from warehouse to wellness



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transformation of the Armamentarium in Delft to a wellness centre

Graduation plan RMIT studio; Mixed projects - Armamentarium Delft

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Preface

Many buildings lose their function overtime, due to changing needs. This leaves a lot of buildings vacant and unused, in need of a new function. The chair of RMIT tries to find possibilities to transform the existing building stock and give it a new future. This graduation studio of RMIT focuses on a selection of these building in The Hague and Delft. The case study building for my graduation studio is the Armamentarium in Delft.

The approach of RMIT appeals to me. I think it is very interesting to develop an existing building and to give a building a new life. The development of a building over the years gives it an historic stratification, not present in newly built projects.

The Armamentarium is a very special building for me. Almost daily I pass by the building, but until now I never really got the idea what happened inside. The size, strong appearance and isolated situation, on this very visible spot in the centre of Delft, give the building something mysterious. It is very exciting to be able to fully explore the building and to be given the opportunity to develop my graduation project with this building.

Structure Graduation plan

The graduation plan is a central document organising the graduation studio. It describes the central problem statement of the graduation project, which results in the research questions that are attempted to be answered during the studio. Furthermore it describes the process how is being expected these questions to be answered and reflects on what the value of the graduation project will be in the larger social and scientific framework. At last, the planning in the end of this document structures the graduation in terms of research, design and execution, with deadlines corresponding to the five presentation moments.

Product

Problem

A great variety of transforming assignments do exist in the architecture profession, for example empty office buildings, obsolete mass housing projects, abandoned industrial site and unused churches. The concerning buildings differ greatly in size, quality, age, former program and setting. The common denominator in these assignments is that they have lost their original function and are in need of transformation. The central task is to make a new use possible and ensure a sustainable new usage.

In my graduation studio, I will transform the Armamentarium into a wellness centre. During the programmatic workshop, this program is determined on the basis of personal interest, current issues in the society and to exploit the nature of the building. The implementation of a wellness in the historic complex in the inner city of Delft, causes some design challenges to emerge.

The Armamentarium has a specific character, which makes it an unique building in Delft. Intervening in existing buildings poses the threat of losing this. How to cope with preservation or even revelation of the existing character in transformation designs, it is a mayor design question. This will be an important accompanying theme during the design process.

Central research question

How can a wellness centre be implemented in the historic complex of the Armamentarium, with preservation or even revelation of the existing character?

Sub questions

How to subdivide program on the big open floors, without losing its spatial character?

The current spaces are very big and open. The integration of a new program in the building will very possible imply a subdivision of these space. The question argues how this can be done, without losing its current, open character.

- How to create internal connections, without losing its character of isolated spaces? Internal connection are currently very poor and possibly will need increasing. The isolated character of the space has been valued to be important.
- How to deal with the privacy and visibility of a wellness centre in the inner city of Delft? A wellness centre demands a seclusion of everyday life and deals with intimacy. The situation in the inner city of Delft causes that the visibility and privacy of the wellness should be investigated.
- How to deal with technical aspects of the Armamentarium in the transformation to a wellness centre? A wellness centre demands a warm and relatively humid indoor climate. An historic building as the Armamentarium, with its uncovered brickwork and timber structure, is not resistant to this changing indoor climate, which can cause molds and salt crystallization. Furthermore, the current structure of the complex is not sufficient for the weight of the different baths in the wellness. These two main technical problem should be solved in the design.

Goal

The central goal of the design studio is to get a better insight in ways how to cope with an historic building like the Armamentarium in transformation process to a wellness centre. The graduation studio should result in a convenient transformation design, that answers the posed research questions, as well as resulting in an inspiring and suitable design for the Armamentarium. From the design and research process should be able to derive wider applicable solutions concerning the posed problems in transforming historical buildings.

Process

Method description

A large part of the design-related research, will be a case studies research of transformation projects that have dealt with the posed research questions. This will imply a throughout understanding of the case study, as well before as after the transformation, and a recognition of the used design intervention. From these case studies, transformation solutions can be deduced, which later on can be implemented in the design. Apart from this, I will do a literature research into wellness centres, regarding practical and technical demand of a wellness centre. Furthermore, I will do a literature research, regarding the concepts of genius loci, character, perception and how to cope with these concepts in a transformation design.

Syntheses between Research & Design

The research of case studies will give me insight in design solutions regarding the posed problems. By deducing the design tools and inducing them in the transformation design of the Armamentarium, I will be able to implement the research in the design. Wellness related literature will gain me practical and technical information, applicable in the transformation design of the complex to a wellness centre. The literature research regarding the character of the building, will give me solid background information on which aspects are at stake in the transformation of an historic building and how to cope with the grasping and preservation of current character of the building. This will allow me to position myself in the method of intervening.

References

Possible literature

Sense of Place, Authenticity and Character: A Commentary; Gunila Jivén & Peter J. Larkham Genius Loci, Towards a phenomenology of architecture; Christian Norberg-Schulz The Secret Lives of Buildings; Edward Hollis Wellness Centers: A Guide for the Design Professional; Joan Whaley Gallup Preventieve wellness in Nederland; A. Lombarts

Possible case studies	
Neues Museum, Berlin	for restoration vision
Therme Vals, Vals	for lay-out wellness
Fort Beemster, Zuidoostbeemster	transformation from fort to wellness
Hurlimann brewery, Zurich	transformation from brewery to wellness

Reflection

Relevance

The central aim of the design studio is to get a better insight in the ways of transformation of historic buildings. Since every transformation assignment is unique, it to my believe very hard to develop generic solution, which are general applicable. Unique buildings deserve a custom attention. However, an insight in the aspects that are at stake regarding the opportunities and restrictions of such an unique building will become apparent. Furthermore, design principles how to deal with these aspects will become concrete. An awareness and deduction of these aspects could make this graduation studio useful for future transformation projects.

Time planning

The time planning of Msc 3 and Msc 4 can be found in appendix 2 and 3. A list of products planned to be finished at the different presentations is displayed in appendix 1.

Appendix 1 Delivered products at the P1 to P5

A planning of the graduation studio is only useful, if you know what for each deadline is being expected. For this reason, first a list of required products for each graduation presentation.

		P1
UΑ	BT	Research on scale of urban, architecture and building technology.
		P2
U		Master plan
А		Programme with programme of requirement
А		Concept
А	BT	First design (plans, sections 1-200)
		Graduation plan
P3		
А		Complete design (plans, facades, sections1:100/1:1200, isometric view)
А	BT	Technical execution part of building (plan, section 1:50)
	BT	Facade fragment (1:20)
	BT	Details (1:5)
P4		
U		Situational drawing in city (1:5000)
U		Situational drawing in surrounding (1:500)
Α	BT	Complete design (plans, facades, sections1:100/1:1200, isometric view)
А	BT	Technical execution part of building (plan, section 1:50)
	BT	Facade fragment (1:20)
	BT	Details (1:5)
		Theoretic en thematic support of research
		Model and first artist impressions
P5		
U		Situational drawing in city (1:5000)
U		Situational drawing in surrounding (1:500)
A	BT	Complete design (plans, facades, sections1:100/1:1200, isometric view)
A	BT	Technical execution part of building (plan, section 1:50)
	BT	Facade fragment (1:20)
	BT	Details (1:5)
		Theoretic en thematic support of research
		Reflection on architectonic and social relevance (reflection paper)

Final model and artist impressions

	Appendix 2	Time planning Msc 3
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Week	Study week	from date	urban	architecture building tech	RMIT project	Others
36	1.1	1-9-2014			Excursies en keuze project	
37	1.2	8-9-2014			Research: urban	
38	1.3	15-9-2014			Presentation urban analysis Research: architecture	
39	1.4	22-9-2014			Research: architecture	Finish history thesis
40	1.5	29-9-2014			Presentation architectural analysis Research: architecture & building technology	Hand-in history thesis Hand-in concept AR
41	1.6	6-10-2014			Research: architecture & building technology	
42	1.7	13-10-2014		Т	Research: architecture & building technology	Hand-in concept analysis BT
43	1.8	20-10-2014			Research: architecture & building technology	No tutoring
44	1.9	27-10-2014			P1 Presentation (Monday 28-10)	
45	1.10	3-11-2014			Making urban model 1:200	Hand-in P1-report (4-11)
46	2.1	10-11-2014			Developing masterplan	Start second quarter Msc 3
47	2.2	17-11-2014			Developing masterplan	Hand in draft Position Paper (21-11) Hand in draft Graduation plan (21-11)
48	2.3	24-11-2014			Presentation and discussion of the master plan	
49	2.4	1-12-2014			Program workshop Define program and compose Prog. of requirements	
50	2.5	8-12-2014			Defining concept Research case studies & literature	Hand in final Position Paper (12-11)
51	2.6	15-12-2014			Developing draft design Research case studies & literature	
52	-	22-12-2014			Developing draft design Research case studies & literature	holiday
1	-	30-12-2013			-	holiday
2	2.7	6-1-2014			Preparing P2, drawings, posters and model	
3	2.8	13-1-2014			Preparing P2, drawings, posters and model	Hand in Graduation plan
4	2.9	20-1-2014			P2 Presentation (Tuesday 21-01)	
5	2.10	27-1-2014			Possible P2 Presentation Retake	
6	-	3-2-2014				holiday

Appendix 3 Time p

Time planning Msc 4

Week	Studie week	from date	urban	architecture	building tech	RMIT project	Others
7	3.1	10-2-2014				Developping pre-final design Research case studies	Start first quarter Msc 4
8	3.2	17-2-2014				Developping pre-final design Research case studies	
9	3.3	24-2-2014				Developping pre-final design Execution BT 1:50	
10	3.4	3-3-2014				Developping pre-final design Execution BT 1:50	
11	3.5	10-3-2014				Developping pre-final design Execution BT 1:50	
12	3.6	17-3-2014				P3 presentation	
13	3.7	24-3-2014				P3 presentation	
14	3.8	31-3-2014				Executing final design Execution BT 1:20 facade fragment	
15	3.9	7-4-2014				Executing final design Execution BT 1:20 facade fragment	
16	3.10	14-4-2014				Executing final design Execution BT 1:5 details	
17	4.1	21-4-2014				Executing final design Execution BT 1:5 details	
18	4.2	28-4-2014				Execution BT 1:50, 1:20, 1:5	Hand in draft Reflection Paper
19	4.3	5-5-2014				preparing P4, posters, model	Hand in draft Reflection Paper
20	4.4	12-5-2014				P4 presentation	
21	4.5	19-5-2014				P4 presentation	
22	4.6	26-5-2014				last changes AR & BT	
23	4.7	2-6-2014				preparing P5, posters, model last changes AR & BT	
24	4.8	9-6-2014				preparing P5, posters, model last changes AR & BT	
25	4.9	16-6-2014				preparing P5, posters, model	
26	4.10	23-6-2014				P5 presenation	Hand in final Reflection Paper
27	4.11	30-6-2014				P5 presenation	Hand in final Reflection Paper
		7-7-2014					Graduation report