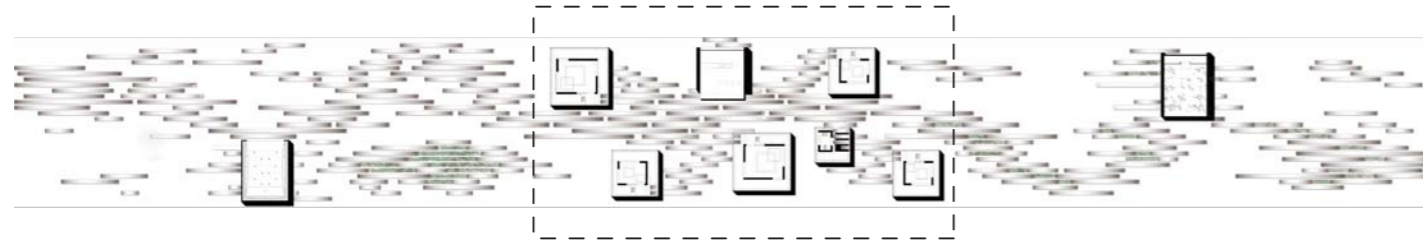
Tea house and Tea garden are the perfect example of ceremonial space designed to receive, appreciate food and nature. Also, it is a space where people from different social class and culture gather and are treated equally.

For our outer facade design, We took the feature of delicate tea garden fences that works as separation from the busy outside world, but is semi transparent that people are not completely isolated from the light and blow of the wind.

When visitors enter, they are required to bow for the respect, as our entrance to the pavillion is made narrow that people cannot enter without doing so. This feature of behaviour is also taken from the design of traditional tea house.

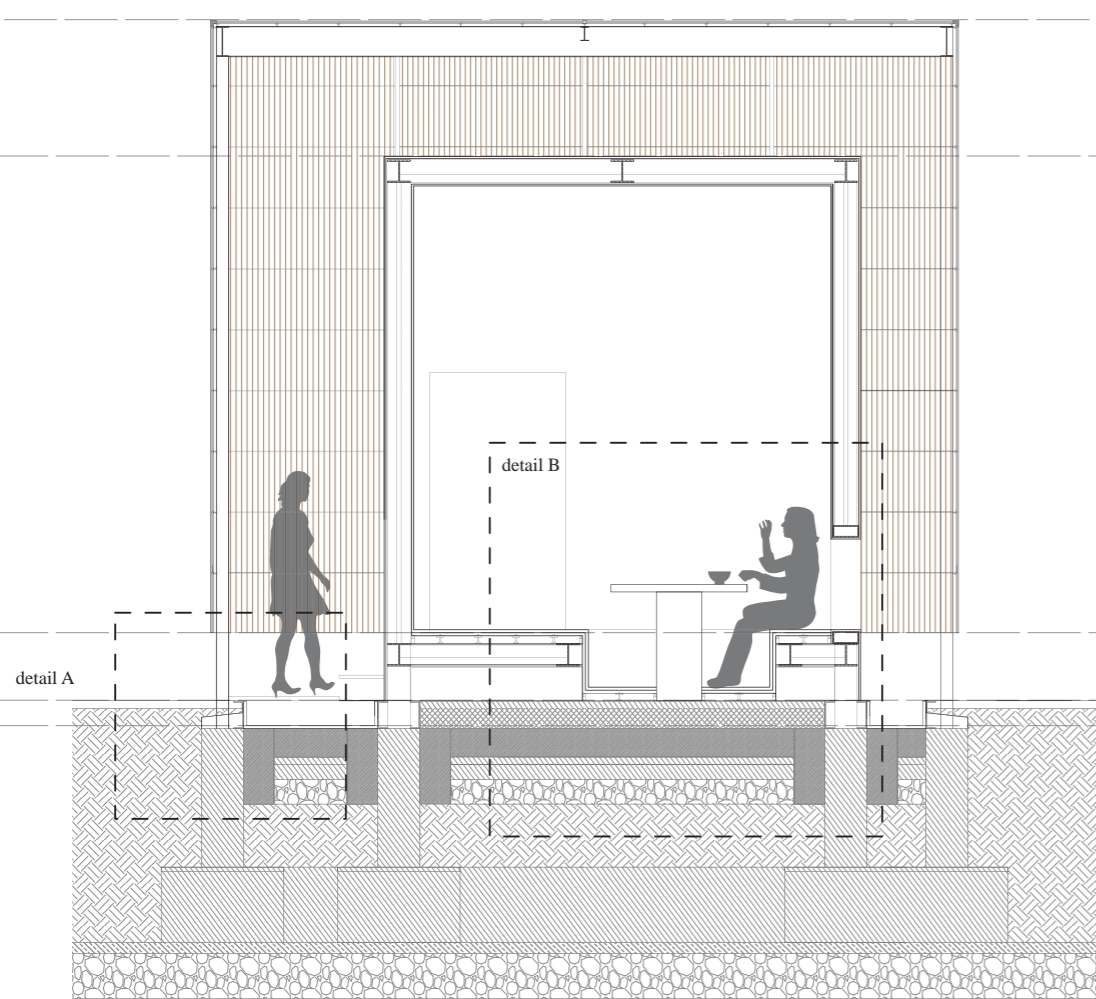
Before entering to the inner layer, visitors are invited to purify themselves as is tradition to be clean when entering to a sacred space.

All of these procedures visitors take is in order for them to calm themselves and to help them prepare accepting food with gratitude and respect.

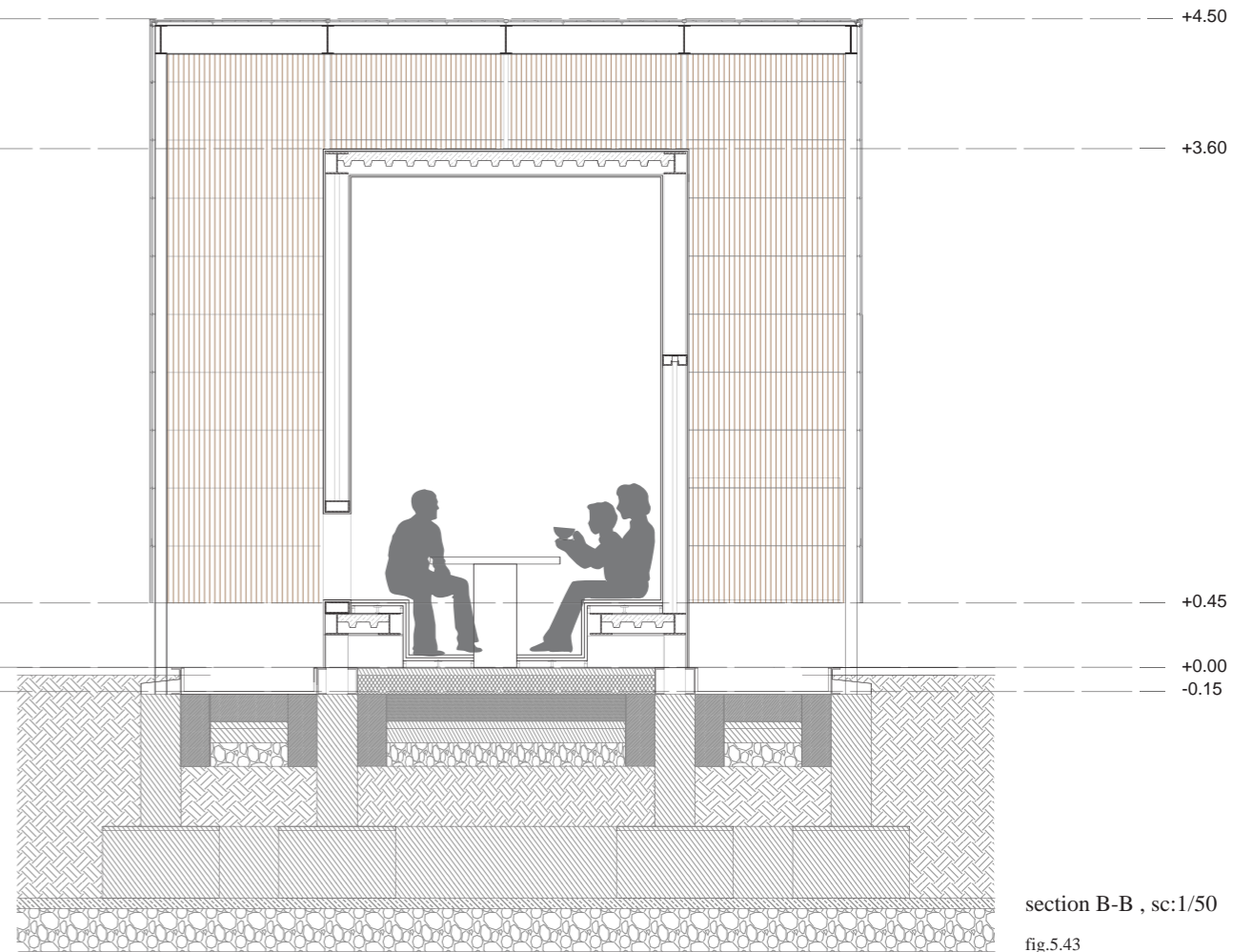


plan , sc : 1/50

fig.5.41



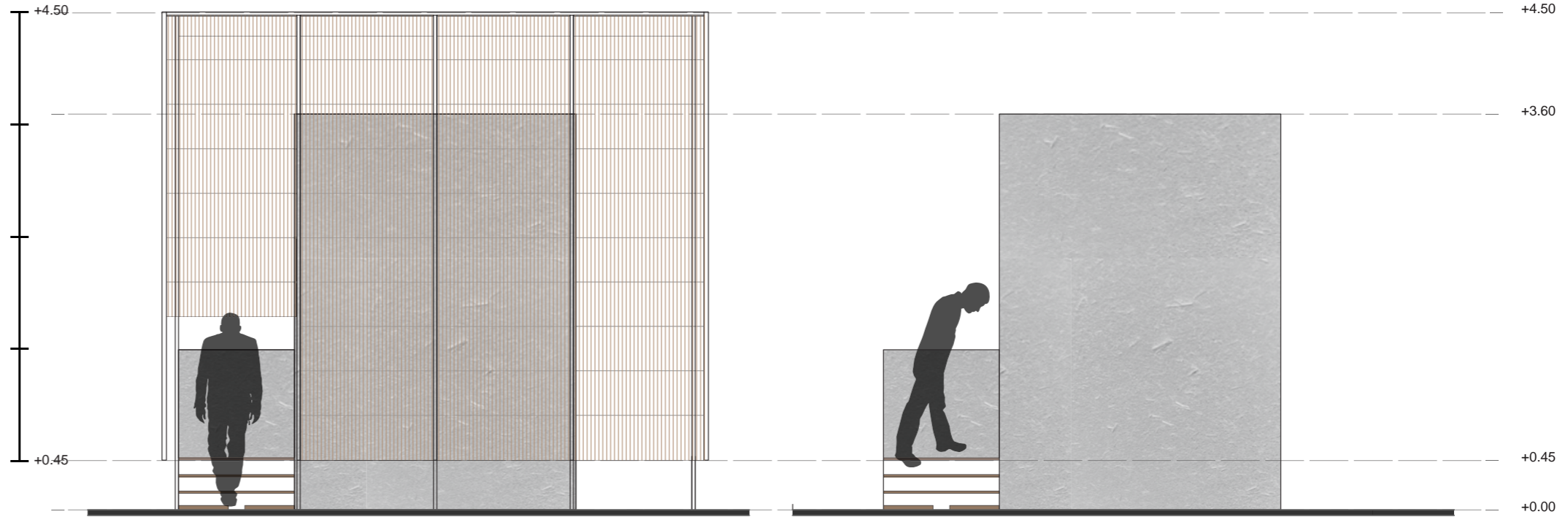
section A-A , sc:1/50
fig.5.42



section B-B , sc:1/50
fig.5.43

OUTER FACADE MEASUREMENT

The measurement of the outer facade is done by the height of the full grown rice.
Normally rice plant grows from 1m up to 1.2m. As our facade material is made of rice straw we decided the height of our facade according to this unit, that is to say: our facade height is “four rice”.

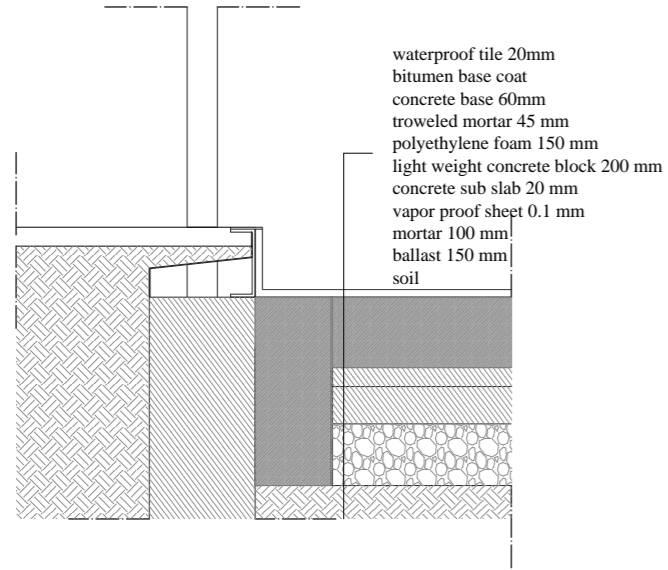


outer layer , sc: 1/50

fig. 5.44

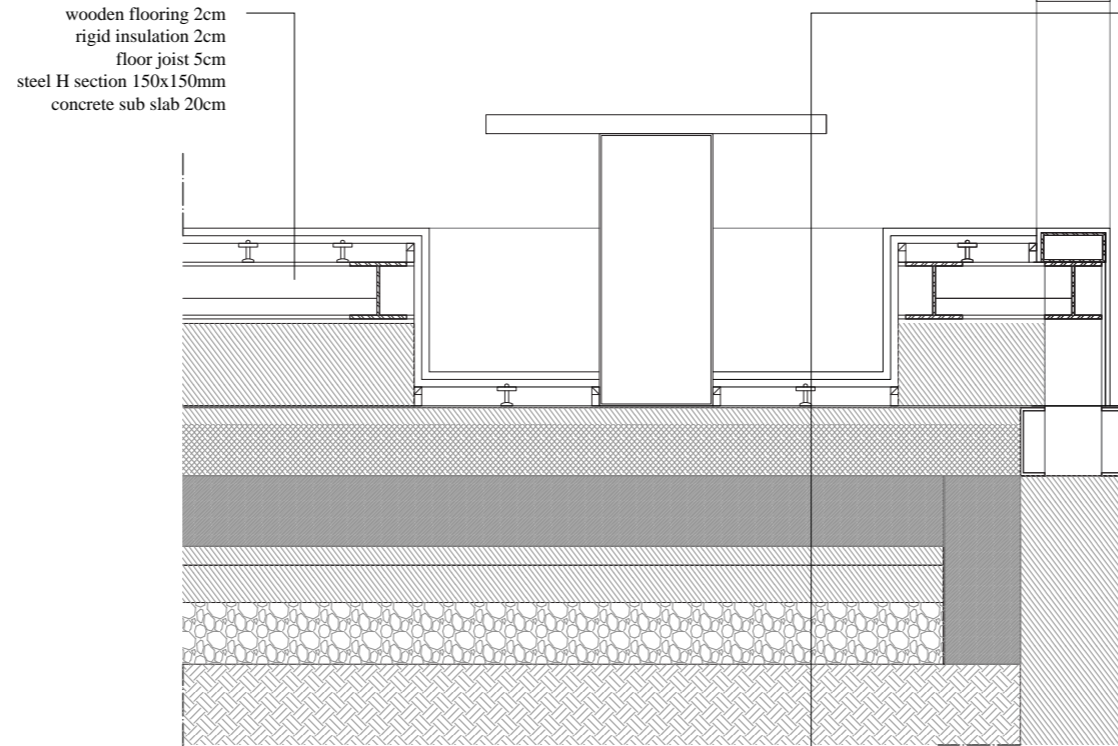
outer layer , sc: 1/50

fig.5.45



waterproof tile 20mm
 bitumen base coat
 concrete base 60mm
 troweled mortar 45 mm
 polyethylene foam 150 mm
 light weight concrete block 200 mm
 concrete sub slab 20 mm
 vapor proof sheet 0.1 mm
 mortar 100 mm
 ballast 150 mm
 soil

detail A
 fig.5.46

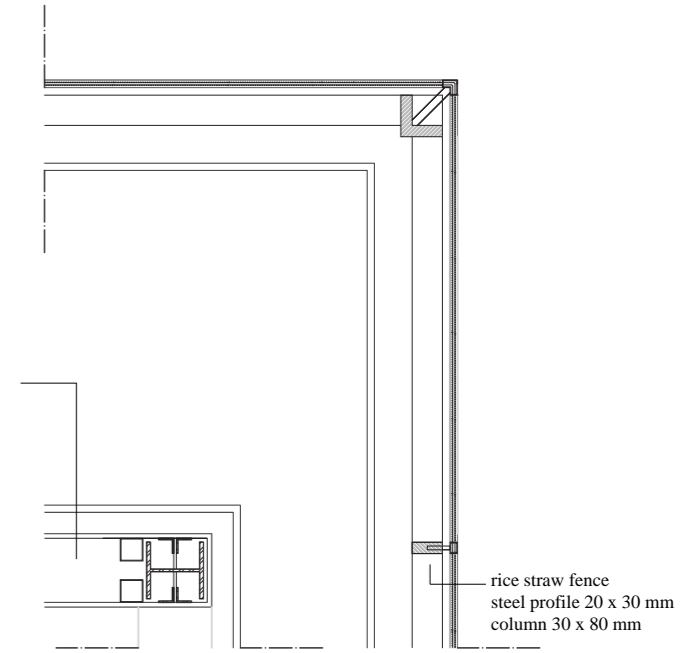


wooden flooring 2cm
 rigid insulation 2cm
 floor joist 5cm
 steel H section 150x150mm
 concrete sub slab 20cm

troweled mortar 45 mm
 polyethylene foam 150 mm
 light weight concrete block 200 mm
 concrete sub slab 20 mm
 vapor proof sheet 0.1 mm
 mortar 100 mm
 ballast 150 mm
 soil

wall: plasterboard t=1.5cm
 steel stud 60x60mm
 wall: plasterboard t=1.5cm

detail B
 fig.5.47



rice straw fence
 steel profile 20 x 30 mm
 column 30 x 80 mm

detail C
 fig.5.48

RESTAURANT PAVILLION OUTER LAYER MATERIAL - RICE STRAW

In Japanese architecture , rice products are frequently used as building materials.Rice straw is one of the common architectural solutions.

Tatami mats which are traditionally made of rice straw to form the core with a covering of woven soft rush (*igusa*) straw.[1].Other than the usage for flooring rice straw can be a vertical element for the seperation of rooms ,it can become even a fence for the garden of a tea house.

It's a light material representing the delicateness of the architecture for tea ceremony .

The picture on the very right shows the rice straw as the body of the rice plant and the picture on the left shows the modern usage and method of rice straw fence.

In our restaurant pavillion design we used the rice straw as an outer layer surface material and we wanted to deliver the idea of lightness and calmness of the tea house to the visitors through the rice straw fence texture by using it in a different scale.We covered all the outer facade with rice straw by giving distance between each straw piece.

1.Article: 'Tatami' from <http://en.wikipedia.org/wiki/Tatami>

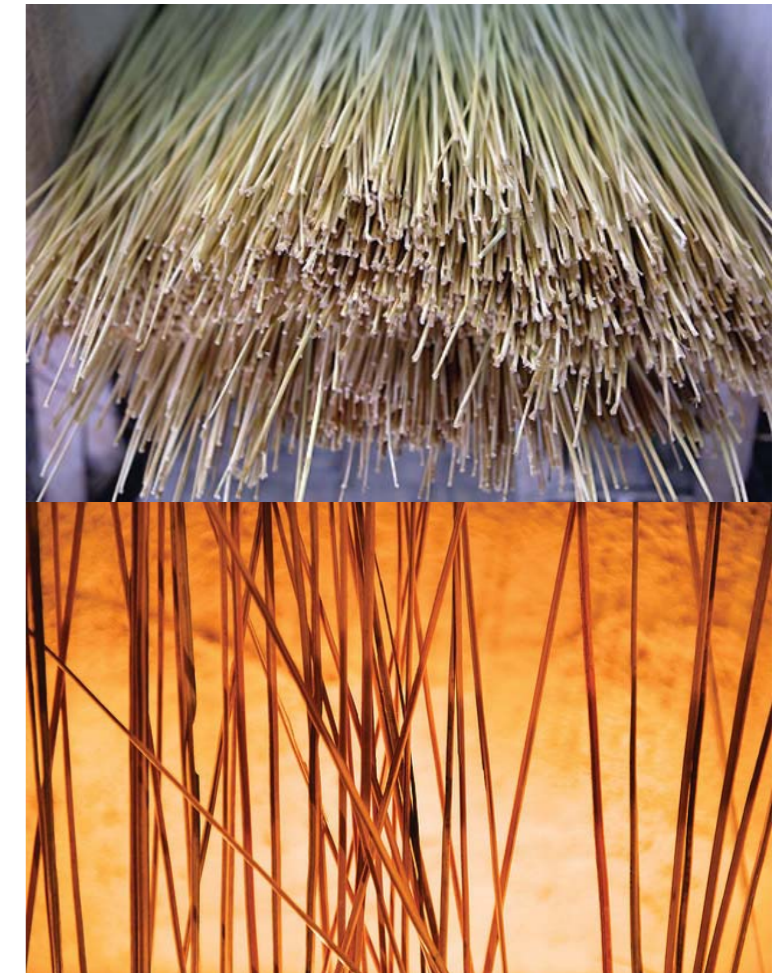


fig.5.49 Image of Rice Straw Fence and Rice Straw

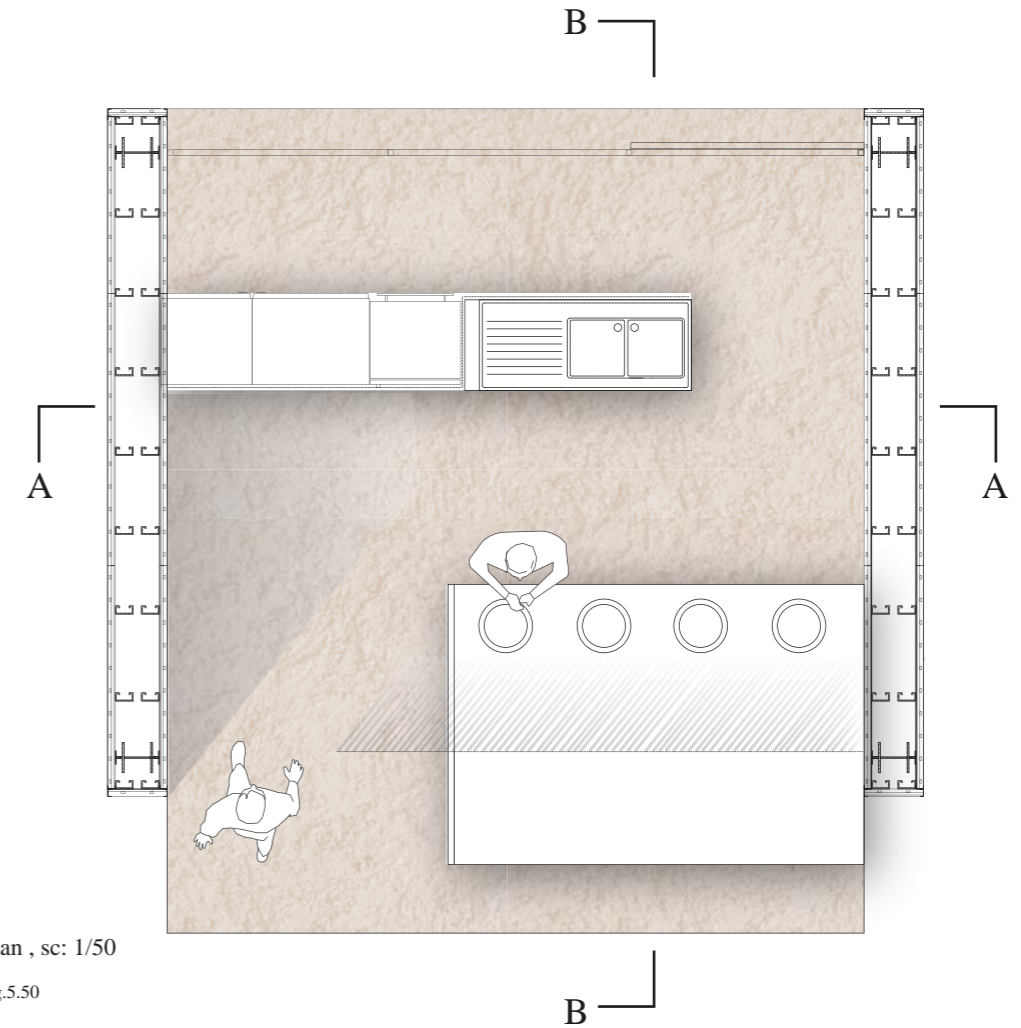
KITCHEN

Design of kitchen takes reference from the kitchen in Far Eastern traditional house. It is designed to distribute the smell of rice around the site.

Kitchens in the traditional housings are always differentiated from the main function of the building and designed in a different way from the other part of the house. It has usually a high ceiling so that the smoke will rise and exit from the upper opening. In our design, we made it taller than other pavillions in the site and gave an opening on the upper part of the building.

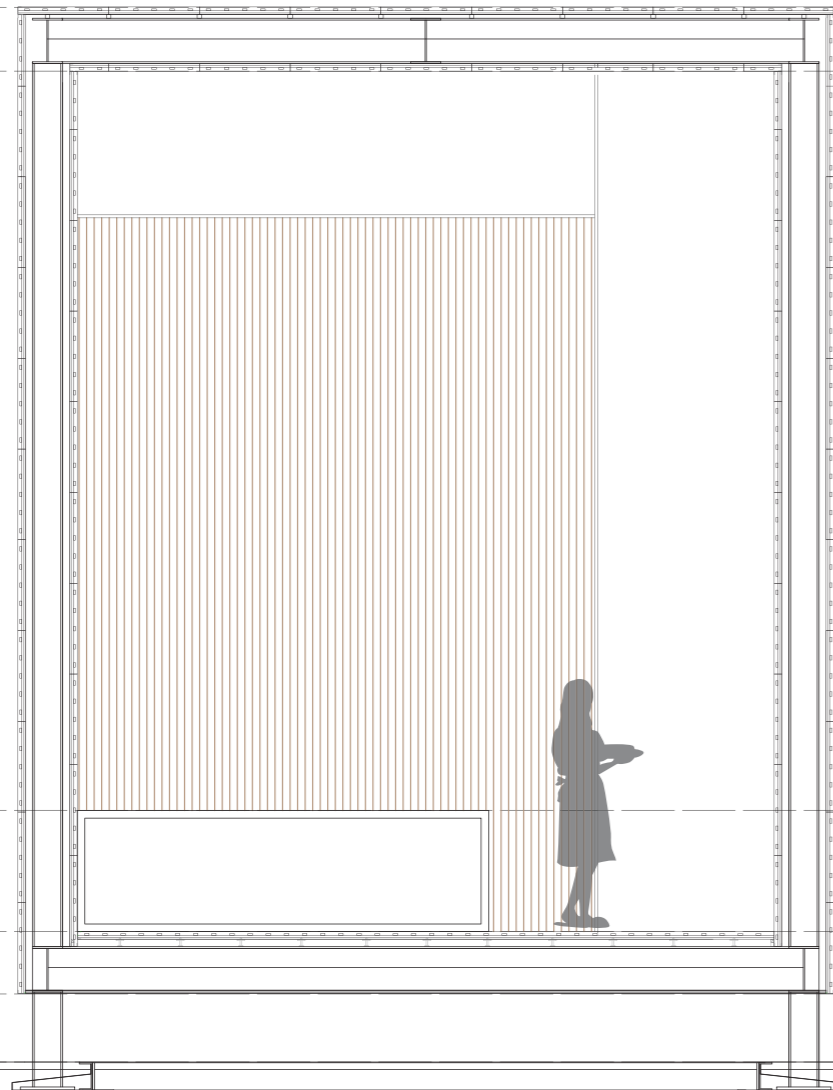
Traditionally farm house kitchen has an earthen floor as it is a space that needs frequent access from outside and it needs less care when it gets dirty. For the kitchen design, we kept it single layer, unlike the other eating pavillions, to allow direct access from the main passage.

We made the walls that separates the main pathway with the kitchen counter semi-transparent so that visitors can sit and watch the process of cooking rice and at the same time to permit the smell of rice to escape towards the main path.



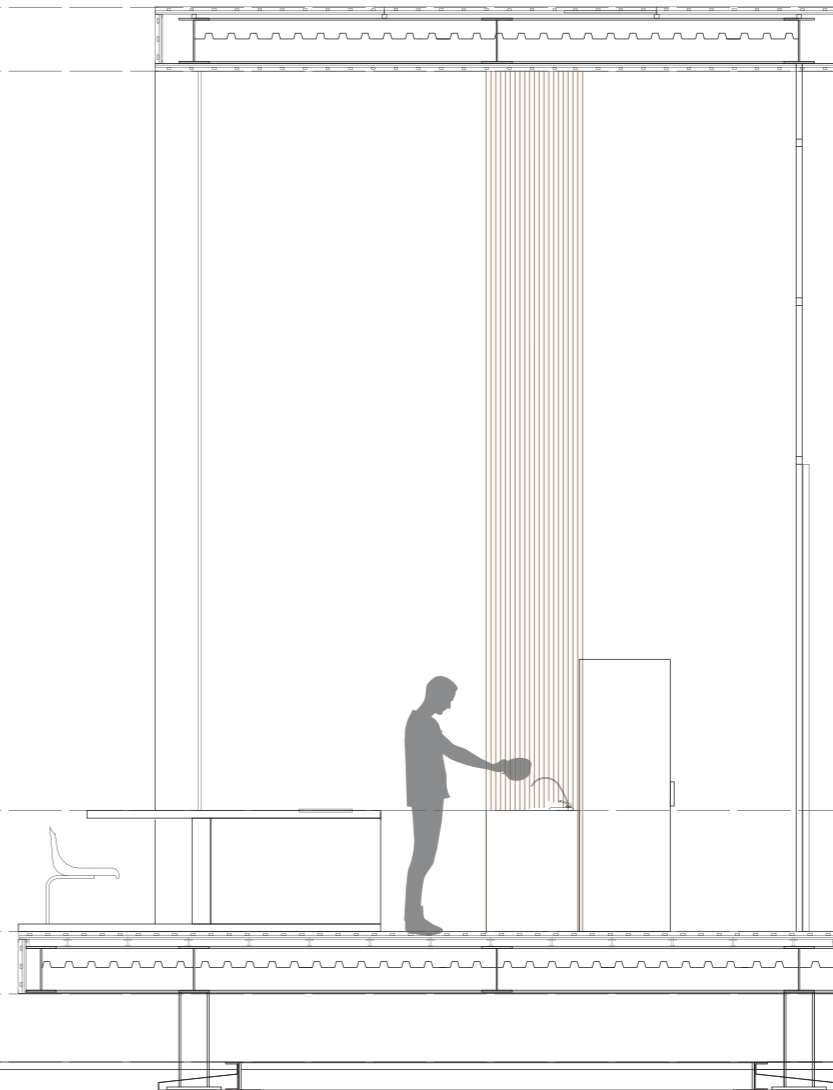
plan , sc: 1/50

fig.5.50



section A-A , sc:1/50

fig.5.51



section B-B , sc:1/50

fig.5.52

+6.95

+6.55

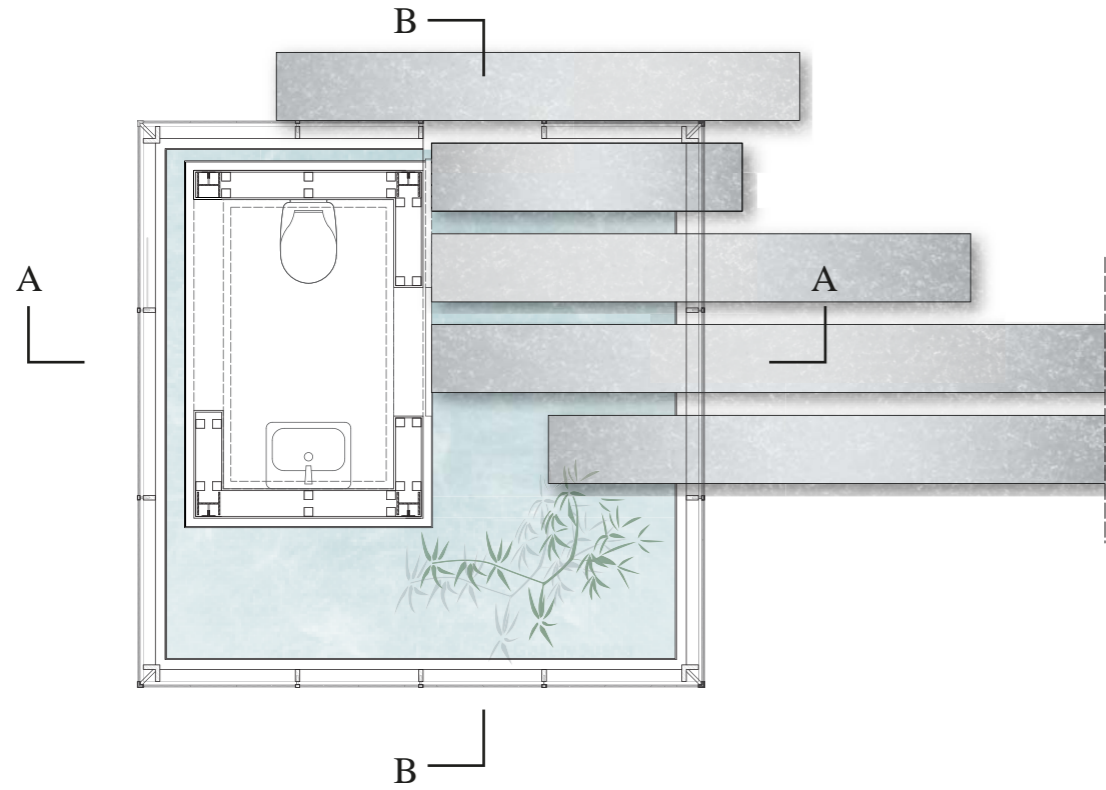
+1.65

+0.85

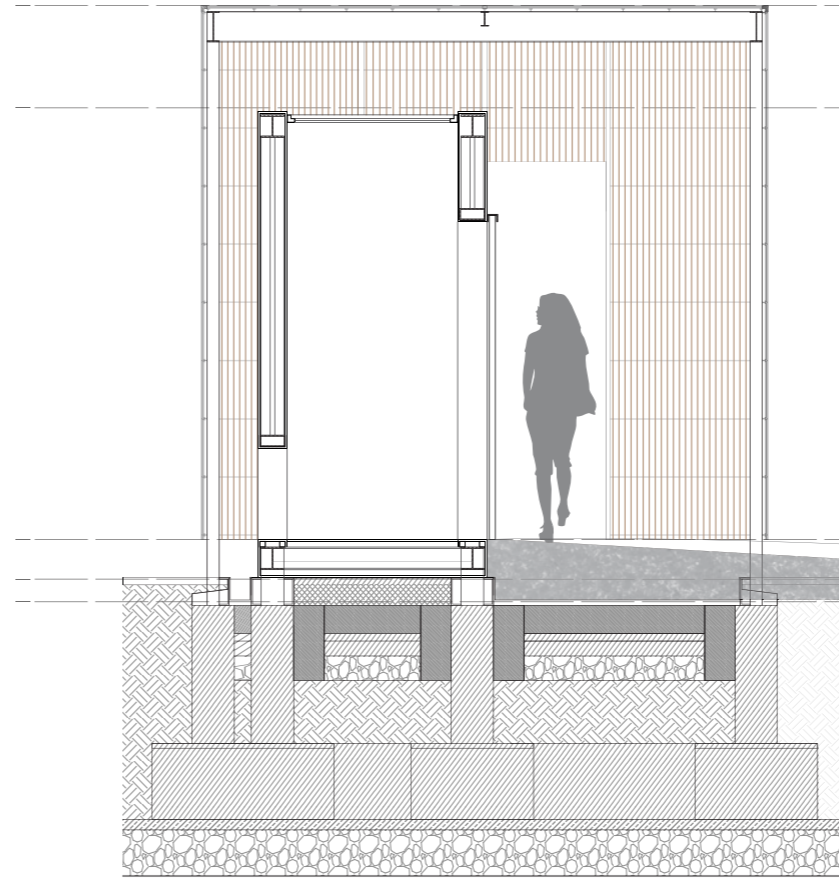
+0.45

+0.00

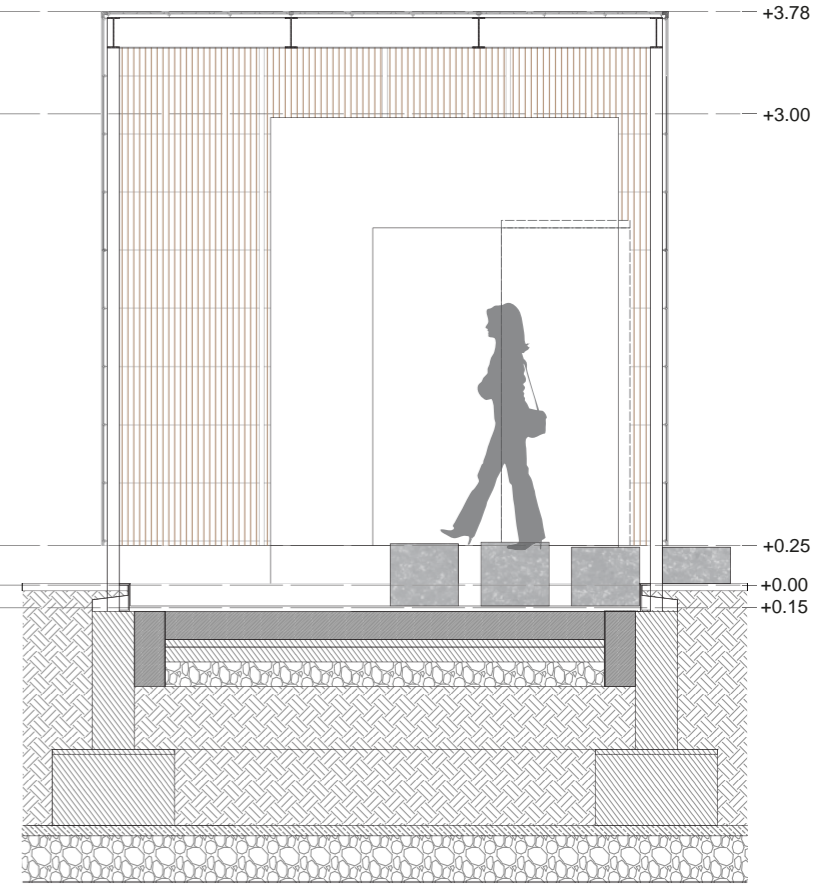
RESTROOM



plan , sc:1/50
fig .5.53



section A-A , sc:1/50
fig.5.54



section B-B , sc:1/50
fig.5.55

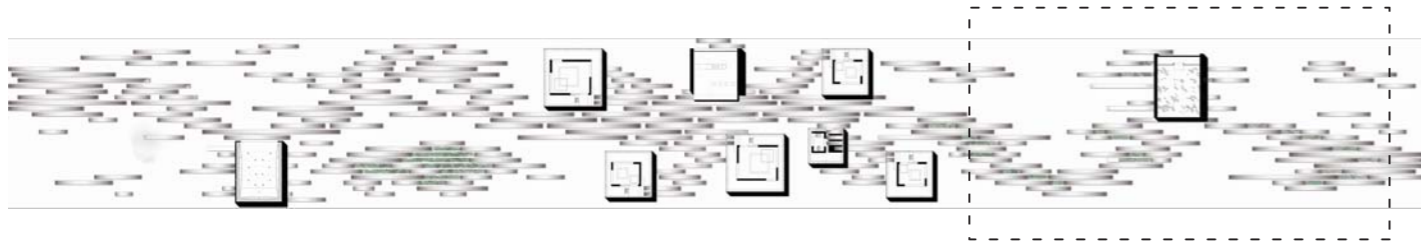
THANKING 2 PAVILLION

Design of thanking 2 pavillion takes reference from the offering space in Chinese Temple of Ancestors. It is a place designed to give thanks to the effort of whom brought the food onto our table.

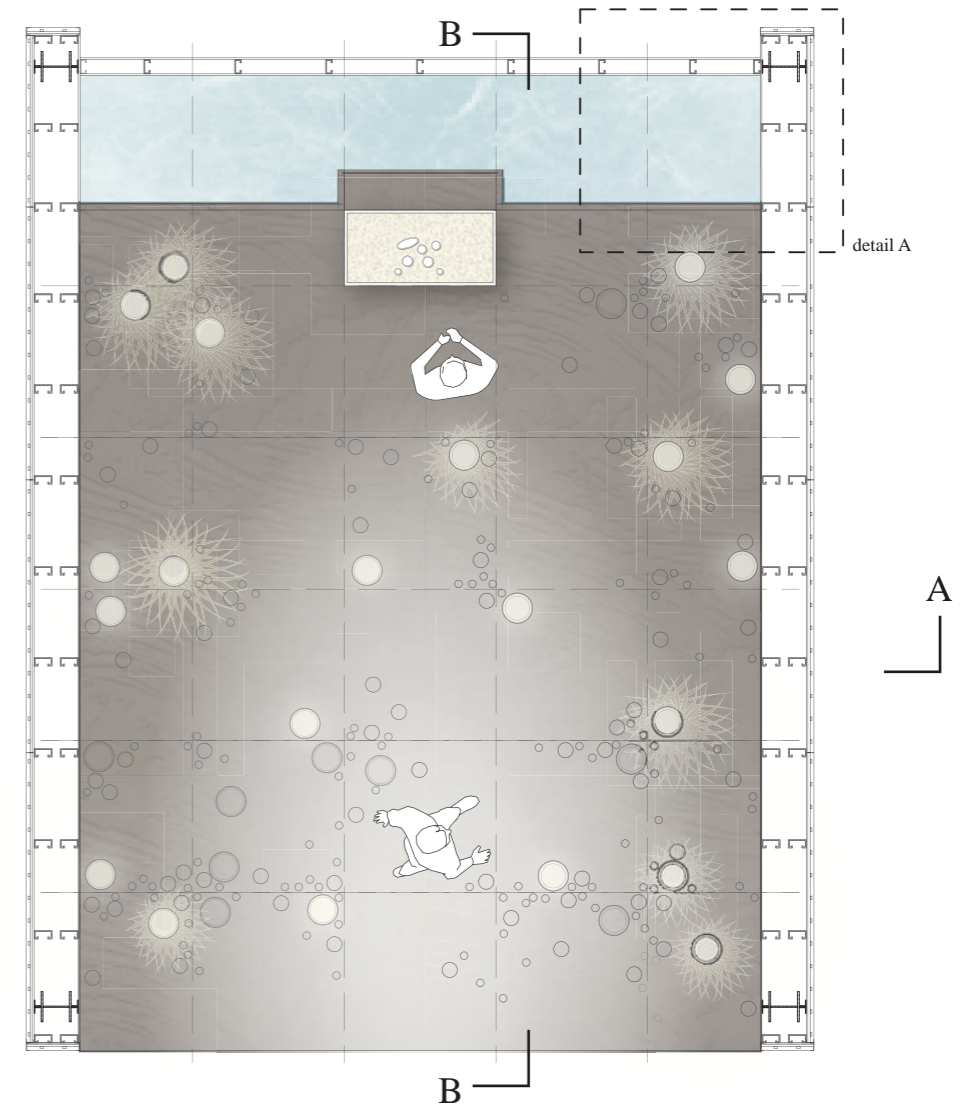
One of the interesting feature about the offering space is that it has many pillers in intervals and you will never reach the destination directly. In our design we located several pillers made of knitted rice straw and they are serving as obstacles to force people go around in order to reach to the offering table.

Another important aspect about the Chinese offering space, or any Far Eastern sacred architecture in common is that the space is very dark. It will never have a direct light as they do in churches, the light conveyed in the space is dim and shows just parts of the objects located inside. It increases the feeling of mistery and sacrarity according to their culture.

We designed the thanking 2 pavillion to make sure the space gets enough darkness. Sunlight is coming from the small openings in the ceiling through knitted straw pillers and is filtered before entering to the space. At the back of offering table are the scrolls made of rice paper and are projecting the light reflected by the water at the bottom of the pavillion. It gives movement and liveliness to the space.

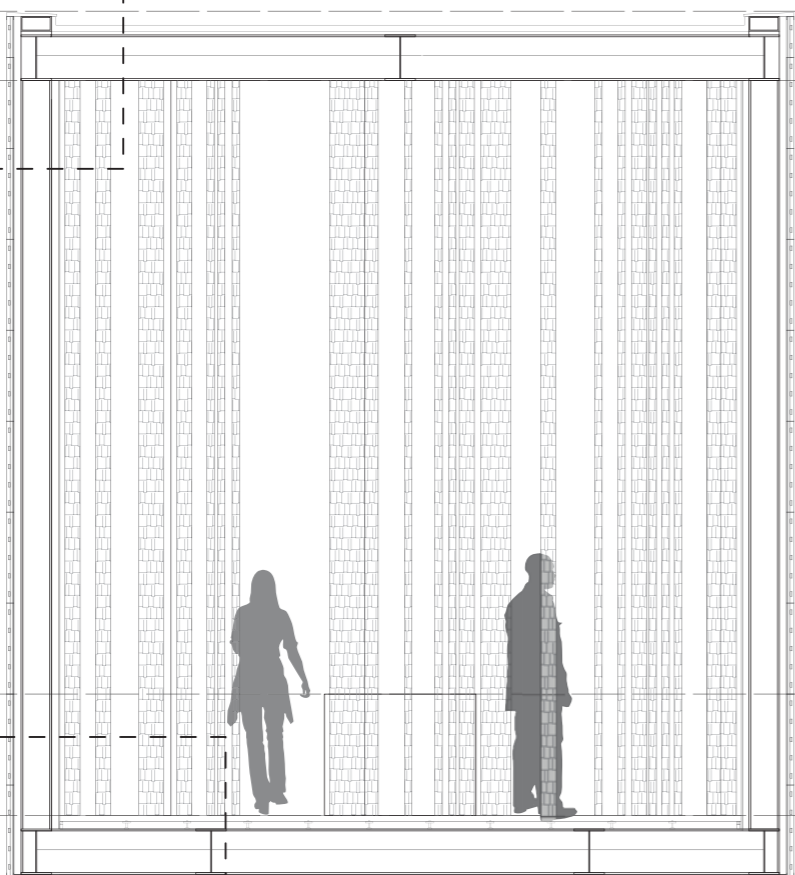


plan , sc: 1/50
fig.5.56



detail B

detail C



section A-A , sc:1/50

fig.5.57

+6.17

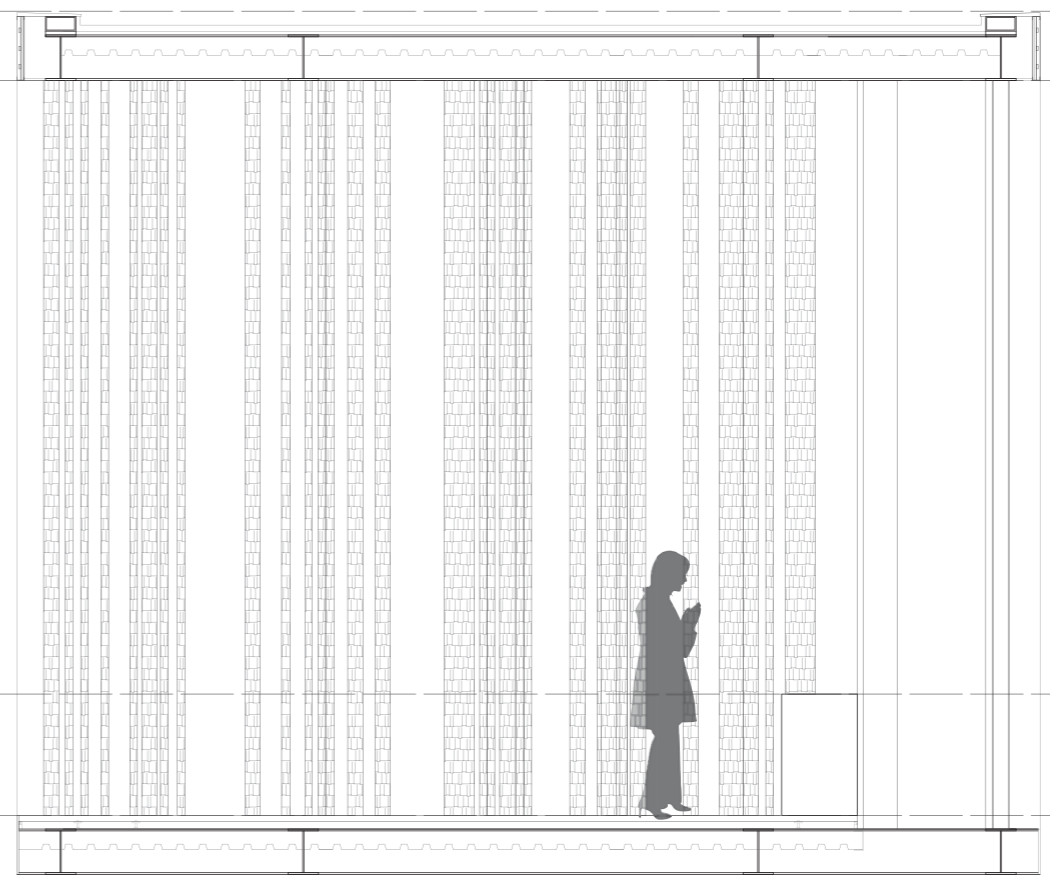
+5.69

+1.65

+0.85

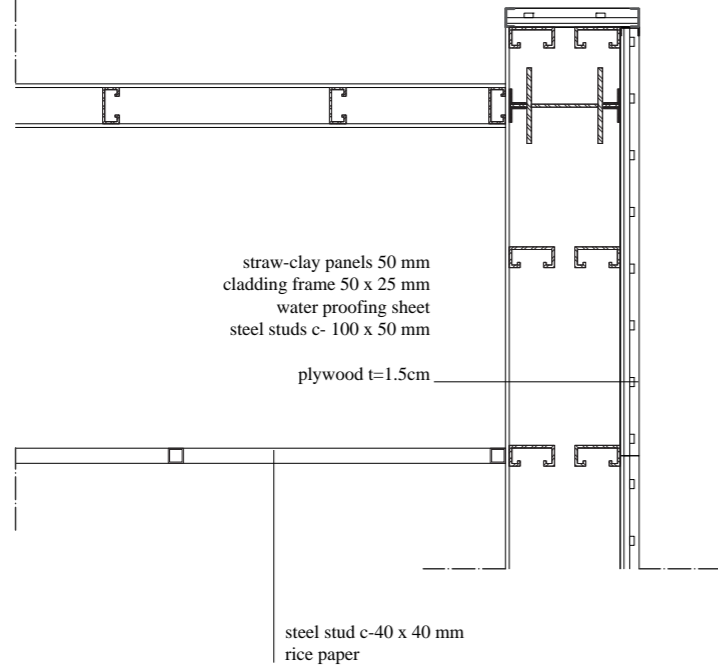
+0.00

+0.15

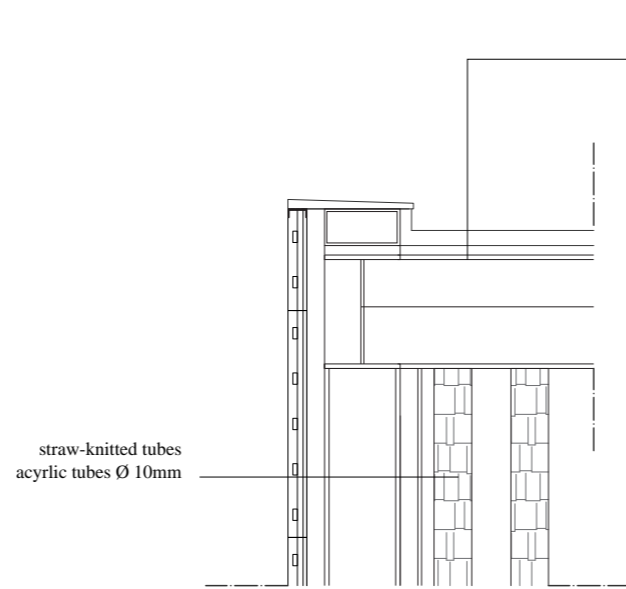


section B-B , sc:1/50

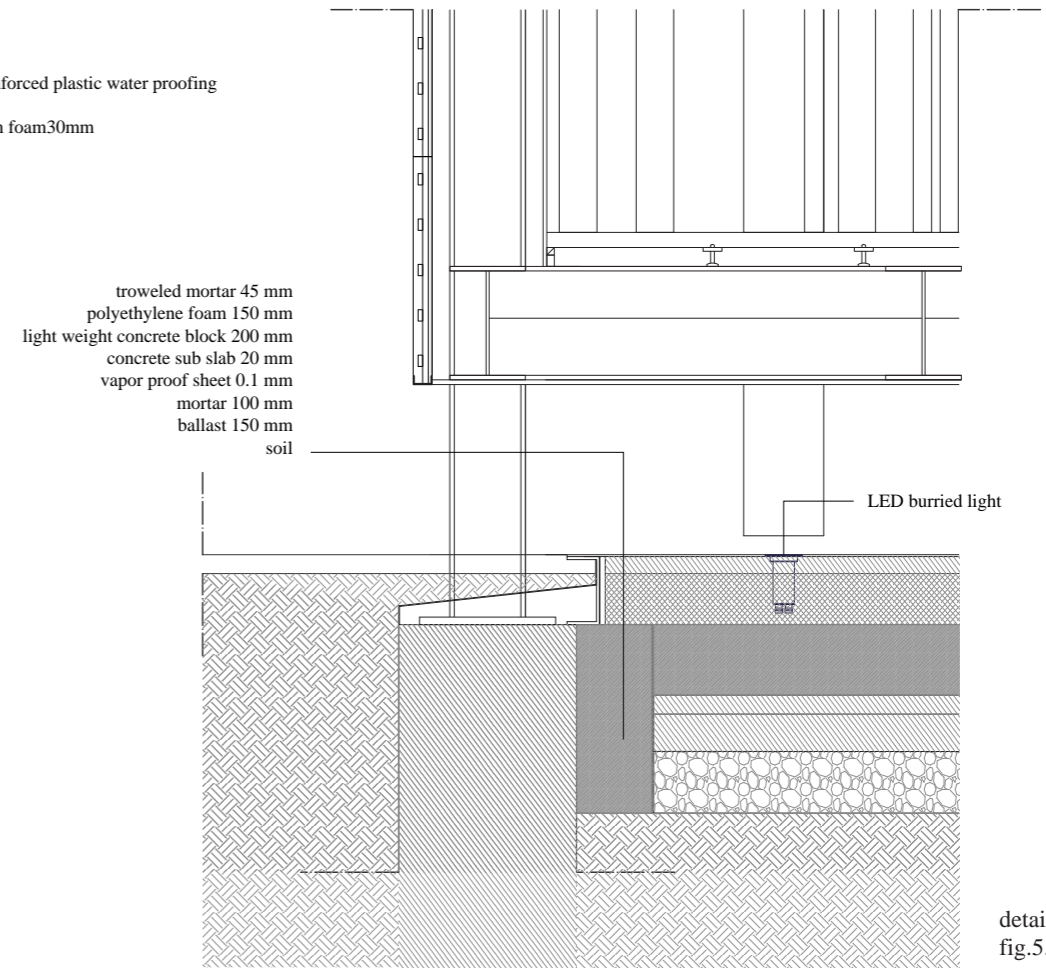
fig.5.58



detail A
fig.5.59



detail B
fig.5.60



detail C
fig.5.61

THANKING 2 PAVILLION INNER COLUMNS MATERIAL - STRAW KNIT

Knitting is a method by which thread or yarn may be turned into cloth or other fine crafts. Knitting consists of consecutive loops, called stitches. Different yarns and knitting needles may be used to achieve different end products by giving the final piece a different colour, texture, weight, or integrity. Using needles of varying sharpness and thickness as well as different varieties of yarn adds to the effect.[1]

In Far East for different types of artworks the knitted rice straw is being used since very old time. One of the artworks that Chinese and Japanese people were interested in was the rice straw-knitted lanterns .

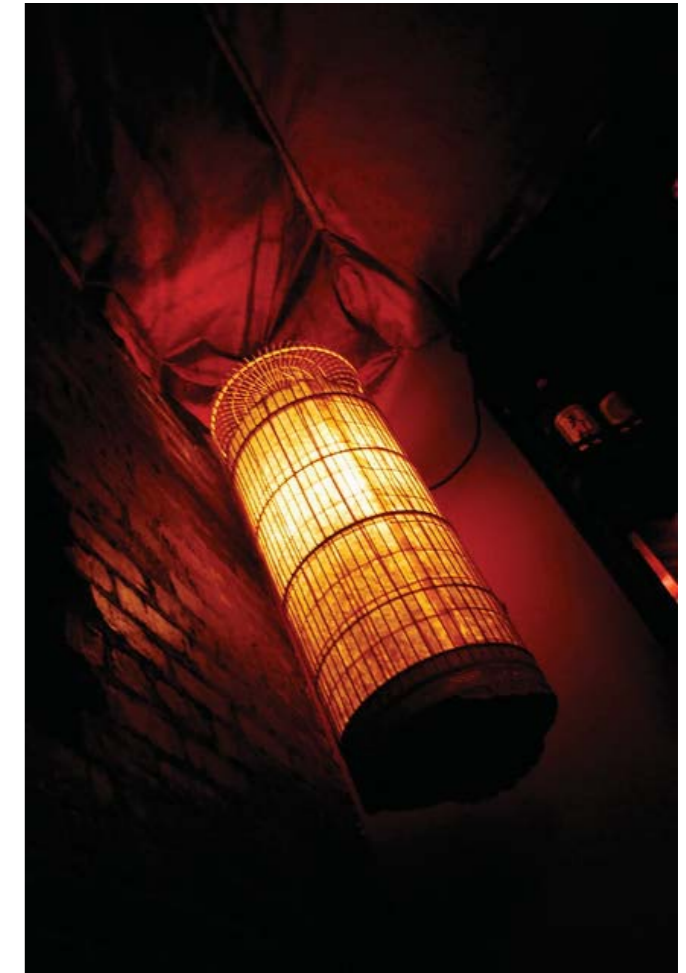
Light is distributed through the eyelets of the straw and different types of patterns form a shadowy texture over the interior walls of a traditional house.

The picture on the right shows the Asian lanterns and the quality of light distributed through the rice straw patterns.

In our second pavillion design (thanking 2) we used the rice straw - knitted columns as light sources and we used acrylic tubes inside the straw knit to diffuse the day light that is coming through the columns which are cutting the roof.

1. Article: 'Knitting' from http://en.wikipedia.org/wiki/Knitting#History_and_culture

fig.5.62 Image of Rice Straw-Knitted Lanterns



THANKING 2 PAVILLION OUTER SURFACE MATERIAL - STRAW - CLAY

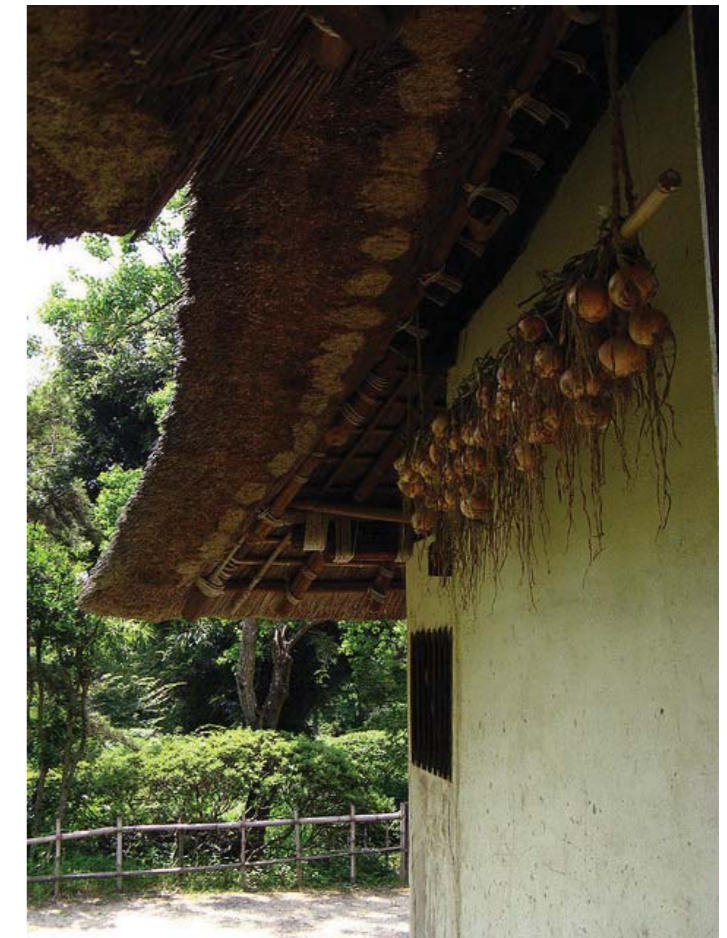
Straw-clay and cob combine the thermal mass qualities of earth and clay with the insulative quality of straw to make an exceptional building material. Modern straw-clay construction is considered a European building system. It is a nonstructural insulation/mass system that compresses a mixture of clay and loose straw into a wall cavity. Compressed straw is coated with a clay slip and compacted into temporary wooden forms. The mixture typically consists of approximately 80 percent straw and 20 percent clay.[1]

The straw/clay walls are one foot thick and have no vapour barrier, allowing the entire building “to breathe”. These combined features provide for unmatched interior comfort and air quality. [2]

In Japan , the central concept in the design and construction of minka -the dwellings of farmers- is the use of cheap and readily available materials such as wood, bamboo, clay and various kinds of grasses and straw.External walls were often completed with the addition of bamboo and clay.

The picture on the right shows Echizen Tsuruga House from north shore of Lake Biwa , near Kyoto which was built with the method of straw-clay in the late 18th to early 19th century.

In our second pavillion design (thanking 2), we used the straw-clay technique for the outer walls and we gave a new texture with rice straw to our facade.



1. Article: 'From the Ground up ', A premier for natural house building , Rachel Ware & Laurie Stone , 2004
2. Article: 'Why Straw / Clay Construction ?' from the website www.harvesthaven.com

fig.5.63 Images of Straw Clay on Traditional Japanese Farm House

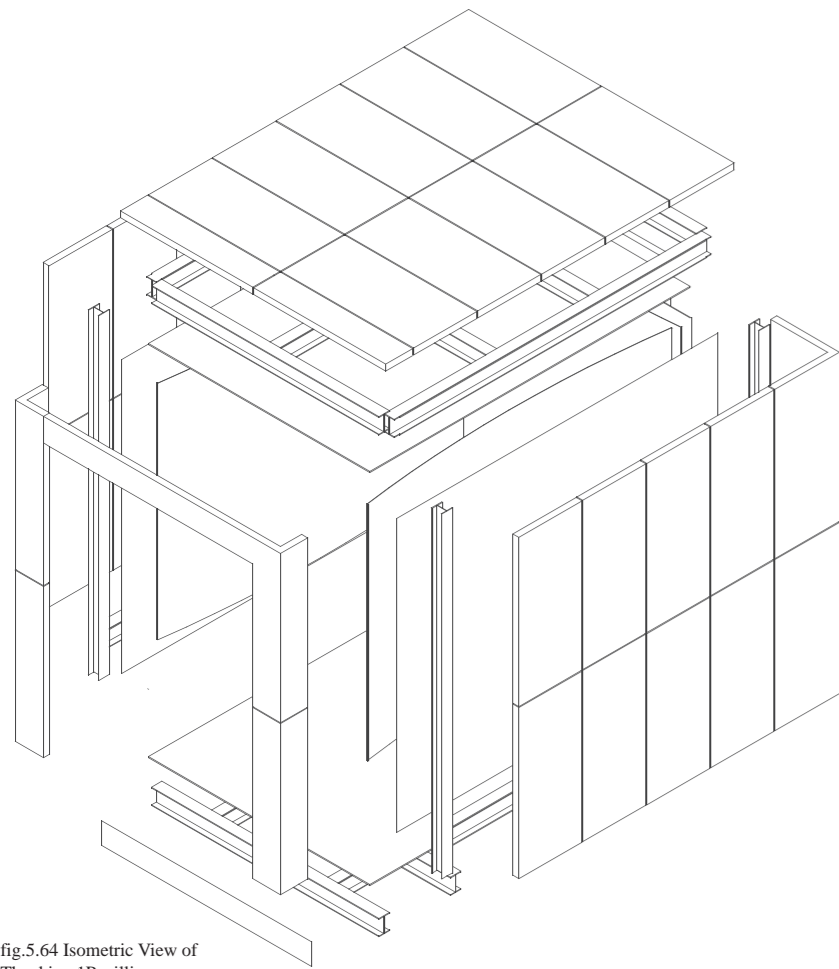


fig.5.64 Isometric View of Thanking 1 Pavillion

PAVILLION STRUCTURE
THANKING 1
Materials

- Outer facade
Rice straw 
- Inner walls /
floor / ceiling
Kiri wood 
- Platform
Rice paper 
- Plant
Single rice
cultivation box 

PAVILLION STRUCTURE
THANKING 2
Materials





- Outer facade
Straw - clay 
- Inner walls /
floor / ceiling
Rice plaster 
- Columns
Acrylic tubes covered
by straw - knit 
- Platform
Rice paper 
- Offering table
Bowls of rice grain 

fig.5.65 Thanking 1 and Thanking 2 Materials

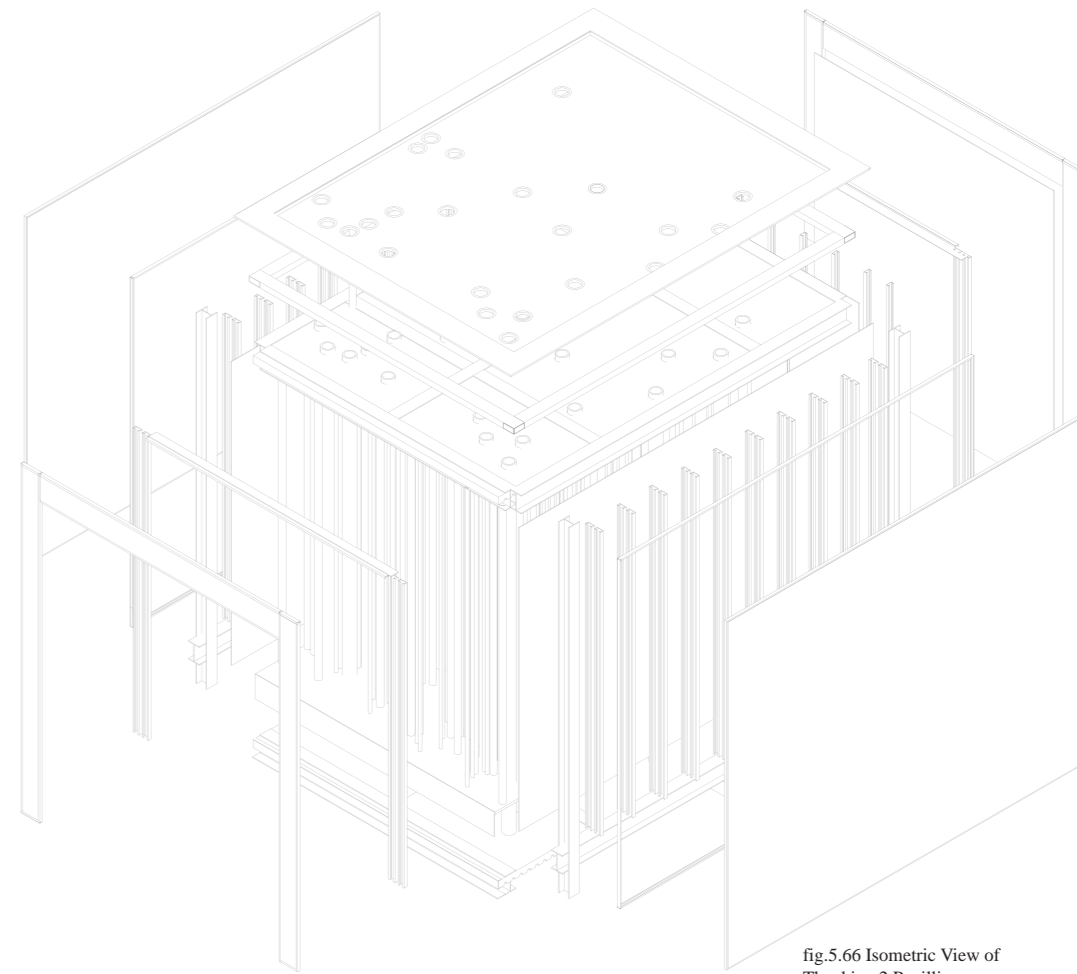


fig.5.66 Isometric View of Thanking 2 Pavillion

In our pavillions , we used steel structure as the main supporting skeleton.

In thanking 1 pavillion ,we used curved wooden panels made of kiri wood for the acoustical solution and for the outer facade we used the thatch-roof material (rice straw) in a different vision and we designed hanging panels of rice straw and we closed up the straw to create a new outlook for facade. We put a single rice into a cultivation box and we located it on a platform made of rice paper and we illuminated the platform so that it can direct the visitors towards the rice which is the object of admiration in the pavillion design.

In restaurant and toilet pavillion , we used double layer system in order to represent the idea of tea house in a garden. The delicateness of the tea garden fence has been a reference for our outer facade material . The outer facade consists of double layered rice straw fence,we re-interpreated the scale of harvested rice plant and transformed it into in a bigger scale for applying it on the outer layer of restaurant.Inner walls are kept calm by using textured plaster . We designed an inner garden for the idea of appreciation of nature .In a shallow pool we put lotus and plants. We used the floor surface material wood for the inner layer where people eat rice in a digged slab and sit on cushions not on chairs.

In thanking 2 pavillion ,we used straw-clay method which is an ecological method for ancient Japanese farmhouses.We tried to give pattern to the earth by adding straw , on the inner walls , ceiling we used white rice plaster to keep the design simple and emphasize the offering table which is made of rice paper . The wall behind the offering table is also made of rice paper to let diffused light inside the pavillion by the reflection of sun over the water pool located under the wall. Columns leading the way towards offering table are acrylic tubes to reflect the day light coming from the roof and they are covered by straw-knit .In the night the light located under the columns let the columns become the light source of the space.

PAVILLION STRUCTURE RESTAURANT AND RESTROOM Materials

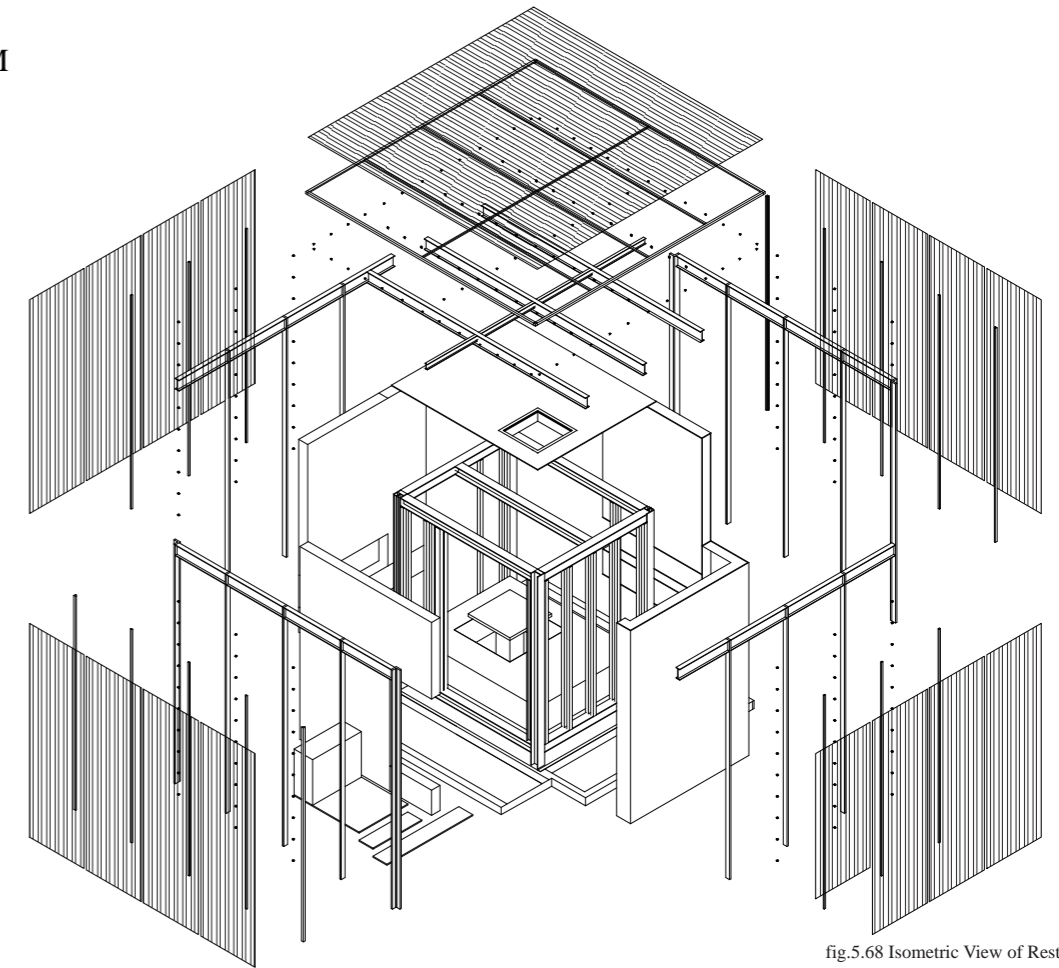
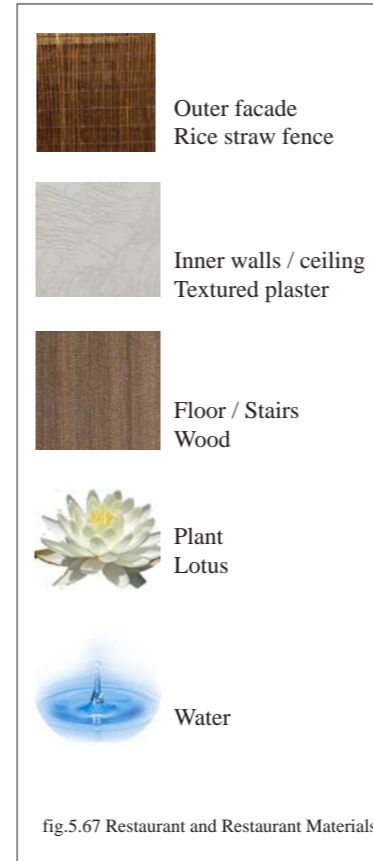




fig. 5.69



fig. 5.70



fig. 5.71



fig. 5.72



fig. 5.73



fig. 5.74



fig. 5.75



fig. 5.76

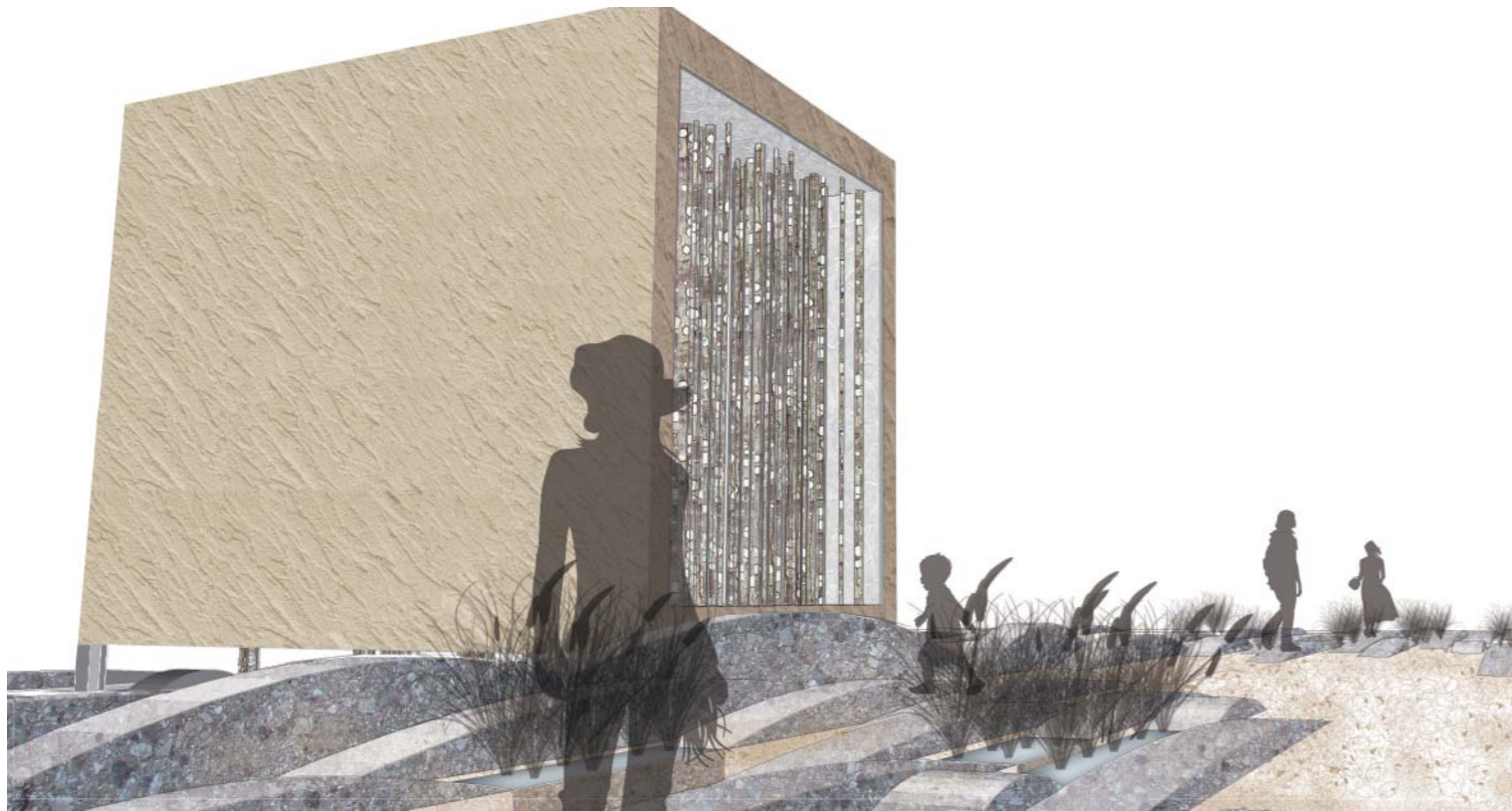


fig. 5.77



fig. 5.78



fig. 5.79



fig. 5.80

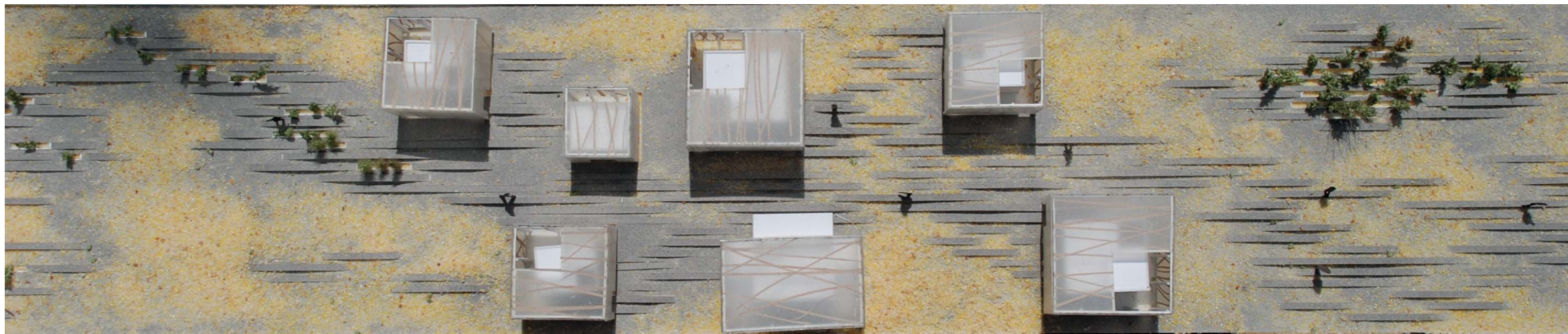
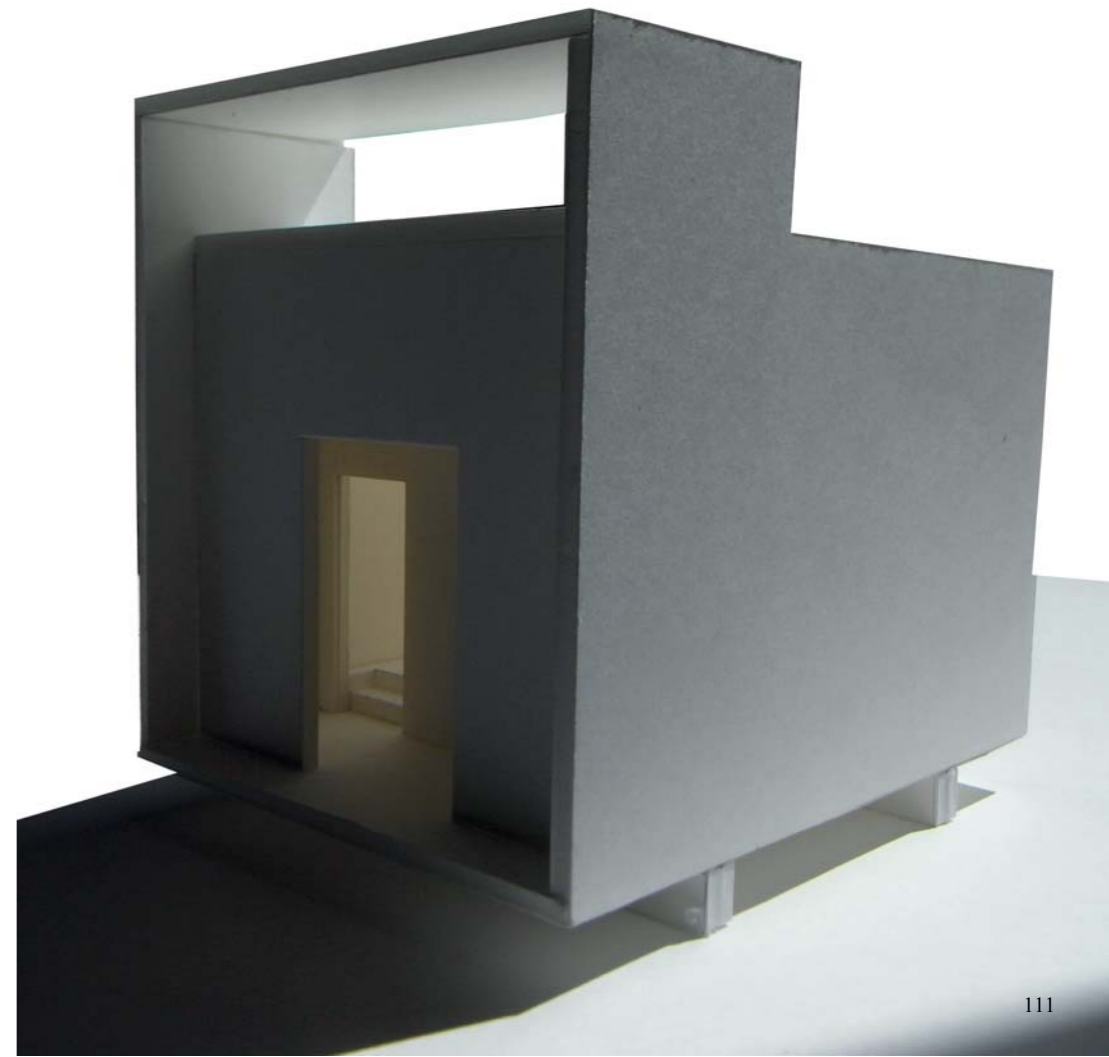


fig.6.1 Photograph of Maquette Process , 20 July 2010

fig.6.2 Photograph of Maquette Process , 20 July 2010



fig.6.3 Photograph of Maquette of Thanking 1 Pavillion , 20 July 2010



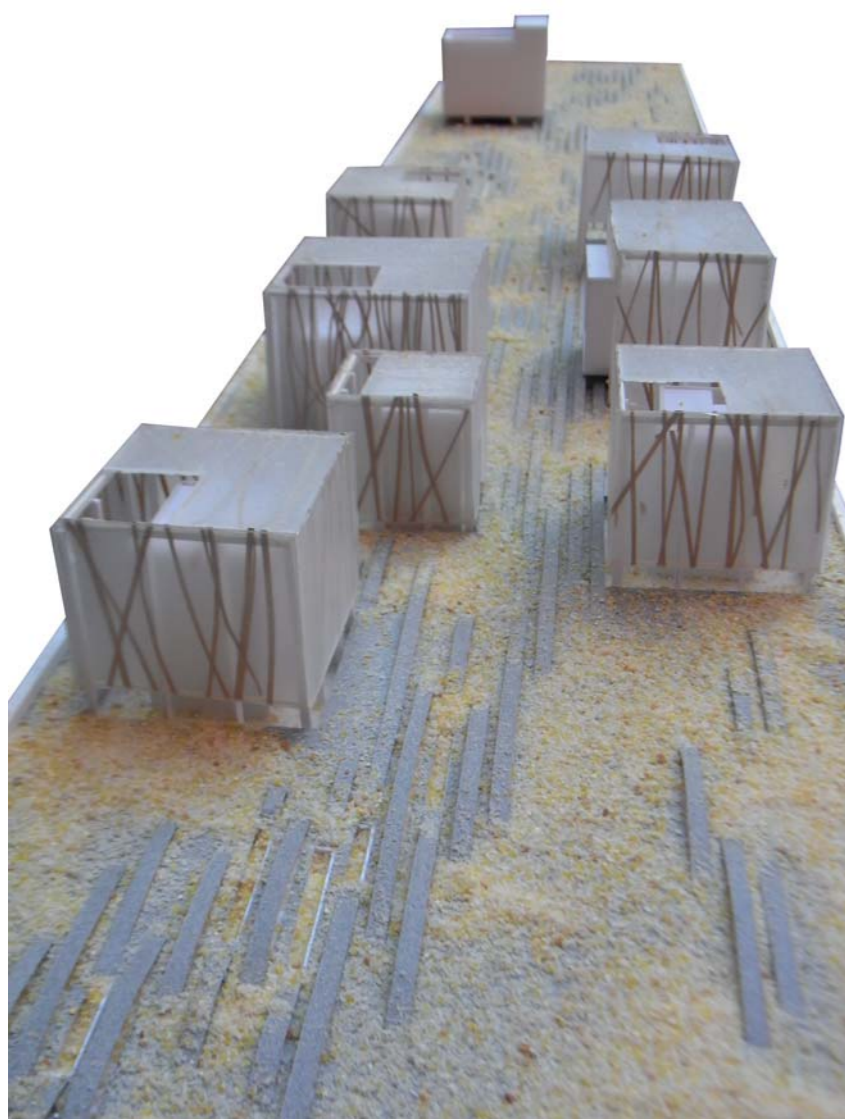


fig .6.4 Photograph of Maquette Process , 20 July 2010



fig .6.5 Photograph of Maquette Process , 20 July 2010

fig.6.6 Photographs of Maquette Process,
20 July 2010

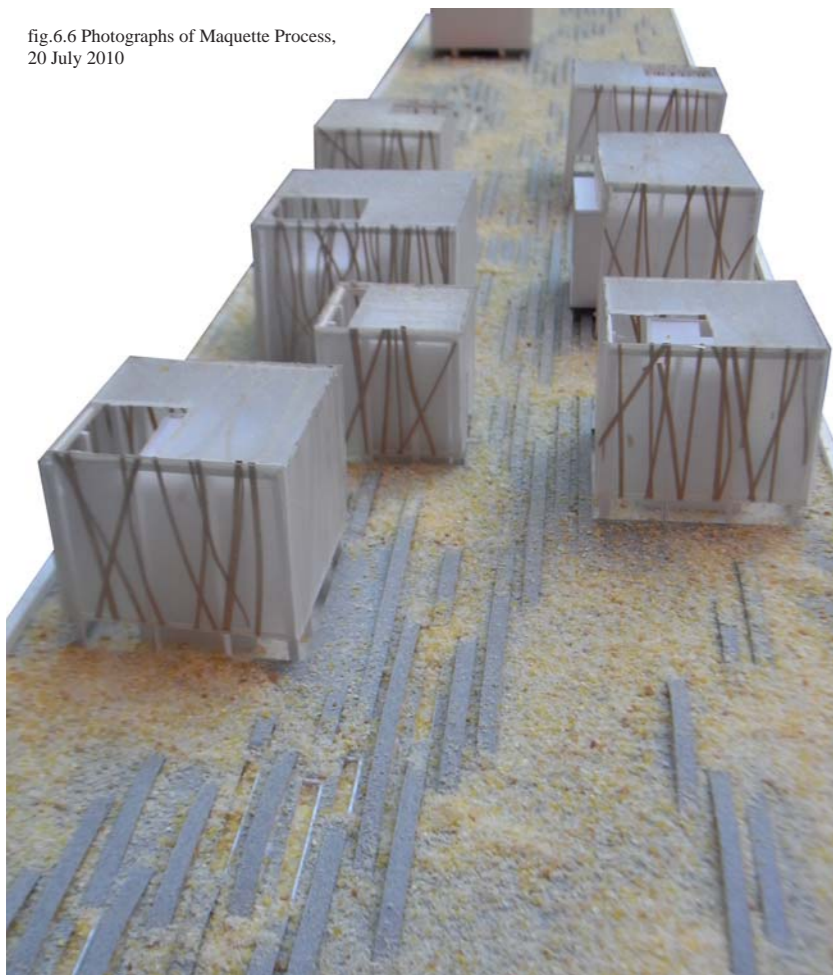
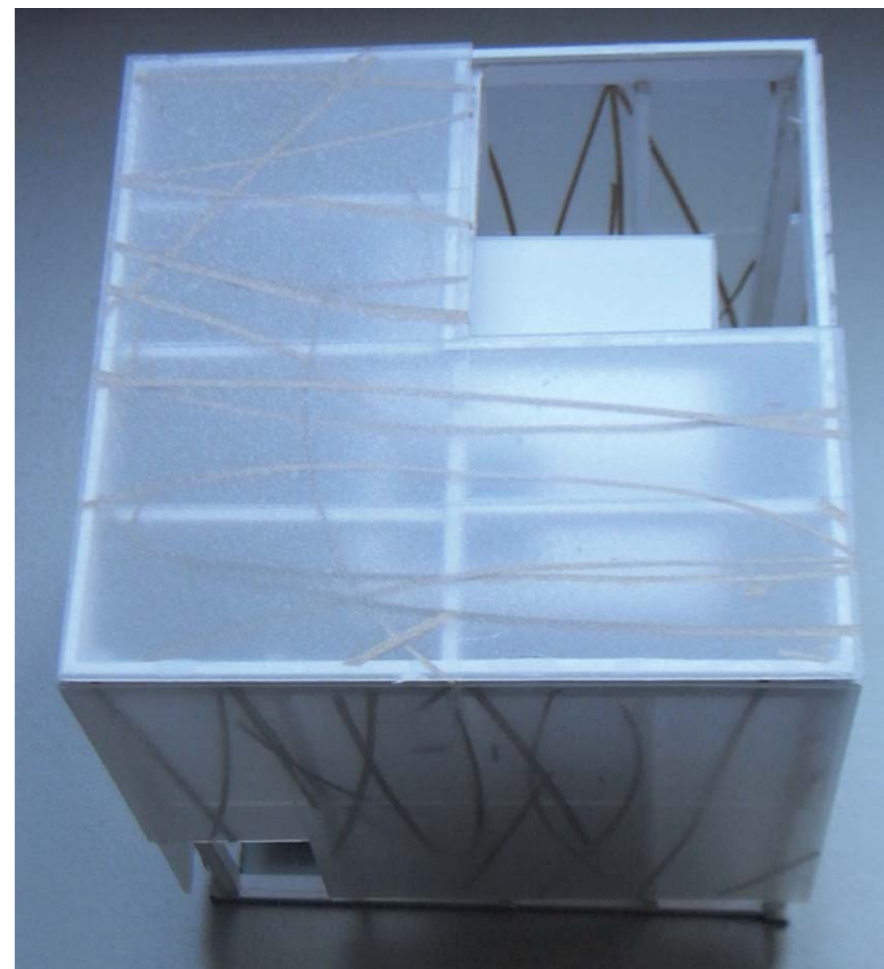
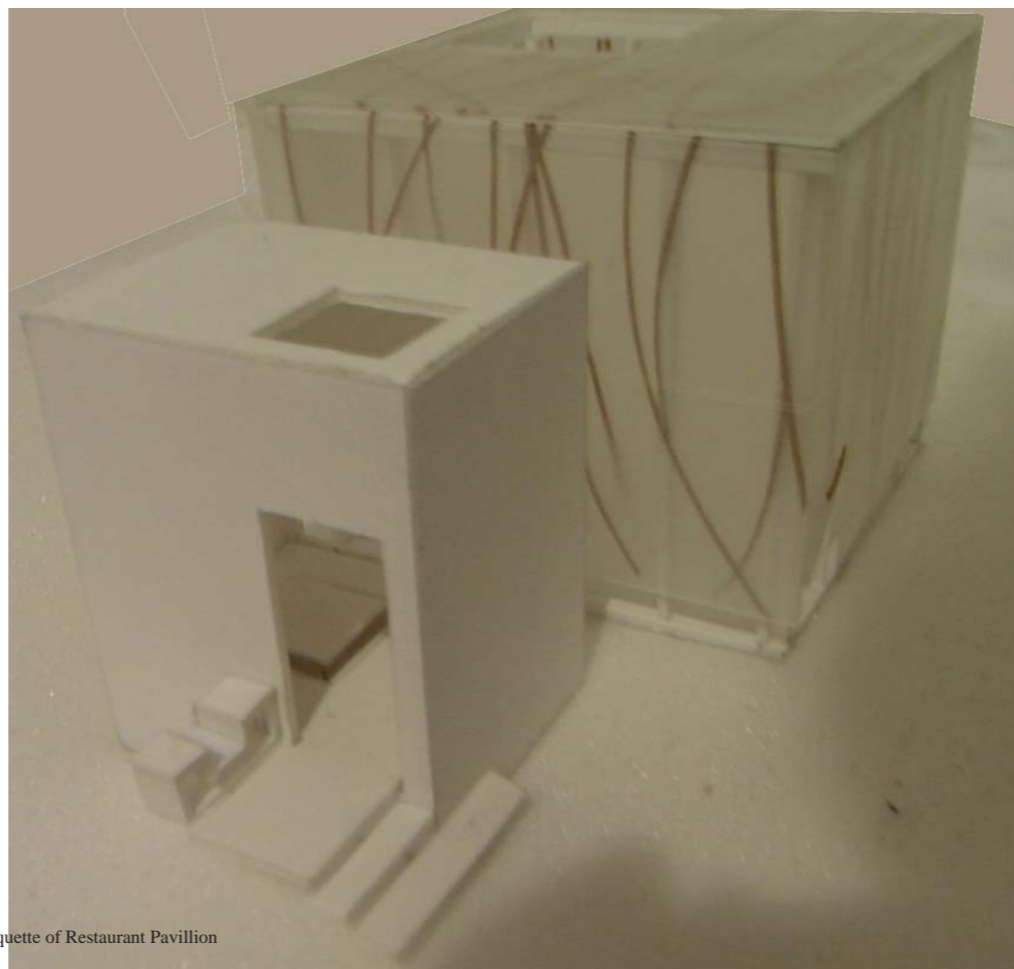


fig.6.7 Photographs of Maquette of Restaurant Pavillion



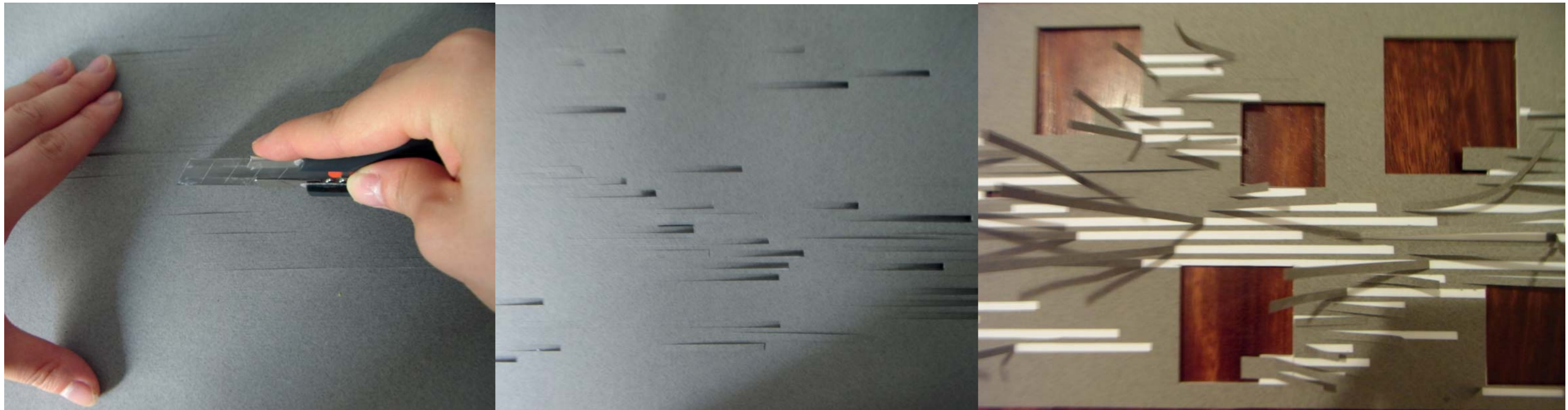


fig.6.8 Photographs of Maquette Making Process , 15 July 2010

BIBLIOGRAPHY

Architectural Institute of Japan, Compact Technical Book for Design Planning (Housing), Maruzen Ltd, June 1991

Asian Rice Culture and Its Terraced Landscapes Report on the Regional Themastic Study Meeting, Manila (Philippines)
March to April 1995
<http://whc.unesco.org/archive/rice95.htm>

Blog for Image of Ancestral Hall
(<http://blog.yangshuomountainretreat.com/blog/index.php?paged=>)

Border Jumpers, Meet Shayna Bailey, Slow Food International, Borderjumpers, March 2010
www.borderjumpers.org

Casa BRUTUS Extra Issue ABC's in Japanese Architecture and Design, Magazine House, July 2007

Casa BRUTUS No.90 ABC's in Japanese Architecture and Design Part 2, Magazine House, September 2007

ChinesePaintings.com
<http://www.chinesepaintings.com/chinese-painting/chinese-painting-P09008.html>

Chinese Poems.com
<http://www.chinese-poems.com/>

David Young, Michiko Kimura Young, Tan Hong Yew, Introduction to Japanese architecture, Periplus ; North Clarendon,
VT : Distributor, Tuttle Pub., 2004

Edward Zwick, The Last Samurai (Movie), 2003

Elizabeth Bebskin, Arts of Japan, A Teacher's Guide, Smithsonian Freer Gallery of Art and Arthur M. Sackler Gallery, 2005

Emiko Ohnuki-Tierney, Rice as Self Japanese Identities Through Time, Winter 2004
<http://www.asian-studies.org/ea/Ohnuki-Tierney.pdf>

Expo Milano 2015
<http://www.expo2015.org/>

JAANUS Japanese Architecture and Art Net Users System
<http://www.aisf.or.jp/~jaanus/>

Japanese Kitchen (Article)
http://en.wikipedia.org/wiki/japanese_kitchen

Jean Holm, Themes in Religious Studies, WORSHIP, Continuum International Publishing Group, 1994

John Wu, Red Cliff (Movie), 2008

Kumagai Mater Thatchers Co.Ltd Official Website
http://www.kayabukiyane.com/thatch_en.html

Dr. Kwanchai A. Gomez, RICE, THE GRAIN OF CULTURE, September 2001
http://www.thairice.org/html/article/pdf_files/Rice_thegrain_of_Culture.pdf

The Hundred Poets, Part I, Ebisu, circa. 1840-1842

Junichiro Tanizaki, Article: In Praise of Shadows pp173-221 from Collection of Essays by Junichiro Tanizaki, Iwanami
Shoten, 1985

Knitting (Article)
http://en.wikipedia.org/wiki/Knitting#Hitory_and_culture

Kyomachiya Sakujigumi, Techniques and Knowledge for Restoring Town House, Gakugei Shuppansha, 2002

Lee Sang-hae, The Special Issue on Architectural Aesthetics in East Asia, Sungkyun Journal of East Asian Studies, Vol. 4, No. 1, 2004

Leonard Koren, Wabi-Sabi: For Artists, Designers, Poets & Philosophers, Stone Bridge Press, July 1994

Lou Qinxin, 12 lectures of traditional Chinese Architecture, March 2004

Los Angeles Country Museum of Art Official Website for the Images of Rice Cultivation Through Four Seasons
<http://collectionsonline.lacma.org/mwebcgi/mweb.exe?request=record&id=155215&type=101>

Maggie Keswick, Charles Jencks, Alison Hardie "The Chinese Garden" Frances Lincoln Publishers Ltd, March 2003

Marian Moffett, Michael W. Fazio, Lawrence Wodehouse, World History of Architecture, Scott Grillo, 2004

Metropolitan Museum of Art Official Website : Landscape Painting in Chinese Art
http://www.metmuseum.org/toah/hd/clpg/hd_clpg.htm

Mirei Shigemori Garden Museum
<http://www.est.hi-ho.ne.jp/shigemori/association-jp.html>

Muinokai Official Website
<http://muinokai.or.jp/>

National Diet Library Official Website Rare Book Image Database for the Image of Genji & Heike print
<http://www.ndl.go.jp/index.html>

Naoko Oigami, Megane (Movie), Megane Shokai, September 2007

Nold Egenter, Japanese Rice Culture –The Misunderstood Philosophy of the Agrarian Past (Article),
http://home.worldcom.ch/negenter/473bTx_E01.html

Rachel Ware & Laurie Stone, From the Ground Up, Rachel Ware & Laurie Stone, 2004

Rob Marshal, Memories of a Geisha (movie), 2005

Table Manners (Article)
<http://japanesefood.about.com/od/tablemanners/ht/howtoeatjifood.htm>

Tadao Ando, What is Wabi-Sabi?(Article)

Takatoshi Yokota, Shinichi Sakamoto, Hideki Tachibana, Thesis: Visualization of Sound propagation and scattering in rooms, Institute of Industrial Science, Graduate School, University of Tokyo, October 2001
<http://www.zainea.com/visual.html>

Tatami (Article)
<http://en.wikipedia.org/wikitatami>

Tea Ceremony (Article)
http://en.wikipedia.org/wiki/Tea_ceremony

Tenshin Okakura, The book of Tea, Kodansha Ltd. 1994

Thatching (Article)
<http://en.wikipedia.org/wiki/Thatching>

Wang Qijun, "Illustration Dictionary of Classical Chinese Architecture", China Machine Press, December 2006

Wabi-Sabi The Aesthetics of Solitude (Article)
www.harmitary.com/solitude/aesthetics.html

Why Straw/Clay Construction?
<http://www.harvesthaven.com/lighthouse/strawclay.html>

YABUNOUCHI ENNAN Official Website
<http://www.yabunouchi-ennan.or.jp/>

Yoichirou Saito , "Rice DNA Tells Us Rice Crops Culture" NHK, 1996

We would like to express our gratitude to our supervisor , Prof .Remo Dorigati . With his enthusiasm , his inspiration , and his great efforts to explain things clearly and simply , he provided encouragement , good advice , good teaching , good company , and lots of good ideas throughout our thesis-writing period. We appreciate his vast knowledge of Far Eastern culture and his assisting in writing our thesis.

We would also like to thank our entire extended families for providing a loving environment for us during our lives and in particular , we must acknowledge our best friends Mustafa Tural , Sinan Beseli and Likang Cheng , without whose love , encouragement and editing assistance , we would not have finished this thesis.

20 December , 2010 in Milan