

GRADUATION PLAN

Merve Gündüz

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Personal Information

Name: Merve Gündüz

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Studio

Faculty: Architecture and the Built Environment

Department/Track: Architecture

Name of studio: Explore Lab

Name/Theme project: Humanitarian Architecture

Teachers/Tutors: Harald Mooij (Design mentor)
Clarine van Oel (Research mentor)
Hubert van der Meel (Technology mentor)

Argumentations of choice of the studio: Since the beginning of my study career I was interested in humanitarian architecture. I believe that architecture can be a strong tool which can bring longterm solutions to help people in need if used in the right way. I searched for a studio that would give me the freedom to my graduation project within this field. My first choice was the studio Health@Bk Lab. Due to some circumstances I am placed in the studio Explore Lab which gives me the same freedom to design within my field of interest.

Graduation Project

Title of the graduation project: The Orphan's Dream

Goal

Location: Indonesia, Jakarta

The posed problem:

Research question: What are the conditions (factors of success) of successful humanitarian architecture projects?

Research subcategories:

1. Introduction
2. Method
3. Introduction to Humanitarian Architecture
 - 3.1. Defining Humanitarian Architecture
 - 3.2. The Need of Architects in Humanitarian Relief
4. Case study
 - 4.1. Introduction
 - 4.2. Case 1: Post-disaster housing Pakistan
 - 4.3. Case 2: Makoko Floating School
 - 4.4. Case 3: Bambu Social
 - 4.5. Conclusion

5. Social Design & Humanitarian Architecture
6. Conclusion
7. Discussion

Research method: Literature study based on project descriptions and reports and complemented with interviews

Design assessment in which these result: The expectation is that at the end of the research it will become possible to create a personal framework in which the design can be placed. The definition of humanitarian architecture and the background information help to understand the field. The case studies help to get insight in the practical world in which the theory behind humanitarian architecture is getting realised. With this insight a base for the personal design can be formed. The framework will help to test the design and will be a guideline in the design process to make the design in terms of architecture and in terms of humanitarian relief a success.

Process

Method description:

1) Research paper: The research for the research paper started with a global orientation on the available academic sources about humanitarian architecture and potential case studies. Three potential cases which provided the most elaborated information were chosen for the case study. The information in this part of the paper is mostly based on the project description and project reports provided by the architects of the designs. One case, Bambu Social, also includes information from an interview. The other part of the paper which provides general theoretic information about humanitarian architecture is based on academic essays about the field.

2) Design Research: The design research started with a general literature research about tropical architecture and the orphanage culture in Indonesia. After the P2 the design research will continue with an on site research. The site research is divided into three parts. The first part is a social/cultural analysis on the daily life of local people, especially of orphans in orphanages, in Jakarta. This is a necessary to understand the needs and wishes of the end users of the design. This will be done with activities and workshop with the children. The information from these activities will be documented in photo and video reports. The second part is a technical/architectural analysis on the traditional and modern building techniques, materials and styles in Jakarta. Interesting buildings which can be a reference for the design will be visited and analysed on themes such as urban situation, materialisation, building techniques, etc. With this information the architectural style and techniques of the design will be defined. The last part will be an orientation on probable partners who are willing to collaborate with the realisation of the project and finding the right spot for the design. After choosing the spot, the PvE (plan van eisen) will be specified. All the information from the site analysis will combined into a design. With design experimentation and consults with the design and technology mentor the design will be developed into a final design.

Literature and general practical preference

Bambu Social (n.d.) *Bambu Social*. On 1 May retrieved from <http://www.bambusocial.com/bambu-social/>

Heritage Foundation of Pakistan (n.d.) *Sustainable Green Construction*. On 1 May 2019 retrieved from <http://www.heritagefoundationpak.org/mi/7/sustainable-green-construction>

Charlesworth, E. (2014) *The Rise of Humanitarian Architecture*. On 1 May 2019 retrieved from

NLEWorks (n.d.) *Makoko Research*. On 1 May 2019 retrieved from <http://www.nleworks.com/publication/makoko-research-heinrich-boll-stiftung/>

Smith, D. (2013) *Humanitarian Architecture: People, Place & Power*. On 1 May 2019 retrieved from

YR Architecture Design (n.d.) *3 Characteristics of successful Humanitarian Architecture*. On 1 May retrieved from <http://www.yr-architecture.com/characteristics-of-successful-humanitarian-architecture/>

Field research Jakarta

- **Activities in orphanages:** Trying to understand their needs, wishes and daily life.
- **Consults with users about the provisional design:** Trying to get valuable input.
- **Technical/architectural analysis:** Researching the local building culture by visiting and analysing buildings.

Consults

- (Architect: Field of profession is low carbon print and local design)
- (Design Alfa Omega School in Jakarta: Combination of modern and traditional styles and techniques)
- (Co-founder Bambu Social: NGO building sustainable housing for disadvantaged people)
- (Bambu Social's bamboo builders network: consult about bamboo building techniques)
- (Psychologist: consult about the plan of activities with orphans in Jakarta)
- (NGO-worker Jakarta: field mentor during research trip Jakarta)
- (Course coordinator Seismic Essentials: consult about seismic design)

Reflection

Relevance: The field of humanitarian architecture is a field which cannot be ignored. But there is little (legal) control and no defined (legal) framework in this field. This makes this field open for interpretation and experimentation. Disasters or other forms of crises give a literally open room for foreign architects to bring their own solution to a site which is unknown for them. Most of the time (with or without the right intentions) architects bring the wrong solution basically because they ignore or underrate the local characteristics. Anyone who wants to act in this field needs to know that this field is a humanitarian field and no field of experimentation. Besides, it is also important to be aware of the power of architecture especially in situations when designing for vulnerable communities. Therefore, having a design framework as a guideline in the design and constructions process is necessary. Defining a framework based on successful cases will provide insight in how the theory of humanitarian architecture can be realised in the best way.

Time planning

When I started my graduation I was missing 6 ECTS. I have passed one of the two retakes (retake1) I had to take, so I am missing 3 ECTS. On 24 June 2019 (retake 2) I have an exam on the course AR1AR080 Heritage and Architecture: Technology of Conservation. In case I fail this exam, I have also another (extra) retake at the end of the first quarter of the next semester (retake 3).