Substantiate Structuralism

Heritage and Architecture: Future of Structuralism
Give reason for preservation or transformation of
Leiden University Humanities Faculty

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Demolition

South cluster ground floor plan

- Remove interior finishes
- Cover the structure with a new surface
  (Thermal bridges)

North cluster ground floor plan

- Remove existing facade
- Cover the structure with new skin
  (Thermal bridges)
The two clusters flanking each side of the main central library were designed by architect Jooj van Stigt and were completed in 1982 together with four other faculty buildings making up the Wittesingle/Doelenterrein inner city university campus. The open structures are well integrated into the context both in terms of the continuation of paths and consideration of building heights. The use of typological spaces like the town square, courtyard, living room and private offices are incorporated into the original design to facilitate opportunities for social interaction amongst students, lectures, researchers, visitors and inhabitants of the city of Leiden.

Methodology of a dual opposite design approach inspired by Herman Hertzberger

"Dialectics is not a method for generating predetermined outcomes but it is a method of study of social process: relations, development, transformation"
South Cluster

Wittesingel
East elevation  Scale 1:200

Trekvliet
West elevation Scale 1:200
South Cluster

Ground floor plan 1:200

First floor plan 1:200
South Cluster: Components
North Cluster

Wittesingel
East elevation  Scale 1:200

Trekvliet
West elevation Scale 1:200
North Cluster

Original
Section C - C, Scale 1:200

New
Section C - C, Scale 1:200

Original
Section D - D, Scale 1:200

New
Section D - D, Scale 1:200
North Cluster: Components

Program

Reprogram

Public Hub

Collaborative Platform

Timber Construction

Reused Roof Structure
North Cluster

Ground floor plan 1:200

First floor plan 1:200
Process of reusing existing building materials according to themes from MSc2 studio: Deconstruction led by visiting professors from Rotor

Dilemma: How to attach reused roof to new floor level?

1 - New 420x180 steel I beam cladded in redwood timber box with opening latch to access service cables.
2 - New IJC composite timber floor joist beams spanning between 90x140mm redwood laminated timber beams. Plywood floorboard. 70mm suspended screed with integrated water piping system. Polished screed floor finish.
3 - Base thickening of beam with timber blocks to support existing column above.
4 - Extension floor:
   - 250mm L-profile steel edge beam.
   - Steel I-beam floor joist, 600mm spacing.
   - Steel floor plate (50mm deeproof rating)
   - Acoustic floor insulation
   - Redwood floor boarding
5 - Reused roof structure

- Heating and cooling system in the floor slabs using water aquifers placed under the squares flanking the Main Library