Graduation Plan Thomas Edes
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Personal Information

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Studio

Name of studio	Second Life
Design Tutor	Anne Sneijders
Research Tutor	Hilde Remøy
Building Technology tutor	-

Choice of the studio
The AE studio appeals very much to me since it has a very pragmatic character. Design assignments are very solution driven and therefore relevant. Furthermore solutions, to relevant design questions, are often pragmatic and verifiable or quantifiable. Making it more objective.

The catalyst to changing office parks
Office transformation to housing

Graduation Project

Problem Statement
Currently in the Netherlands, there is a housing shortage, which is expected to last till at least the year 2030. Most development of housing is the big cities. Mainly rental housing.

Furthermore there is a big amount of office buildings which are vacant. Office obsolescence and vacancy results in a problem for the area, not just the individual owner. This could be: Deterioration of the area, a lack of liveliness, reduction in value of property etc.
Vacancy is not necessarily structural.

Thirdly, according to EU regulations, office buildings in the Netherlands (Europe) will have to have an Energy-label C or higher from 2023. 44% of the office building stock does not meet that requirement. In 2030 this might be changed to Label A. 75% of the office building stock does not meet that requirement. These buildings will have to be converted. If not transformed, these buildings could become vacant, adding to the for mentioned problems.

It seems that transformation from (vacant)office building to housing is a logical step. (Especially with the 2023 regulation, when suddenly a whole lot more buildings do not comply.) However, this transformation is not happening. Why is that? It seems that there is not wish from the owner to transform the building into housing, or the owner is not able to.

Another reason could be that office buildings are often owned by parties with big building portfolios. They focus on offices as a solid investment. Their focus is short term, perhaps 3-7 years. They valuate their stock by rent value (''gekapitaliseerde huurwaarde''). If vacant, hey are convinced that the vacancy is of a temporary nature. Not at all incomprehensible since there is also an office shortage in the Netherlands.
While developer valuates a building by deducting the building costs from the expected income.

Secondly, almost no developer wants to be the first to take the risk when it comes to transforming office parks to housing.

Objective
The objective is to create a design, suitable to convince a developer to transform an (partially) vacant office building into housing (and other functions) in a monofunctional office area. A developer in line with the vision of the municipality.

The objective of the research is to develop a strategy to convert the (vacant) office buildings into housing.
This is a quite project-development-like approach (MBI). The goal is to make this a scalable strategy for similar situations, regarding office buildings, in the Netherlands.

The actual application of the strategy, in the form of a design, is the design of this graduation studio. The AE approach. With a more technical focus compared to the research, looking into opportunities and threats in a specific case that meets the other requirements.

Whereas the research focusses on a broader scale, the design focusses on one building. The design will be locations specific, but the strategy remains the same. The focus is on finding the right user group for a 'first' in an area and what building methods are suitable for such a project (e.g. low cost building). This could result in re-using present materials.

Overall design question
The Main design question:

- How to go about converting a vacant office building in a monofunctional office-park to housing and possibly other uses?
  (The building chosen to convert is a former office building on the Tesselschadestraat 4 in Leeuwarden.)

Subquestions:

- What are characteristics of a suitable location and building for transformation?
- Which locations are suitable? → *monofunctional office parks*
- Where is the need and wish to transform?
- Which users are the right catalyst (aanjaaggroep)?
- What are the needs of present users in the location?

And possibly:

- Which materials are present in the chosen building?
  - How and where can these materials be reused in a transformation?

Stripping building to core and if need be reusing materials.

- How to reuse the present materials?
- Could reuse be used to lower (materials) costs?

Note:
I will be making a conversion design for the Tesselschade 4 (T4) building in Leeuwarden. Using the lesson learned from the thematic research as much as possible. This is a different building as the previously selected 'de Ster' in Rotterdam Alexanderknoop. T4 has a lot of similarities, but the need for a conversion is more urgent than in Rotterdam Alexander. Furthermore there is quite a bit more information on the building itself and the monument status makes this a very intriguing building as well, more so than the earlier selected building in Rotterdam. The focus for the added functions will be on housing. The main design challenges will probably be found in the cultural-historically important façade.

Thematic Research Question
The main research question:
What are the opportunities and bottlenecks for conversion from (partially) vacant office buildings to housing, in office parks in the Netherlands?

Subquestions:

- Who are the stakeholders in the decision for transformation?
- Where is the need for transformation from office building to housing?
- How to make the conversion more feasible?

- Who are the right users for conversion in monofunctional office areas?
- What are successful cases for conversion of offices to housing?

Methodologies
Answering the research questions with literature and casestudies.

Casestudies are:
- Westplantsoen, Delft
- GEB-tower, Rotterdam
- Puntegale, Rotterdam
- Kleiburg Klusflat, Amsterdam
- De Grote Enk, Arnhem

Finding suitable buildings that meet following requirements:
- Office building, With an Energylabel C or lower
- Housing need in the area
- Vacancy
- Conversion the only option

The building that meets these requirements is located on the Tesselschadestraat 4 in Leeuwarden. It is not insulated, and situated on the edge of an area with lots of offices. Furthermore it has been vacant for two years and has a need for conversion since it has been declared a monument by the municipality of Leeuwarden (*gemeentelijk monument*).

The research leads to strategy. The implementation of that strategy is a design, specific to one location.

Relevance
With a big building portfolio and a nearing deadline of 2023, there will be many office buildings vacant. This is bad for the areas, and the stakeholders. There are opportunities to redevelop into housing. Developing a strategy, and implementing this strategy into a design, is a solution the for mentioned problems.

''Voor het aanbod op monofunctionele kantoorlocaties is dit echter geen oplossing, waardoor langdurig leegstand […] wel een probleem vormt.'' (SCK rapport 2019)

Literature

- Transformatie monofunctionele kantoorlocaties, Eerenberg, P.
- Transformatie kantoor ontwikkelingen, Hilde Remoy
- Re-design course, TU Delft (from area to building block), Hilde Remoy
- Out of office, Hilde Remoy
- Opbrengstgeneratoren en transformatiepotentie, Muller 2008
- Bouwkosten transformatieprojecten, Mackay 2008
- Graduation projects:
    - Ferry Koornneef
    - Jelle de Groot
    - Mischa Moritz
    - Sascha Jansz

And more

Planning
See next page

Planning

		Week																				
		Intro	Intro	39	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	
		1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	1.10	2.1	2.2	2.3	2.4	2.5	-	-	2.7	2.8	2.9	
MSc3	**Subject**	*September*				*October*				*November*				*December*				*January*				
Research	Verkennend onderzoek (literatuur)							P1											P2	P2		
	Locatie bepaling																					
	Literature Research																				P2	
Writing	Graduation Plan																					
	Research Paper																					
Designing	Designing																					
Presentation	Preparation																					
Other	Research Methods																					

Lectures + Outro final assignment

Submission date final assignment

x

		Week																						
		5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
		2.10	-	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	3.10	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	4.10	4.11
MSc4	**Subject**	February					March				April				May				June					
Research	By Design											P3?						P4	P4				P5	>
	Case studies																							
Design	Sketching																							
	Digital Drawing																							
	Model																							
Presentation	Preparation																							
	Model																							
	Reflection																							
Other	Retake Research Methods																							

Façade model