Graduation plan P2 – All tracks

Personal information

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<thead>
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Studio

<table>
<thead>
<tr>
<th>Name</th>
<th>Expolrelab</th>
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<tr>
<td>Teachers/Tutors</td>
<td>Main mentor: Eireen Schreurs</td>
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<tr>
<td></td>
<td>Research mentor: Birgit Jürgenhake</td>
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<td></td>
<td>BT mentor: Jan van de Voort</td>
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Argumentation of choice of studio

Expolrelab is a studio that nominates students based on their personal fascination and offers the opportunity to develop this fascination into a research and design project. As I was caught by a specific fascination into Japan I considered Expolrelab to be the studio that would offer the right program for my graduation.

Goal

<table>
<thead>
<tr>
<th>Location:</th>
<th>De Grutte Wielen, Friesland, The Netherlands</th>
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<tbody>
<tr>
<td>The posed problem, research questions and design assignment in which these result.</td>
<td>In the text below.</td>
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The posed problem

The rational based architectural climate in the Netherlands, can be seen as significant for the Western building climate since the Modern architecture and the technical developments of mass production, as Florentine Sack explains in her book the ‘Open house’. Sack ascribes the rational approach to the division of science in the west into esoteric and exoteric. Opposed to the intuitive, esoteric understanding of the cosmos, the rational, exoteric understanding formed the basis of Western science and aesthetics.  

During my working- and travel experience in Japan I came across a different approach towards architecture, which in my personal observation appeared to be more poetic, intuitive and sensitive.

During my travels in Japan I photographed textures of the build surroundings. While documenting these detailed pictures I was fascinated by the beauty of the weathered facades that showed their lifetime by the traces of water, sun, or wind. Readings and experiences made me aware of a high degree of Japanese spirituality. My feeling was that the sensibility of Japanese architecture seemed to relate to an ephemeral character, a sense of embracing impermanence.

The notion of time in relation to the building, seems to relate in the Japanese culture to a degree of temporality by the flexible use of spaces and their changing settings, by the acceptance of the weathering of natural materials, or even ultimately to the short lifespan of 26 years of the modern houses, occurred to me as strongly relating to a more spiritual relation towards nature and its temporality.

Western literature addresses similar topics regarding the European architecture, such as David Leatherbarrow in his book on ‘On Weathering: The Life of Buildings in Time’, that advocates the quality in viewing the weathering materials as part of the aesthetics of a building. Also American writer Stewart Brand discusses the lifespan of a building of Western architecture in the book ‘How Buildings Learn’. Brand views a building as a scheme of different layers each with their own lifespan.

However, my observations in Japan made me aware of the sensitive and even spiritual approach stated in the Japanese architecture that relates differently towards similar topics discussed in Western literature regarding the lifespan of the building and its relation to nature in terms of weathering materials or spatial enclosure.

The fascination for the Japanese sensibility in architecture from my personal experiences created the intention

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1 Sack, Florentine. Das offene house, Jovis Berlin, Berlin, 2006
to use this Japanese sensibility for the design of a building in the Dutch context, which in this case is the rural surroundings of Friesland. Therefore, a research is necessary that is based on my own observations together with a theoretical frame in order to formulate specific themes relevant for the design of a building in the Frisian countryside.

This results in the following research questions.

**Main research question**
What can I learn from my observation regarding traditional Japanese architecture and can I use certain aspects for the Dutch context?

Definitions:
Observation
The action or process of closely observing or monitoring something or someone

Traditional Japanese architecture
Housing built around the Edo Period (1616-1860)

Dutch context
My site: de natural area ‘Grutte Wielen’ in Friesland, the Netherlands

Subquestions:
1. What were my observations?
   - What do I observe in my photography?
   - What do I observe in woodblocks?
   - What do I observe in haiku’s?

   Resulting in:
   - The observation of temporality:
     The state of existing within or having some relationship with time:
   - The observation of flexibility:
     The ability to be easily modified:
   - The observation of Relation (of inside to outside):
     The way in which two or more people or things are connected; a thing’s effect on or relevance to another:

   Source definitions: [www.oxforddictionaries.com](http://www.oxforddictionaries.com), access date: 08-06-2014

2. What is the theory behind traditional Japanese architecture concerning temporality, flexibility and relation of inside and outside?
   - What is the Japanese climate, spirituality and aesthetics?
   - What is the Japanese architecture in a greater sense; the module, ma, oku and rituals?
   - What is the relation between Japanese architecture and nature; the influence of climate on architecture, spirituality of wood and the garden?

3. How is temporality, flexibility and relation to inside and outside translated into specific aspects of traditional Japanese architecture in different contexts?
   - How do the spatial characteristics relate temporality, flexibility and relation to inside and outside?
   - How is the building constructed regarding the use of the module concerning temporality, flexibility and relation to inside and outside?
   - How do the materials employed relate to the topics of temporality, flexibility and relation to inside and outside?

4. How do the topics of concerning temporality, flexibility and relation to inside and outside relate to Frisian context for my design?
   - What is the history of the Frisian site de Grutte Wielen?
   - What is the view on Frisian nature in paintings and poetry?
   - What are the characteristics of the site?
   - How do the materials weather in the surroundings of the site?
   - What is the way of building concerning the relation concerning temporality, flexibility, to inside and outside of the surroundings buildings?

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Design

As the intention of the research is eventually the translation of the specific themes into a building in the Frisian context, design assignment will not only focus on the design of building but also on the surrounding landscape, in order to fully employ the potential of the site and the topics of temporality, flexibility and relation to indoor and outdoor.

The location of the design is a natural area named ‘de Grutte Wielen’, situated North-East from the capital Leeuwarden. The Frisian character and the nature of the area, provide the Grutte Wielen with a great potential to attract visitors and to make a sensitive connection of Frisian nature with architecture that is currently not employed. The natural surroundings ask for a design approach that deals with the relation of the building towards nature, integrating the building in the Frisian natural and architectural building context while addressing current demands for sustainability and building techniques.

The program for the design assignment entails a strategy for the landscape and building design that integrates the design of a museum with a collection of art. By combining art, architecture and nature, both the interior of the building as the building in its relation to the landscape is connected by a sensitive approach that speaks to its visitors. This sensitive approach could combine the Japanese values of temporality, flexibility and relation indoor and outdoor, which are suited for combining nature, architecture and art, while the specific that will be used themes for the design will result from the research.

The assignment will entail a route that connects the indoor exhibition space, and outdoor exhibition. The outdoor exhibition is an art route, that seeks for direct relation to the natural characteristics of the site; the flooding parts of the different polders, the different vegetation of swamps, grass, reed. This route will connect different outdoor art pieces. The route will be designed as a strategy, however the focus will be on the design of the architectural interventions. This architectural intervention is a building that houses the indoor exhibition, together with the design of a restaurant/café and entrance office.

The architecture is an abstract interpretation of the surrounding nature in relation to the Japanese themes, while it is integrated with the art route. The importance of a careful consideration for the placing of the building(s) will also mean the building design entails a relation to the outdoor space, in which the direct surroundings of the building are manipulated and intervened (as courtyards and/or a garden).

The program entails the following functions and m2:

<table>
<thead>
<tr>
<th>Function</th>
<th>M2</th>
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<tbody>
<tr>
<td>Entrance</td>
<td>75</td>
</tr>
<tr>
<td>Ticket/Information Office</td>
<td></td>
</tr>
<tr>
<td>Wardrobe and lockers (With 30 lockers)</td>
<td>10</td>
</tr>
<tr>
<td>Desk</td>
<td>10</td>
</tr>
<tr>
<td>Museum shop</td>
<td>20</td>
</tr>
<tr>
<td>Exhibition space</td>
<td></td>
</tr>
<tr>
<td>Indoor exhibition spaces</td>
<td>1500</td>
</tr>
<tr>
<td>Permanent (1000) temporary (500)</td>
<td></td>
</tr>
<tr>
<td>Outdoor exhibition</td>
<td>1000</td>
</tr>
<tr>
<td>Outdoor space (courtyards/garden)</td>
<td>1000</td>
</tr>
<tr>
<td>Storage and technical facilities</td>
<td>125</td>
</tr>
<tr>
<td>Restrooms (m+f+d) (incl. baby changing room)</td>
<td>30</td>
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<tr>
<td>Restaurant/café</td>
<td></td>
</tr>
<tr>
<td>Seating area</td>
<td>60</td>
</tr>
<tr>
<td>Kitchen</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>3850m2</td>
</tr>
<tr>
<td>Parking</td>
<td>400m2</td>
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<tr>
<td>Total</td>
<td>4250m2</td>
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</tbody>
</table>
Literature mentioned in text:


Graduation project
Title:
Japanese sensibility in the Frisian context.

Process
Method description
A description of the methods and techniques of research and design, which are going to be utilized.

Research
-Analyzing my photography and observations of Japan
-Researching data: Poetry, woodblocks, literature and theories

Method of case studies
Case studies will be viewed consisting of traditional architecture dating back to the Edo period.
The intention is to look at various relevant topics concerning the architecture in a similar way for all case studies, in order to make a comparison between the different buildings.
Therefore, it seems necessary to select buildings with a similar function, which in this case is housing that are build around the same time period.
As the relation to nature plays a significant role, the case studies are selected based on three different contexts with buildings of different sizes; a small farmhouse the countryside, a small samurai house in the city, a large villa in an enclosed the park. This way it becomes clear how the buildings are adapted to their environment and which elements are significant for the philosophy behind the way of building.
Summarizing the criteria are:
- Similar function; Housing
- Same time; approximately around the Edo period
- Different context; the countryside, the city and the enclosed park
- Different size; Minka, Machiya and Villa

For each type one example will be studied, which is for the
Minka: Kitamura House, Hadano City, in Kanagawa, Japan (countryside), 144m2, build in 1687.
Machiya: Yoshida House in Kyoto, Japan (city), 264m2, build around 1880-1920.
Villa: Katsura Imperial Villa in Kyoto, Japan (enclosed park), 880m2, build in 1615 untill 1663.

The documentation for the three buildings is based on photographs, plans and sections. Important to notice is that the photographs of each of the buildings are taken in one moment. This is significant due to the fact that the interior settings of the Japanese house are changing throughout the year. By basing the analytical drawings on one moment, this moment is taken as the setting of the house for the comparison.

Minka: Kitamura house
https://deutsudesignstudio.wordpress.com/2012/10/15/kitamura-house-a-study-model/
http://english.nihonminkaen.jp/visual_visit/old_folk_houses/15_kitamura_house/
Google maps
Google images

Machiya: Yoshida House
Fingley, Eric, Stahl Caroline. The Urban Housing handbook, John Wiley and Sons Ltd., West Sussex England, 2009

Villa: Katsura Imperial Villa

Site analysis:
Site visits
Analysis based on photography of the site and surroundings and maps (by Google maps and historical maps provided by It Fryske Gea)

Interview on the ecology of the area with It Fryske Gea.

-Research Frisian culture: Comparing observations of Japan with Frisian observations, based on:
  Photography of facade details, analyzing poetry and paintings.

-Model making
  Use of material tests
  Building a 1/1 pavilion in a garden to test the themes.
  Models with different scales: 1/33, 1/200 or 500, 1/1000

-Drawings and sketching

**Literature and general practical preference**

The literature (theories or research data) and general practical experience/precedent you intend to consult.

**General practical experience/precedent**

**Research**

-Travel to Japan: Photography, and personal observations (ceramics)
-Woodblocks and Haiku's: Sourced at Museum Nihon No Hanga in Amsterdam
-Case studies: Yoshida House in Kyoto, Kitamura House in Kanagawa, Katsura Imperial Villa in Kyoto.

**Design**

-Site visit and analysis: Photography,
-Interview on ecology of the area with: It Fryske Gea, Jelle-Jan Douwsma.
-Reference research: Kröller Muller museum and Insel Hombroich
-Research Frisian culture and landscape: Poetry and Paintings on Frisian landscape. Source: Fries Museum

**Literature and theories:**


Fingley, Eric, Stahl Caroline. *The Urban Housing handbook*, John Wiley and Sons Ltd., West Sussex England, 2009


Reflection Relevance

The value of my graduation project in the larger social and scientific framework relies on the base of my research, which consists of my own observations that are subsequently researched with an academic approach by using literature and case studies. As there exists numerous literature on Japanese architecture, it is my personal point of view that is based on my objective observations as a 'Stranger' in Japan, according to the theory of Georg Simmel: 'The Stranger', which develops a relevance for a larger framework. Moreover, the conclusions of the research into the Japanese sensibility in architecture are translated into the Frisian context. The project aims to develop another sensibility in the design approach towards the natural surroundings of Friesland, which is based on the Japanese sensibility while it is integrated in the local buildings culture and natural surroundings. This translation regarding the aspect of cultural and natural context shows an approach that is relevant for a greater framework due to its application to the specificity of the site.

Planning overview

Week 3.1-3.5
Literature list / assemble data
Research questions
Problem statement
Selection Teachers

Week 3.6
Research frame and teachers
Literature list and data

Week 3.7
Start chapter one: Literature research
Site analysis
Week 3.8
Literature research
Program description
P1: 31th March

Week 3.9
Literature research
Connecting data of literature to design assignment

Week 3.10
Literature research: conclusions
Connecting data of literature to design assignment
Deadline chapter 1 Japanese philosophy: April 14th

Week 4.1
Case Studies: Selection criteria and method
Develop Masterplan

Week 4.2
Case Studies: Select cases and data
Develop Masterplan

Week 4.3
Case Studies: Analytical Drawings
Develop 1/1000 design

Week 4.4
Case Studies: Analytical Drawings
Develop 1/500 design
Deadline chapter 2 case studies: May 21st

Week 4.5
Case Studies: Compare Analytical Drawings
Develop 1/500 design

Week 4.6
Case Studies: Compare Analytical Drawings with observations
Develop 1/33 design

Week 4.7
Write conclusions
Develop 1/500 design to 1/200 design
Deadline chapter 3 comparison: June 4th

Week 4.8
Write conclusions
Develop 1/200 design
Deadline chapter 4 conclusions: June 7th

Week 4.9
P1: June 18th
Retake last exam (3ects): AR1A060 Architectural theory on design (24-06-2014)

The products of the first semester are:
- Research book: including describing texts, data and conclusions
- Site analysis: History, ecology and approach formulated
- Design assignment: Program and design approach formulated

The weeks after the P2 will be based on the continuation of the conclusions and approach based on the above products which will be presented at the P2.

Week 1.1-1.2
- Design landscape design 1/1000
- Integrate 1/500 model and plan (make changes if needed according to landscape)

Week 1.3
- Design Museum design 1/500 to 1/200

Week 1.4
- Material research 1/1 or 1/5
- Finish landscape design 1/1000
Week 1.5-6
- Design 1/33 Fragment museum
- Integrate 1/5 details options

Week 1.7-1.8
- Connect 1/33 with 1/200 and 1/500 landscape design

Week 1.9-1.10
- Determine:
  - 1/1000 and 500 landscape/building
  - 1/200 building
  - 1/33 fragments
  - 1/5 details

**P3 presentations**

Week 2.1-2.3
- Final design
- Final drawings
- Climatic installations
- Final Models

Week 2.5/2.5

**P4 presentations**

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The scales mentioned in the planning are containing the following aspects:

**Landscape 1/1000**
- Plan drawing showing, Route, Proposed borders of vegetation and water flow, Elements in the landscape: Dams, hills, trees etc.

**Building 1/500**
- 1:500 plan ground floor, longitudinal and cross sections
- Architectural drawing indicating the programme (legend)/ use of the spaces, location of the entrances, space in relation to the urban surrounding, north arrow

**Building 1/200**
- 1:200 model zoom landscape and building
- 1:200 ground plans
- 1:200 longitudinal and cross section
- 1:200 two essential interior facades (in sections)
- All drawings including basic measurements, hatches, indication of entrances to the single components of the programme, materials, furniture, indication of use (e.g. people).

**Fragment 1/33**
- model: showing materials, construction principles and finishes

**Details 1/5**
- Drawings
- Material samples

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**Planning overview**