Graduation Plan

AR3AR111 Heritage and Architecture

Date: 11-06-2018

Personal information

Name: Michelle Bettman
Student number: 4575938
Telephone number: 0647870991
Private e-mail address: michelleontherun@gmail.com

Studio

Name / Theme: Future of Dutch Structuralism
Teachers / tutors: Ir. W.L.E.C. Meijers
Dr. I. Nevzgodin
Ir. F.W.A. Koopman

Argumentation of choice of the studio

My interests are in a field of architecture where solutions are created to preserve the significance of carefully constructed buildings while also balancing the facts that our cities will change to be less dependent on fossil fuels and to support an increasing number of inhabitants. Existing architecture in our society retains history therefore architecture adds layers of embodied knowledge to our environment. I see increasingly more opportunity for transformation and renewal of existing buildings as cities evolve and grow.

The studio of Heritage and Architecture provides an opportunity to learn how to value buildings of relatively young heritage. Then to design an intervention which deals with the heritage values and future programmatic requirements from a conceptual and theoretical level all the way to materialization and detailing.

An intensive two part analysis and research exercise at the start of the studio allows me to be informed on how to make the critical cultural value decisions and provide a design direction with starting points which are further articulated into a refined spatial solution.

The main goal during in the graduation project, is to create and position a new layer into or around the existing structure (load bearing and in an anthropology context). With this one bold but elegant move, I aim to bring the building to a suitable state for use for the next 40 years (or longer).
Graduation project

Title: Design from within Structuralism - The Human Net
Location: Leiden University - Humanities Faculty of the Arts

The proposed problem:

The Humanities Faculty buildings on the Wittesingel campus surround a very central landmark point where many people of all kinds of backgrounds converge towards. The main university library is chockablock full with students however the Humanities buildings around it are quiet with occasional surges of students either arriving for or leaving from their lecture on the ground floor. The humanities faculty buildings are lacking a buzzing vibrance of enthusiastic scholars who are rigorously working to learn through literature and from each other.

The division of area for private individual lecturer offices and student work spaces is unbalanced as there are very few collective study spaces for students to work between lectures, or to do a group study session. Informal interactions before and after lectures cannot take place as the current environment uninviting for students to stay on campus for the whole day.

Research questions:

How to catch and keep the clever and passionate students and staff on campus for longer periods of time.

How can the articulation and position of one new layer improve the thermal comfort, services and spatial qualities of the existing building units?

How to facilitate and strengthen the transitions from public zone to collective zones and finally private zones as originally intended by the architect Joop van Stigt?

And design assignment in which these result:

Determine what are the core values of the architects original intentions for the buildings and why they are core values?

Investigate what was realised by the original architect and find the current challenges with what is present on the site.

Highlight the opportunities for intervention, define what the meaning of the intervention will be and what the benefits/consequences will be.

Considering the programmatic problem of the types of learning environment not being sufficient and proposing a solution for inspiring learning and study spaces.

Develop a master plan for the ground floor as this is the level which connects the South cluster, central library and North clusters together.

Decide on a proposed concept and further develop the ideas in terms of architectural composition, components, structure, services and sustainability, materialization and atmospheres.
Process: Research by design

A. Excursion visits

Group visit existing transformed structuralism buildings. Through a group presentation on the site visit we became more knowledgeable about common characteristics of structuralism buildings and what are the possible intervention techniques used by other architects in the transformation.

B. Model building of the existing

After making the decision to work on the Humanities Faculty buildings, we physically constructed the existing building in a 1:50 cardboard model. The reason was to rapidly come to grips with the current types of spaces, sequence of spaces and have a firm understanding of the building construction system.

C. HNI Archives

Original drawings show best the intentions of what the original architect envisioned for the building. Through analysis of the drawings, visits to the site and reading appropriate literature, themes were formed and decisions could be had with group members about the heritage value of structuralism and of the building.

D. Group analysis report

A presentation and report contain the conclusions found from the analysis and core values for making a framework to continue further with the design. Where are opportunities for transformation and where are limitations before heritage values of the building will be destroyed.

E. Research how to modernise the existing program

As the current program for the site is significant for the city of Leiden as a landmark and convergence points of the knowledge, I believe the program organizations should rather be improved instead of being changed to an alternative program. Many wonderful reference projects exist of new university campus buildings where students do comfortably stay all day on campus.

F. Conceptual form making and translation through sketching into architectural drawings

An artistic conceptual process to come to break through moments of making new spatial experiences in the in-between spaces of the original structure on the south side of the campus. Models of new possible daylight qualities are explored for the north campus units.

G. Hand sketches in elevation and perspective of intervention level

Sketches are my favourite tool for explanation of my design intervention and are an method of condensing many thoughts into one drawing.
Literature and general practical preference

   Reason why: Research and design process for dealing with heritage.
   Reason why: Theoretical framework to understand structuralism
   Reason why: As building as a city is an important theme, the phenomenological experience of viewing a city is also relevant
5. Alexander, C. / Pattern Language. 
   To understand alternative movements in architecture at the climax of Dutch Structuralism
   Understanding the lifetime of the various layers of a building and helps to be more specific about the value which is give to each layer of the building
   Ostfildern: Hatje Cantz. (2012) 
   My invested interested in sustainability lies in retaining the embodied energy in a building and being aware of the full Lifecycle of a building.
   Analysis of the context.

Reflection

Leiden university is internationally renowned as an incredible research institution with a rare collection of artefacts and archive items. The diversity of knowledge which culminates on one place is of great value for students and staff member however the significance of the institution is currently not reflected in current architecture.

The original architect should be highly respected for his ability to produce a solid strong construction with maximum efficient use of material properties and consideration of surrounding context. However his intentions for social interactions never developed as he may have wished it to be.

I strive to acknowledge the original architect by preserving the interior on north cluster and preserving the exterior on south cluster. Then I aim to create an intervention which will reflect the significance of the Humanities Faculty as an institution with new volumetric and inspirational collective workspaces.

Time planning:

(See Appendix A)
### Appendix A

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