HERITAGE RELOADED

EXPLORING COMPLEX RE-USE PROCESSES OF HERITAGE BUILDINGS

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COLOPHON

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FOREWORD

I have a thing for heritage that I cannot easily explain. For me it is the most natural thing in the world to get really excited from walking around or working or living in old buildings with character. In my perception, this is the same for every human being. This is the reason why I am genuinely surprised that so many monumental buildings are becoming and staying vacant nowadays. It is also the starting point of my research. Why are these beautiful buildings still vacant? Why is nobody doing anything?

In my perception, this has something to do with all the challenges that one comes across when starting a re-use process in general. Where to start, who can help and what is needed? It is commonly known that maintaining, renovating or transforming a monument is a complex and costly business. Next to that, the extensive legislation of listed buildings could function as a threshold as well. I would like to address these challenges and investigate which share of the challenges is attributable to the complexity in heritage re-use processes, and how we can ensure that initiative is taken.

Due to the rising vacancy among monuments I think that this research could significantly contribute to the current discussion on how to deal with these buildings and who is responsible for them. In the end, I hope to contribute to the re-use of vacant heritage buildings through this research and my continuing work.

0 EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

HERITAGE RELOADED
Exploring complex re-use processes of heritage buildings

Abstract

Purpose: Complexity is seen as the main bottleneck to start re-use processes for vacant heritage buildings. Researchers ask for the development of conceptual frameworks to explore project complexity and for tools to manage these complex processes.
Aim: This research focuses on collaborative complexity and aims firstly to provide an understanding of the complexity within the collaboration in heritage re-use projects and secondly to reduce this complexity with a clear overview on the role and responsibility divisions of stakeholders in the process.
Research question: *How can a clear overview on role and responsibility divisions contribute to a reduction of the complexity of heritage re-use processes?*
Methodology: The complexity is explored by means of a literature study, four empirical case studies including a cross-case analysis and a focus group discussion. The collaboration within empirical heritage re-use processes is mapped with the help of: 1) a timeline, which gives an overview on the iterative nature of the process; 2) a process description that explains the key activities mentioned in the timeline; 3) a relation structure explaining how stakeholders are linked to each other and which roles they fulfil; 4) a collaboration framework that explains the role and responsibility division between stakeholders per process step; and 5) a complexity assessment framework explaining which aspects increase the level of complexity.
Findings: Complexity of heritage re-use processes cannot be reduced with a clear overview on role and responsibility divisions: These projects are unique, a clear overview on role and responsibility divisions in these types of processes could therefore not be made. The division of roles and responsibilities amongst stakeholders seems to differ within every project and changes occur during the process. Stakeholders cannot anticipate with certainty on changes as the dynamics are unknown at the start and they differ extremely per project. It might however be possible to steer on aspects that increase the level of complexity within the collaboration, or to deal with the complexity by implementing a step-by-step approach.
Limitations of the research: Qualitative research is always subject to bias due to the interpretation of the qualitative information. Subsequently, the modest number of samples that is investigated in this master thesis may not adequately represent the target population.
Practical implications:This research raises awareness on the complexity of heritage re-use processes and the limited action that is taken up until now to decrease the vacancy among cultural and historical valuable buildings in the Netherlands. It offers recommendations for initiators of heritage re-use processes to deal with the complexity within these processes to increase the amount of re-uses of heritage buildings in practice.
Scientific relevance: This research tries to fill gaps in literature on process complexity and collaboration in heritage re-use processes. It argues that heritage re-use processes should not be set in blueprints as these models lack the ability to map the complexity of these processes.
Originality/value: Limited literature is available on heritage re-use processes, this research increases the insight in these processes.

Keywords: Stakeholder roles, responsibility division, vacant monuments, collaboration, adaptive re-use.

INTRODUCTION

Heritage re-use processes seem to be extremely complex: This is due to a dynamic context, feasibility issues, the types of stakeholders including different perspectives and aims, the touchability of the buildings, increased regulations and the changing roles and responsibilities of stakeholders involved. This complexity is seen as the main bottleneck to start re-use processes for heritage buildings. Heritage buildings hold a high cultural value as they represent a tangible continuation of the past; they visualize the unique character and identity of cities and villages and they offer a sense of belonging and a point of reference to residents. Due to the current increase of vacancy of heritage buildings, these values are now endangered. Adaptive re-use is needed to maintain and preserve these buildings in a feasible and sustainable way (Douglas, 2006). Researchers ask for the development of conceptual frameworks to explore project complexity and for tools to manage these complex processes. Gaasenbeek (2016), Schönau & De Bruijne (2008), Van der Kuij (2014) and Zwikael & Smyrk (2001) all argued that an overview of project roles could map the collaboration in development processes and could be used as a tool to better steer developments. A clearly defined framework is needed since unclarity in role and responsibility divisions could lead to bottlenecks in the collaboration (Schönau & De Bruijne, 2008; Van der Kuij, 2014). Currently, limited knowledge is available on project roles in development processes.

Problem statement

Role and responsibility divisions are unclear for stakeholders involved in heritage re-use processes due to a changing context and limited knowledge. This unclarity may lead to bottlenecks in the collaboration and adds to the complexity of these processes. This complexity is one of the crucial barriers to entry adaptive heritage re-use processes.

Research aim

The main aim of this research is to increase insight for involved stakeholders on their roles and responsibilities in order to reduce the complexity of these types of re-use processes. In a broader sense, this research aims to contribute to the execution of heritage re-use projects in practice.

Conceptual model

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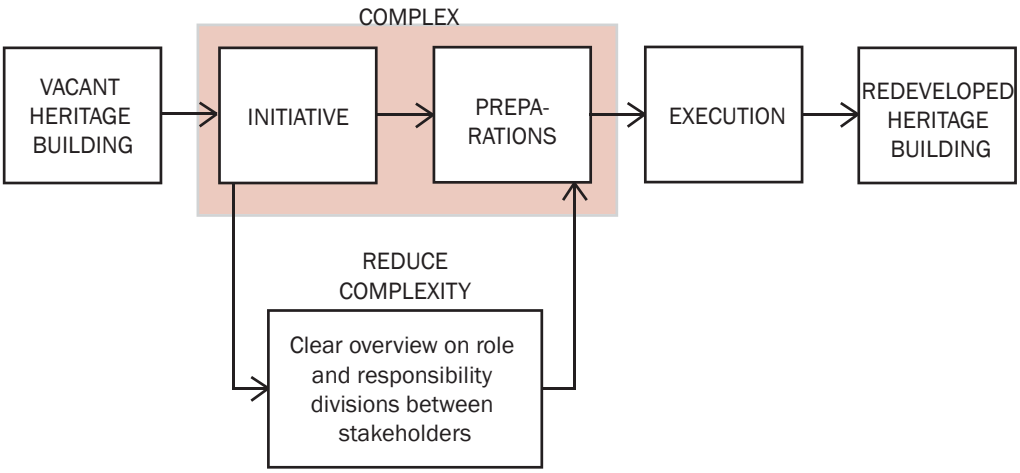

Research questions

How can a clear overview on role and responsibility divisions contribute to a reduction of the complexity of heritage re-use processes?

1. What does a heritage re-use process look like?
2. Which roles have to be fulfilled in heritage re-use processes?
3. Which challenges can be identified?

METHODOLOGY

This research can be labelled as explorative research as the nature of heritage re-use processes is explored to gain better understanding of the problems involved. It uses a qualitative approach to understand the field: Data collection and data analysis are alternated. Data is collected by means of a literature study, empirical case studies including semi-structured interviews and a focus group. The analysis is made with the help of five analysing models, and a cross-case analysis.

Research model

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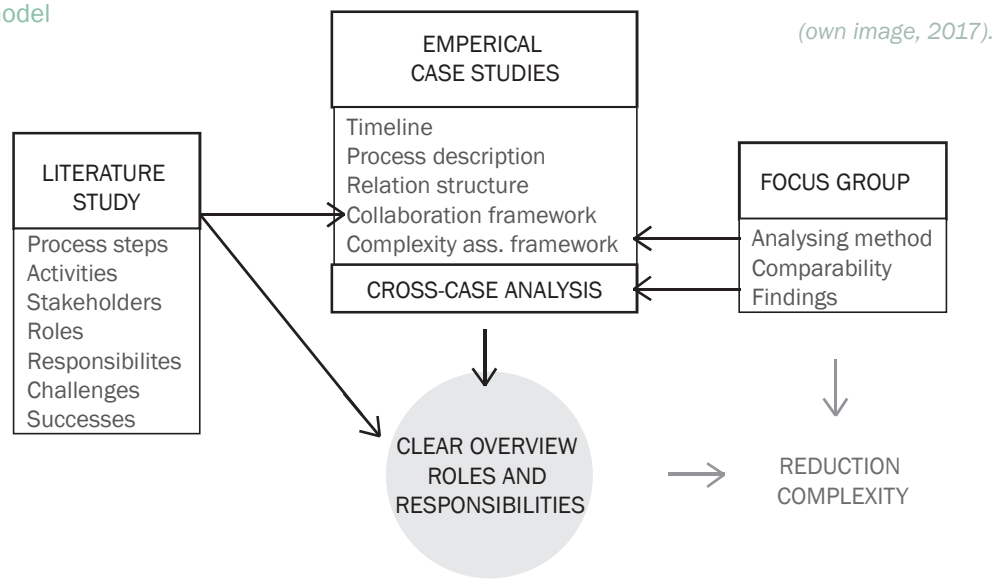

Case studies

Case I – CHV, Veghel
(own image, 2017).

Case II – De Ploeg, Bergeijk
(Bruns, 2016).

Case III – De Hallen, Amsterdam
(Knaack, 2015).

Case IV – BK-City, Delft
(Braaksma & Roos, 2013).

The case studies are analysed with the help of a timeline, a process description, a relation structure, a collaboration framework and a complexity assessment framework. The collaboration framework is based on the responsibility division model of Van der Kuij (2014) and translated for the use of heritage re-use processes with input from the literature study. Together these models aim to provide a clear overview on the roles and responsibilities of stakeholders in the process.

THEORETICAL FRAMEWORK

Collaboration framework

The collaboration framework summarizes the literature study on process steps, activities, process sequence, and the role and responsibility division. It is used as an analysing tool to understand the collaboration process in the case studies. The table below shows the collaboration framework, accumulated in the literature study.

		Roles and responsibilities					
	Collaboration framework	**I**	**O**	**R**	**F**	**P**	**U**
Process steps and activities	**Initiative**						
	Diagnosing current building state	R	A			R	
	Value assessment building / complex : cultural, historical, architectonic	R		A			
	Preliminary assessing adaptation potential	A				R	
	Determining extension possibilities	R	A				
	Identify potential users	R					S
	Assessing financial expenses and resources in combination with risks and uncertainties		A		C	R	
	Advice on best form for development					A	
	Attract financier	A	R		I		
	Acquire building complex		A				
	Idea forming						
	Gathering involved parties	R					
	Defining ambitions for development for several stakeholders	R					
	Scenario planning	R	A	C			
	Setting up concept for development	R	A			S	
	First sketches (conceptual)		A			R	
	Feasibility						
	Research market need / synergies	R				R	
	Research willingness of potential visitors / attractiveness concept	R				R	
	Research competition field	R				R	
	Attracting potential users	R	A				S
	Defining relationship of building with other buildings and functions		A	R			
	Detailed diagnoses current building state		A			R	
	Searching for stakeholders with specific knowledge and experience, suitable for development	A				S	
	Identifying revenues and expenses		A				
	Researching legislation potential uses		A	C			
	Researching legislation potential interventions		A	C			
	Analysing possibilities within possible zoning plan		A	C			
	Identifying risks and uncertainties		A				
	Identify and attract potential users	A					S
	Research / discuss aims of (potential) users	R					C
	Preliminary design		A			R	
	Refining ideas						
	Determine degree of interventions	S	A			R	
	Set up intervention plan for execution		A			R	
	Attract (additional) finances	A	R		C		
	Definitive design		A			R	
	Contract negotiations						
	Apply for permits		A	C		R	
	Identification of stakeholders for execution	R				S	
	Tender procedure		A				
	Set up and sign contracts users/ producers	R	A			I	I
	Research solutions for design challenges	R				R	
	Aligning project stakeholders	R					

(own table, based on the responsibility division model of Van der Kuij, 2014).

LEGEND

R	Responsible
A	Accountable
S	Supportive
C	Consulted
I	Informed

Owner
Initiator
Producer
Regulator
Financier
User

Process description

This research only focusses on the initiative and preparation of heritage re-use processes as these turn out to be more complex compared to contemporary re-use processes and are decisive for the success or prematurely termination of the process. Limited literature was available on heritage re-use processes, therefore, input for the process description is gathered from literature on general development processes (Nozeman & Fokkema, 2008; Miles et al., 2001; Van der Kuij, 2014; Wamelink, 2010), adaptive re-use processes (Andriessen, in Van der Voordt, 2007; Douglas, 2006; Wilkinson, et al., 2014) and several specific documents on heritage re-uses (Heijer, 2014; Kloek, 2015; Roos, 2007). The process steps and activities that are executed in heritage re-use processes are summarized in the collaboration framework.

Stakeholder description

The stakeholders present in heritage re-use processes were found to be:

- The client
- The investor
- The financier
- Public stakeholders
    - The National government
    - The municipality
    - The quality and safety committees
    - The residents
- The user
- The developer
- Advisors
    - The architect
    - The engineer
    - The manager (project/process)

These stakeholders seem to have an overlap in tasks and responsibilities. According to Gaasenbeek (2016), Schönau & De Bruijne (2008), Van der Kuij (2014) and Zwikael & Smyrk (2001), roles give a much clearer vision of the division of tasks and responsibilities in development processes.
Therefore, roles in heritage re-use processes are investigated.

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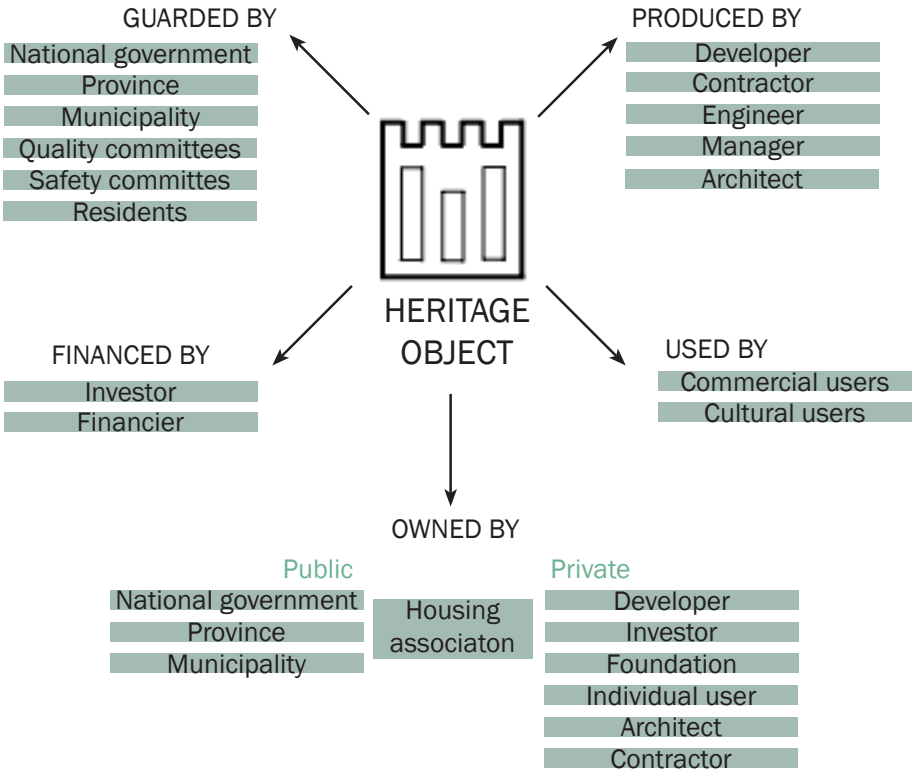


Roles and responsibilities

Role division

1. Owner - owns the real estate asset, is the contracting authority and therefore makes the end decisions in the process. The owner defines his own ambitions for the real estate development and negotiates with the other involved roles. In order to define this ambition, he preliminary assesses the adaptation potential and the state of the property and considers different housing alternatives. A first assessment of own financial resources and possible yields and risks are made by the owner to base his decisions on. The owner earns his right for the decision-making through the ownership of the building.

2. Regulator - restricts the project in order to guard public values and to safeguard quality norms. The ambition of the regulator is based on a vision on city or national level. Boundaries are set for the quality of the end product, the preservation of heritage, the added value of the building and function for the neighbourhood and city, safety issues and social needs. The consequences of the development have to be analysed thoroughly in order to set the appropriate standards. The regulator has regulation as power tool to fulfil its ambitions.

3. Financier - sets the boundaries for the investment with corresponding frameworks and preconditions. The financier finances the project whenever the ambitions of the project are in line with these boundaries. In order to set an own ambition, the adaptation potential and state of the building is analysed in a financial way, to make a first assessment of the financial returns possible and the involved risks within the project. Subsequently, the market potential and market risks are researched, which give an indication for the return of the investment. The financier has the investment budget as powerful negotiation tool in the process.

4. Initiator - takes the initiative to re-use a vacant monument. The initiator takes the initiative out of personal interest and therefore shares this enthusiasm with potential stakeholders. This way, a group of interested stakeholders can be formed rather naturally. The role includes gathering financial resources, creating a support base for the new development, getting residents and users involved and searching for solutions for specific challenges in the process.

5. Producer - has an executive role: he produces the building to the wishes of the owner and/or user, within the limits of the regulator, with the (economic) help of the financier and the initiator. In the initiative and preparation phase, this role includes setting up the statement of requirements. The producer role includes a lot of knowledge and expertise about heritage redevelopments and a network of stakeholders that are specialised; they therefore advice the owner to achieve the objectives. The producer is for instance responsible for the design and cost calculations.

6. User - eventually uses and maintains the developed building, but is also present in the initiative phase in order to explain the ambition and to define the function (requirements) and the relation to other buildings and functions. The ideas, knowledge and experiences of the user are integrated in the conceptual design.

Responsibility division

Nieuwenhuis (2003; 2010) indicated five process roles that have to be fulfilled in construction processes in the RASCI model: RASCI is an abbreviation for Responsible; Accountable; Supportive; Consulted; Informed. These process roles explain the responsibility per stakeholder during a specific activity whenever it is executed by multiple stakeholders at the same time.

Responsible	This stakeholder is responsible for implementation. It is either the stakeholder who is carrying out the work himself, or the one that has the work performed by contracted stakeholders. The responsible is held accountable by the stakeholder who is accountable for the task.
Accountable	This stakeholder has the (final) responsibility; he is competent and approves the result. The accountable must be able to form the final judgment, have veto power. Only one person is accountable.
Supportive	This stakeholder is supportive for the result. The supportive role is similar to the consulted role; however, this stakeholder is less attached to the project (non-obligatory).
Consulted	This stakeholder provides direction. This person shall be consulted before decisions are made. This is (obligatory) two-way communication.
Informed	This stakeholder will be informed about the decisions of the progress, achievements etc. This is one way communication.

PRACTICAL FRAMEWORK

The practical framework explains the findings of the four executed case studies (Ch. 4.), the cross-case analysis (Ch. 5.) and the focus group discussion (Ch. 6.)

Case studies

For the cases of CHV and De Ploeg, 14 interviews were conducted in a 10 week period. A semi-structured interview protocol was drawn to understand the key activities, key stakeholders and key issues in the process. This data was used as input for the timeline, the process description and the relation structure. Additionally, the collaboration framework designed in this study was used to ask specific questions on process steps to understand the collaboration in detail: The framework was filled during the interviews with help of the interviewees. Several stakeholders of the cases of De Hallen and BK-City have been interviewed by Den Heijer et al. (2009), Kalk (2015) and Kloek (2015). These interviews and the subsequent process descriptions are used as content for the five research models to understand the collaboration within these processes. Lastly, a complexity analysis is made with help of the MODeST framework (Maylor, 2010; Maylor, Vidgen & Carver, 2008), based on interview outcomes and written documentation.

Cross-case analysis

In the cross-case analysis, the collaboration frameworks and the complexity assessment frameworks of the cases are compared in order to find similarities and differences in process steps, activities, sequence, involved stakeholders, role and responsibility divisions and levels of complexity.

Comparison of process steps, activities, sequence, involved stakeholders and their roles and responsibilities

The steps and activities defined in literature seem to overlap quite well with the steps and activities that were found in the empirical case studies. However, not every activity has to be executed in every heritage re-use process: The complexity within heritage re-use processes differs, which means that some actvities can be omitted when there is no need for them.

The sequence of the project steps and activities differed a little within all four cases. The main difference compared to the literature involved the timing of the purchase of the building (complex). Douglas (2006) and Wamelink (2010) both describe that the building or site is acquired after all steps in the initiative and preparation phase have been executed. However, in all four case studies the building was bought after a quick scan on possibilities. In general, many project steps and activities were executed at the same time; no general sequence could be drawn, based on the research findings.

The stakeholders fulfilling the initiator, owner, financier and user role differed within all for cases: these roles seem to be project dependent. The regulator role is continuously being executed by the public authorities. The advisor role was often executed by architects, constructors, managers, private developers, engineers and contractors.

The responsibilities per role and stakeholder seemed to differ extensively in the four cases. Stakeholders seem to take tasks upon them according to their knowledge levels and experience and their interest in the project, which is project dependent.

Comparison of complexity level

There is a difference in the complexity level of the four researched case studies: The case of BK-City and the second part of the re-use process of De Ploeg were less complex than the case of CHV, De Hallen and the first part of De Ploeg. This difference is mainly visible in the timescale of the project, the number of constraints, the interdependencies and interaction with other projects, changing participating organizations, governmental decision making and the collaboration between stakeholders. De Hallen turned out to be the most complex project according to the analysis.

Focus group

The focus group was held with five experts in the field of (heritage) re-use processes. Experts were deployed on the basis of their availability and their capabilities/specialties in this field. All roles except the owner role were present during this meeting. In the focus group, the applicability of the relation structure and the collaboration framework together with the added value of the research were discussed. Furthermore, common challenges and possible solutions were debated.

Applicability of the models

- Both models are too academic for practice;
- Both models miss the social and cultural values involved with heritage;
- The collaboration model does give a rather complete picture of the roles, responsibilities, steps and activities in these processes;
- However, HRPs are probably not possible to steer; the approach of the collaboration framework does not fit with heritage due to the importance of the values involved. Furthermore, these buildings and re-use processes are unique.

Added value of the research

- In practice, there is no demand for academic models that help structure or steer the process. There is however a demand for success stories of executed heritage re-uses to inspire stakeholders;
- Success stories cannot be copied! It is not possible to create a blueprint based on a success story;
- Stakeholders might benefit a list of common challenges in practice.

Challenges

1. Missing confidence to start exciting processes;
2. Patience is required for the long-term process;
3. Financial and feasibility issues;
4. Difficult to find capable stakeholders;
5. Differences among stakeholders cause friction;
6. The dynamic context results in the fact that we are currently in a learning process ourselves.

Possible solutions

1. An enthousiastic initiator who steers the long-term process and attracts other stakeholders;
2. Binding stakeholders with the story of the building;
3. Movement /events in the initiative phase;
4. Establishment of a clear set of conditions to favour heritage re-use processes;
5. Innovative ways to deal with current legislation;
6. A more integral approach by the public authorities.

CONCLUSIONS

1. Heritage re-use processes

A general process description for heritage re-uses could not be developed: Heritage re-use processes are unique; the processes of the four cases differed to a great extent, especially considering project duration; involved personalities; sequence of the activities and implementation manners. However, project steps, activities and involved stakeholder types were similar in all four cases.

2. Roles in heritage re-use processes

The six defined roles from literature seem to give a rather complete picture of the roles involved in the initiative and preparation phase of heritage re-use processes. However, the producer role becomes involved after these phases. Within the definition of this role, executing stakeholders gave advice in the first two phases. Therefore, the producer role is now defined as the advisor role.

- Initiator: conveys the passion for the project and shares this enthusiasm with potential stakeholders; he arranges activities that increase the feasibility of the overall project;
- Owner: owns the real estate asset, is the contracting authority and therefore makes the end decisions in the process. The owner is accountable for the end result;
- Regulator: restricts the project in order to guard public values and to safeguard quality norms;
- Financier: finances the project whenever the ambitions of the project are in line with his preconditions;
- Advisor: gives advice on design, legislation, feasibility, safety, etc. in order to increase the quality or success of the project;
- User: explains the housing ambition which defines the function (requirements).

3. Challenges and possible solutions

Challenges

1. Financial - due to insufficient granted bank loans. This could lead to delay or even abortion of the project.
2. Feasibility - finding a feasible use.
3. Collaboration - difficulties in aligning the aims of the different stakeholders. Conflicting interests might lead to suspicion and distrust and a lack of support between stakeholders.
4. Governance - strict or errant regulations hamper innovations and efficiency in the process.

Possible solutions

1. Mixed-funding methods - 80% funded with traditional methods; Bank loans, subsidies, low interest funds and own equity. Additional 20% by innovative methods.
2. Organic grow / step-by-step approach - allows for smaller investments at the start; test of use and support base against time;
3. Initiator and story - to find a mutual goal between stakeholders and to build a support base.
4. Changing governance - smoother permit procedures could simplify and accelerate the process.

How can a clear overview on role and responsibility divisions contribute to a reduction of the complexity of heritage re-use processes?

It is impossible to reduce the complexity of heritage re-use processes with the help of a clear overview, because a clear overview cannot be made: heritage re-use processes are unique and changes occur during the process. Stakeholder cannot anticipate with certainty on these changes in the beginning of the process as they are unknown at the start and differ extremely per project.

EPILOGUE

In the epilogue, the initial aim based on literature recommendations is reflected with the outcomes of this research. Furthermore, the findings of the practical framework are discussed to identify possible solutions to reduce the complexity in different manners or to deal with the complexity within HRPs. Additionally, the methodology of this research is discussed, before recommendations are given.

Discussion on research findings

This research shows that heritage re-use processes cannot be put in blueprints and do not profit from a clear overview on role and responsibility divisions. This finding contradicts with the aim of foregoing researchers to develop a role division framework to increase insight and to better steer real estate developments.

These foregoing researchers however either focused their role divisions on one organisation alone, which is not comparable with the dynamics and complexity of inter-organisational role divisions; or they did not specify their role division with attached stakeholder activities and responsibilities. This might explain why role divisions on a larger scale do not provide additional insights, especially because the latter researchers did not increase the insight in the collaboration on a detailed level either.

Discussion on project complexity

According to the complexity analyses of the cases, the main differences in complexity levels were due to differences in the timescale of the project, the number of constraints; the interdependencies and interaction with other projects; changing participating organizations; governmental decision making and the collaboration between stakeholders.

The complexity of heritage might be reduced by keeping the development period as short as possible; by limiting the interdependencies and interactions with other projects and by limiting the number of stakeholders involved. The complexity could furthermore be dealt with by prioritising certain needs; clear governmental strategies; attracting experienced stakeholders; using written legal agreements; an early attraction of users and residents; smoothed permit procedures; continuously alignment of stakeholders; experienced project teams and by using a step-by-step approach.

Discussion on methodology

This research scores high on verifiability, as the analysing method is explained in detail; this report is publicly available; concerned parties were allowed to ask critical questions in a public presentation; and experienced researchers have assisted the author during the research process. The validity of this research is gained with use of data-triangulation; multiple case study analyses including a variety of perspectives within the cases; a focus group; and a verification of the interview summaries. This validity could have been further improved by additional methods and an additional verification of the case findings by the interviewees. This was omitted due to time limits. The reliability of this study is limited due to the chosen (qualitative) approach, however it is secured due to the use of an interview protocol and a relatively strict collaboration framework.

Limitations of the research

- Risk of biases due to qualitative data.
- Relatively small sample; comparison with other cases might lead to (slightly) different outcomes.
- Limited reliability due to forming of the concept during the interviews and the use of semi-structured interviews.
- The collaboration framework works better within one organisation in which roles are clearly defined (like housing associations).
- The relation structure becomes complicated easily and it is not possible to add a lot of information layers in the figure.

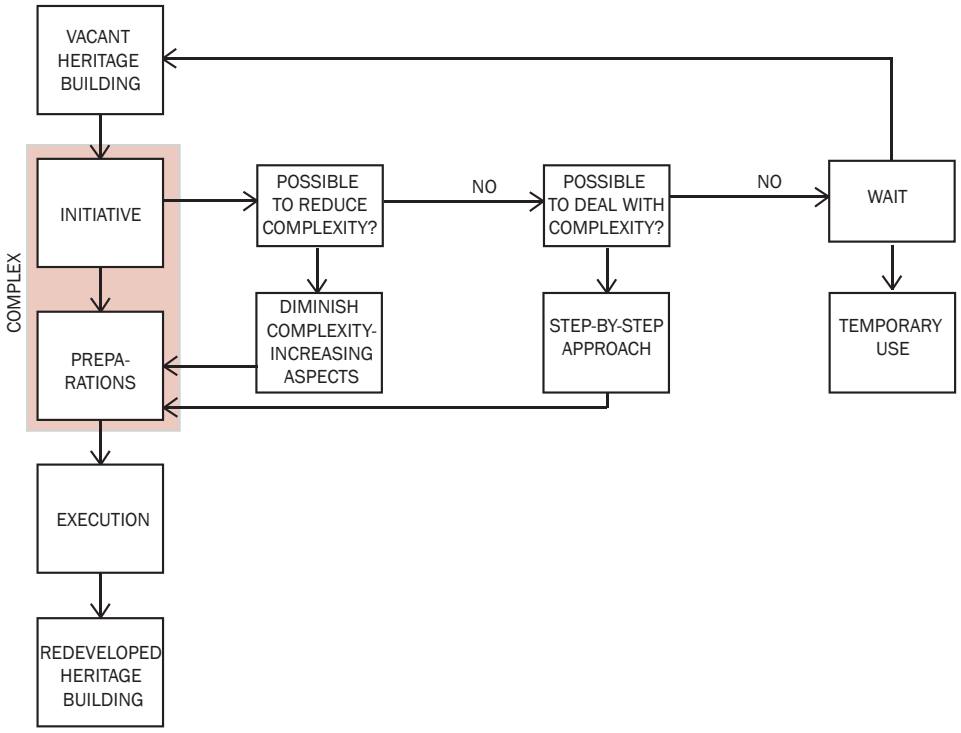
Recommendations

For further research

1. Stop trying to fit heritage re-use processes in blueprints;
2. Further research into manners that might possibly reduce complexity / deal with complexity, as these are not tested within the methodology.

In practice

The revised conceptual model shows an advice for stakeholders in practice.



(own image, 2017).

Whenever the process is perceived as highly complex, stakeholders could look at possibilities to reduce the complexity: Diminish the development period, limit interdependencies and interactions with other projects, and limit the number of stakeholders involved. If this is not possible, stakeholders could start with a step-by-step approach, which helps deal with uncertainties, allows for smaller investments at the start, tests the feasibility of the concept and buys time to form an experienced project team. Patience and perseverance is needed with this approach. If stakeholders still refrain from action, the priority might just not be high enough. Sometimes this needs time, in which case waiting or a temporary use is the only solution left.

CONTENT

LIST OF FIGURES AND TABLES

Figures

Tables

TABLE OF CONTENT

REPORT STRUCTURE

The aim of the research is to answer the following research question:
How can a clear overview on role and responsibility divisions contribute to a reduction of the complexity of heritage re-use processes?

PART I – RESEARCH AIM AND STRUCTURE

This part of the report includes the introduction to the subject and the methodology of the research. Chapter 1 describes the introduction, problem statement, research aim, scope and relevance. Chapter 2 describes the methodology, starting with the research questions, followed by the type of research and the method and approach.

PART II – THEORETICAL FRAMEWORK

The theoretical framework includes chapter 3, the literature study of the research. This chapter investigates the manner of heritage re-use processes: It provides an overview of the process steps, the stakeholders that are involved, the tasks they fulfil and the roles that can be extracted. It offers a framework that summarizes these findings which is used as an analysing tool in the practical framework.

PART III – PRACTICAL FRAMEWORK

The practical framework includes the findings of the case studies, the cross-case analysis and the focus group discussion. Chapter 4 describes the processes of four empirical case studies: It includes an overview of the involved stakeholders, their tasks and responsibilities and the roles they have fulfilled in the process. This is made visible by means of a timeline, a process description, a relationship structure, the collaboration framework and a complexity assessment framework. The complexity within the cases is explained in the conclusions of the cases. Chapter 5 includes the cross-analysis of the four cases. Here, the collaboration and complexity assessment frameworks are compared with each other. Chapter 6 describes the outcomes of the focus group discussion.

Part IV – CONCLUSIONS

This part of the report includes the conclusion (chapter 7). In this chapter, the three research questions are answered before an answer on the main question is given.

Part V - EPILOGUE

The epilogue comprises a discussion chapter (8); recommendations for further research and practice (chapter 9); and a personal reflection, in which the research process of the author is reflected. Here, the acknowledgements are stated as well (chapter 10). Chapter 8 elaborates on the research outcomes, complexity in heritage re-use processes, the chosen methodology and the limitations of the research.

I

RESEARCH AIM AND STRUCTURE

1. INTRODUCTION

Heritage buildings are special: They visualize the unique character and identity of cities and villages, represent tangible continuation of the past and often have a striking appearance. They offer a sense of belonging and a point of reference in a way that contemporary buildings cannot (Giannakopoulou & Kaliampakos, 2016; Tweed & Sutherland, 2007; Yung & Chan, 2012). The changing environment, new demands for functions and upcoming trends have caused heritage to lose its function and to become vacant (Kaat, 2013; Rijksdienst van Cultureel Erfgoed, 2016a; Sylvester, 2015a&b). Lately there is much commotion around the issue of vacancy among monuments. It seems that from 2013 on, attention started to grow to define the number of vacant monumental buildings (Harmsen, 2016; Kaat, 2013; Sylvester, 2015a;b), the reasons behind the vacancy (Kurul, 2007) and the (negative) consequences of this vacancy (Douglas, 2006). Additionally, the value of heritage is increasingly examined (Giannakopoulou & Kaliampakos, 2016; Tweed & Sutherland, 2007; Remøy in Wilkinson et al., 2014; Yung & Chan, 2012) and calculated (Barentsen, 2015; Ruijgrok, 2006; Van der Bree, 2011). However, even with all the commotion around heritage, up until now, limited action is taken to solve the vacancy issue. Stakeholders seem to refrain from acting upon this vacancy mainly due to the complexity of these processes (Kurul, 2007).

1.1. Background

1.1.1. Vacancy among heritage

Secularisation is seen as the main cause of the vacancy among heritage buildings (Rijksdienst voor het Cultureel Erfgoed, 2016b), although the aftermath of the shift of an industrial driven economy into a service driven economy has a lot of influence as well (Scheltens, Van de Voordt & Koppels, 2008). Many attempts have been made to identify the vacancy rate, however, it turned out that almost no ordered knowledge exists about the actual state of affairs, the nature and the extent of the vacancy. It is not clear who has proper information, information is not shared, information is not accessible or not up to date (Harmsen, 2016). Kaat stated that at least 135 monumental churches and abbeys and 138 previous industrial buildings that are listed were vacant in 2013. She warned that possibly, this is only the tip of the iceberg as it is hard to get information on hidden vacancy and temporary use. It is for instance almost impossible to gain insight in the number of churches in which hardly any religious services take place anymore (2013). Sylvester stated in 2015 with more confidence that 2,000,000 m^2 of heritage is vacant, supported by a study by the research agency Ecorys on behalf of the National Restoration Fund (2015a). The government expects that between 1500 and 2000 churches and 100-150 monasteries will become vacant in the coming 10 years (Rijksdienst voor het Cultureel Erfgoed, 2016b).

1.1.2. Negative consequences

Regardless of the size of the problem, the current vacancy has negative consequences on the state of (listed) buildings and their surroundings. Vacant buildings are often threatened by vandalism, occupancy by (anti) squatters, premature deterioration and therewith related damage. Heritage is no exception (Douglas, 2006). With the new Heritage Law (2016) and the arrival of the new Environmental act (2019) is tried to deal with this problem: Owners are now required to execute regular maintenance on monuments. However, this duty is only bound to National monuments and the current state of affairs still shows many dilapidated heritage buildings with severe overdue maintenance (Kaal, 2015; NRP, 2013; 2014; 2015; Raad van Staten, 2015).

1.1.3. Adaptive re-use

Adaptive re-use of heritage buildings is needed to preserve them in a sustainable and feasible way (Bullen & Love, 2011; Douglas, 2006). However, adapting a monumental building into a new use comes with challenges: Older buildings more often deal with environmental issues, asbestos or toxic chemicals (e.g. in paint), which leads to extra costs and time delays whenever these issues are not anticipated (Douglas, 2006). The National Renovation Platform (NRP) foundation, researching hundreds of re-use processes in the Netherlands, defined that a poor building state; the listing of a building; high costs and relatively low yields compared to new-built; errant regulation (e.g. meet building degree or sustainability requirements); high levels of uncertainty; tight budgets; and pollution lead to challenges in re-use processes (2013-2015). Gelinck & Strolenberg add a retreating public financier and cautious banks as a result of the high uncertainty as challenging as well (2015).

Successful adaptive re-uses where found to be those projects in which the history of the place was taken into account and the character of the building was kept; where sustainable measures were well integrated; where there was an enthusiastic initiator who steered the development; when there was a support base within the neighbourhood; where the location suited the (new) function; and where the redevelopments ensured an upgrade for the area (NRP, 2013-2015).These success factors are however hard to quantify and are extremely difficult to measure: *When is the character of the building kept? When is the history sufficiently taken into consideration? What is the norm for sustainability of used buildings? Where lays the priority of the redevelopment? Which type of stakeholder can execute the enthusiastic initiator role, what does this role entail and how do we find him? How is a support base created? When does a location suit a specific function? How can the redevelopment contribute to a larger area?* It is therefore difficult to replicate the success of executed heritage re-use projects.

1.2. Problem field

The challenges linked to adaptive re-use of heritage buildings lead to highly complex processes. Kurul determined on the basis of interviews with practitioners in the field that this project complexity was one of the "crucial barriers" to entry adaptive re-use processes. According to Kurul, projects are perceived as complex mainly due to limited knowledge and understanding of heritage re-use processes (2007, p. 555).

1.2.1. Complexity of heritage re-use processes

Re-use projects are called 'complex projects' because their processes require decision-making with many involved stakeholders, each representing a different perspective (Winch, 2010). These stakeholders make decisions at several stages in the process and have different influences on the project, which adds to the complexity of these processes (Douglas, 2006; Wilkinson, et al., 2014). Often, there seem to be struggles in the collaboration between different partners, as stakeholders are suspicious or antagonistic towards each other (Shipley, et al., 2006). Local residents for instance sometimes oppose to plans of developers when they feel unheard or ignored. This resistance often brings projects to a standstill (Wiesman, 2016). Jones & Deckro state that an increase in project complexity leads to an increase of internal conflicts within the project (1993).

Heritage re-use processes are increasingly complex - compared to contemporary re-use projects - due to the increased amount of parties involved in these projects, as there are important social and cultural values concerned. This adds an emotional layer to the perspective of stakeholders as well. Heritage buildings have a positive influence on their neighbourhoods as they are of great value for human beings and their personal well-being. According to Yung and Chan, opportunities for public participation should therefore be provided to allow the public to express their views and to contribute to the design and decision-making processes of heritage re-uses. This way, the social impact of the new use on the existing community could be evaluated as well (2012; Ministerie van Onderwijs, Cultuur en Wetenschap, 2017). However, adding users and residents to the process to express their views and to contribute to the design and outcomes, asks for a redistribution of roles in order to give users a more central stage in the process (Alford, 1998; Czischke, 2016).

1.2.2. Changing roles in heritage re-use processes

Next to the increased role of the user and resident; roles and responsibilities of current key stakeholders in development processes are currently changing as well: Developers started to redefine their roles during the financial crisis and public bodies started to hand over responsibilities to the market. Due to the increase of complexity in development projects; project and process managers take on a much broader role than previously (Muir & Rance, 1996; Roos, 2007; Wamelink, 2010; Wiesman, 2016).

Gaasenbeek opted that it could be beneficial to create an overview of project roles as involved stakeholders are looking for their own respective role in conversion initiatives (2016). These project roles could be used as a possible tool to better steer developments (Zwikael & Smyrk, 2001).
Project roles should be clearly defined, as unclarity within role and responsibility divisions could lead to bottlenecks in the collaboration (Van der Kuij, 2014). Schönau & De Bruijne indicated the need to create knowledge on this topic in the form of a framework, as there is limited literature available on project roles (2008).

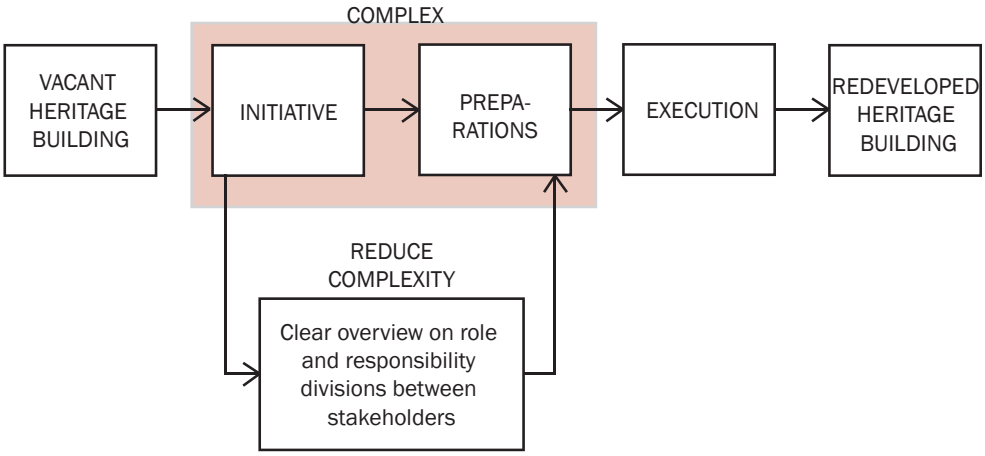
1.3. Problem statement

Role and responsibility divisions are unclear due to a changing context and limited knowledge. This unclarity may lead to bottlenecks in the collaboration and adds to the complexity of heritage re-use processes. This complexity is one of the crucial barriers to entry adaptive re-use processes of heritage.

1.4. Conceptual model

The perception of complexity by stakeholders in the process is at least partly due to limited knowledge and understanding of the process. In this thesis, the problem statement is therefore interpreted in such a way that it is worth exploring if a clear overview on role and responsibility divisions could reduce the complexity in the collaboration of heritage re-use processes.

Figure 1.1. Conceptual model (own illustration, 2017).



This leads to the following main research question: *How can a clear overview on role and responsibility divisions contribute to a reduction of the complexity of heritage re-use processes?*

1.5. Scope, aim and main definitions

In this thesis is focussed on the complexity within the initiative and preparation phase of heritage re-use processes wherein the collaboration between stakeholders is unravelled. This is done by addressing the stakeholders who are involved in each stage; the activities they undertake; the roles they fulfil; the responsibilities they take upon them; and the way they collaborate.

Aim

The main aim of this research is to increase insight for involved stakeholders on their roles and responsibilities in order to reduce the complexity of these types of re-use processes. In a broader sense, this research aims to contribute to the execution of heritage re-use projects in practice.

Main definitions

Heritage — In this report, with heritage is meant: 'All listed National monument buildings in the Netherlands'. This definition ensures an equal regulatory system and value proposition.

(Adaptive) re-use — Adaptation means "any work to a building over and above maintenance to change its capacity, function or performance" (Douglas, 2006, p.1). This research focuses on vacant heritage buildings. The term 'adaptive re-use' therefore includes all works above low-key maintenance in order to re-use the vacant monument.

Re-use processes

A re-use process includes all activities that need to be undertaken in order to redevelop a (vacant) heritage building for a new viable use; from initiative to execution. This study focusses on the initiative and the preparation phase of heritage re-use processes as there are many differences in these phases when (heritage) re-use processes are compared with new-built developments. This is mostly due to the amount of research and the specific knowledge that is needed to map and analyse the information of the building in the right way (Andriessen in Van der Voordt, 2007; Heijer, 2014). The initiative phase is defined as the phase in which the initiative is taken, the feasibility studies are done and the project definition is set up, while the preparation phase includes the preliminary, the conceptual and the definitive design for the project (Wamelink, 2010, p. 7).

Collaboration complexity

There are many definitions for complexity in development projects (Baccarani , 1996; Cicmil & Marshall, 2005; Maylor, 210; Walker & Shen, 2002; Williams, 1999), of which Maylor specifically points out the 'organisational complexity', which is linked to: the number of people, departments, organisations, countries, languages, cultures and time zones involved in the process. Kurul's research on complexity of re-use processes has shown that project complexity is indeed "directly proportional to the number of: agents involved in each stage, the activities they have undertaken; the issues they have taken into consideration; and the reiterations that occurred" (2007, p. 563). In this thesis, collaboration complexity covers the differences between stakeholders regarding their aims, perspectives, knowledge levels, roles, networks, vocabularies, skills, competences, experience and attitudes.

Abbreviations

CHA	-	Cultural Heritage Agency (Rijksdienst voor het Cultureel Erfgoed - RCE - in Dutch)			
HA	-	Housing association	HAO	-	Housing association organisation
HRP	-	Heritage re-use process	HRPs	-	Heritage re-use processes
PoR	-	Programme of requirements			

1.6. Intended results

The intention of this research is to offer a clear overview on role and responsibility divisions for initiators of heritage re-use processes. Furthermore, recommendations on how to deal with the complexity in the collaboration in these processes are intended as well.

1.7. Relevance of the research

1.7.1. Societal relevance

Vacancy among heritage buildings is increasing and is seen as a societal problem due to the negative consequences and the importance of the cultural values associated with heritage. This research raises awareness on the complexity of heritage re-use processes and the limited action that is taken up until now to decrease the vacancy among cultural and historical valuable buildings in the Netherlands. It offers recommendations to deal with the complexity within these processes in order to increase the amount of re-uses of heritage buildings in practice.

1.7.2. Scientific relevance

Many researchers state the importance of an integrating approach for the preservation or adaptive re-use of heritage due to the rising vacancy and the increasing complexity of re-use processes (Giannakopoulou & Kaliampakos, 2016; Tweed & Sutherland, 2007; Yung & Chan, 2012). Foregoing graduation students stress the importance of an in-depth research in the collaboration process and the profiles of stakeholders including the influences they have on each other and on the project (Gaasenbeek, 2016; Heijer, 2014; Kaal, 2015; Kloek, 2015; Schunselaar, 2009). Gaasenbeek (2016), Schönau & De Bruijne (2008), Van der Kuij (2014), Yung & Chan (2012) and Zwikael & Smyrk (2001) all point out the need for a clear role division in development processes to assist decision-making processes, in order to deal with the complexity within these projects. This research increases the insight in heritage re-use processes; it explores the process steps and activities that are being executed in heritage re-uses, the roles and responsibilities of stakeholders and the way they interact with each other.

2. METHODOLOGY

2.1. Research questions

Main question

How can a clear overview on role and responsibility divisions contribute to a reduction of the complexity of heritage re-use processes?

Research questions

1. What does a heritage re-use process look like?
    a. Which steps have to be taken in the process?
    b. Which stakeholders are involved?
        i. What are their tasks and responsibilities??
2. Which roles have to be fulfilled in heritage re-use processes?
        i. Which stakeholders are fulfilling these roles now and why?
        ii. Which roles are not fulfilled?
        iii. Which roles are executed by multiple stakeholders?
3. Which challenges can be identified?
    a. Which risks and challenges are identified by which stakeholders?
    b. What are possible solutions to these challenges?

2.2. Type of research

This research can be classified as explorative research, as the complexity within the collaboration of heritage re-use processes is explored. The choice for this qualitative approach was made due to a limited availability of data on these processes. This research is conducted in order to determine the nature of heritage re-use processes and to have a better understanding of the problems involved: It explores the meaning behind interactions, processes, behaviours, feelings and experiences. It does not intend to offer final and conclusive solutions to existing problems. It uses a qualitative approach to understand the field (Boeije, 2012).

The risk involved with explorative research concerns the interpretation of the qualitative information which is subject to bias. Subsequently, the modest number of samples that is investigated in this master thesis may not adequately represent the target population: The conclusions of this research could therefore not simply be generalised (Bryman, 2012; Dudovskiy, 2016). With the use of several (academic) mapping models in a multiple case study analysis, the bias is tried to be diminished as much as possible.

2.3. Method and approach

In this research is made us of a phased research design in which data collection and data analysis are alternated.

2.3.1. Literature study and review

First, a literature study is done to get a first grip on heritage re-use processes with the help of re-use and development descriptions. This is done in order to understand which variables influence the complexity and to understand the context in which heritage re-use processes are executed. Furthermore, literature is used to find key stakeholders and their key tasks. The literature is reviewed to extract process steps and stakeholders roles, which are linked to these tasks. Eventually, the outcome of this theoretical research forms the base of a framework that is used to model the collaboration in the case studies. The literature study is mostly based on contemporary re-use processes as there is only limited information available of re-use processes of heritage buildings.

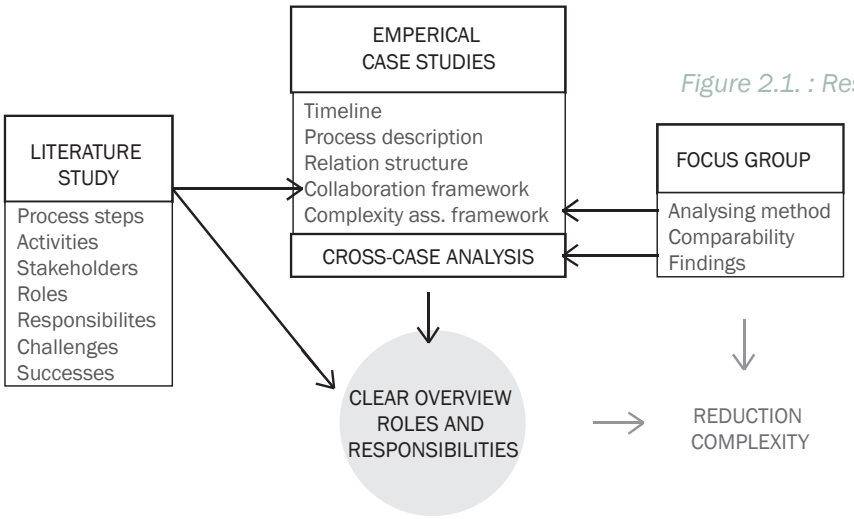


Figure 2.1. : Research model (own model, 2017).

2.3.2. Case studies

Practical case studies offer the ability to obtain a holistic view of real-life projects and the possibility of in-depth analysis by looking at a multiplicity of causal links (Boeije, 2012). In this thesis, four case studies are researched. The first two cases were proposed by my internship company, they included fourteen semi-structured interviews with the key stakeholders in the project, who were found by the project leaders of the Erfgoedfabriek. The other two cases were added later and exclude any interviews due to time limits and less cooperative stakeholders. These cases were chosen as a sufficient amount of data (including interview transcripts of foregoing researchers) was available, which enabled enough insight in the complexity of the collaboration in the process.

Figure 2.2.: CHV, Veghel (own image, 2017).

Case I – CHV, Veghel

Former food factory, now transformed into a cluster of cultural and food-related functions.

Figure 2.3.: De Ploeg, Bergeijk (Bruns, 2016).

Case II – De Ploeg, Bergeijk

Former weaving mill of 'De Ploeg' fabrics, transformed into an office and industrial work space.

Figure 2.4.: De Hallen, Amsterdam (image by Ulrich Knaack, 2015).

Case III – De Hallen, Amsterdam

Former tram remise (industrial maintenance halls), now transformed into a mix of uses; cinema, restaurant, kindergarten, library, offices, workplaces, retail, hotel.

Figure 2.5.: BK-City, Delft (Braaksma&Roos, 2013).

Case IV – BK-City, Delft

Former chemistry faculty and laboratory, now transformed into the architecture faculty of the TU Delft.

Mapping models

This type of research asks for a clear set of models that have the ability to model the complex and iterative nature of heritage re-use processes (Kurul, 2007). The case studies are analysed with the help of five models: A timeline, a process description, a relation structure, a collaboration framework and the complexity assessment framework (Maylor, Vidgen & Carver, 2008). Timelines and project descriptions are generally used to gain understanding in processes but are individually inadequate to map complexity as they often condense processes to a few simple concepts and barely show interdependencies (Kurul, 2007). The relation structure and collaboration framework are therefore added to gain more detailed understanding of the collaboration within the process. The conplexity assessment framework assesses the project complexity in general. In appendices A1-2, the collaboration framework and the complecity assessment framework are explained, to gain understanding of the analysing technique.

1. Timeline

The timeline gives an overview on the iterative nature of the process; it displays a list of events in chronological order. Timelines are particularly useful for studying history, as they convey a sense of change over time. In project management, timelines show the milestones that have to be achieved (Grafton & Rosenberg, 2010). In this research, a timeline is used to show the milestones or important activities within the project and it is used to understand the change over time (combined with key issues occurring during that time).

2. Process description

This research makes us of a descriptive process analysis method: It tries to describe as well as possible what has happened during to process, according to steps visualised in the timeline. It is argued that process descriptions in a case study method should always be made descriptive as rare phenomena are researched: Due to expectancy effects and atypical individuals, it is hard to determine cause and effect; it is therefore difficult to explain the reasoning behind the phenomena (Jackson, 2009). The process descriptions of the case studies explain the key activities executed in their dynamic context as documented in agreements, written process descriptions of foregoing researchers and as derived from interviews.

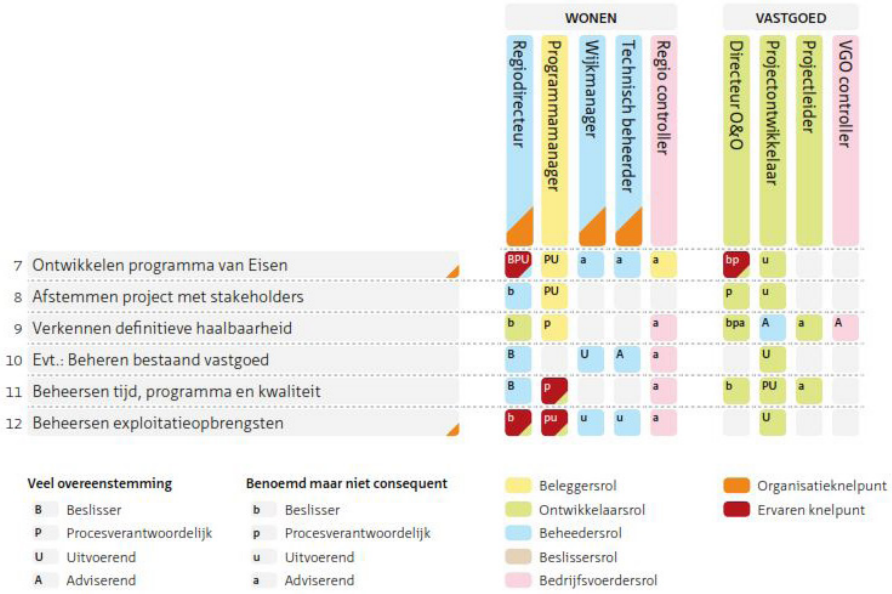
3. Relation structure

The relation structure combines the formal and informal collaboration between stakeholders. The formal collaboration is linked to the hierarchy within organisations and between stakeholders; the informal collaboration shows personal links between stakeholders. In research, informal collaboration is often visualised in flow charts in collaboration or interaction diagrams (with use of UML: Unified Modeling Language) while contract and organization models explain the formal collaboration between stakeholders (Eriksson & Penker, 2000). In the relation structure these models are thus combined to map reality as close as possible. It shows how stakeholders are linked to each other and which roles they fulfil; something that is not shown in a timeline or process description. Therefore, it gives a more detailed explanation of the collaboration.

4. Collaboration framework

The collaboration framework explains the role and responsibility division between stakeholders at every step in the process. This framework is based on the responsibility division model of Van der Kuij; designed to understand bottlenecks in housing association organisations (2014). The responsibility division model is translated within this research with the help of literature to understand the collaboration in heritage re-use processes. Within the case studies, the model is adapted further to better fit heritage re-uses in practice. The collaboration framework is added as a mapping tool as it gives a detailed overview on the collaboration of stakeholders in heritage re-uses per process step: It explains which stakeholder is executing which activity in the process, in which way (executing, responsible, supporting, consulting or informing) and from which role they take this activity upon them (see appendix A.1. for a more detailed description of the analysing method). The design of the framework enables to compare the collaboration within several case studies and to extract conclusions on generalisation of this collaboration (appendix B.1.). The three previous described models all deliver input for the collaboration framework.

Figure 2.6.: Responsibility division model (Van der Kuij, 2014, p. 175).



5. Complexity assessment framework

Maylor, Vidgen, & Carver (2008) designed a grounded model to understand which aspects make projects complex to manage: The MODeST framework. Maylor (2010) used the MODeST framework to scale the complexity of different projects against predefined criteria. For the case studies, this is done as well. This analysis is made to understand if complexity could be reduced and which aspects deserve attention for this matter. The ranking is based on the documentation and interview outcomes of the case studies (appendix A.2.).

2.3.4. Cross-case analysis

The cross-case analysis is executed in order to determine causal links and similarities within the four case studies. The cross-analysis includes a comparison of the collaboration frameworks and the complexity assessment frameworks of the four case studies. With the case studies is tested if the project steps, step sequences, involved stakeholders and their roles and responsibilities are similar enough to provide a general picture of the collaboration within heritage re-use processes (on the basis of the chosen case studies). Furthermore, a comparison is made on the level of complexity and the aspects that made the cases complex. Chapter 5 explains the outcomes of the cross-case analysis. The analyses themselves can be found in appendix B1-2. Cross-case analyses are often executed to find a common explanation on problems or successes; however, Yin argues that these analyses are often insufficiently documented to produce a specific set of guidelines for future researchers (1981). Due to the relatively strict designs of the frameworks this analysis could be done with future case studies as well, when the findings of four studies are found to be insufficient in amount.

2.3.5. Focus group

A focus group is a guided group discussion with experienced people in the research / practical field. It is often used in explorative research as it is not needed to ask predefined questions and it offers a way to understand the participants and their perspectives (Morgan, 1997).
The focus group is deployed to test the findings of the case studies and the outcome of the cross-case analysis with stakeholders in practice. The relation structure and collaboration model are showed as models to understand the collaboration within heritage re-use processes. Additional information on role and responsibility divisions was provided (this documentation can be found in appendices C1-4). The focus group is included as a method to generalize findings of this research in recommendations that are applicable on a larger scale. Furthermore, the focus group was used to give insight in the added value of the research and its outcomes in the practical field.

II

THEORETICAL FRAMEWORK

3. LITERATURE STUDY

With the help of a literature study is endeavoured to unravel the content and sequence of heritage re-use processes, to increase insight in involved stakeholders and their roles and responsibilities. This part of the report starts with a process description of HRPs, which is erected with the help of a combination of studies into heritage and contemporary re-uses and new-built construction processes (due to limited available data on HRPs alone). Furthermore, the involved stakeholders, the tasks and responsibilities they fulfil and the roles that are visible in HRPs are described in detail in this chapter. This chapter serves as input for the collaboration framework: One of the models which is used to understand the division of roles and responsibilities in practice.

3.1. Process description

3.1.1. Development phases

Development processes, either newly-built or re-use, are commonly explained through the different phases of the project. These phases are described by several researchers, who hold a slightly difference in perspective and content in their definitions. Table 3.1. shows the different phases, described by several authors, in order to define the scope of this research and to find the predefined project steps and sequence of heritage re-use processes. This study only deals with the initiative and preparation phases of HRPs as these phases are evaluated as more complex compared to newly-built or contemporary re-uses: In the initiative phase, a higher investment is needed due to extensive studies into the current building state and possibilities (Heijer, 2014); there are more stakeholders involved in comparison with new-built projects of comparable sizes and many of them are involved earlier in the project. It seems that the way in which the initiative phase evolves, is decisive for the success or prematurely termination of the process (Andriessen, in Van der Voordt, 2007). The preparation phase is of high importance considering complexity in the collaboration: This is due to the amount of stakeholders and the changing trends and priorities. Public participation is for instance winning ground in HRPs nowadays, and users are given a vote in the design of the building more and more (Van Balen & Vandesande, 2015).

Authors	Phases					
Andriessen in Van der Voordt (2007)	**Initiative phase**: specific research into state of building, extension potential, possibilities. Financial principles	**Definition phase**: define listing, discuss possibilities transformation with public bodies, define preservation, select architect, select contractor	**Preparation phase:** Specifications (from PoR), Budget, choose materials	**Design phase:** PoR in design, flexibility in negotiations, measuring	**Realisation phase:** demolition, find solutions for setbacks, supervision and surveillance during construction	
Douglas (2006)	Cient's brief Choice of options	Outline scheme design	Prepare production information; design drawings for applications; tender		Monitoring building operations	Formulate aftercare strategy
Miles, Berens & Weiss (2001)	**First stage:** first ideas	**Second stage:** redefine ideas, **Third stage:** feasibility study	**Fourth stage:** contract negotiations **Fifth stage:** formal commitment		**Sixth stage:** construction **Seventh stage:** completion and formal opening	**Eighth stage:** property, asset and portfolio management
Nozeman & Fokkema (2008)	**Initiative phase:** vision on possibilities, feasibility studies, discussions with landowners, determine feasibility		**Development phase:** write PoR, architectural designs, test designs, write specifications for execution		**Realisation phase:** work preparations, work execution, completion, formal opening, use	**Exploitation phase:** use and maintenance
Wamelink (2010)	**Initiative phase:** Initiative, Feasibility, Project definition		**Preparation phase:** preliminary, conceptual and definitive design		**Execution phase:** plan of approach, attract experts, guard time, quality and budget	**Use phase**: use and maintenance

Table 3.1. Phases in development processes; either new-built or adaptive re-use (own table, based on named authors, 2017).

3.1.1.1 Initiative phase

The starting point of a HRP, as described in this thesis, is a vacant heritage building of which the previous user has left or is leaving. In many heritage projects, finding a new user within the same function is almost impossible as the current function has become superfluous. In other cases, the function might still be in demand, but the building is in a dilapidated state; which makes in unattractive for new users. In order to re-use the building, either major renovation works are in place or the building needs to be transformed to fit a new function (Douglas, 2006; Wilkinson et al., 2014).

The initiative can be taken by the owner or by another stakeholder that has an interest in the project; this varies within different re-use processes, due to the context (Nozeman & Fokkema, 2008). In any case, a project group has to be formed that exists out of the needed experience and knowledge in order to set up and execute the re-use process (Wamelink, 2010).

The current state of the building needs to be analysed before new plans can be opted. In practice, it seems that gathering the adequate information is a real challenge, which is mostly underrated: In the initiative phase, too little research is done and there is a lack of knowledge about building styles and restauration techniques. Many budget estimates are therefore calculated on assumptions that do not align with reality. It is argued to be important to map the current situation of the building extensively in the early stages of the project, to avoid budget overruns in a later phase (Andriessen, in Van der Voordt, 2007; Heijer 2014).

In heritage re-use processes the determination of the degree of protection of the listed building and its area is very important, as it indicates the degree of adaptations that are allowed (Douglas, 2006; Heijer, 2014; Wilkinson et al., 2014). This relates to the possibilities within the zoning plan as well: It is also about defining the relationship of the specific building with other buildings, the extension possibilities and the (relating) functions in the neighbourhood (Andriessen, in Van der Voordt, 2007; Douglas, 2006).

Furthermore important is to make a financial assessment. Possible financial resources have to be indicated. order to make the project feasible, the real markets need has to be researched, which indicates possible financial resources as well (Van der Kuij, 2014).

Whenever possible uses are mapped, the relating legislation of these potential functions needs to be figured out, to indicate possibilities and challenges (Douglas, 2006). Whenever this is clear, the different ambitions of stakeholders for the development need to be determined and aligned. This means that the deployment capability of the different stakeholders is sorted out and objectives for the project are set (Van der Kuij, 2014).

3.1.1.2. Preparation phase

With knowledge on the building state, the market demand, the legislation and the ambitions and capabilities of the involved stakeholders, a preliminary assessment of the adaptation potential can be made, which involves physical, social, economic, environmental, legal and technological perspectives (Douglas, 2006; Wilkinson, et al., 2014).

Through scenario planning, different housing alternatives for possible futures can give an idea of the involved risks and opportunities. It is therefore important to estimate the revenues and expenses and the risks of the alternatives in relation to the scenarios, before the 'most effective' alternative can be chosen (Wamelink, 2010).

Whenever the alternative is chosen, an adaptation scheme, sensitive and appropriate to the building's status, condition and capabilities can be set up (Douglas, 2006). This includes the design of the redevelopment, which leads to a plan of approach for the execution (Wamelink, 2010). The plan of approach still needs to be tested against practical feasibility, which includes time and money deployment (Van der Kuij, 2014; Wamelink, 2010).

Older buildings have been built according to the regulation at that time, and therefore cannot always be transformed according to the new building degree demands. It may occur that exemption must be requested to specific parts of the building permit (Andriessen, in Van der Voordt, 2007).

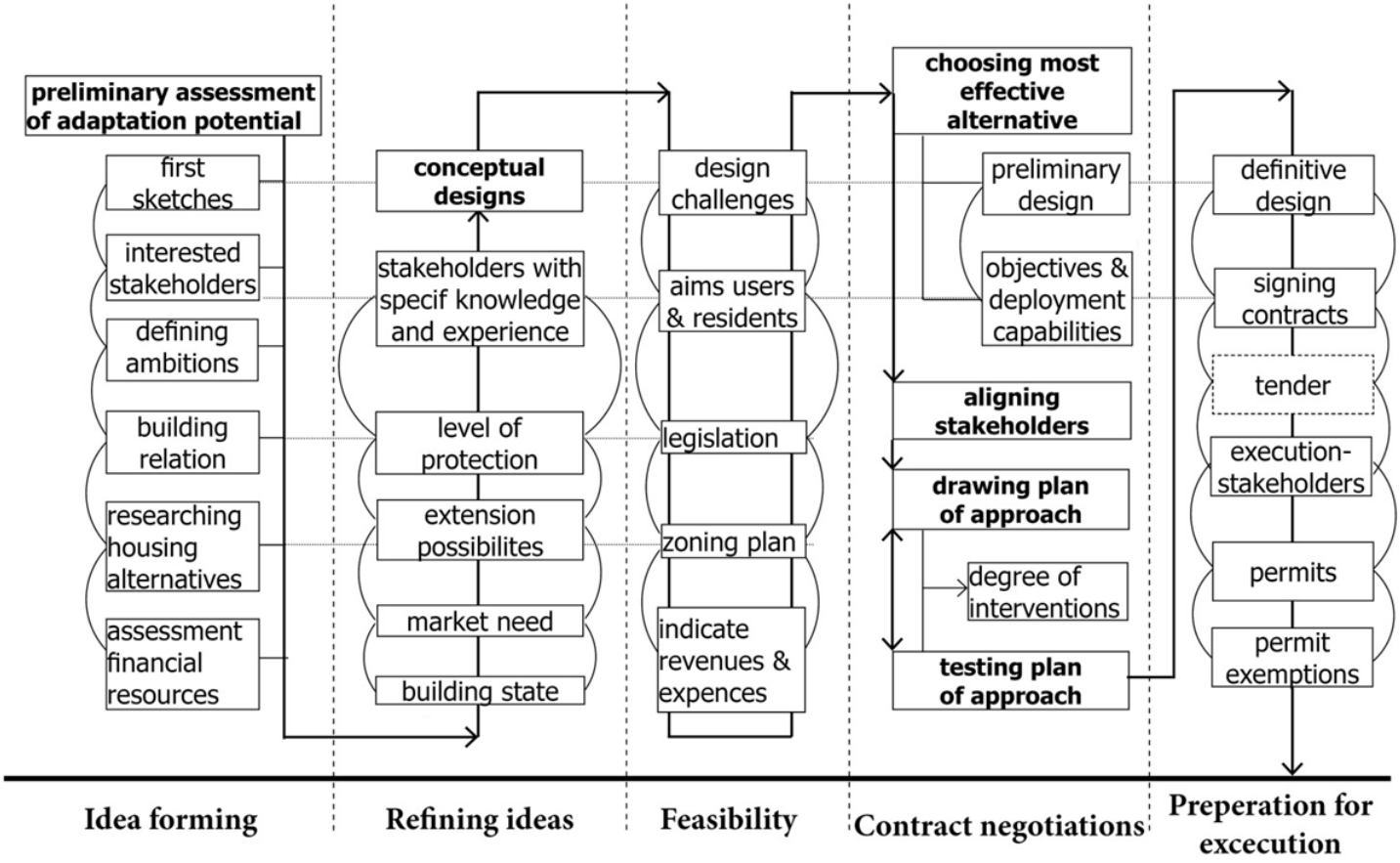
Eventually, the project can be set in action, by applying for permits, possibly tendering the project, mobilising financial resources and finding users. Whenever the initiating party is not the owner, a shift in ownership could be made in this part of the process as well (Douglas, 2006; Wamelink, 2010). The subsequent steps of the process are out of the scope of this research.

3.1.2. Sequence

The beforementioned steps do not particularly have to be executed in this sequence; some steps can be executed at the same time, and others might be prioritised according to the aim of the project. In order to be able to compare processes on project steps and activities, a general picture is drawn with use of data of all the subscriptions regarding National monuments for the Golden Phoenix Price 2015. This price is focused on best-practice restorations and transformations of real estate in the Netherlands (NRP, 2015).

The general sequence is established on the basis of project steps, which are referred to as steering and decision moments by Miles, Berens & Weiss (2001) and Nozeman & Fokkema (2008). Miles et al. distinguish these moments in the initiative and preparation phase as follows: Suggest ideas; refine ideas; feasibility studies; contract negotiations and contractual commitments (2001). Nozeman & Fokkema deviate slightly with the development of the idea as a starting point, followed by the initiative that is taken, the feasibility study, the preliminary design and the definitive design (2008).

Figure 3.1. The general sequence of adaptive re-use processes of heritage buildings (own illustration, based on Miles et al., 2001 and Nozeman & Fokkema, 2008).



Based on this sequence, table 3.2. describes the project steps and activities that are part of the initiative and preparation phases of heritage re-use processes. This overview is used within the collaboration framework.

	Identified project steps and activities in heritage re-use processes
1	**Idea forming**
	Preliminary assessment of adaptation potential (physically, socially, economically, environmentally, legally and technologically);
	- Scenario planning for different futures including different housing alternatives;
	- Searching for interested stakeholders;
	- First assessment of financial resources;
	- Defining relationship of building with other buildings and functions;
	- Defining ambitions of the real estate development (for different stakeholders);
	- First sketches
2	**Refining ideas**
	- Diagnosing the current building state;
	- Determining real market need;
	- Determining extension possibilities;
	- Determining degree of protection of building and conservation area;
	- Searching for stakeholders with specific knowledge and experience suitable for the development;
	Conceptual design
3	**Feasibility**
	- Identifying the revenues and expenses and the risks of the alternatives in relation to the scenarios;
	- Researching legislation relating to potential uses;
	- Analysing possibilities within applicable zoning plan;
	- Research aims (potential) users and residents;
	- Research solutions for specific design challenges;
4	**Contract negotiations**
	Choosing the most effective alternative;
	- Preliminary design;
	- Setting objectives and determining deployment capability of different stakeholders;
	- Identification of stakeholders with specific knowledge and experience suitable for the development;
	Aligning project stakeholders;
	Setting up an adaptation scheme, sensitive and appropriate to the building's status, condition and capabilities / Designing a plan of approach;
	- Choosing degree of interventions;
	Testing the plan of approach against practical feasibility (time and money);
5	**Preparation for execution**
	Possibly tender the project
	Signing contracts involved actors
	Definitive design
	- Request exemption for parts of the building permit
	- Applying for permits
	- Search for stakeholders for the execution of the project (which were not involved yet) (e.g. tender procedure, within own network)

Table 3.2. Identified project steps and activities in heritage re-use processes (own table, based on Andriessen, in Van der Voordt, 2007; Douglas, 2006; Heijer, 2014; Miles et al., 2001; Nozeman & Fokkema, 2008; Van der Kuij, 2014; Wamelink, 2010; Wilkinson, et al., 2014).

3.2. Stakeholder description

Stakeholders commonly involved in heritage re-use processes are described below in order to understand their influence on the process and to show the ambiguity that is present in stakeholder descriptions, as the influence of stakeholders differs according to their role and the context of the process.

1. The client

A (group of) stakeholder(s) that acts as future or present owner. Clients are commonly the ones that initiate the real estate project, however, in some cases the initiator is never becoming the owner of the object. The client could be several types of stakeholders: A developer; an executive contractor; an investor; a government body; a housing association or a (collective of) individual(s).
These stakeholders have different profiles – from culture-loving to purely commercial – could be more or less knowledgeable and they could have a private or a collective interest (Roos, 2007; Wamelink, 2010). The key activities of clients may vary extensively due to the differences in experiences, aims, knowledge and skills. The role of the client is customized at every particular real estate project. Furthermore, ownership can be transferred (multiple times) during a re-use process, which means that the client can change within time.

2. The investor

Is the (temporary) owner of the real estate asset. In the past, especially housing associations and local governments were main investors in heritage re-use processes: They dealth with the unprofitable part of the investment as they gained the added value from the area (development). Due to changing roles, new investors need to take their place. This is now done by long-term investors, developers, or 'emotional investors': People who invest their own equity and settle for little to no (financial) yield (Gelinck & Strolenberg, 2015). The type of investor steers the approach of the re-use process and has influence on the types of decisions made. According to Hoppenbrouwers, private investors take more risks and are willing to accept more uncertainties in the project (2016), which makes them more suitable for heritage re-use processes, as these are complex and uncertain. Developers fall under this type of investors. However, according to Gelinck & Strolenberg, especially long-term investors are now filling the investor gap that housing associations and local governments left behind, as their long-term vision suits well with long-term heritage redevelopments. Due to a lack of financial backing, private parties are now partly co-financing projects with own equity (for instance involved contractors, construction companies or landowners). Sometimes future buyers fund the investments up front, as an institutional investor or end user (Mackaaij & Nozeman, 2014). Furthermore, private equity firms (participatiemaatschappijen) are being established to arrange the financial commitments concerning user-led (re)developments (Mackaaij & Nozeman, 2014).

3. The financier

Financiers are never owner of the real estate asset, even though they (co-) fund the development. The most common financier is a bank: banks loan money in the form of mortgages, the building is the collateral whenever the borrower cannot pay the loan. Investors often make use of bank loans as part of their investment strategy (Geltner et al., 2010). However, due to the economic crisis of 2008 and the increasing complexity to finance real estate projects, banks are becoming more cautious with lending money (Cushman & Wakefield, 2014; Gelinck & Strolenberg, 2015).
The public could also be the financier of the project, which can be done by subsidies, low interest rents or rent paid up front (e.g. for cultural institutions). Additionally, crowdfunding – individuals who finance a part of a project for a product, discount or yield in return – is used more and more in (re)development processes.

4. The public

A. The National government

The National government had the responsibility of the collection development, value proposition and consolidation of heritage until 2010. However, the policy switched to the view that monument care did not belong to the National government, but to citizens and the private initiative (Wiesman, 2016). Due to this shift, heritage conservation and redevelopment are no longer prioritised in their programmes, which led to budget and capacity issues in ongoing and future projects on local levels (Strolenberg, 2016; Van den Hurk, 2016). The government now steers on preservation and re-use of heritage buildings with the new Environmental Planning Act (2019) and the new Heritage law (2016), which combine the previous monument law (1988) with the law concerning environmental management, the spatial planning Act (including the land exploitation act), the Environmental Permitting (General Provisions) Act, the expropriation law, regulations concerning construction and the Culture preservation Act. New implemented with these two laws is the conservation obligation for National monuments, which also includes a conservation subsidy for monument owners (Rijksdienst voor het Cultureel Erfgoed, 2016a).

B. The municipality

- The (spatial) planning department sets up the zoning plan which includes allowed functions.
- The licence department is in charge of the authorisation of permits, which are tested according to the zoning plan and the Building Act.
- The enforcement department comes in force whenever owners are acting opposite to the zoning plan; building act; safety rules or if they apply changes without having the right permits.
- The economy department is of particular importance when a governmental body is owner of the site or the building itself. Agreements have to be made about the market price or the value of the land lease with the involved stakeholders. Furthermore they come in the picture when subsidies are offered.
- The culture department is concerned about its cultural property and could furthermore be of interest whenever is searched for communities of cultural institutes as possible future users.

C. Quality and safety committees

- The safety departments (e.g. fire department) advices the client and the licence department of the municipality on safety measures which are also stated in the Building Act.
- The quality committee advices the licence department about the aesthetical and architectural value of the plan in relation to the neighbourhood for interventions that require a permit.
- The monumental care departments advice the licensing authority on the aesthetical, architectural, cultural and historical value of the building, its surroundings and the planned (re)development. Whenever interventions are license-free according to the Building Act, the addition of the monumental care department ensures that the aesthetical, architectural, cultural and historical value of heritage is still guarded, even when normally no permit is required for the type of intervention (Hobma, 2016).

There are several public monument departments:
- Municipal monument care department;
- Provincial monument care department;
- 'Monument-houses';
- Cultural Heritage Agency concerned about specific National listed buildings.

Private monument institutes exist independently from the public committees to preserve and prioritise important heritage buildings (e.g. Bond Heemschut; Het Cuypersgenootschap).
In some cases the quality committee and the monument care departments disagree about the aesthetical or architectural value of the building. However, the licensing authority is responsible for the decisions concerning the granting of licences at all times (Hobma, 2016).

D. Residents

Residents might be invisible and quiet, they could be willing to think along, help or even co-develop, however they can also disturb, delay or even stop a project whenever they are opposed the re-use plans or whenever they feel ignored. It is impossible to predict how the neighbourhood will respond to new plans, if their opinion is not asked for (Muir & Rance, 1995; Van Balen & Vandesande, 2016).

5. The user

The users' group consists out of many different actors who could also participate as one of the abovementioned actors in the project. Citizen participation depends on the possibilities within the process of the project development and the customer preferences. There is a possible range of participation levels, from no participation to occupant controlled development (Qu & Hasselaar, 2011).

6. The developer

A developers' main aim is to earn money with arranging ground, money and users in order to realize a building structure. He commonly takes the initiative to the development, convinces other parties to join the project and often takes the management task upon him (Nozeman & Fokkema, 2008).

Developers could also be the owner of the building; therefore, they can also be seen as real estate investors, although the developer takes upon a more active participation in the process then a solely investor does. Developers can be present in development processes next to a real estate investor: Agreements have to be made on the risk allocation, responsibility division and the degree of ownership and return (Brueggeman & Fisher, 2010). In most cases the developer takes the associated risks for the customer and provides the construction of the project after commissioning the tenant / buyer. There are different types of developers, with differences in approaches: From purely commercial to a more societal approach. In heritage projects, especially the latter type is present in re-use processes, as the return on investment tends to be lower with heritage projects compared to new-built. In some cases, the developer stays owner after completion, to let the buildings to tenants directly. In this case, they are still involved in the operation phase. This is mostly done by investor-developers (Wamelink, 2010).

7. Advisors

A. The architect

The architect is not a one-of-a-kind stakeholder. Architects have different expertise levels, knowledge levels, design styles, levels of assertiveness and company profiles. An architect could either be the designer of the project, the project manager, the consultant for the client, the advisor on use or the (co-)developer (Roos, 2007; Wamelink, 2010). In principle, the architect is responsible for the preliminary, the conceptual and the definitive design. Next to the design tasks, architects sometimes act as advisor on specific parts of the project, depending on their level of expertise (Wamelink, 2010). Several architects have a pure focus on heritage buildings, which expands their range of duties compared to non-heritage architects (Roos, 2007). Successful redeveloped heritage projects often include an assertive architect that also acts as the initiator, developer or project manager of the project (Gelinck & Strolenberg, 2014; Stichting NRP, 2015).

B. The engineer

Advisory engineering firms are either specialists or generalists and could focus on the product or the process of the redevelopment. The relationship with the client depends on the type and the amount of advisors. Advisors do not solely have a relationship with the client, sometimes advisors are selected by the architect or the project manager (Wamelink, 2010).

C. The manager

In theory, process managers are more suitable for heritage re-use processes compared to project managers as project management in used in rather static projects with more or less stable problems and solutions while process management is used for more dynamic projects and when decisions are made in a network, rather than hierarchical (De Bruin, Ten Heuvelhof & In 't Veld, 2010). In reality however, project managers have broadened their tasks from a purely financial and management approach into the softer side of management and advisement; for both the demand as supply side of the market. Especially on the supply side, this advice is focussed on the steering of complex processes between involved stakeholders, which requires and a valuable partner with a helicopter view (Wamelink, 2010). Project managers have therefore evolved more into process managers, which makes the distinction between these two stakeholders very ambiguous.

Conclusion on involved stakeholders

Some stakeholders are clearly defined in literature; they execute specific tasks and hold specific responsibilities. However, most stakeholders seem to adapt their tasks and responsibilities according to other involved parties, the project aims and the context in which the project is executed. Thus, tasks and responsibilities of stakeholders show a lot of ambiguity as they seem to overlap often. Van der Kuij argues that project roles in development processes give a clearer view on the division of tasks and responsibilities, which might reduce the unclarity in the collaboration (2014). This argument is strengthened by Gaasenbeek (2016) who states that unclarity due to changing roles is the reason why there is a lack of action considering conversions of vacant offices. Zwikael & Smyrk (2001) furthermore see project roles as a possibility to better steer developments. Yung & Chan state that current forms of collaboration appear to provide limited possibilities for co-corporation of users and residents, and therefore new role and responsibility divisions have to be drawn up (2012). Schönau & De Bruijne (2008) explain that a framework is needed to start creating new knowledge on project roles. This framework is designed within this research in the form of a collaboration framework; the roles and responsibilities will be explained in the next paragraph.

3.3. Roles and responsibilities

The knowledge of project roles in new-built developments and adaptive re-use processes is limited: Van der Kuij (2014) investigated role divisions linked to bottlenecks in the process of (newly-built) developments within the organisation of housing associations; Gaasenbeek (2016) has investigated project roles for office conversions in the Netherlands across different organizations; Zwikael and Smyrk formulated project roles across different organizations for contemporary construction projects (2011); and Nutt (1993, in Douglas, 2006) defined six participant groups in development processes, which can be defined as project roles as well.

The role division used in this research originated from the basis of the project roles defined by abovementioned authors. This basis is redefined for the initiative and preparation phase of heritage re-use processes after a comparison between the authors and the stakeholder description (§3.2.).

Authors / Roles	**Van der Kuij (2014)**	**Gaasenbeek (2016)**	**Zwikael & Smyrk (2011)**	**Nutt (1993)**
Owner	X		X	
Initiator		X	X	
Investor	X	X		X
Developer	X	X		X
Advisor		X		
Manager	X		X	
Administrator	X			
Regulator		X		X
User			X	X
Producer				X
Marketing				X

Table 3.3. Project roles according to literature (based on Van der Kuij, 2014; Gaasenbeek, 2016; Zwikael & Smyrk, 2011; Nutt, 1993).

The overview of table 3.3. shows eleven roles that are being fulfilled in development projects (for convenience, the three different developer roles by Gaasenbeek are merged into one). It is however difficult to compare these role divisions because there are overlaps and differences in the role definitions given by the authors. Additionally, Van der Kuij's role division is based on one organisation, while the others are based on the collaboration between multiple organisations. Furthermore, not all mentioned roles are present in the project at the same time.

Owner / Developer

The owner is accountable for the project outcome, determines the objectives and sets the requirements for the development. The owner role is sometimes merged with the developer role, which explains why both roles are not referred by all authors. The additional role of the developer is to organize the development, to determine the investment potential and to research market opportunities.

Regulator

The regulator has the responsibility to ensure compliance with statutory requirements (Nutt, 1993) and to reduce vacancy (Gaasenbeek, 2016). The regulator is not always referred, as sometimes this role fell outside the scope of the role division.

Investor / Developer

The investor has the responsibility to arrange capital to fund the project and to purchase the building (Nutt, 1993) and to maximize profit (Gaasenbeek, 2016). According to Van der Kuij's division; the investor is the future owner of the asset who determines the ambition of the exploitation programme, which coincides with the stakeholder description from literature. However, this leads to an overlap with the owner role.

Initiator / Manager / Marketing role / Investor / Developer

According to Gaasenbeek, the initiator role ensures that the conversion project is carried out. He states that this role is not always present in office conversions (2016). This role could be fulfilled by another role according to Zwikael and Smyrk as they defined the manager as the entity who runs the project. Zwikael & Smyrk see the initiator more as a "Champion": The role that gets the project funded and that leads the development until the business case is drawn up (2011). However, according to Nutt, this can be done by the investor and developer as well (1993).

The initiator might not always be referred; however this role is often mentioned as a crucial party to convince real estate investors who leave their properties vacant (Gelinck & Strolenberg, 2015). Other than this, it is not made clear in literature what the exact tasks of the initiating role are. The marketing role defined by Nutt could for instance also be executed by the initiator, as it includes attracting users to the building, which helps the funding and leads to a higher chance for redevelopment (1993).

Advisor

The advisor role is only referred by Gaasenbeek. The main responsibility of the advisor is to assist committed actors in achieving their objectives (2016).

Producer

The producer role is only referred Nutt, the producer role includes designing, specifying costs and executing the adaptation to the building (1993). The actual execution of the adaption falls outside of the scope of this research. However, in the initiative and preparation phase, the design is made and the costs are specified.

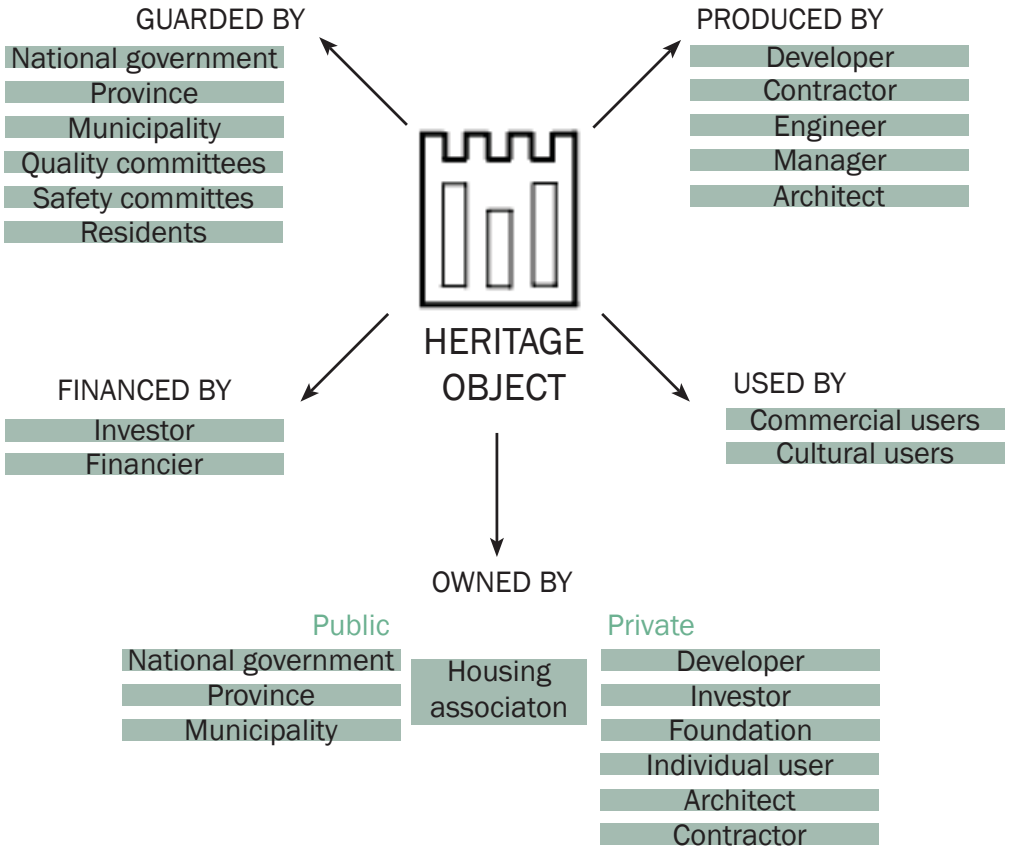
User

The user creates outcomes (Zwikael & Smyrk, 2011), occupies, manages and uses the building (Nutt, 1993), which means that their main role lies outside the scope of this research. However, users are nowadays involved earlier in the process in order to express their wishes and to contribute to the design and decision-making.

Administrator

The administrator role is specific within housing associations organisations and thus falls outside the scope of this thesis.

Figure 3.2. Roles in the initiative and preparation phase of heritage re-use processes.



3.3.1. Role division

This role division aims at gathering a complete set of roles for heritage re-use processes in the initiative and preparation phase. Therefore, overlapping definitions are cut and roles are brought back to their essence. This resulted in a set of six project roles. The earlier defined activities are included in the definitions of the roles to frame their boundaries.

1. Owner - owns the real estate asset, is the contracting authority and therefore makes the end decisions in the process. The owner defines his own ambitions for the real estate development and negotiates with the other involved roles. In order to define this ambition, he preliminary assesses the adaptation potential and the state of the property and considers different housing alternatives. A first assessment of own financial resources and possible yields and risks are made by the owner to base his decisions on. The owner earns his right for the decision-making through the ownership of the building.

2. Regulator - restricts the project in order to guard public values and to safeguard quality norms. The ambition of the regulator is based on a vision on city or National level. Boundaries are set for the quality of the end product, the preservation of heritage, the added value of the building and function for the neighbourhood and city, safety issues and social needs. The consequences of the development have to be analysed thoroughly in order to set the appropriate standards. The regulator has regulation as power tool to fulfil its ambitions.

3. Financier - sets the boundaries for the investment with corresponding frameworks and preconditions. The financier finances the project whenever the ambitions of the project are in line with these boundaries. In order to set an own ambition, the adaptation potential and state of the building is analysed in a financial way, to make a first assessment of the financial returns possible and the involved risks within the project. Subsequently, the market potential and market risks are researched, which give an indication for the return of the investment. The financier has the investment budget as powerful negotiation tool in the process.

4. Initiator - takes the initiative to re-use a vacant monument. The initiator takes the initiative out of personal interest and therefore shares this enthusiasm with potential stakeholders. This way, a group of interested stakeholders can be formed rather naturally. The role includes gathering financial resources, creating a support base for the new development, getting residents and users involved and searching for solutions for specific challenges in the process.

5. Producer - has an executive role: he produces the building to the wishes of the owner and/or user, within the limits of the regulator, with the (economic) help of the financier and the initiator. In the initiative and preparation phase, this role includes setting up the statement of requirements. The producer role includes a lot of knowledge and expertise about heritage redevelopments and a network of stakeholders that are specialised; they therefore advice the owner to achieve the objectives. The producer is for instance responsible for the design and cost calculations.

6. User - eventually uses and maintains the developed building, but is also present in the initiative phase in order to explain the ambition and to define the function (requirements) and the relation to other buildings and functions. The ideas, knowledge and experiences of the user are integrated in the conceptual design.

3.3.2. Responsibility division

Nieuwenhuis (2003; 2010) indicated five process roles that have to be fulfilled in construction processes in the RASCI model: RASCI is an abbreviation for Responsible; Accountable; Supportive; Consulted; Informed. These process roles explain the responsibility per stakeholder during a specific activity whenever it is executed by multiple stakeholders at the same time.

Responsible	This stakeholder is responsible for implementation. It is either the stakeholder who is carrying out the work himself, or the one that has the work performed by contracted stakeholders. The responsible is held accountable by the stakeholder who is accountable for the task.
Accountable	This stakeholder has the (final) responsibility; he is competent and approves the result. The accountable must be able to form the final judgment, have veto power. Only one person is accountable.
Supportive	This stakeholder is supportive for the result. The supportive role is similar to the consulted role; however, this stakeholder is less attached to the project (non-obligatory).
Consulted	This stakeholder provides direction. This person shall be consulted before decisions are made. This is (obligatory) two-way communication.
Informed	This stakeholder will be informed about the decisions of the progress, achievements etc. This is one way communication.

3.4. Collaboration framework

The collaboration framework includes the project steps and activities, the six defined roles and the five responsibilities defined from literature. It is used as an analytic model to give a clear overview on role and responsibility divisions within the case studies.

Collaboration framework	I	O	R	F	P	U
Initiative						
Diagnosing current building state	R	A			R	
Value assessment building / complex : cultural, historical, architectonic	R		A			
Preliminary assessing adaptation potential	A				R	
Determining extension possibilities	R	A				
Identify potential users	R					S
Assessing financial expenses and resources in combination with risks and uncertainties		A		C	R	
Advice on best form for development					A	
Attract financier	A	R		I		
Acquire building complex		A				
Idea forming						
Gathering involved parties	R					
Defining ambitions for development for several stakeholders	R					
Scenario planning	R	A	C			
Setting up concept for development	R	A			S	
First sketches (conceptual)		A			R	
Feasibility						
Research market need / synergies	R				R	
Research willingness of potential visitors / attractiveness concept	R				R	
Research competition field	R				R	
Attracting potential users	R	A				S
Defining relationship of building with other buildings and functions		A	R			
Detailed diagnoses current building state		A			R	
Searching for stakeholders with specific knowledge and experience, suitable for development	A				S	
Identifying revenues and expenses		A				
Researching legislation potential uses		A	C			
Researching legislation potential interventions		A	C			
Analysing possibilities within possible zoning plan		A	C			
Identifying risks and uncertainties		A				
Identify and attract potential users	A					S
Research / discuss aims of (potential) users	R					C
Preliminary design		A			R	
Refining ideas						
Determine degree of interventions	S	A			R	
Set up intervention plan for execution		A			R	
Attract (additional) finances	A	R		C		
Definitive design		A			R	
Contract negotiations						
Apply for permits		A	C		R	
Identification of stakeholders for execution	R				S	
Tender procedure		A				
Set up and sign contracts users/ producers	R	A			I	I
Research solutions for design challenges	R				R	
Aligning project stakeholders	R					

LEGEND

R	Responsible
A	Accountable
S	Supportive
C	Consulted
I	Informed

Owner
Initiator
Producer
Regulator
Financier
User

Table 3.4. Collaboration framework (own table, based on Van der Kuij, 2014; designed with input from literature study, 2017).

PRACTICAL FRAMEWORK

The practical framework explains the findings of the four executed case studies (Ch. 4.), the cross-case analysis (Ch. 5.) and the focus group discussion (Ch. 6.)

For the cases of CHV and De Ploeg, 14 interviews were conducted in a 10 week period. A semi-structured interview protocol was drawn to understand the key activities and key issues in the process. Additionally, the collaboration framework designed in this study was used to ask specific questions on process steps to understand the collaboration in detail: The framework was filled during the interview with help of the interviewees. Biases are furthermore tried to be diminished by sending the interview summaries to the interviewees for verification. 11 interviewees responded with small clarifications and a verification of the content. Three interviewees did not react after multiple reminder emails. Several stakeholders of the cases of De Hallen and BK-City have been interviewed by Den Heijer, Dalmeijer & Van der Leij (2009), Kalk (2015) and Kloek (2015). These interviews and the subsequent process descriptions are used as content for the five research models to understand the collaboration within these processes.

The cross-case analysis compares the collaboration frameworks and the complexity assessment frameworks of the cases in order find similarities and differences in process steps, activities, sequence, involved stakeholders, role and responsibility divisions and the level of complexity.

The focus group was held with five experts in the field of (heritage) re-use processes. Experts were deployed on the basis of their availability and their capabilities/specialties in this field. All roles except the owner role were present during this meeting.

4. CASE STUDIES

The case studies are explained by the means of five models:
1. timeline
2. process description
3. relation structure
4. collaboration framework
5. complexity assessment framework

The process description explains the milestones illustrated in the timeline. With the relation structure, the key stakeholders are further explained. The collaboration and complexity assessment frameworks are the overview of the collaboration and complexity analysis. The manner in which they are used are explained in the appendix for the case of CHV (A1-2).

Whenever not referred, the interviews formed the input for the description of the case study.
Additional documentation is referred when applicable.

It was difficult to fill the collaboration models of all four cases:

- Not every stakeholder in the project is interviewed, which leads to missing information or interpretations of other stakeholders;
- Some answers were not in line with the written documentation;
- There were contradicting answers between interviewed stakeholders, the actual truth was therefore hard to define;
- Aligning the responsibilities to the stakeholders was impossible without conducting interviews;
- The model is quite static, whenever steps were done multiple times by different actors, this was difficult to integrate in the model;
- Stakeholders were fulfilling multiple roles in the project, it was not easy to link specific roles to them;
- Stakeholders changed during the process; sometimes stakeholders are interviewed that were not present at the start, others left the project before it was completed;
- The producer role was confusing, as the actual production or execution of the works fall out of the scope of this research. The stakeholders that gave advice to the owner and prepared for construction were now labelled as producers.

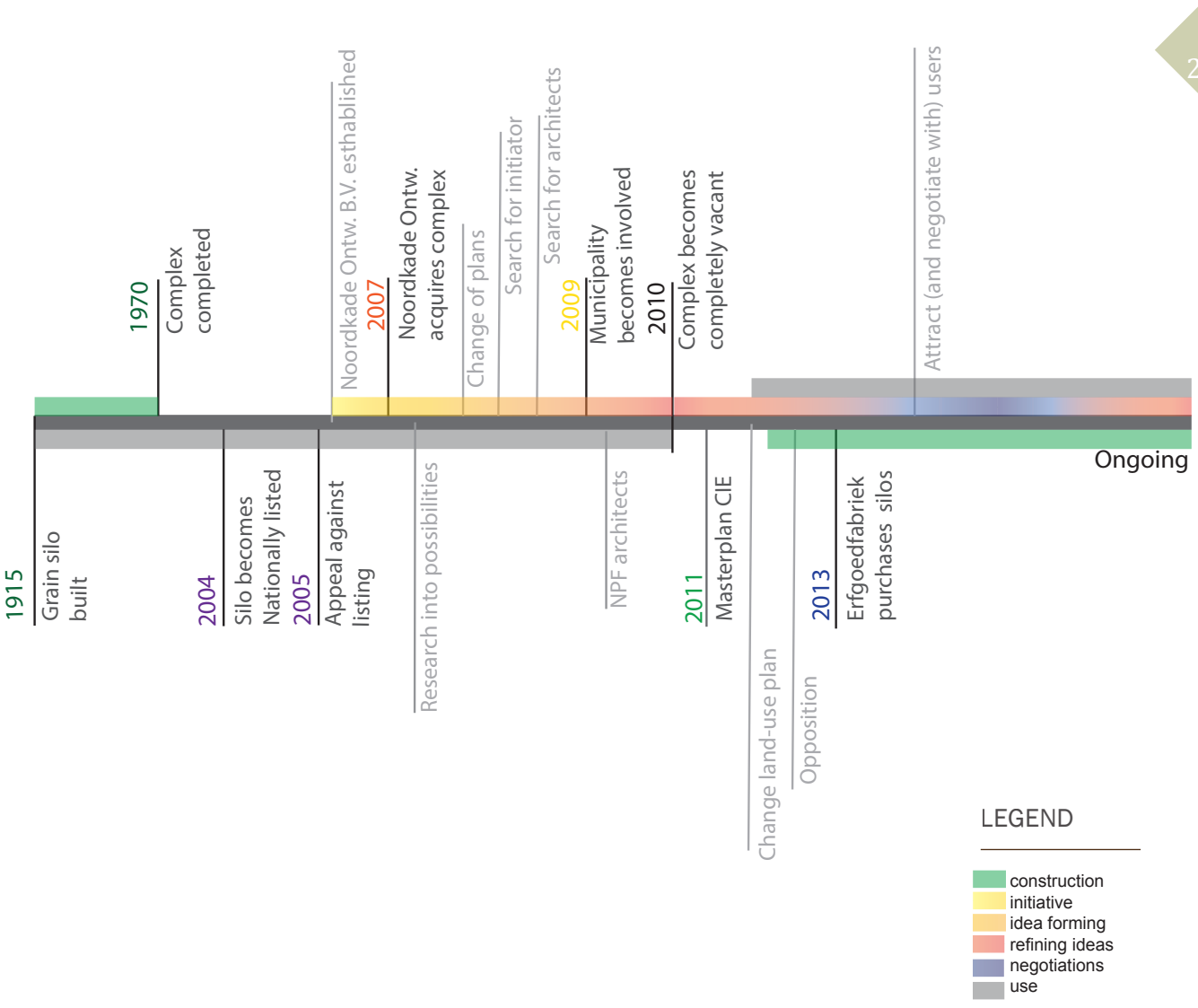

4.1
CHV Veghel
jumbo
Foodmarkt

National listed monument	J.G. Wiebenga Silo since 2001
Buidling year	1915 – 1970
Situation	Situated near the Marina W.S.V. Veghel, on the Verlengde Noordkade, 250 meters away from the city centre of Veghel as the crow flies.
Ownership	Previously owned by Cehave Landbouwbelang, currently owned by Noordkade Ontwikkeling B.V. since 2007
Originial function	Food factory
Current function	A cluster of cultural and food-related functions
Start initiative	2007
Completion	In use since 2015; Organic grow still in progress

Table 4.1. Case introduction CHV, Veghel (own table, based on interview outcomes, 2017).

4.1.1. Timeline

Figure 4.1. Timeline CHV (own image, based on interview outcomes, 2017).



Contextual influences

The financial crisis hit the world in 2008: This was felt by the owner of the CHV as banks were hesitant to provide loans. This added additional risks to the project. Furthermore, the CHV complex had been partly out of use for four years: The buildings suffered from premature deterioration.
In 2008, Veghel dealt with a governmental crisis which led to a new team of mayor and aldermen. The culture within the departments of the municipality has changed during the entire period of the process. In te beginning, the departments mainly worked separately from each other and often held a different opinion or vision. Procedures were handled in a strictly formal manner: owners were submitting applications, receiving receipts, licence authority checked for eligibility by and asked for additional input, the owner had to re-submission the request, received a receipt again, request was checked for eligibility again, etc. During the years, the departments started to work more integrally and permit procedures were loosened.

4.1.2. Process description

Listing of the silo

The Cultural Heritage Agency registered the grain silo on Noordkade as a National monument. Cehave Landbouwbelang (previous owner) suspected that this listing would hinder the sale and appealed against the listing in court. They lost this case due to the use of an improper value assessment.

Research into possibilities

Environmental experts of the municipality researched the site, the noise nuisance, the odor circle and the presence of (toxic) substances in the air. From this research became clear that living was not possible, due to the amount of industry that was still present in the neighbourhood.

New owner

The complex was bought by Noordkade Ontwikkeling B.V based on a SWOT analysis aimed at demolishing the complex to make room for a new distribution centre.

Change of plans

After purchase, the owner was surprised by the character and value of the complex and decided to preserve it. The new concept was based on Veghels´ no. 1 position in food production in the Netherlands: The owner decided to build a new food centre including a mix of functions that complement each other, like cultural functions.

Municipality involved

The owners enthusiasm was shared by the culture department of the municipality, who brought cultural functions to the CHV. This was beneficial because they could solve many open dossiers at this location.

Search for initiator

The owner was searching for a 'fool' who could take the lead in the development. A well-experienced retail developer was asked to participate, however he only wanted to give advice during the process. The owner itself then became the initiator.

Concept forming

The project leader of the municipality created a vision for Veghel to esthablish two centres with their own qualities: The innercity of Veghel the CHV terrain.

Masterplan

The masterplan is based on the City vision for 2030 and designed by Architekten CIE.

Selection of architects

Local architects were asked to invest personal drive and time in the project to show their commitment. Two architects formed a partnership in NPF Architects.

First execution works

First renovation works were executed after Cehave Landbouwbelang left the buildings entirely (permit requests for these interventions were made afterwards).

Change land use plan

From industrial use to education, business and leisure; based on the Masterplan.

Attracting users

Users were gradually attracted by the owner and municipality. First tenants could rent for a low price, with the condition to help with festivities and maintenance. Choices for implementation of functions and users were continuously based on discussions between the owner, the municipality and the architects. The perceived content changed regularly during the process.

Opposition

The development initially had to deal with a lot of opposition within Veghel due to the fear of competition. Advisory bureau Fakton conducted a (DPLO) survey which showed that competition was practically not the case.

The cultural users brought by the municipality did not all want to move. Some already made advanced agreements with the municipality and stakeholders at other locations. Others distrusted the idea of a developer with a commercial perspective.

The culture department started a trajectory to look at the needs of the users to see how this would fit within the plan, the owner was present at these meetings, he organised a tour and used visualisation to convince the users.

Preliminary design

The preliminary design was made by Architekten CIE with help of NPF architects. With this design, the owner went straight to realization. Discussions were held every Monday with the owner, the construction company, the architects, the users and the municipality to discuss their aims.

Permit procedure

Instead of a formal permit procedure, deliberate ideas were submitted to be viewed by the municipality in advance. Meanwhile the owner sat together with environmental experts, architects and municipal officials who tested the application. Within these meetings was discussed what was needed for the application: an informal submission was done. Afterwards, the application could be favoured at once.

Province involved

The risks and investments became too high for the owner to bare; Bureau Morge was hired to write a Prospectus to the province. De Erfgoedfabriek joined the project as co-developer to share the risks and investment costs. They became owner of the Wiebenga Silo in 2013. It was beneficial for the province due to the listing of the building; the anticipated yield and a greater benefit for the entire Province by preservation of important heritage.

4.1.3. Relation structure

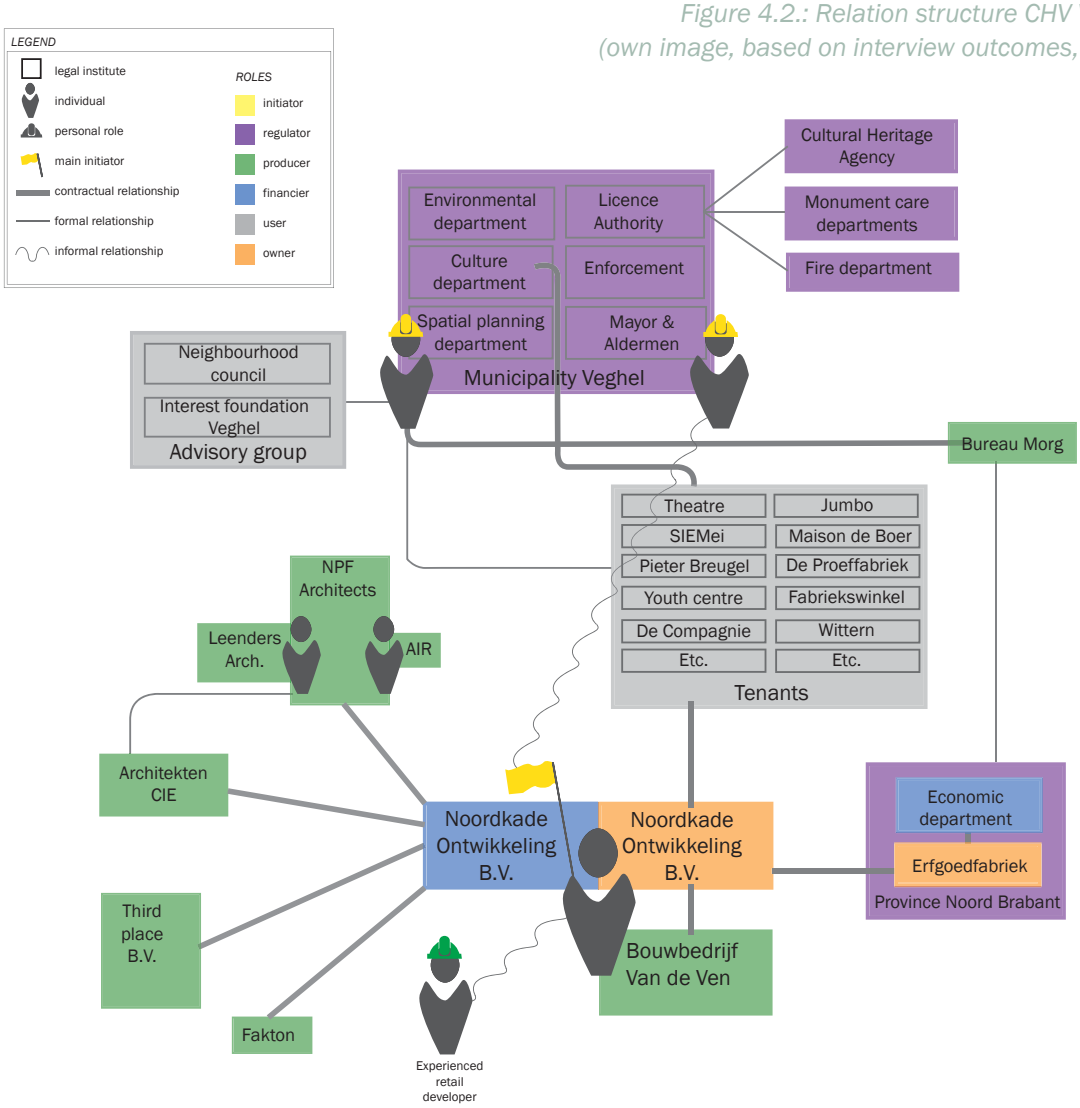


Figure 4.2.: Relation structure CHV Veghel, (own image, based on interview outcomes, 2017).

Key stakeholders

The main owner of the complex (Noordkade Ontwikkeling B.V.) acted as the main financier and is co-owner of the involved construction company. He acted as the main initiator during the whole process.

- initiator role - as individual and owner
- owner role - Noordkade Ontwikkeling B.V.
- financier role - Noordkade Ontwikkeling B.V.
- producer role - Bouwbedrijf Van de Ven

The project leader of the municipality was detached from the spatial planning department acted as a medium between the owner and the concerned parties in the area such as the neighbourhood council (which represented local businesses and residents), the 'Interest foundation Veghel' (which is dedicated to the economic operation of the city centre), the surrounding (industrial) businesses and the cultural institutions now housed on the CHV.

Furthermore, he was responsible for the communication with the departments within his own organization: the quality and monument committee, economic department, mayor and aldermen, specific environmental specialists and the culture department. He can be seen as an initiator as he set up a vision for the area, he attracted users and he aligned stakeholders during the entire process.

- initiator role - as individual
- regulator role - project leader
  part of the spatial planning department

The alderman is a previous entrepreneur who became the responsible alderman for the CHV location. He became enthusiastic about this project due to the charm of the buildings, his personal connection to the industry and his experience and knowledge of these kinds of industries. He can be seen as an initiator because he took personal risks in order to keep progress in the process and to make the location and concept successful.

- initiator role - as individual
- regulator role - alderman

4.1.4. Collaboration framework

Process steps and activities	Roles and responsibilities: Noordkade ontw	Erfgoedfabriek	Bouwbedrijf vd	Architecten Cie	Municipality V.	Monumentcare	Heritage agency	Retail developer	Leenders arch.	Air arch. & res.	Third Place	Cehave Landbo	Fakton
Initiative													
Recommendation for nomination monument		R A			A R		I					I	
Value assessment building / complex : cultural, historical, architectonic					S		A					I	
List building					I	I	A R					I	
Appeal against listing					I		I					R	
Preliminary assessing adaptation potential	A		R		A R								
Assessing financial expenses and resources	A												
Advice on best form for development	A							S					R
Acquire building complex	A R	A R											
Idea forming													
Scenario planning	A R			S				S	S	S			
Setting up concept for development	A R		I	R				S	R	R			
First sketches (conceptual)				R					R	R			
Feasibility													
Research market need / synergies	A							S					R
Research willingness of potential visitors / attractiveness concept	A R							S			R		
Research competition field	A							S			R		
Defining relationship of building with other buildings and functions	A R			S				S	S	S			
Diagnosing current building state	A		R										
Searching for stakeholders with specific knowledge and experience, suitable for development	A		R										
Identifying revenues and expenses	A R	A R						S					
Researching legislation potential uses	A R			S	S								
Researching legislation potential interventions	A R				S		C						
Analysing possibilities within possible zoning plan	A R			S	S								
Identifying risks and uncertainties	A R	A R	S					S					
Identify and attract potential users	A R	A			S								
Research aims of (potential) users	A R				A R								
Refining ideas													
Determine degree of interventions	A		R	S	C				S	S			
Set up intervention plan for execution	A		R	R									
Definitive design	A			S					R	R			
Contract negotiations													
Apply for permits	A R			S	S				S				
Set up and sign contracts users	A R		R										
Research solutions for design challenges	A		R	S					S	S			
Aligning project stakeholders	A R				R								

LEGEND

R	Responsible
A	Accountable
S	Supportive
C	Consulted
I	Informed

Owner
Initiator
Producer
Regulator
Financier
User

Table 4.2. Collaboration framework CHV, Veghel (own table, based on interview outcomes, 2017).

4.1.5. Complexity assessment framework

Element of complexity	Example of issue	Level of complexity
Mission	Long timescale	++
	Large scale, high value, high importance, high urgency	+
	Large number of constraints – legal, health and safety, security	++
	High level of interaction and interdependency with other projects	++
	High level of uncertainty – novelty, implications and side effects	++
Organisation	Lack of face to face communication between stakeholders	-
	Ongoing organizational restructuring	++
	High level of change in the organization	+
Delivery	Lack of common or appropriate project management method	++
	Lack of effective governance for decision-making	-
	Problematic communications in the project team	+
	Lack of clear or timely decision-making	-
	Lack of flexibility for the project manager to respond to changes	-
Stakeholders	Large number of stakeholders with different requirements	+
	Lack of commitment by key stakeholders	o
	Interference in the project by key stakeholders	+
	Lack of relationships with key stakeholders	o
	Problematic inter-relationships between stakeholders	++
	Competing priorities of stakeholders	+
	No shared understanding of the project aims	o
Team	Lack of leadership shown by project manager	-
	Cultural and other differences between stakeholders	+
	Low level of motivation of team	-
	Lack of project, technical and business experience in the team	o

Legend	very high	++	2
	high	+	1
	medium	o	0
	low	-	-1

Table 4.3.Complexity assessment framework CHV, Veghel
(own table, based on Maylor, 2010, pp. 38-39 and Maylor, Vidgen, & Carver, 2008, pp. 19-23).

4.1.6. Conclusion

Due to the entrepreneurial attitude of the owner; the investments he made within Veghel; the risks he took in financially hard times; the expertise and experience he showed; his way of handling aims of the municipality and the users; his first priority for safety and quality and the fact that he was a local entrepreneur ensured that the project leader and alderman of the municipality became actively involved in open participation with the owner.

The projectleader and alderman were co-responsible for the culture change within the municipality: The project leader demanded a more integral approach, as most resistance in this process was experienced between the different departments. The alderman overruled civil servants in their decisions and actions when this was found beneficial for the progression of the project.

The organic growing model allowed for smaller investments at the start of the project; a test of functions; and time to adjust to the project for the opposing parties. Additionally it bought the owner time to attract additional finances. Some official phases and many layers of experts and advisors are cleared; leading to decreasing costs; increasing feasibility and an acceleration of the process. The owner was able to take these tasks upon him.

The early attraction of the users led to the creation of festivities and commotion in the area. The active involvement of the users and the direct communication with the owner increased the satisfaction of the end result, the quality of the project and the trust of the users and the municipality.

The use of professional advisors enhanced the negotiations, discussions and arguments with the municipality, the residents and the local entrepreneurs.

12 De Ploeg Bergeijk

National listed monument	Rietveld building 'De Ploeg' since 2008 Park designed by Mien Ruys: 'Ploeg park' since 2008
Buidling year	Both 1956-1959
Situation	De Ploeg building and the Ruys park are situated near the edge of Bergeijk and are located in an area that is designated as a milieu zone
Ownership	First acquired by housing association Wooninc. in 2007 Currently owned by Bruns B.V. since 2015
Originial function	Fabric weaving mill
Current function	Office and industrial workspace of Bruns B.V.
Start initiative	2007 (Part I) 2014 (Part II)
Completion	December 2016

Table 4.4. Case introduction De Ploeg, Bergeijk (own table, based on interview outcomes, 2017).

Contextual influences

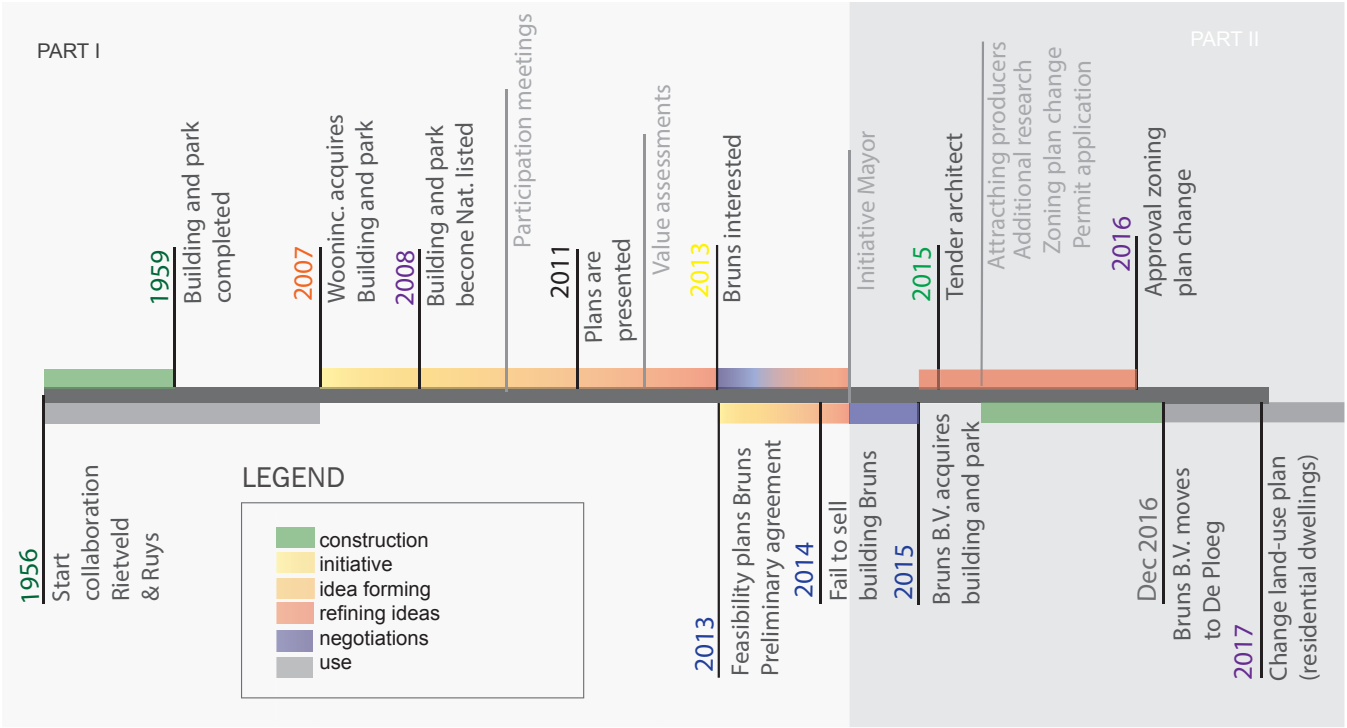
An administrative trend caused municipalities to start withdrawing tasks, especially concerning developments and heritage preservation. Housing associations often took over due to their long-term and social vision; combined with their reliable image. This was the case with Wooninc. as well.

The financial crisis hit the world in 2008: The housing association was influenced by this because it could not find developers for the private functions; developers experienced difficulties in acquiring investment budgets and did not dare to take high risks.

The scandals concerning housing associations since 2009 ended their reliable image.
Due to these scandals, a new Housing Act was developed (erected in 2015) which restricted housing associations in their developments.

4.2.1. Timeline

Figure 4.3. Timeline De Ploeg (own image, based on interview outcomes, 2017).



4.2.2. Process description

Part I

Wooninc. acquires building and park

Acquiring De Ploeg was a logical step for the housing association Wooninc., as this type of real estate was in need of a reliable developer with a long-term vision: The municipality was withdrawing tasks, housing associations often took over their development tasks and were seen as reliable social developers.

Building and park become Nationally listed

De Ploeg and the Ruys park were noticed as controversial and outstanding heritage, the combination was therefore designated within the 'Wederopbouw' period of the Cultural Heritage Programme.

Idea forming

Wooninc. planned to add social or cultural functions in combination with housing for elderly and commercial functions to make the project feasible. The residential dwellings would be added within the Ruys park, whenever the redevelopment was finished.

Participation municipality

The municipality wanted to facilitate the development in such a way that they were planning to move public functions (e.g. the theatre 'De Kattendans', the library and a music school) from the centre to the building.

Participation meetings

Wooninc. started a trajectory of two years to find a new (mixed) use for the building. Discussions were held with the project leader of the municipality and the resident council. Architekten CIE assisted with the visualisation of the concepts, which were used in open lectures for the neighbourhood.

Value assessment building and park

Wooninc. commissioned IAA architects and Buro Mien Ruys to assess the values of the building and park to understand the (im)possibilities of the development.

Feasibility

It seemed very difficult to bind commercial companies to the project. The cultural functions only covered one third of the complex and could only be realised budget neutral.

Bruns B.V. becomes interested

Bruns B.V. was asked by the municipality to consider De Ploeg for their planned expansion. Bruns indicated that they would need the entire building for the function and that they did not want to share the building with other users.

Wooninc. decides to sell

As the current plans of the housing association did not become feasible and the role of housing associations in the Netherlands started to change, Wooninc. decided to dispose the property as a whole.

Start negotiations Bruns B.V.

The negotiations started with an indication for the sale price of Wooninc., the possible investment from Bruns B.V. and the ability to add housing at the terrain. These negotiations already revealed that a subsidy was needed to bridge the gap for investments, which was promised by the Erfgoedfabriek. The agreement was made that if Bruns could sell its current company location within a year, De Ploeg would be acquired.

Part II

Initiative Mayor

When the company location of Bruns was not sold within a year, the deal was off the table: The purchase could not go through. The Mayor arranged a meeting with all stakeholders to discuss the possibilities to continue the sale.

Active involvement municipality and province

The project leaders of the municipality and the province foresaw that it would become real difficult to attract a new buyer that would be as suitable for the building as Bruns B.V., it would probably take years before a new use would be found, which would lead to further dilapidation and a potential loss of values. Therefore they decided to actively steer the negotiations between Wooninc. and Bruns B.V. and to contribute to the redevelopment themselves.

Final negotiations Wooninc. and Bruns B.V.

At the final negotiations, Wooninc. decided for more favourable terms of sale and the province elevated their former intended subsidy to a higher amount. The municipality promised to invest in the restoration of the Ruys park to make it suitable for events. Furthermore they promised to take over the structural maintenance if Bruns promised to open the park for the public in return. Additionally, five residential dwellings were allowed to be built in the countryside of the park, to increase the feasibility of the project. A hard deadline was set on the completion of the project.

Idea forming and selection of stakeholders

Burgmans hired Franken & Pouderoyen advisors to assist him with project management and specific application procedures. Diederendirrix was selected as the winning architect. An interior artist was attracted to complement the work of the architect. They immediately started to visualise and discuss the previously indicated wishes (Programme of Requirements) and drew up a preliminary design. Construction company Burgmans & Wijnstra was attracted to perform the execution.

Refining ideas and permit applications

The Cultural Heritage Agency was requested to give an advice on the preliminary design, before the design was definitive and the actual permit application was made. An intensive consultation was held with the commission for spatial quality, the license and enforcement department of the municipality, the owner, and the architect from which a preliminary recommendation of the Cultural Heritage Agency followed. The plans were adapted according to this advice. They were submitted and immediately approved with the note that some aspects still needed discussion during the developments.

Guarding cultural and historical values

The Cultural Heritage Agency collaborated closely with the owner and the architect while dealing with these details in the execution phase of the project to guard the values of the complex.

Changing land-use plan

The planning department of the province submitted a negative advice for the change in land use plan for residential dwellings, as in principle, it is not possible to allow housing outside urban areas in Brabant, especially not when they are located in a milieu zone. This was inconsistent with their intention agreement made in June 2016. An exception was found on the ground of Article 24, paragraph 2: Area regulations, because this project is dealing with civilian homes that were realized in a designated area of cultural and historical interest.

4.2.3. Relation structure - Part I

Figure 4.4. Relation structure De Ploeg, Part I (own image, based on interview outcomes, 2017).

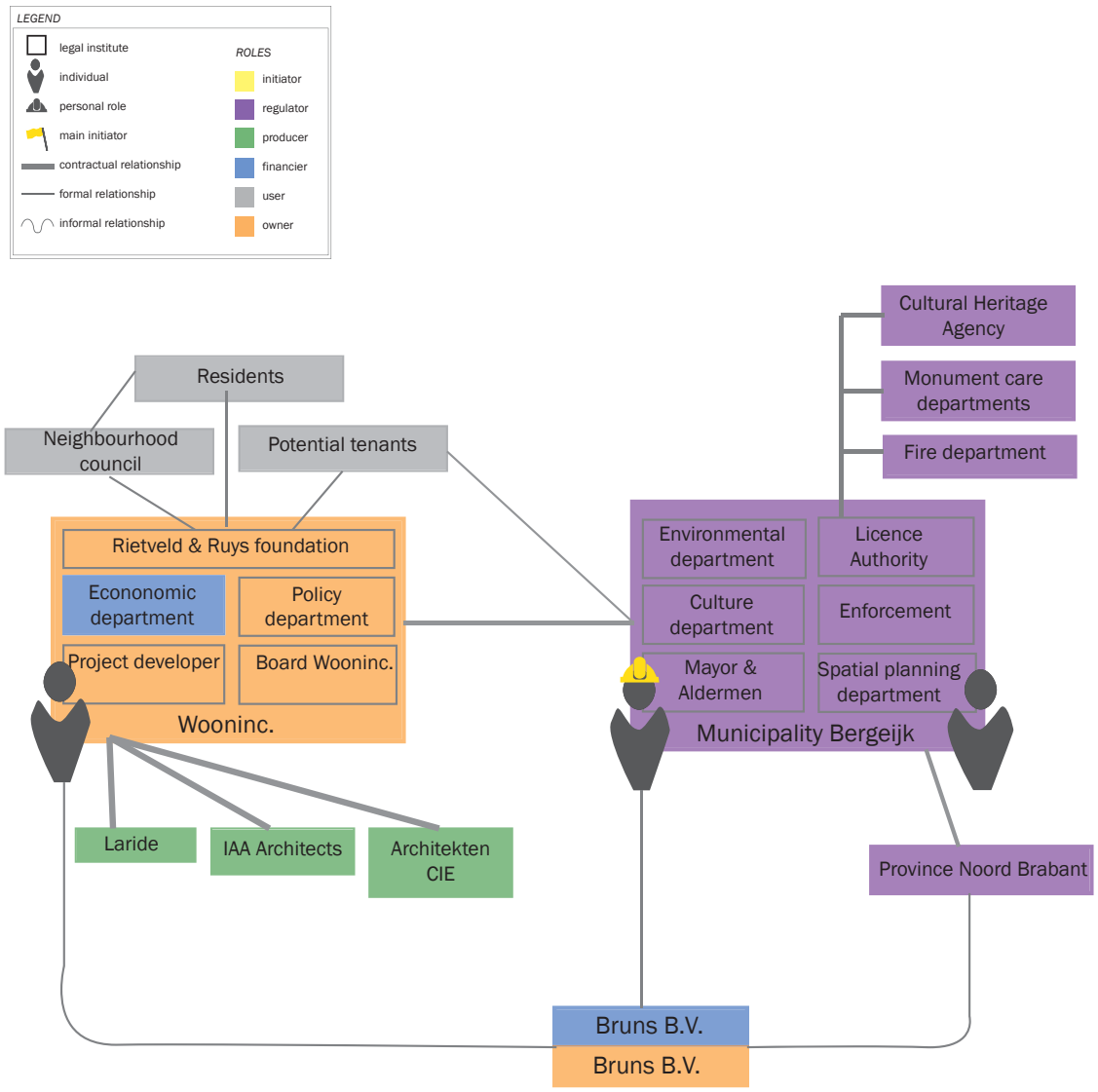
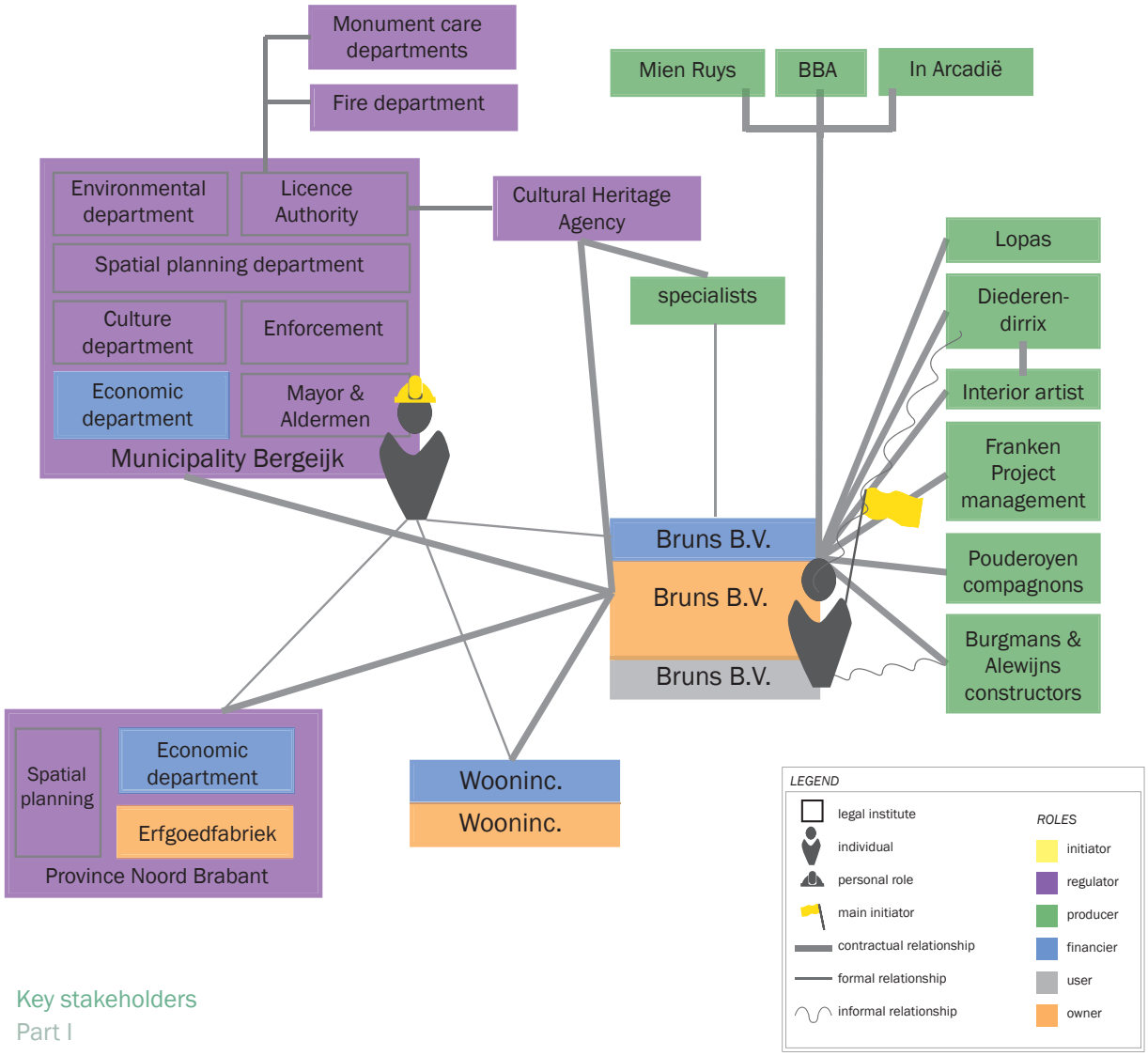


Figure 4.5. Relation structure De Ploeg, Part II (own image, based on interview outcomes, 2017).



Key stakeholders

Part I

The project developer of Wooninc. was resonsible for the start-up of the process. She was mainly responsible for the financial aspects of the development, like feasibility studies, Furthermore she was the link between the municipality and the other departments within Wooninc.

- owner role

The neighbourhood council represented the interests of the citizens of Bergeijk. They have been actively involved in discussions about the conservation and new function for the building of Rietveld in Part I.

- user role

The mayor of the municipality Bergeijk initiated the negotiations between Wooninc. and Bruns B.V. after the deal was expired.

- initiator role

Part II

The municipality of Bergeijk decided to invest (in the restoration and preservation of the park) to ensure that the deal could go through. They cooperated with Bruns regarding the park. Furthermore, they cooperated with the Province in terms of finance and spatial planning.

- financier role
- regulator role

The project leaders of the CHA provided advice to the municipality for granting the environmental permit. Within this process, they redeveloped their role as an active advisor for the client. They loosened their advice towards the legislation authority and actively thought along with the architect, owner and interior designer during the process.

- regulator role
- producer role

4.2.4. Collaboration framework - Part I

Process steps and activities	Roles and responsibilities										
	Municipality B.	Wooninc.	Laride.	IAA architecten	Cie Architecten	Broker	Erfgoedfabriek	RCE	Monumentcare	Dorpsraad	Bruns B.V
Initiative											
Recommendation for nomination monument	S							A I			
Value assessment building / complex : cultural, historical, architectonic								A R			
List building	I	I						A R			
Preliminary assessing adaptation potential	S	A	R			S					
Assessing financial expenses and resources		A	R			S					
Acquire building complex		A R									
Idea forming											
Defining ambitions for development for several stakeholders	S	A R			S					S	
Concept development	S	A R			S					S	
Scenario planning		A R			S						
First concept sketches		A			R						
Feasibility											
Research feasibility concept	S	A R	S	S							
Attracting potential users	R	A R									
Research legislation linked to concept	C	A R	S					C	C		
Research possibilities for execution project	C	A R	S	S							
Selling complex	S	A R					S				S

LEGEND

R	Responsible
A	Accountable
S	Supportive
C	Consulted
I	Informed

Owner
Initiator
Producer
Regulator
Financier
User

Table 4.5. Collaboration framework De Ploeg, Part I (own table, based on interview outcomes, 2017).

Process steps and activities	Roles and responsibilities																
	Municipality B.	Wooninc.	Province NB	RCE	Bruns B.V	Franken Projec	Lopas	Pouderoven	Diederendirrix	Interior artist	Monumentcare	Buro Ruvs	OVersticht	BBA	In Arcadië	Burgmans & A
Initiative/ Idea forming / Feasibility / Contract negotiations																
Gathering involved parties	A R	R	R		R		S									
Defining ambitions of development for involved stakeholders	A R	R	R		R		S									
Diagnosing current building state	S	S	I		A R		S									
Assessing adaptation potential	S	S	S		A R		S									R
Research feasibility	S	S	S		A R		S									S
Determining extension possibilities	S		S		A R		S									
Determining revenues and expenses in combination with risks and uncertainties					A R		R									
Researching legislation (conceptual)	C		C		A		R									
Intention agreement for development and collaboration	R A	R	R		R		S									
Selling current building					A R											
Acquiring new building	S	S	S		A R											
Refining ideas / Contract negotiations																
Identification of stakeholders for execution					A R	I	S	I								
Tender procedure					A R	S			I							
Singing contracts involved stakeholders					A R	I S		I	I	I						
Preliminary design					A	S			R	S						
Research legislation (detailed)	C		C	C	A R	S					C					
Assessing cultural and historical values of the building				R	A R	S			S			R	R	R	R	
Definitive design				S	A	S			R	R						
Permit application zoning phase I and environmental	I				A	S		R								
Permit approval zoning phase I and environmental	A R			I	I											
Adaptation scheme including degree of interventions, with respect for cultural and historical values					A R	S			S	S						R
Identification of stakeholders for execution					A R	S										R
Singing contracts involved stakeholders					A R	S										S
Research solutions for specific design challenges				C	A R	S			S	S						
Permit application zoning phase II					A			R								
Appeal against zoning change phase II			A R		I											
Research zoning legislation (detailed)	S		R		A											
Re-application zoning phase II	I				A			R								

LEGEND

R	Responsible
A	Accountable
S	Supportive
C	Consulted
I	Informed

Owner
Initiator
Producer
Regulator
Financier
User

Table 4.6. Collaboration framework De Ploeg, Part II (own table, based on interview outcomes, 2017).

4.2.5. Complexity assessment framework

Element of complexity	Example of issue	De Ploeg Part I	De Ploeg Part II
Mission	Long timescale	++	-
	Large scale, high value, high importance, high urgency	+	++
	Large number of constraints – legal, health and safety, security	o	+
	High level of interaction and interdependency with other projects	o	-
	High level of uncertainty – novelty, implications and side effects	+	o
Organisation	Lack of face to face communication between stakeholders	o	-
	Ongoing organizational restructuring	+	-
	High level of change in the organization	-	-
Delivery	Lack of common or appropriate project management method	+	-
	Lack of effective governance for decision-making	+	-
	Problematic communications in the project team	o	-
	Lack of clear or timely decision-making	++	o
	Lack of flexibility for the project manager to respond to changes	+	o
Stakeholders	Large number of stakeholders with different requirements	+	o
	Lack of commitment by key stakeholders	+	-
	Interference in the project by key stakeholders	o	-
	Lack of relationships with key stakeholders	+	-
	Problematic inter-relationships between stakeholders	+	o
	Competing priorities of stakeholders	+	o
	No shared understanding of the project aims	+	-
Team	Lack of leadership shown by project manager	++	
	Cultural and other differences between stakeholders	+	o
	Low level of motivation of team	+	-
	Lack of project, technical and business experience in the team	++	-

Legend	**very high**	++	2
	high	+	1
	medium	o	0
	low	-	-1

Table 4.7. Complexity assessment framework De Ploeg, Bergeijk
(own table, based on Maylor, 2010, pp. 38-39 and Maylor, Vidgen, & Carver, 2008, pp. 19-23).

4.2.6. Conclusion

A lack of support in the area and lack of knowledge and experience within heritage re-use processes resulted in a failed re-use attempt by Wooninc. The mistrust within the village was caused by the fact that Wooninc. was not local and residents assumed that Wooninc. would not know what they needed. Especially the high housing ambitions and the removal of cultural functions from the city centre strengthened this view.

Due to the failed attempt of Wooninc. the loss of hope for completion and the high importance of this building for the area, the municipality took the initiative to start negotiations with Bruns B.V. When these negotiations seemed to strand, the mayor decided to actively steer on reopening the negotiations. This involvement supported the negotiations and enhanced the feasibility of the project by Bruns B.V.

The hard requirement of the owner to open Bruns B.V. in De Ploeg at the end of 2016 imposed a time pressure on the project. This led to a different approach of the permit procedure: The intensive consultation with the license department of the municipality speeded the process and allowed for more flexibility in the process. The trust in the owner given by the CHA and the municipality allowed for this flexible procedure. Quality and safety was guarded by continuous consultation with the CHA.

The relatively short development period enhanced a smooth process as it decreased uncertainties due to little changes in the context.

The unclear role division within the province North Brabant resulted in opposing interests and promises by the different departments. Due to promises made at the negotiation table and the high importance of the feasibility of the preservation of the building and the park, a solution was sought within the regulations.

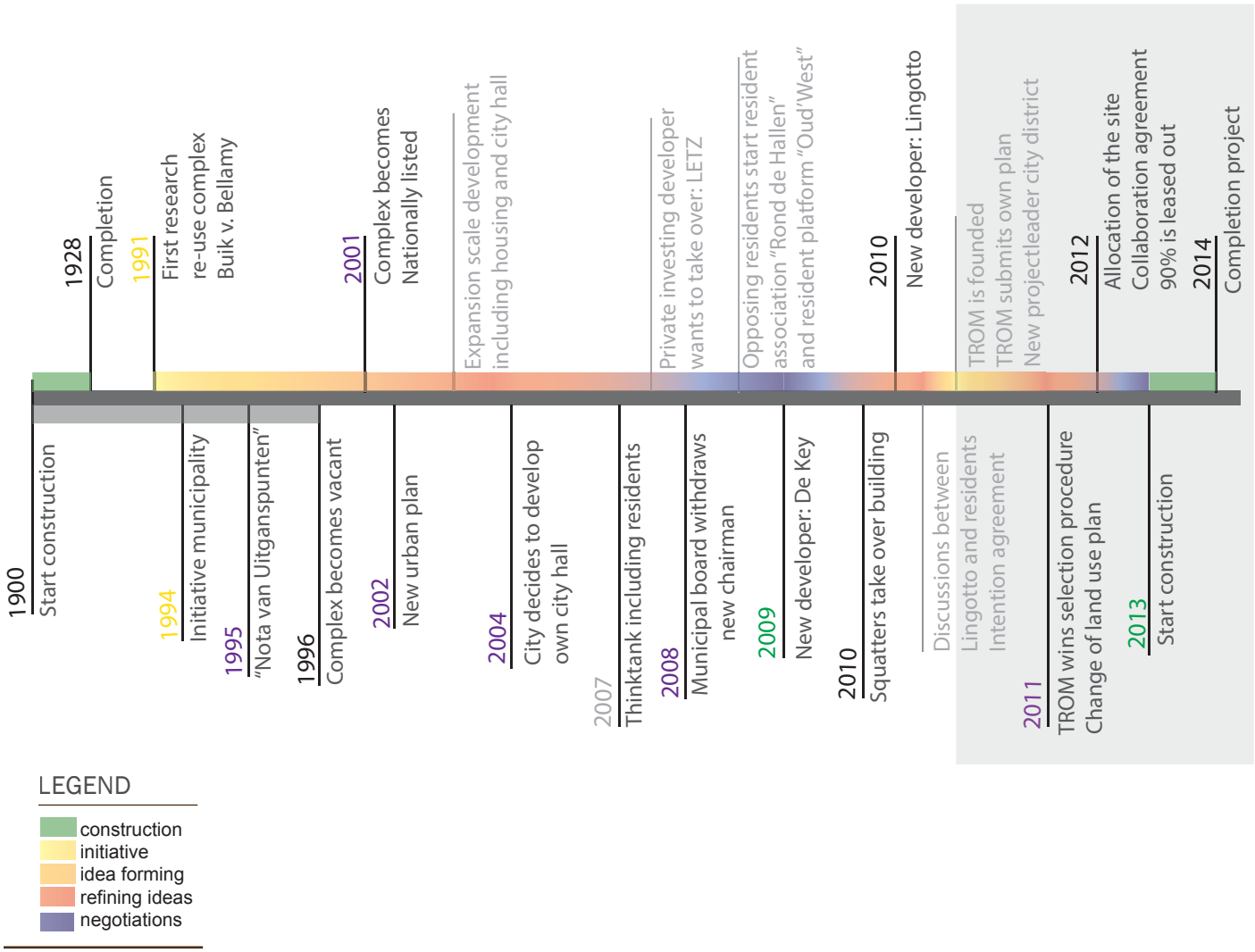
De Hallen Amsterdam

National listed monument	Since 2001
Buidling year	1900 – 1928
Situation	Located in Amsterdam Oud-West, on the Kinkerstraat (inner-city location)
Ownership	Owned by TROM B.V. for a period of 10 years (until 2024)
Originial function	Tram maintenance station
Current function	Multi-use: cinema, restaurant, kindergarten, library, offices, workplaces, retail, hotel
Start initiative	1994
Completion	2014

Table 4.8. Case introduction De Hallen, Amsterdam (own table, based on Kalk, 2015).

4.3.1. Timeline

Figure 4.6. Timeline De Hallen (own image, based on Kalk, 2015).



Contextual influences (Kalk, 2015).

Within the 20 years of planning, the city district had to deal with many changing officials and project leaders, which influenced the project as plans changed often. The city district suffered from legal conflicts with prior developers as they have been changing their opinion often during the project and called for new developers many times.

Over the years, the project grew from a redevelopment of the tram remise into a redevelopment of the whole area: The city district had the vision to build a new city hall and a new residential quarter behind the industrial halls. The projects were merged in order to acquire a larger investment budget.

The financial crisis caused the municipality to remain with limited resources to invest in real estate developments; furthermore, banks became cautious in financing risky projects and provided lesser amounts of the total investment budget. In this project, many additional financiers were needed before the banks became involved.

Housing association De Key became involved in the project just before housing associations became restricted in their developments. During the project, they had to step down, as the municipality was not able and willing to bear the additional risks.

With the rise of a new district board and project leader in 2008, the plans changed; the scale of the project was brought down to De Hallen alone, the housing project became disconnected and the city hall was arborted. The following project leader ensured that the developer with a feasible plan, ready to execute, was chosen over a developer with a new projectplan on paper.

4.3.2. Process description

De Hallen has been re-used after more than 20 years of planning. The municipality took the first initiative in 1994 by forming ideas and acquiring understanding of the interests in the neighbourhood. Following, they tried to co-develop with several commercial parties. The first plans included expensive apartments, a new municipal office, a big parking garage and a high rise 5 star hotel; however, residents did not agree with these ideas as it did not fit with the neighbourhood. Many more plans followed, however the lack of a support base continuously seemed to be a bottleneck, next to financial and governance challenges (Kalk, 2015). This process description mostly focusses on the period in which TROM was founded and became involved, since the whole initiative and planning period would be too long to discuss. The process description is based on Kalk (2015) and Kloek (2015).

Squatters take over

In 2010, squatters tried to raise awareness on the failed plans of the last 10 years. They urged the city district to take measures against leakages and for small renovation works. The squatters wanted to use the complex for social and cultural functions until an actual plan was be realised. In the meantime, they organised events and provided weekly meals for residents.

New developer: Lingotto

Lingotto was asked to give a second opinion on the project by the city district while they were in negotiations with De Key. When housing association De Key dropped out, Lingotto was asked to further elaborate on their plans. With the new interim alderman Lingotto was obliged to involve a resident focus group. The focus of the plan laid on fashion, interior and design. It included a hotel, a library, a restaurant, a tv-studio and several workspaces.

Foundation of TROM B.V.

The focus group initiated by the new project leader, aiming at more room for input of residents did not lead to the desired effect: Residents felt like they had no influence once again. This led to the foundation of a Neighbourhood Development Company (TROM), established by an experienced heritage re-use architect together with the resident association ‘Rond de Hallen’ and resident platform Oud-West. Together they made a plan that fitted the neighbourhood and which had a lot of support from the local residents: It included small retail stores, a restaurant, a cinema, a hotel, a kindergarten, a library, several offices, a small parking garage and several handcraft workspaces.

Intention agreement

An intention agreement is made with Lingotto which promised that the city district would only negotiate with one developer. Within the municipality, this led to critical questions about violation of the procurement regulations.

New project leader

The new project leader decided that the squatters could stay until a new plan was developed. TROM presented their plans to the new project leader. She explained that an intention agreement was signed and that the plans of TROM could not be taken into account. However, she still tried to bring the plans of Lingotto and TROM together. This did not succeed. Due to the critics within the municipality, the plans of TROM are still discussed. However, in the end, the plan of Lingotto is chosen.

Selection procedure Lingotto v.s. TROM

Heritage organisations Bond Heemschut and Het Cuypergenootschap objected against this choice as the plan of Lingotto included large new-build areas which violated the qualities of the complex. The plan of TROM was found to better fit with the building and the neighbourhood. The project leader asked advice within the municipality on how to proceed.

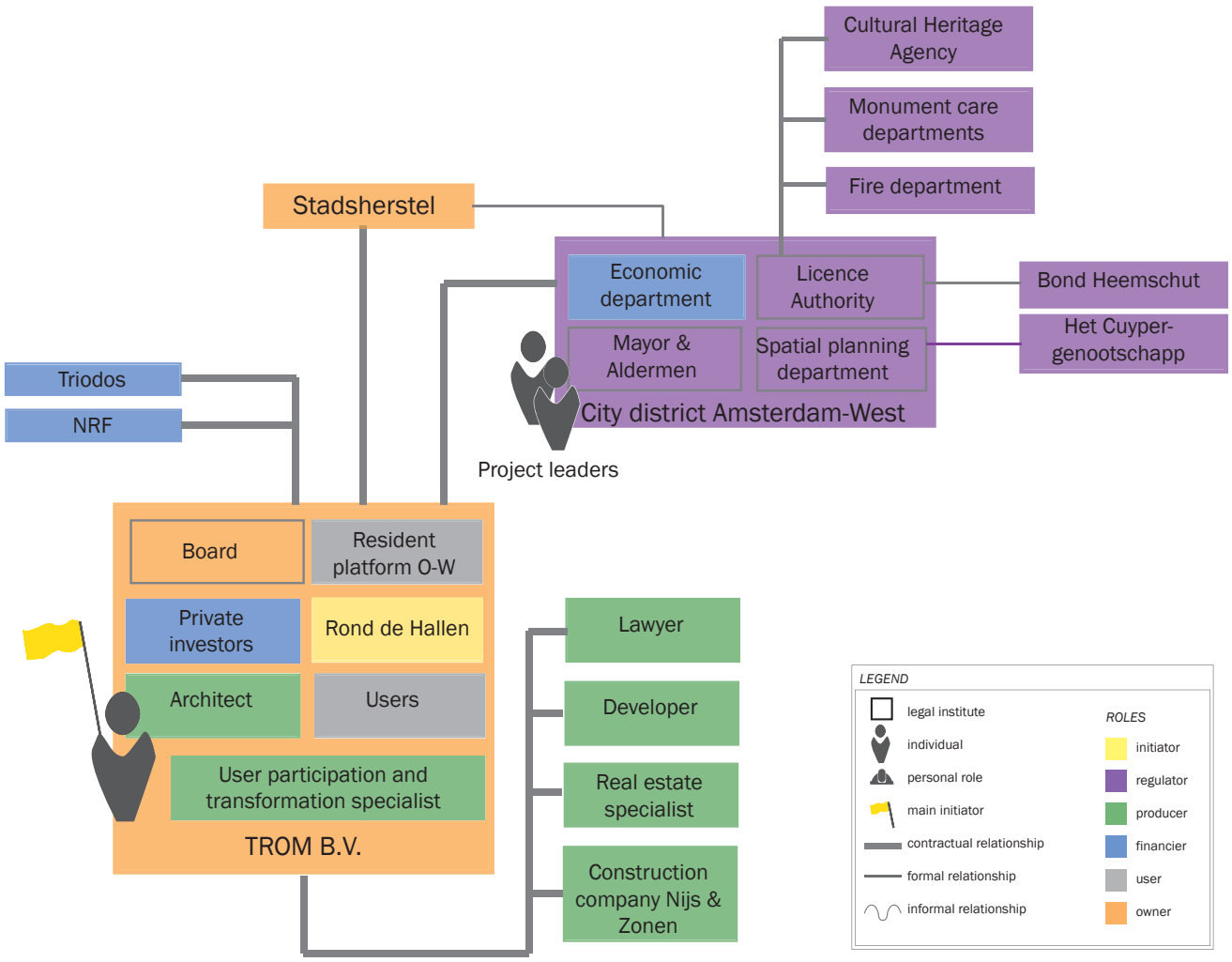
The city district decided to ask advice of independent research bureaus on financial- economic and organisational aspects of both proposals. Both parties were allowed to underpin their proposals on critical points. Eventually, TROM convinced the city district due to a feasible plan that kept the values of the building and that was ready to be executed as the users were already found.

Collaboration agreements

The development company construction of TROM included several residents and potential users. Therefore most of the current tenants, both commercial and social firms were involved prior to the start of construction: They signed intention agreements on the amount of space they wanted to rent and co-invested in the development. TROM is responsible for the maintenance and operation of the building for the first 10 years (until 2024) and is collectively owner of the building during this time.

4.3.3. Relation structure

Figure 4.7. Relation structure De Hallen, Amsterdam, (own image, based on Kalk, 2015 & Kloek, 2015).



Keystakeholders

The architect can be seen as the main initiator in this project. He has been involved in the project since 1996. At the time TROM was formed, he was not only responsible for the design of the development, he was the main point of contact between TROM, users, residents, banks, the municipality and executive stakeholders: He convinced the residents about the need for commercial functions to make the cultural and social functions feasible; he convinced banks about the potential of the development; he initiated and steered the planning of the functions and implementation; he searched for participants, both within TROM as within the project; he fought against the changing land use plan and he had a weekly meeting with the project leader of the municipality. During the execution, the architect was also the construction supervisor. Therefore, he temporarily left his board position in TROM. He met the monument care delegates every 6 weeks to discuss about specific interventions (Kloek, 2015).

- initiator role - as individual
- owner role - as shareholder of TROM
- financier role - as shareholder of TROM
- producer role – as architect

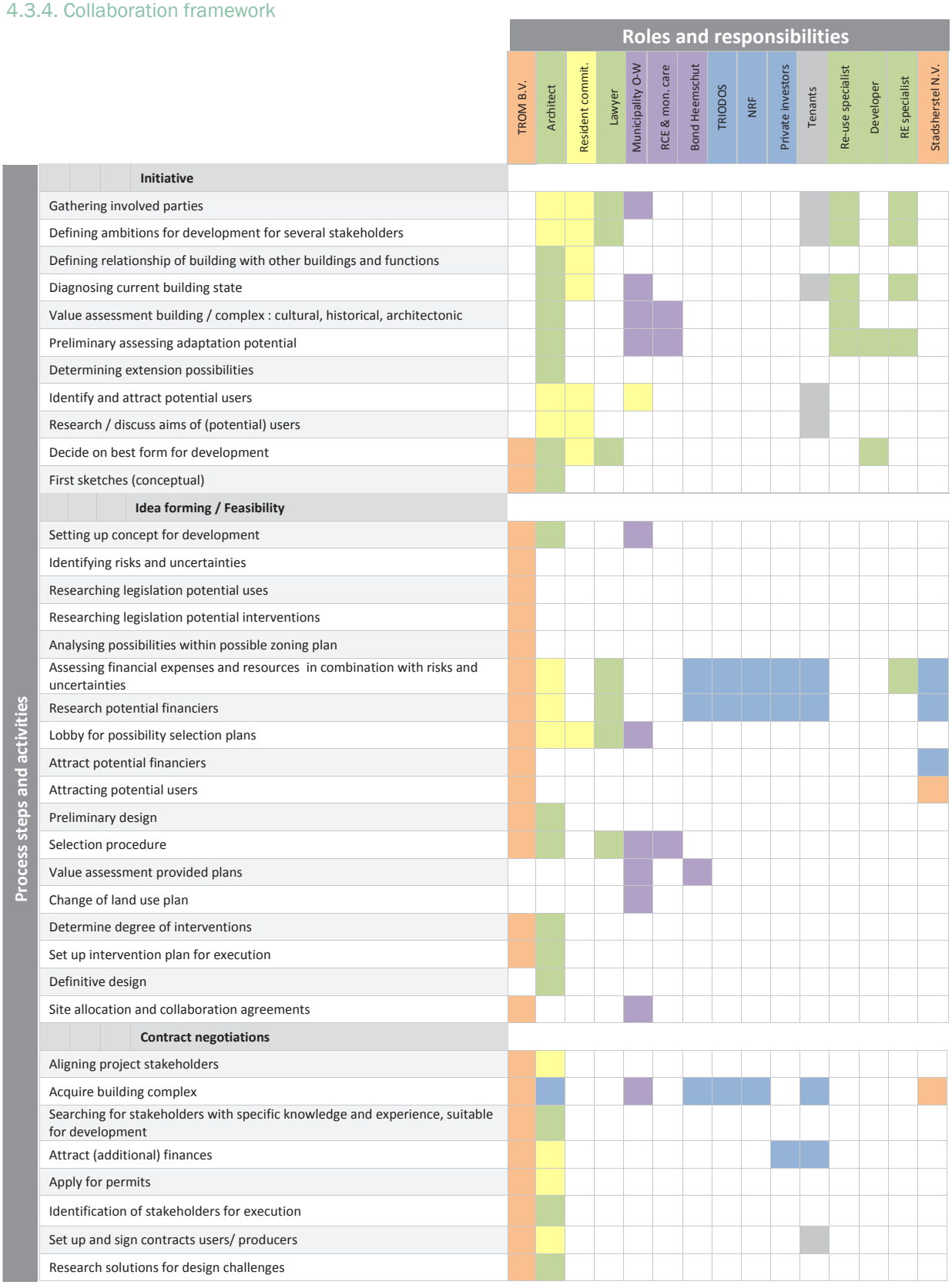
The project leader[1] who became involved in 2008 ensured that a final decision was made on the city hall that was already in construction. He quit the execution works as they went far over budget in order to decrease the damage.

- owner role - as municipality was previous owner
- regulator role - as project leader of the city district Oud-West

The project leader[2] who became involved in 2010 mainly had a regulator role. She had to deal with a lot of pressure from within the municipality the neighbourhood and several developers. She interfered in the official organisation for the project to succeed. She attracted an experienced project leader from another city district who assisted with a force field analysis and dialogues with the main stakeholders: officials, directors, prior-directors, TROM and Lingotto. She made important decisions that helped the process to proceed based on this advice (Kalk, 2015).

- regulator role - as project leader of the city district Oud-West

4.3.4. Collaboration framework



LEGEND

Owner	Regulator
Initiator	Financier
Producer	User

** This case study is solely based on literature. No interviews are executed within this case study by the author. Therefore in-depth knowledge on the responsibility arrangement per activity was not available.*

Table 4.9. Collaboration framework De Hallen, Amsterdam (own table, based on Kalk, 2015; Kloek, 2015).

4.3.5. Complexity assessment framework

Element of complexity	Example of issue	De Hallen
Mission	Long timescale	++
	Large scale, high value, high importance, high urgency	+
	Large number of constraints – legal, health and safety, security	++
	High level of interaction and interdependency with other projects	++
	High level of uncertainty – novelty, implications and side effects	++
Organisation	Lack of face to face communication between stakeholders	+
	Ongoing organizational restructuring	++
	High level of change in the organization	++
Delivery	Lack of common or appropriate project management method	-
	Lack of effective governance for decision-making	++
	Problematic communications in the project team	++
	Lack of clear or timely decision-making	++
	Lack of flexibility for the project manager to respond to changes	++
Stakeholders	Large number of stakeholders with different requirements	++
	Lack of commitment by key stakeholders	++
	Interference in the project by key stakeholders	++
	Lack of relationships with key stakeholders	++
	Problematic inter-relationships between stakeholders	++
	Competing priorities of stakeholders	++
	No shared understanding of the project aims	+
Team	Lack of leadership shown by project manager	o
	Cultural and other differences between stakeholders	+
	Low level of motivation of team	o
	Lack of project, technical and business experience in the team	+

Legend	**very high**	++	2
	high	+	1
	medium	o	0
	low	-	-1

Table 4.10. Complexity assessment framework De Hallen, Amsterdam
(own table, based on Maylor, 2010, pp. 38-39 and Maylor, Vidgen, & Carver, 2008, pp. 19-23).

4.3.6. Conclusion

The approach of the municipality failed due to many changes in the formal plans, changes within the governmental organisation, insufficient support from the residents and financial troubles. After a last attempt with a new project leader and a co-development including a housing association (De Key), the municipality took a step back. Instead of actively steering on the development, the municipality engaged itself as an advisor and facilitator when the TROM development association won the selection procedure. This attributed to the success of the project.

The additional plans of a city hall and residential district made the project more complex, resulting in hampering procedures, lacking decision mandate and jammed plans. The lack of clear decision-making by the accountable officials ensured that no real decisions were made and no developments were executed.

The project was dealing with many organizational changes, a lack of clear decision-making, little experience with redevelopment of heritage complexes and inflexibility of the first project leaders to react on differences in context and stakeholder aims.

The lack of a support base by a very active resident population let many plans fail to become reality. These plans never became concrete enough to come up with a feasible plan, due to a lack of governmental leadership, inexperience with heritage redevelopments and financial issues.

The financial issues started long before the financial crisis, however, they were made visible more clearly when developers and banks became cautious.

4.4 BK-City Delft

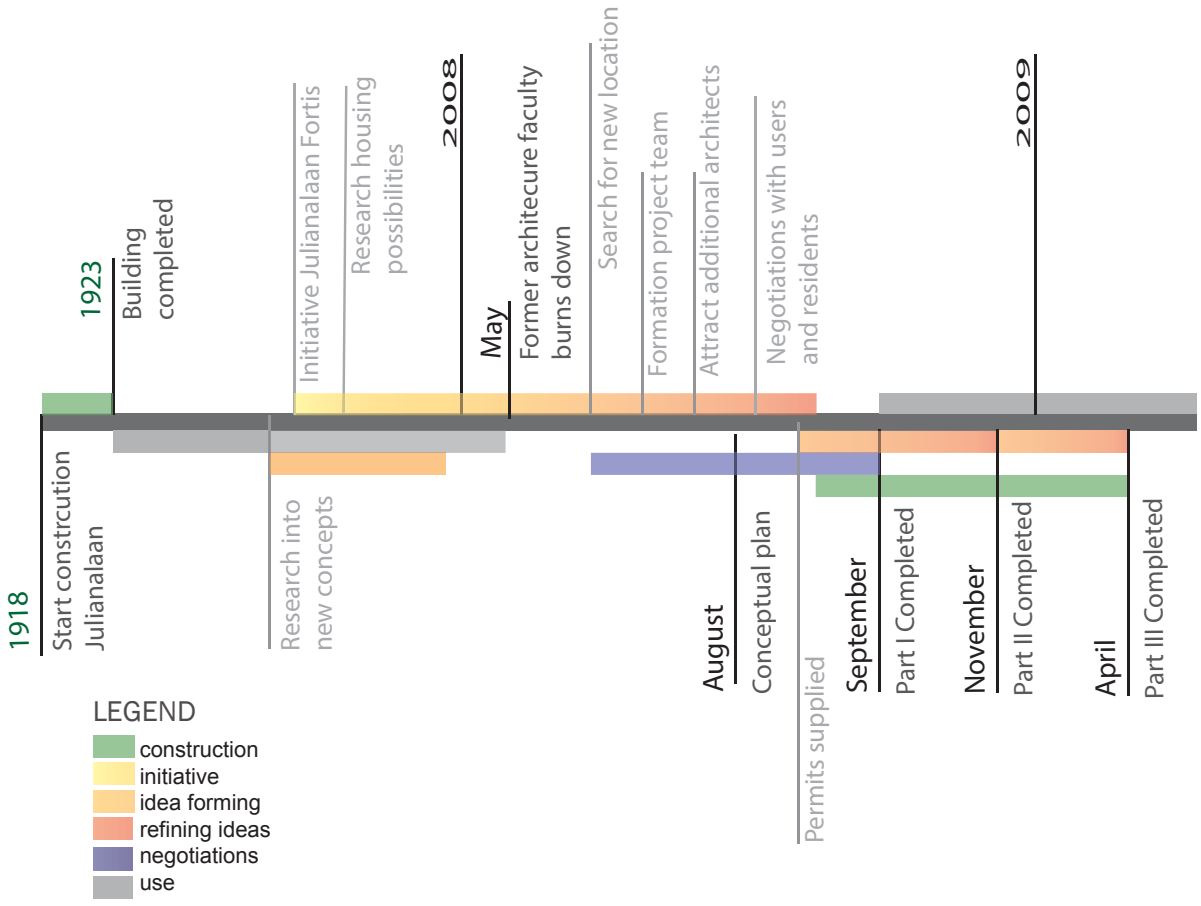
© Area Veld (Braaksma&Roos, 2012).

National listed monument	Since: unknown. Designed by architect Van Drecht
Buidling year	1918-1923
Situation	Located on the edge of the TU Campus, near the city centre of Delft. Main entrance on the Julianalaan.
Ownership	FMVG TU Delt
Originial function	Chemistry faculty, laboratory
Current function	Architecture faculty
Start initiative	2008
Completion	Part I & II (2008); Part III (2009)

Table 4.11. Case introduction BK-City, Delft (own table, based on Den Heijer et al., 2009).

4.4.1. Timeline

Figure 4.8. Timeline BK-City (own image, based on Den Heijer et al., 2009).



Contextual influences

Due to the very short development time, possible changes in the context did not influence the development process.

4.4.2. Process description

The architecture faculty of the TU Delft was destroyed after a fire on May 13th, 2008. In four days, an emergency camp was built in order to facilitate the students and researchers temporarily. However, a more definitive solution was needed to household the faculty for the long run. For this case study, the process from investigating new housing possibilities until the start of construction is investigated; the process description is mainly based on Den Heijer et al. (2009).

Search for new location burned down faculty

The executive board from the University of Technology started searching for a new building or building site during the construction of the temporary tent camp. The aim was to re-open the architecture faculty on the 1st of September, to household all new students at once. Therefore, a high time pressure was attributed to the process. The main objectives was to have a building near to the faculty of the TU Delft. Five options were visited: Two former faculties at the TU Campus and three former industrial buildings owned by TNO. Furthermore, an investigation was done on a possible new building to household the faculty. The old main building of the TU Delft on the Julianalaan was found to be the most suitable solution, at least for a temporary move.

Research housing possibilities

This location was sold to Fortis a few days before the fire, to be transformed into housing. Much research was done into the state and the possibilities of the building by architects Braaksma & Roos: The plans were ready, the destination was changed and the permits were applied. However, it was sold back to the TU Delft.

Research into new concepts

Over the years, in the previous building, Fokkema & Partners Architecten were studying the implementation of the 'atelierconcept' within the faculty. This knowledge was used in the creation of the new faculty.

Formation of the project team

After the choice of the location, a project team was formed easily and fast. The architecture faculty involves many experts in the field of design, planning, development and management: Several project leaders were installed: to guide the project team, the design team; the construction and to help with the programme and overall concept. Additionally, a project leader detached from facility management (FMVG, current owner) was part of the project team. Later on, several advisors were attracted with a specific specialty, like Finance & Control, ICT and Marketing & Communication.

Attracting additional architects

Fokkema & Partners Architecten and Braaksma & Roos were involved with this project due to their prior work.

Three other architectural firms (MVDRV, Kossman. deJong & Octatube) were asked to give aesthetic advice on the redevelopment. Together the five architects were responsible for the overall concept of the building, the design, and the permit application documents. They all had their own design task within the building: Fokkema & Partners Architects was responsible for the overall programme and interior concept, the employee and student workplace concepts, internal signage, conference rooms, the library and the construction hall. Braaksma & Roos was mainly responsible for supervision and coordination (together with the project leader of the design team); the arrangements of the procedures and detailed drawings (used for permit applications and execution) made on the basis of concept drawings of the other architects. MVDRV was responsible for the creative ideas, Kossman.deJong was responsible for the public areas and Octatube was responsible for the new-built parts (glasshouses).

Conceptual plan

Ten crucial were functions needed to be included in the building: Education ateliers; offices; lecture and conference halls; a library; laboratories and spaces for practical work; a restaurant; public spaces and storage. Possible changes to the façade of the building were limited. The new design made use of the characteristic hall structure of the building. Two glasshouses were added to be able to include all functions needed.

Negotiations with residents and users

Residents were involved in the process from the beginning, as the project team knew that they could hamper the development whenever they were ignored. During the negotiations and discussions, they were represented by the municipality.

Many stakeholders participating in the process were future users of the building, which made it easier to get a clear picture on their programme of requirements and to steer the development according to these aims.

From the project group: the project leaders of the development, design team and programme were daily users of the building. Some of the architects are university teachers as well. Furthermore, student associations were asked for input during the process.

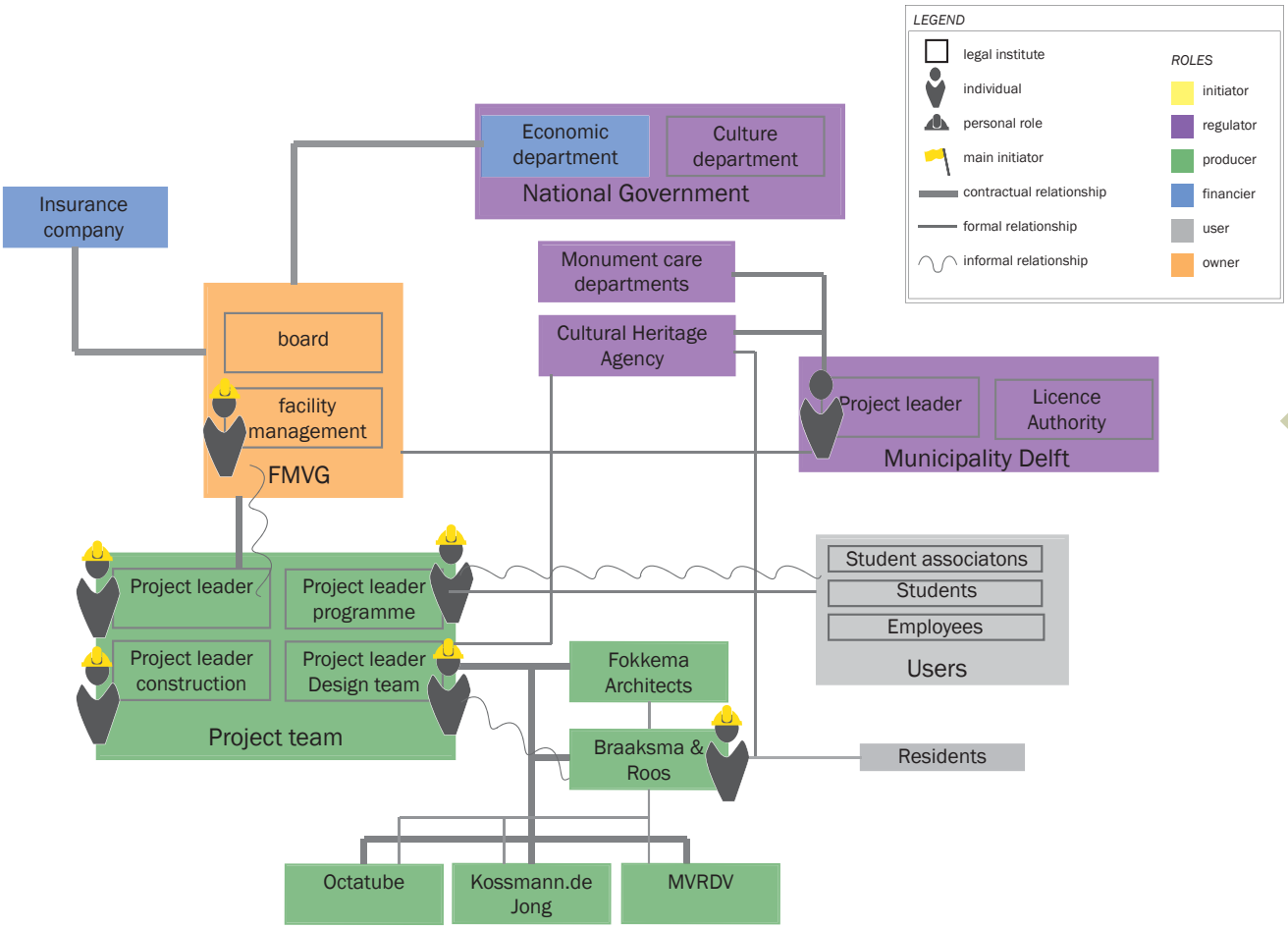
Permits supplied

As detailed plans were drafted for the residential use, the Cultural Heritage Agency was involved in the project before the turnaround. This ensured that permits could be delivered fast, as faculty use was less invasive than residential use.

Due to the time pressure in the process, the design phase, obtaining of the permits and the execution works evolved parallel. Sometimes detailed drawings were not yet made, where executions already had taken place. All profound changes were discussed prior to execution within the project team, with the Cultural Heritage Agency and the municipality.

4.4.3. Relation structure

Figure 4.9. Relation structure BK-City, Delft (own image, based on Den Heijer et al., 2009 & Kloek, 2015).



Key stakeholders

The insurance company

Aon Risk Services could be seen as the main financier, who was present at many project meetings to guard the budget.

- financer role

National government

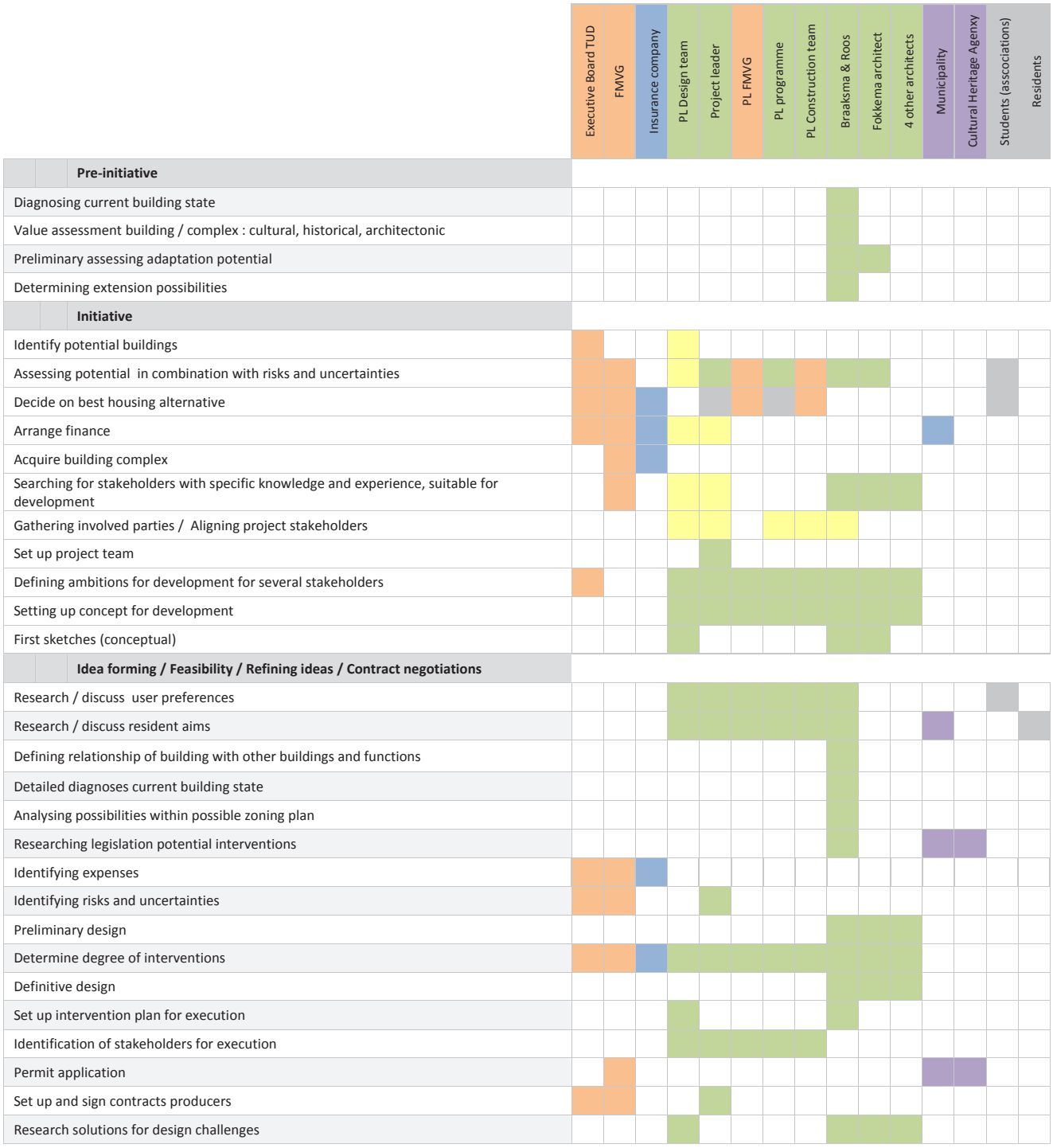
A subsidy of € 25 million was promised immediately after the fire by the Minister of the culture department; to encourage the new building for architecture to become an icon of Dutch architecture.

- financer role

The municipality of Delft

A project leader from the municipality was present at the negotiations and discussions with the project team. Permits were delivered quite fast, partly due to the fact that the CHA was involved in the process for a long time due to the potential transformation to housing. Furthermore, the point of departure with this development was that it was done for a temporary use; this ensured a faster process as well. Both the municipality as the Cultural Heritage Agency were found to be very flexible in their working manner, especially compared to previous projects.

- regulator role



LEGEND

Owner
Initiator
Producer
Regulator
Financier
User

** This case study is solely based on literature. No interviews are executed within this case study by the author. Therefore in-depth knowledge on the responsibility arrangement per activity was not available.*

Table 4.12. Collaboration framework BK-City, Delft (own table, based on Den Heijer et al., 2009; Kloek, 2015).

4.4.5. Complexity assessment framework

Element of complexity	Example of issue	BK-City
Mission	Long timescale	-
	Large scale, high value, high importance, high urgency	++
	Large number of constraints – legal, health and safety, security	-
	High level of interaction and interdependency with other projects	-
	High level of uncertainty – novelty, implications and side effects	+
Organisation	Lack of face to face communication between stakeholders	-
	Ongoing organizational restructuring	-
	High level of change in the organization	-
Delivery	Lack of common or appropriate project management method	-
	Lack of effective governance for decision-making	-
	Problematic communications in the project team	-
	Lack of clear or timely decision-making	-
	Lack of flexibility for the project manager to respond to changes	o
Stakeholders	Large number of stakeholders with different requirements	+
	Lack of commitment by key stakeholders	-
	Interference in the project by key stakeholders	-
	Lack of relationships with key stakeholders	-
	Problematic inter-relationships between stakeholders	-
	Competing priorities of stakeholders	o
	No shared understanding of the project aims	-
Team	Lack of leadership shown by project manager	-
	Cultural and other differences between stakeholders	o
	Low level of motivation of team	-
	Lack of project, technical and business experience in the team	-

Legend	**very high**	++	2
	high	+	1
	medium	o	0
	low	-	-1

Table 4.13. Complexity assessment framework BK-City, Delft
(own table, based on Maylor, 2010, pp. 38-39 and Maylor, Vidgen, & Carver, 2008, pp. 19-23).

4.4.6. Conclusion

High time pressure ensured that the development was prepared and executed in a very short time period; no contextual influences impacted the project. The planning of this development was however challenging as a National listed building needed to be transformed to a new use within 3 months' time. Therefore, a large amount of stakeholders needed to collaborate in a very short time frame. Furthermore, the investment budget was unknown, as the insurance company needed time to calculate the amount to disburse.

Due to the high urgency, the high importance of both the building and the new user, the stakeholders had the same goal. This smoothened the aligning of the stakeholders and enabled a fast set up of the project team.

The project team consisted out of a group of highly experienced stakeholders who had a personal relationship with each other. Furthermore, they were highly motivated due to the high importance and urgency.

A traditional permit procedure was impossible, due to time limits. However, these procedures were likewise smoothened due to the high urgency and high importance.

	CHV	De Ploeg	De Hallen	BK-City
Step sequence	1. Initiative; 2. Idea forming; 3. Feasibility; 4. Refining ideas; 5. Contract negotiations	1a. Initiative; 2a. Idea forming; 3a. Feasibility. 1b. Initiative, Idea forming, Feasibility & Contract negotiations 2b. Refining ideas & Contract negotiations	1. Initiative & Idea forming; 2. Feasibility & reforming of the ideas; 3. Contract negations	1. Initiative; Idea forming & contract negotiations; 2. Feasibility & reforming ideas
Activities	**Missing:** Definitive design; Identification of ambitions stakeholders; Tender procedure	**Missing:** Scenario planning; Determining real estate; Research aims of users and residents	**Missing:** scenario planning; a research into market need/synergies and a formal tender procedure	**Missing:** Attracting users; Choose form development; Research uses, competition field etc.
Roles	All 6 roles were fulfilled. Main initiator also fulfilled owner, financier and advisor role. Two owners in the project, multiple regulators, financiers, initiators, advisors and users.	In first part of the project, the initiator role was missing. The second part included one initiator, one owner, one user, several regulators and several financiers. The user was also owner.	All roles were fulfilled. Main initiator group also fulfilled advisor and user roles. Regulator, financier, owner and advisor roles changed often during the project.	All roles were fulfilled. Many overlapping and shared roles.
Responsibilities	Owner role is main accountable and sometimes responsible for execution of the activity. Initiator is often supportive, sometimes responsible or even accountable. Regulator is mainly supportive, financier is responsible, user is accountable or consulted.	Owner is mainly accountable and responsible. Initiator is mainly supportive. Regulator is mainly responsible and consulted, financier is responsible and the advisor is supportive or responsible.	N/A	N/A

Table 5.1. Comparison empirical cases on activities, sequence of the steps, roles and responsibilities (own table, based on case study findings, 2017).

5. CROSS-CASE ANALYSIS

The collaboration and complexity assessment frameworks are compared to find similarities and differences within the four case studies. The collaboration frameworks of the cases are placed in the predefined collaboration framework from literature to have the same baseline on which they are compared. This analysis shows the similarities and differences in process steps, activities, stakeholders and their roles and responsibilities. The comparison of the complexity assessment frameworks explains the ranking of the complexity of the four cases and the aspects that increased the complexity level in each process.
The analyses can be found in the appendices (A1-2).

5.1. Compared collaboration frameworks

The steps defined from literature seem to overlap quite well with the steps that were found in the empirical case studies. However, not every step has to be executed in every heritage re-use process: The complexity within heritage re-use processes differs, which means that some steps can be omitted when there is no need for them.

The sequence of the project steps and activities differed a little within all four cases. The main difference compared to the literature involves the timing of the purchase of the building (complex). In literature is stated that the building or site is acquired after all steps in the initiative and preparation phase have been executed (Douglas, 2006; Wamelink, 2010). However, in all four case studies the building was bought after a quick scan on possibilities. In two cases, most stakeholders were gathered before the purchase, however, in the case of the CHV and De Ploeg the stakeholders were attracted after the building (complex) was purchased. Noteworthy to say is that sketches and preliminary designs are made after the purchase of the building in three out of four cases; apparently a visual picture on possibilities is not needed before the purchase of the building.
In general, many project steps and activities were executed at the same time.

The stakeholders fulfilling the initiator, owner, financier and user role differed within all for cases: these roles seem to be project dependent. The regulator role is continuously being executed by the public authorities. The advisor role was often executed by architects, constructors, managers, private developers, engineers and contractors.

The responsibilities per role and stakeholder seemed to differ extensively in the four cases. Stakeholders seem to take tasks upon them according to their knowledge levels and experience and their interest in the project, which is project dependent.

5.2. Assessment of complexity

There is a difference in the complexity level of the four researched case studies; according to the complexity assessment analysis, the case of BK-City and the second part of the re-use process of De Ploeg were less complex than the case of CHV, De Hallen and the first part of De Ploeg. This difference is mainly visible in the timescale of the project, the number of constraints; the interdependencies and interaction with other projects; changing participating organizations; governmental decision making and the collaboration between stakeholders. De Hallen turned out to be the most complex project according to the analysis.

6. FOCUS GROUP

The focus group was initially set up to generalize the outcomes of this research, which help recommendations to be applicable on a larger scale and to give insight on the added value of this research and its outcomes in the practical field.

The focus group was attended by several experts in the monumental development sector:
- Consultant at Real Solutions: Thijs Evers, fulfilling the roles of initiator and advisor;
- Provincial official at De Erfgoedfabriek: Wim Haarmann, fulfilling the roles of regulator and financier;
- Private developer at Stad in de Maak: Erik Jutten, fulfilling roles of initiator and advisor;
- Emeritus professor and sustainability consultant at Foundation Witte Roos: Tjeerd Deelstra fulfilling roles of user, initiator and advisor;
- Municipal official at the monument care department of the Municipality Delft: Ilse Rijneveld fulfilling the role of regulator.

6.1. Applicability of the models

Preceding the focus group meeting, a general version of the relation structure and the collaboration framework were sent together with an explanation of the roles and responsibilities (Appendices C1-3). During the focus group, a short presentation was given on the problem statement and the methodology to deal with this problem; the models to reduce complexity. The models were placed in the middle of the discussion table, accompanied by the definitions of the roles and the responsibility division. The timeline and case description were not tested, as the focus group was not focused on one specific case and these models are often used to explain processes. The complexity assessment framework was likewise not tested; this framework has been tested in literature multiple times before and proves to be of value (Geraldi, 2009; Thamhain, 2013; etc.)

Relation structure

The relation structure was found to be too complex to give a clear overview of the process for stakeholders in practice. One of the experts explained that some actors in practice are not willing to look at a model this complex. The differences between stakeholders and roles did not become clear. The main initiator (or hero) was not clearly indicated. Furthermore, the impact and the motivation of the different stakeholders are not made visible, while this is an important part of the complexity within the collaboration in these processes.

Collaboration framework

The collaboration framework gave a rather complete overview on the project steps and activities that have to be fulfilled. However, it is still missing a focus on the social values and identifying the story of the building. According to the experts it shows that multiple roles can together execute activities in the process, which might lead to friction, but could also lead to possibilities for collaboration.

6.2. Added value of this research in practice

- Both models are seen as to be too academic to use in practice;
- Both models miss the social and cultural values involved with heritage;
- These kinds of processes are probably not possible to be steered; the approach of the collaboration framework does not fit with heritage due to the importance of the values involved;
- In practice, there is no demand for academic models that help structure of steer the process. There is however a demand for success stories of executed heritage re-uses to inspire stakeholders;
- Success stories cannot be copied! There is no blueprint possible from a success story;
- A list of common challenges might come in handy for stakeholders in practice as well.

6.3. Challenges

1. Heritage re-use processes are exciting, and the involved stakeholders need confidence to start such processes. The confidence is not always present among stakeholders.

2. As heritage re-use processes are so complex and involve so many values, it is a long term process that requires a lot of patience.

3. Finding a feasible financing structure is still explained as one of the main challenges in heritage re-uses.

4. Finding capable stakeholders seems to be a challenge as well, as much knowledge is needed and these stakeholders need to be convinced by the values of the building rather than by high yields.

5. Stakeholders speak different languages: Some talk about return yields while others talk about historical and cultural values, the need for preservation or social benefits. Furthermore, there are opposite aims involved; a translation of aims is needed.

6. We are currently in the middle of a learning process due to the dynamic context: It is difficult to learn from prior successes when the rules have changed.

6.4. Possible solutions

1. The paramount of an enthusiastic initiator was one again made clear in the focus group meeting: There is a need to search for a long-lasting stakeholder who steers the process and gets everybody on board in order to start these projects.

2. According to the experts, the most important power tool in heritage re-use processes is the story of the building and the location. This is what is of interest to people, what explains the values concerned and what prioritizes the need for preservation. It helps to convince stakeholders and to find a mutual goal. To discover the story, it is important to work with a 'discussion table' instead of the conservative 'hierarchical structure' that is often used by regulators.

3. It is important to create movement in the initiative phase of the process to find opportunities. This movement also helps in getting the right people on board and eventually results in a quicker progress of the process. Time and money are important resources to create this movement.

4. A clear set of conditions could help filtering the preferred kind of stakeholders. It is important to attach certain competences and criteria to the desired actors involved; linked to the cultural and social values of the building. A platform can help to identify successes, to develop the valuable stories and to find the right people (e.g. tinder for buildings; a social map combining initiatives to vacant real estate; or 'de oude kaart van Nederland', initiated to inspire and attract people).

5. Regulations are always lagging behind. With innovation, it is always needed to go against existing regulations.

6. A more integral approach by public authorities will help to discover possibilities within the current rules:

- Make temporary functions easier: Temporary use helps to bring people together and to find the initiator;
- Identify a percentage of (monumental) vacancy that should be used for social initiatives: Making way for those with a well-defined social plan, but not a well-filled investment budget to prevent vacancy and to facilitate initiatives (e.g. SER ladder).

IV

CONCLUSIONS

7. CONCLUSION

Heritage re-use processes are complex in nature. This thesis aimed to investigate a possible reduction of the complexity in heritage re-use processes with the help of a clear overview on role and responsibility divisions. Five models were used to increase the insight in the collaboration within these processes. These models gave enough input to answer the three defined research questions:

7.1. What does a heritage re-use process look like?

Heritage re-use processes are one-of-a-kind; the processes of the four cases differed to a great extent, especially considering project duration; involved personalities; sequence of the activities and implementation manners. A general process description for heritage re-uses could therefore not be developed. However, project steps and involved stakeholder types were similar in all four cases. The summarized relation structure and collaboration framework including a list of project steps and activities (appendices C1 and 2) were indeed found to be rather complete for heritage re-use processes according to the experts in the focus group. Table 7.1. shows the project steps and activities that are generally executed in heritage re-use processes. Table 7.2. shows the stakeholders that are involved in these processes, including their tasks and responsibilities.

Project steps and activities

Identified project steps and activities in heritage re-use processes	
1. Initiative	Identify financial resources
Diagnosing current building state	Researching legislation potential uses
Preliminary assessing adaptation potential	Researching legislation potential interventions
Determining extension possibilities	Analysing possibilities within possible zoning plan
Assessing financial expenses and resources in combination with risks and uncertainties	Identifying risks and uncertainties
Gathering involved stakeholders	Identify and attract potential users
Decide on best form for development	Research / discuss aims of (potential) users
Attract finances	Preliminary design
Acquire building complex	4. Refining ideas
2. Idea forming	Searching for stakeholders with specific knowledge and experience, suitable for development
Value assessment of the building(complex): cultural; historical; architectural	Detailed diagnoses current building state
Assessing relationship of building with other buildings and functions	Research solutions for design challenges
Defining the story of the building (complex)	Determine degree of interventions
Defining ambitions for development for several stakeholders	Set up intervention plan for execution
Scenario planning	5. Contract negotiations
Identify potential users	Attract finances
Aligning stakeholders	Acquire change of land-use plan
Setting up concept for development	Determine degree of interventions
First sketches	Definitive design
3. Feasibility	Apply for permits (done by owner)
Research market need / synergies	Test definitive design against cultural, historical, aesthetical and social values (done by licence authority)
Research willingness of potential visitors / attractiveness concept	Advice licence authority on the preservation of cultural, historical, aesthetical and social values based on definitive design (done by local / regional monumental and local aesthetical committees and Cultural Heritage Agency)
Research competition field	Identification of stakeholders for execution / Tender procedure
Attracting potential users	Signing contracts with stakeholders for development
Identifying revenues and expenses	Set up and sign contracts users

Table 7.1. Identified project steps and activities in heritage re-use processes (adjusted from table 3.2., based on research outcomes, 2017).

Stakeholders involved

Stakeholders	Tasks	Responsibilities
Owner of the building	Assessing financial expenses and resources; Identify risks and uncertainties; Preliminary assessing adaptation potential; Attract finances; Acquire building; Decide on degree of interventions; Apply for permits; Sign contracts with users	Financing the property; restore and maintain the building in a good state (Accountable)
Municipality	Test project on broader vision; Investigate safety; Changing land-use plan; Provision of subsidies; Permit issuance	Safeguarding the public interest, safety and the environment (Responsible, Consulted)
Monument and quality committees	Value assessment of the building(complex): cultural; historical; architectural. Advice on permit issuance.	Advising the licence authority of the Municipality (Supportive, Consulted)
Investor / Financier	Financing the acquirement of the building and the investment costs	Supplying sufficient investment budget (Responsible)
Architect	First sketches; Value assessment building; Scenario planning; Setting up concept for development; Defining relationship of building with context; Preliminary design; Definitive design; Set up intervention plan for execution; Research solutions for design challenges;	Advise owner Visualise ideas and draw definitive design; documentation for permit application (Supportive)
Advisors (on finance, planning, aesthetics, law, etc.)	Research market need / synergies; Research attractiveness concept; Advice on investments.	Advise owner on re-use, challenges, risk management, possible solutions. (Supportive)
Users	Identify and communicate aims	Preservation of the building (Consulted)
Managers (project or process)	Guard time and budget; Steer the process according to a predefined plan; Guidance of stakeholders: Conflict mediation	Advise owner on process steps and collaboration (Supportive)
Developers	Arranging ground; Attracting sufficient finances; Attracting users; Take associated risks (financial and development risks)	Executing the redevelopment (Responsible)

Table 7.2. Stakeholders and their specific tasks (own table, based on research outcomes, 2017).

7.2. Which roles have to be fulfilled in heritage re-use processes?

The six defined roles from literature seem to give a rather complete picture of the roles involved in the initiative and preparation phase of heritage re-use processes. However, the producer role often becomes involved after these phases. Within the definition of this role the executing stakeholdders gave advice in those phases, therefore the producer role was redefined as the advisor role.

- Initiator: conveys the passion for the project and shares this enthusiasm with potential stakeholders; this way arranges activities that increase the feasibility of the overall project.
- Owner: owns the real estate asset, is the contracting authority and therefore makes the end decisions in the process; is accountable for the end result.
- Regulator: restricts the project in order to guard public values and to safeguard quality norms.
- Financier: finances the project whenever the ambitions of the project are in line with his preconditions.
- Advisor: gives advice on design, legislation, feasibility, safety, etc. in order to increase the quality or success of the project.
- User: explains the housing ambition that defines the function (requirements).

The role divisions per stakeholder, including the subsequent task and responsibility divisions differed extensively between the four cases. The regulator and advisor role seem to be executed by the same types of stakeholders, however, the initiator, owner, financier and user role are executed by multiple types of stakeholders depending on specific characteristics of the project. Exact definitions on which tasks and responsibilities are part of the roles could not be made: Roles change due to the dynamic context and the boundaries of project roles are hard to define. Within this research, the definitions of the roles did not become exact enough to clearly determine these boundaries.

7.3. Which challenges can be identified?

Challenges in heritage re-use processes are context and project dependent. The perspective of different stakeholders influences if aspects are perceived as challenging: Some challenges are more personal and therefore even more project and context dependent.
Within this research, four challenges were present in all the investigated case studies that were likewise described in literature and discussed by the experts of the focus group as common challenges:

1. Financial challenges

Include difficulties in finding sufficient funding, mostly due to insufficient granted bank loans. This could lead to delay or even a prematurely abortion of the project.

2. Feasibility challenges

Include finding a new use that fits the building and the neighbourhood; that can count on a support base; that yields enough return to make the necessary investments to preserve and maintain the building in a good condition; and that is according to (new) regulations (including sustainability aims and preservation needs). The degree of difficulty is mostly related to the location of the vacant building, the size of the building and the amount and the degree of values that are present in the process.

3. Collaboration challenges

Include difficulties in aligning the aims of the different stakeholders as they use a different vocabulary; have different priorities; are not equally experienced with heritage re-uses; and do not all have the same time scope. Conflicting interests might lead to suspicion and distrust and a lack of support between stakeholders.

4. Governance challenges

Include strict or errant regulations that hamper innovations and efficiency in the process and drive up the investment costs. Regulations are always lagging behind. Therefore, whenever something innovative has to be executed, dealing with existing regulations is often perceived as challenging.

Possible solutions

Possible solutions to these challenges are likewise context and project dependent. However, successful approaches to deal with the challenge above could be used as inspiration for future heritage re-use projects:

1. Mixed funding methods

Commonly, 80% of the development budget can still be composed by a mix of traditional financing methods: Bank loans, subsidies, low interest funds and own equity. Additionally ground lease measures; financing by project partners; equity funds; payments in instalments or rent reduction and crowdfunding could be used.

2. Organic grow / step-by-step approach (might include temporary use)

The organic grow approach allows for smaller investments at the start of the process, which requires less funding and in turn increases feasibility. Furthermore, the success of the type of use can be tested against time and a support base can be formed rather naturally. Additionally, the involved stakeholders have more influence in the process as plans are not strictly defined yet.

3. Story of social values including an initiator

The story of a heritage asset explains the history of the building and its location, the cultural and social values and other reasons why people are attached to it. This story can be used to find a mutual goal and language between stakeholders and to build a support base in the neighbourhood. It is formed by people who care about the building and who want to find a new purpose for it: initiators. The story could be spread as a mean to attract the stakeholders needed for further development.

4. Changing role regulators

Public bodies have been changing their role in heritage re-use processes in order to better facilitate this type of processes. The change is mostly visible in the allowance for more freedom in the permit application procedure and a reinterpretation of the current legislation: The licence departments from several municipalities have started to look beyond the written law into the purpose of the law; whenever the purpose is achieved, permits are supplied. These changes in working approach ensure a simplification and acceleration of the process. It seems that municipalities changed their approach when time pressure was involved; when the owner was trusted and when the use or building was of great social importance.

7.4. Answer to the main question

How can a clear overview on role and responsibility divisions contribute to a reduction of the complexity of heritage re-use processes?

First of all, a clear overview on role and responsibility divisions is not possible:

- There are too many stakeholders involved; all these perspectives need to be mapped, the actual 'truth' is hard to define;
- Stakeholders change during the project;
- People within organizations change during the project;
- The context in which the development is executed changes;
- The perspectives and attitudes of important stakeholders influence the project to a large extent and they change during the process as well.
- Roles are changing during the project / stakeholders fulfil different roles at different moments; it is impossible to give a complete and explicit definition of the different roles with relating tasks and responsibilities.

Secondly, it is impossible to reduce the complexity of heritage re-use processes with the help of a clear overview, because stakeholders cannot anticipate with certainty on the changes in the beginning of the process as these dynamics are unknown at the start and as they differ extremely per project.

7.5. Aim fulfilment research

The aim of this research has been to reduce the complexity within the collaboration with a clear overview on role and responsibility divisions between stakeholders, in order to stimulate the initiatives for vacant heritage buildings. With the conclusion of this research, this aim is not fulfilled, since a clear overview could not be generated and the complexity is not reduced. However, the example cases broadcast that even though the role and responsibility divisions were not clear from the start, the projects were successful in the end: A clear overview on roles and responsibilities in heritage re-use processes is therefore not needed to start and successfully execute these processes. In the reflection part of this thesis, a discussion is conducted about these researchers that argued that a clear role division would help steer (re)development projects.

The complexity analysis revealed that the cases differed in level of complexity. It might therefore be possible to steer on aspects that increase the level of complexity within the collaboration, or to deal with the complexity. This possibility is likewise further elaborated on in the discussion of this report.

V

EPILOGUE

This part of the report includes a discussion on the findings of the research, a discussion on project complexity, a discussion on the methodology and the limitations of this research (Ch. 8.). Next, recommendations are given for further research and practice (Ch. 9.). Finally, the reflection describes the research process of the author This chapter includes the acknowledgements as well (Ch. 10.).

8. DISCUSSION

8.1. Discussion on research findings

This research shows that heritage re-use processes cannot be put in blueprints and do not profit from a clear overview on role and responsibility divisions. This finding contradicts with the aim of foregoing researchers to develop a role division framework to increase insight and to better steer real estate developments.

Van der Kuij (2014) did derive a rather clear overview on the role and responsibility divisions in his research; however, his research only focussed on housing association organisations: The role division within these organisations can be strictly defined as HAs work with a strict (hierarchical) structure. The collaboration between different organizations is not so strictly organised and changes during the process, especially in heritage re-use processes. This might explain why the role division on a greater scale does not provide additional insights. Furthermore, Van der Kuij found major differences in the experienced process compared to the documented process, which made it difficult to obtain clearity on the 'actual' process. He therefore also struggled with the strict design of his model; on which the collaboration framework is based. He decided to draw multiple models and to discuss these, in order to make the bottlenecks more understandable. The main output of his research was thus a tool for discussion (2014). Due to limitations of this master thesis in time and means, it was not possible to use the collaboration framework in the same way as the responsibility divison model is used.

Gaasenbeek (2016) tried to draw a complete role division for all organisations involved in office conversions; however, his role division is only tested with thirteen individual expert interviews, not with empirical case studies. His role division does not become specific enough as activities and responsibilities are not linked to the roles; many overlaps could still occur, which will lead to unclarity in the collaboration. I believe that this will become visible when his role division is tested in practice.

Schönau & De Bruijne (2008) proposed three project roles for stepwise adaptive re-use developments in a 'three-phases" model. In this role division, several additional roles are missing, which fell out of the scope of their research. Again, no strict division on activities and responsibilities is made within the role division; the roles could still include overlaps (even within the three roles) which could lead to unclarity in practice.

Zwikael & Smyrk proposed a 'rigorous project management framework' that can be applied in all project contexts (2011, p. 11-35). They do link activities and responsibilities to project roles. With their division, they already mentioned that it is quite common for a particular entity to fulfil a number of project roles simultaneously, which was likewise visible in the empirical case studies of this research. However, they again focus on one organisation, instead of the collaboration between several organisations. I believe that when multiple organisations deal with stakeholders that are fulfilling multiple roles, insight in the collaboration will not be increased with a role division framework, especially when these roles are changing during the process.

8.2. Discussion on project complexity

According to the complexity analyses of the cases, the main differences in complexity levels were due to differences in the timescale of the project, the number of constraints; the interdependencies and interaction with other projects; changing participating organizations; governmental decision making and the collaboration between stakeholders.

Timescale

A long timescale leads to an increase in uncertainties, due to the dynamic nature of the context in which heritage re-use processes are being executed. This was mainly visible in the case of De Hallen, which took 20 years before the project was completed. To a lesser extent, this was also visible in the first part of the De Ploeg case and in the CHV case. The uncertainties are increased whenever multiple regulatory periods occur during the process, as this leads to changing responsible aldermen and project leaders; possible changes in regulations and subsidies; and changes in governmental decisions made (both on local as on National level). Furthermore, the economic context changes over longer periods, which adds uncertainty to long-term projects. This was visible in all cases that dealt with the financial crisis (CHV; De Ploeg; De Hallen), as this made the three cases more complex due to (unforeseen) financial challenges. Based on the findings of the cases, I believe that a shorter development period could decrease the uncertainties and therefore reduce the complexity of the process.

Constraints

The number of constraints are partly coherent to the changing context and thereby will possibly increase with a longer development period. However, these constraints are mostly location dependent as they concern safety, health, legal issues, security constraints, and public participation. Often, these are aspects that have to be dealt with; they cannot be diminished. They can be dealt with by: 1. Giving priority to safety, health and security (CHV); 2. Attracting experts that have a lot of experience with these kinds of processes (CHV; De Hallen; BK-City); 3. Following legal procedures and ensure well-written formal documents and contracts (CHV; De Hallen); 4. Attracting users and residents early in the process to give them a voice, to avoid opposition and hampering of the process in a later stadium (De Hallen).

Interdependencies and interactions

Interdependencies and interactions are linked to the scale of the project and the aims of the city and involved stakeholders. Maylor et al. describe in their complexity framework that complexity will increase by an increase in interdependencies and interactions with other projects (2008). However, it seems that this is something that can be steered as well: In the case of De Hallen, the project boundaries were enlarged to increase the overall investment budget and to link all developments in the same area together. However, this ensured a large increase in complexity. Eventually, the plan was scaled down again as the project was deadlocked due to a large number of involved stakeholders, with contradicting aims and developments that dealt with different development periods and investment budgets. The level of complexity is thus reduced by diminishing the scale of the development and by allowing for little interdependencies and interactions with other projects.

Changing participating organizations

Changes in participating organizations increase project complexity as a shift in working manner and culture is needed. This often leads to delays as stakeholders need to re-arrange their position in the project (CHV; De Ploeg (I); De Hallen). However, due to the dynamic context, organisations need to change in order to keep up with the competition and to keep their added value. With short-term developments, again, chances of large organizational changes are smaller compared to long-term developments. Nevertheless, this is another aspect that stakeholders need to deal with. When a project is divided into smaller steps (CHV; BK-City), it is easier to deal with these changes as they will encounter less influence per project phase.

However, changed organisations could eventually lead to a smoother process as well. An example is the culture change within municipalities in the cases of CHV and De Ploeg (II). In both cases, the municipalities started to work more integrally with their own departments and quality committees in order to simplify and accelerate the process. The change is mostly visible in allowing for more freedom in the permit application procedure and a reinterpretation of the current legislation. The licence departments started to look beyond the written law into the purpose of the law: Whenever the purpose was achieved, permits were supplied. A reinterpretation of the regulator role might therefore be beneficial to deal with the complexity.

Governmental decision making

Governmental decision making seemed to be challenging mostly in De Hallen case, as the project leaders and city district board were inflexible and indecisive in the first part of the project. However, also in the case of De Ploeg (II), different perspectives within the provincial organisation led to confusion on legal agreements. In both projects, the strategy of heritage preservation was not similarly defined within all governmental departments. It is important for public parties to align their strategies to avoid unclarity and opposing regulations.

Collaboration

Challenges in the collaboration mostly seem to point at differences in aims and perspectives between stakeholders as these lead to suspicion, distrust and a lack of support. It is therefore important to align stakeholders at the start of the project and to keep discussing differences during the process (CHV; De Ploeg (II); BK-City). According to experts in the focus group, a common vision including the values of the building (the story) is a possible steering tool to align the project stakeholders in the initiative phase. Furthermore, an experienced team deals with the complexity better because they expect the process to be dynamic and they know each other's added value (CHV; De Ploeg (II); BK-City). Additionally, the four case studies reveal that when less stakeholders are involved, the complexity level was lower as well.

Organic growing approach: step-by-step

The case of the CHV complex knows a relatively long development period, covers a relatively large scale and deals with interdependencies with other projects. The scale and level of interdependency is not decreased in order to reduce the complexity. Still this case turns out to be much less complex than the case of De Hallen. This is probably due to the organic growing approach that is used in the process. This approach leads to: 1.) smaller investments at the start of the project; 2.) a test of functions; 3.) time to adjust to the project; and 4.) time to attract additional finances. This approach leads to a project that is easier manageable. The division into several phases of the BK-City project had the same benefits. Therefore, the organic growing or step-by-step approach is considered as a way to deal with complexity in heritage re-use processes as well.

Concluding

The complexity of heritage might thus be reduced by keeping the development period as short as possible; by limiting the interdependencies and interactions with other projects and by limiting the number of stakeholders involved. The complexity could furthermore be dealt with by prioritising certain needs; clear governmental strategies; attracting experienced stakeholders; using written legal agreements; an early attraction of users and residents; smoothed permit procedures; continuous alignment of stakeholders; experienced project teams and by using a step-by-step approach. These findings still need to be tested though.

The initial conceptual model is revised according to the outcomes of this discussion (Figure 9.1.).

8.3. Discussion on methodology

Qualitative research is subject to biases and (mis)interpretations. "An analysis can proceed suddenly due to an example study that is discovered at the right time, due to a link that suddenly occurs or by doing fieldwork that leads to new insights." (Boeije, 2012, p.12). The analysing approach in qualitative research is therefore hard to asses, which makes the findings questionable. The methodology of this thesis is assessed on five criteria defined by Braster to validate the quality of qualitative research and case studies (2000). The constructed, internal and external validity are explained in one paragraph.

Verifiability

It is possible to verify the findings of a research only if the results are clearly written; the report is publicly available; if concerned parties can assess the report; and if the procedure of obtaining the results is or can be clearly explained (Braster, 2000, p. 62). This report is publicly available on the repository of the TU Delft. In a public presentation, concerned parties were allowed to ask critical questions on the results. Furthermore, during the whole process of graduation, experienced researchers have advised the author on the research. The author has tried to write down the results of this research as clear as possible.

Additionally, the methodology chapter and the practical framework explain how the results were obtained with the help of the five research models. The procedure of filling two of these research models is furthermore explained in the appendix of this research, as these research methods are rather extensive. In the appendix of this research the interview protocol can be found; in the appendices of the reports of the supervisors, the summaries of the interviews are also included, since these need to be dealt with in a confidential manner.

Validity

Constructed validity refers to the adequate translation of theoretical concepts into empirical variables. This can be done by means of triangulation; peer debriefing and member checks (Braster, 2000). In this thesis, the only form of triangulation that is used is data-triangulation which means that interview data is compared with written documentation. Furthermore, one project meeting is observed within the first case study. However, no surveys, statistical analysis or multi variation analysis are conducted. The data sources did not lead to completely similar answers. Member checks are executed in the form of verifying the interview summaries with the interviewees, on which 11 of the 14 interviewees responded; however the eventual analysis and description are not checked by the interviewees due to time limits. Some of the findings are however discussed with experts in the focus group meeting. This research is thus only partly constructively validated.

The internal validation is guaranteed by acquiring different perspectives on the same process and by comparing these answers with written documentation. The case studies solely describe the processes, only in the conclusion the cause and effect is tried to be explained with help of the five analysing models. This is always subject to own interpretation: Due to expectancy effects and atypical individuals, it is hard to determine the actual cause and effect; it is therefore difficult to explain the reasoning behind the phenomena (Jackson, 2009).

The external validity deals with the possibility to generalise the research outcomes. Even though the four case studies were very specific and individually they do not give an adequate representation of the target population, the fact that multiple cases are researched in the same manner ensures that a certain *theoretical generalisation* can be made (Braster, 2000, p. 73). Furthermore, the findings of the-case studies were tested on generalisation ability in a focus group discussion.

Reliability

The reliability of a research is high if results will be the same or similar if the research was executed a second time of by a second researcher (Braster, 2000). With qualitative research and especially case study research, it is not easy to score high on this criterion, as the concept is often developed during the execution of the interviews; interviewees may answer according to their specific mood on that particular moment and semi-structured interviews have a 'conversation' set-up, instead of a clearly defined list of questions. In this research, the concept was indeed formed during the execution of the interviews. However, the semi-structured interview protocol still adds to the reliability, because it offered a framework of themes and questions that were discussed within every interview. Additionally, the strictly defined collaboration model as a research tool increased the reliability as the same detailed questions were asked within every interview.

8.4. Limitations of the research

Limitations within the methodology

- Risk of biases with the interpretation of qualitative data;

- Relatively small sample; comparison with other cases might lead to (slightly) different outcomes;

- Limited reliability of the case study results due to forming of the concept during the interviews and the use of semi-structured interviews.

Limitations of the research models

- The collaboration framework works better within one organisation in which roles are clearly defined (like housing associations);

- The relation structure becomes easily complicated and it is not possible to add a lot of information layers in the figure.

9. RECOMMENDATIONS

9.1. Recommendations for further research

1. Stop trying to fit HRPs in blueprints

Heritage re-use processes are complex and dynamic; strict blueprints do not work as these processes are unique and need customized approaches. The included values could not be fit in blueprints either.

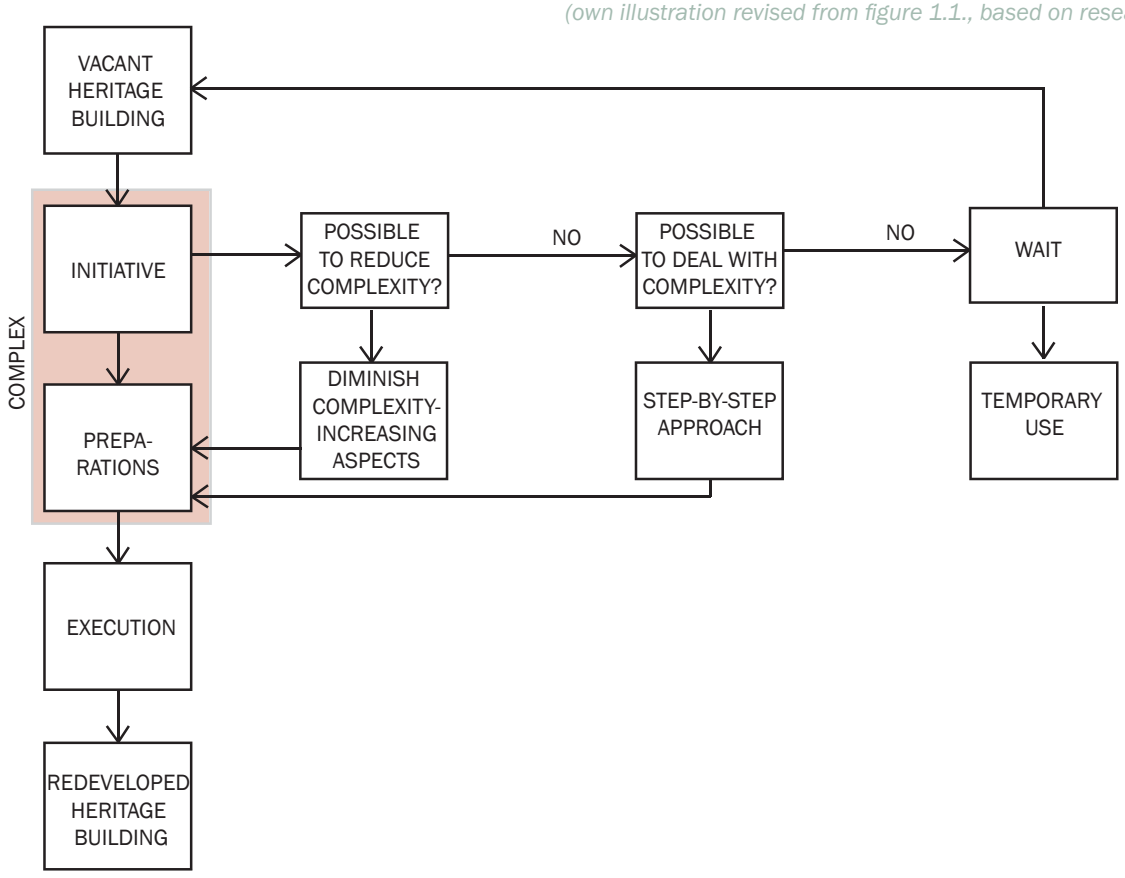
2. Further research into ways to reduce complexity / that deal with complexity

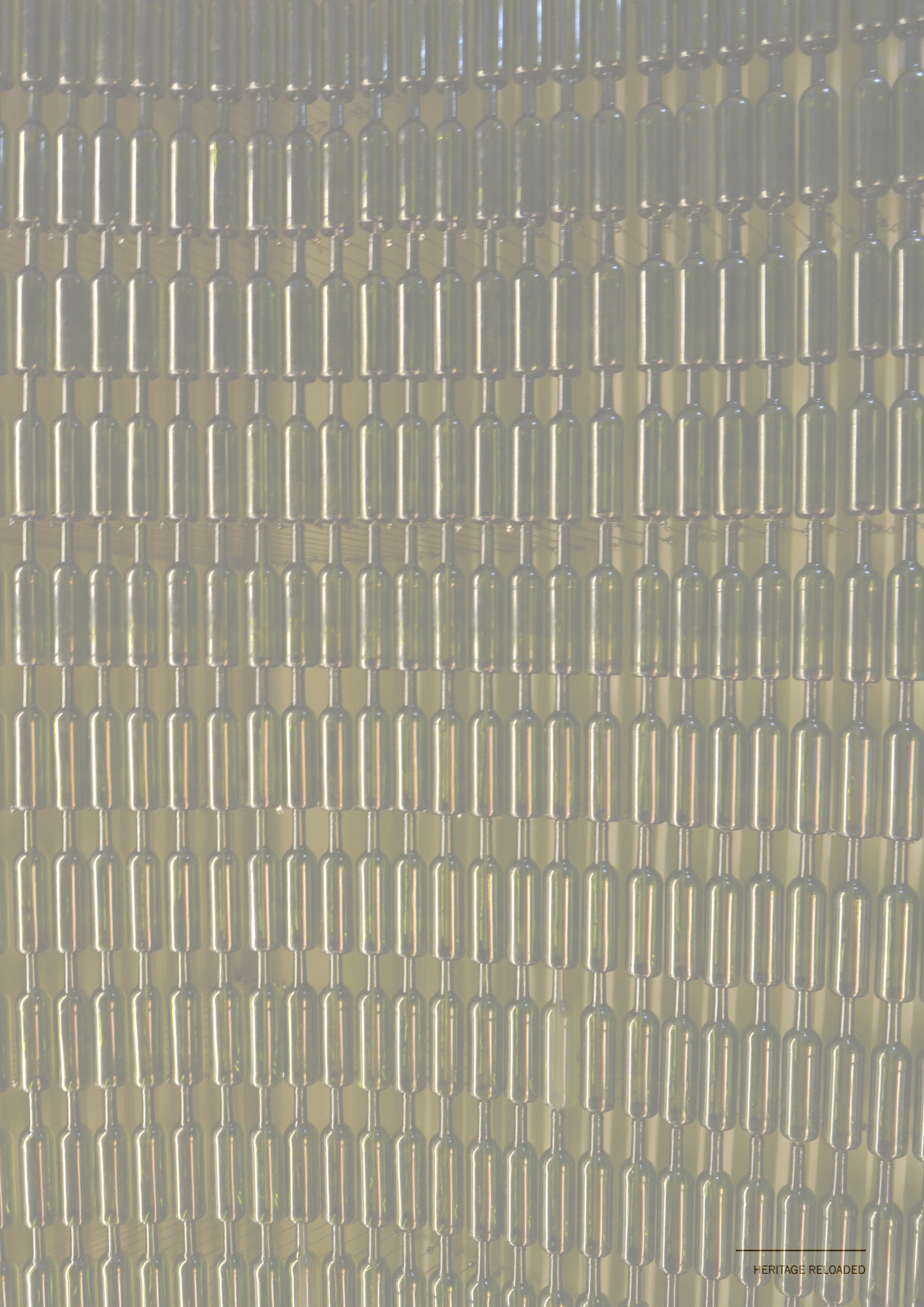
The discussion on project complexity concluded with several approaches that could help decrease or deal with complexity in heritage re-use processes. However, these approaches are not tested or properly defined yet. Further research is therefore needed to understand how these approaches could help stakeholders in practice to deal with the complexity.

9.2. Recommendations for practice

The revised conceptual model shows an advice for stakeholders in practice. Whenever the process is perceived as highly complex; stakeholders could look at possibilities to reduce the complexity: Diminish the development period, limit interdependencies and interactions with other projects, and limit the number of stakeholders involved. When this is not possible, stakeholders could start with a step-by-step approach, which helps deal with uncertainties, allows for smaller investments at the start, tests the feasibility of the concept and buys time to form an experienced project team. Patience and perseverance is needed with this approach. Public parties could enhance heritage re-uses by aligning their strategies and by smoothing permit procedures. If stakeholders are still refraining from action, the priority might just not be high enough. Sometimes this needs time, in which case waiting or a temporary use is the only solution left.

Figure 9.1. Revised conceptual model
(own illustration revised from figure 1.1., based on research outcomes, 2017).





10. PERSONAL REFLECTION

Point of departure

As mentioned in the preface; I have a thing for heritage: The choice to graduate on a heritage related topic was therefore quickly made. The current problem of vacant heritage; changing regulations; discussions on challenges and successes; and the question about who is responsible for the vacancy were starting point for this research. My aim to find a solution for the vacancy of heritage was however very broad and needed to be scoped down. The demarcation of the research proposal took some time, as heritage involves many challenges that are in need of a solution. In the end, the scope was found with the help of the responsibility division model designed within my supervisor's PhD-thesis, which focuses on collaboration challenges due to unclear roles and responsibilities.

Research challenges

Being able to ask the author and designer of the responsibility division model about the way the model was constructed was very convenient, as it was not easy to understand all the layers involved in the model. For this research, the model needed to be translated into multi-organizational heritage re-use processes framework, which did not happen without troubles. The main trouble with this translation was that the model is based on the stakeholders within one organization alone. Furthermore there was not yet a clear description with steps that are executed in heritage re-use processes, so I had to base this on descriptions of new-built processes and re-use processes of contemporary buildings, which slightly differs from heritage re-use process steps. Furthermore challenging was the development of a general role division for stakeholders including assigned tasks and responsibilities according to literature descriptions and practical outcomes. Within literature, available role divisions are not always defined precisely enough to understand the collaboration on a detailed level. Described role divisions in literature furthermore seemed to be overlapping as well. As stakeholders are executing project roles, the definitions of stakeholder roles and project roles needed to be used independently to really understand possible bottlenecks.

Refining research aim

The framework was first meant as a prescriptive model that would explain how heritage re-use processes should be executed. However, at an early stage (after presenting the research proposal) I understood that this would not become possible. I would never obtain enough data to generalise and extract grounded conclusions to describe how it should be done, in six months' time: Prescriptive models and recommendations were out of my scope because I had too little knowledge and the complexity of the process was not sufficiently explained yet. A more in-depth description of the complexity of heritage re-use processes had to be made first. This ensured that I needed to adjust my research proposal accordingly. My supervisors advised me to focus on the first two or three research questions, instead of all five (defined within the research proposal). Due to the comments of my supervisors and my own struggles to link roles to stakeholders, tasks and responsibilities, the step from a descriptive model into a prescriptive model was skipped (question 5 of the research proposal).

The fieldwork

The interviews for two cases in Brabant were started immediately after the research proposal presentation. For this I fortunately was able to extract some detailed information and interesting contacts from my graduation internship company. The interviews gave insight in the way the independent organisations and stakeholders executed their jobs. It therefore increased the insight in heritage re-use processes for me personally: The interviews provided a great insight in how the re-use processes were executed; how the process is perceived by the different stakeholders; which tasks were executed by which stakeholders and which challenges the stakeholders came across. The developed collaboration framework offered a structured way to research the collaboration manner in heritage re-use processes in depth. It was used intensively after the first few interviews supplied the basic description of the process. The interviews restored my faith in the purpose of this research, as interviewees were enthusiastic about the topic and saw the added value.

Furthermore, it was very instructive to observe a project meeting between the owner of the CHV and the project leader of the Province of North Brabant (who owns a part of the complex as well), as it showed that the province had to deal with a lot of opinions from their different departments, that were not always aligned with each other, while they were negotiating with the owner of the CHV, who was trying to get as much as possible out of this meeting, as fast as possible.

Findings

The outcomes of the interviews were interesting, however, hard to compare: The processes seemed to differ to a great extent, especially when is focused on role and responsibility divisions. Therefore, two additional literature case studies were executed to substance my assumption that a clear overview on role and responsibility divisions would not be possible.

The focus group discussion left me with a lot of interesting views and answers, however, the question of who was benefitting in heritage re-use processes could not be answered with the data generated in this research. Therefore, question 4 of the research proposal was omitted as well.

After the conduction of all four case studies, a cross-case analysis and a discussion with experts in the development field, I came to the conclusion that it is indeed impossible to get a clear overview on the role and responsibility divisions for large heritage re-use processes because there are too many stakeholders involved: These stakeholder have different perspectives, which means that there is not one ‘truth’. The roles have been changing during the projects and stakeholders changed their approaches multiple times. Furthermore, some stakeholders left the process, while others entered. These changes were mostly linked to changes in the context. Therefore, the methodology gave me enough insight to answer my research questions.

Additional findings

Additionally, the four case studies provided an interesting view on the manners used to deal with the complexity within these processes. The cross-case analysis revealed that the level of complexity within the collaboration can possibly be steered. This insight provided input for the discussion of this report, however, the discussed manners still need to be researched in depth to formalise the understanding of their contribution to the process.

Acknowledgements

In this part of the thesis I would like to take the time to thank the people who contributed to this research:

Firstly I want to thank the interviewees and the experts of the focus group for taking their time to explain the way these processes are being executed; for carrying me along their line of thinking and perspective; for being so pro-active in delivering the needed information and for being interested in my research.

Secondly I want to point out the contribution of four of my co-graduates as well:
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- Arno van den Hurk – representative Province Brabant – Den Bosch, date: June, 6th, 2016.

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APPENDICES

APPENDICES

CONTENT

** The summaries are only made available in the digital print of this thesis for the supervisors, due to confidentiality.*

A. Analysing models explained

1. Collaboration framework

Figure A.1. The collaboration framework explained (part of table 4.2.)

	Roles and responsibilities												
	Noordkade ontw	Erfgoedfabriek	Bouwbedrijf vd	Architecten Cie	Municipality V.	Monumentcare	Heritage agency	Retail developer	Leenders arch.	Air arch. & res.	Third Place	Cehave Landbo	Fakton
Analysing possibilities within possible zoning plan	A R			S	S								
Identifying risks and uncertainties	A R	A R	S					S					
Identify and attract potential users	A R	A			S								
Research aims of (potential) users	A R				A R								

LEGEND

R	Responsible
A	Accountable
S	Supportive
C	Consulted
I	Informed

Owner
Initiator
Producer
Regulator
Financier
User

Noordkade Ontwikkeling B.V. was accountable to stick to the zoning plan, or to formally apply for a change of use. In any case, the owner was responsible to analyse the possibilities within the current zoning plan. Architekten CIE assisted him in this analysis. Furthermore, the municipality was researching possibilities for the CHV terrain as well, as part of a greater vision for the two centres in Veghel.

Both owners were responsible to identify the risks involved and accountable for their decision making based on this identification. Noordkade Ontwikkeling B.V. was assisted in this analysis by the construction company and by his personal advisor who is a well-experienced retail developer.

Both owners were furthermore accountable for the exploitation of the project and thus for the attraction of users. The owner of Noordkade Ontwikkeling B.V. took a more initiating role in gathering the users with help of his personally network. The culture department of the municipality assisted, together with the project leader, by moving their cultural institutes to the complex.

The aims of the users were of importance for the municipality (as they subsidies these institutes) and of the owners. However, the owner of Noordkade Ontwikkeling B.V. took over this accountability of all stakeholders and actively communicated with the users (one-on-one) about their wishes; after a fist initiation by the project leader of the municipality.

Figure A.2. The complexity assessment framework explained (part of table B.2.)

Element of complexity	Example of issue	CHV	De Ploeg Part I	De Ploeg Part II	De Hallen	BK-City
Mission	Large number of constraints – legal, health and safety, security	++	o	+	++	-
	High level of interaction and interdependency with other projects	++	o	-	++	-

CHV, Veghel
The complex is located in an industrial area; environmental experts explained that many functions were not possible due to odor and noise nuisance and safety risks.
Due to a greater vision by the municipality and the amount of users involved, the process of the re-use of CHV had interaction with many other projects and agreements.

De Ploeg (part I)
The plans for De Ploeg in the first part of the discussed process were not elaborated enough to research the number of constraints into detail.

De Ploeg (part II)
Due to the location in a rural area, additional housing was legally not allowed.
Due to the specific function and the individual owner and initiator, almost no overlap with other projects existed.

De Hallen
Due to the inner city location, the city visions, the previous industrial use and the high values within the building, finding a new suitable function was found to be difficult due to many constraints.
Due to the long duration of the project, the lack of effective decision-making by the public parties and the inner city location, this project was dealing with many interdependencies and interactions with other projects.

BK-City
The redevelopment of the faculty of the TU Delft did not deal with many constraints, as the property was found suitable to house a residential function but was eventually transformed into a faculty. This is a much less invasive and less vulnerable function. Furthermore, the faculty was the only development project the team was focussing on, at that moment. There were no interactions and interdependencies with other projects.

B. Cross-case analysis

1. Comparison of the collaboration frameworks

	Literat.	Practice				
Activities		CASE 1	CASE 2a	CASE 2b	CASE 3	CASE 4
1. Diagnosing building state	O; P; U	O	O	I; O; R; P	I; R; P; U	P
2. Value assessment building	R; P	O; **R**	**R**	O; **R**; P	**R**; P	P
3. Preliminary assessing adaptation potential	I; O; U	O; R	I; O; P	I; O; P	R; P	P
4. Determining extension possibilities	R; P	I; O	O; P	I; O; P	P	P
5. Identify potential users	I; P	O	O	-	I	-
6. Assessing financial expenses and resources	I; O; F; P	**O**	**O**; **P**	**O**; **P**	I; **O**; F; **P**	I; **O**; **P**; U
7. Identify risks and uncertainties	O; F; P	**O**; P	**O**	-	**O**	**O**; P
8. Choose form of development	-	O; P	-	-	I; O; P	-
9. Attract financier	-	**O; F**	-	**O; F**	**O; F**	I; **O; F**
10. Acquire building complex	-	**O; F**	**O; F**	**O; F**	**O**; R; **F**; P	**O; F**
11. Gathering involved parties	-	**I**	-	**I**; O; R; P	**I**; R; P; U	**I**
12. Defining ambitions for several stakeholders	-	-	**I**; O; P; U	**I**; O; P	**I**	**I**; O; P
13. Scenario planning	O; P; U	I; O; P	O; P	-	-	I; O; P
14. Concept for development	P	I; O; **P**	I; O; **P**; U	-	O; R; **P**	**P**
15. First sketches (conceptual)	O; P; U	**O**; **P**	**O**; **P**	-	**O**; **P**	**P**
16. Research market need / synergies	R; F; P	O; P	O; P	-	-	O; P; U
17. Research attractiveness concept	-	I; O; **P**	I; O; **P**	-	-	**P**; U
18. Research competition field	-	**O**; P	**O**	-	-	-
19. Attracting potential users	I; P; U	**I; O**	**I; O**	-	**I; O**; U	-
20. Defining relationship building with context	I; F	O; P	-	O; P	I; P	P
21. Detailed diagnoses current building	O; P	-	-	-	-	P
22. Searching for stakeholders for development	P	I; **O**	-	O	**O**; P	I; **O**; P
23. Identifying revenues and expenses	F	**O; F**	-	O	O	**O; F**
24. Research legislation potential uses	R; P	O; **R**	O; **R**; P	I; O; **R**; P	O	**R**; P
25. Research legislation potential interventions	R; P	O; **R**	O; **R**; P	O; **R**; P	O	**R**; P
26. Analysing possibilities within possible ZP	R; P	O; R; P	-	O; P	O	P
27. Attract users	-	I; O	-	-	-	-
28. Research / discuss aims users	I; P; U	I; O; U	-	-	I; O; U	P; U
29. Preliminary design	O; P; U	**O**; **P**	-	**O**; **P**	**O**; **P**	**P**
30. Determine degree of interventions	O; F; P	I; **O**; P; U	-	**O**	**O**; P	**O**; F; P
31. Set up intervention plan for execution	P	I; O; **P**	-	O; **P**	O; **P**	**P**
32. Attract (additional) finances	-	**O**	-	-	I; **O**; F	-
33. Definitive design	O; R; P	-	-	O; **P**	**P**	**P**
34. Apply for permits	O; R	**O**; R; P	-	**O**;R; P	I; **O**	**O**; R
35. Identification of stakeholders for execution	P	**O**	-	**O**; P	**O**; P	P
36. Tender procedure	O; P	-	-	O; P	-	-
37. Set up and sign contracts users/producers	O; P; U	**O**	-	**O**; P	**O**	**O**; P
38. Research solutions for design challenges	R; P	I; **P**	-	O; R; **P**	O; **P**	**P**
39. Aligning project stakeholders	I; P	I	-	-	I; O	I

Table B.1. Roles linked to stakeholder activities (own table, based on research outcomes, 2017).

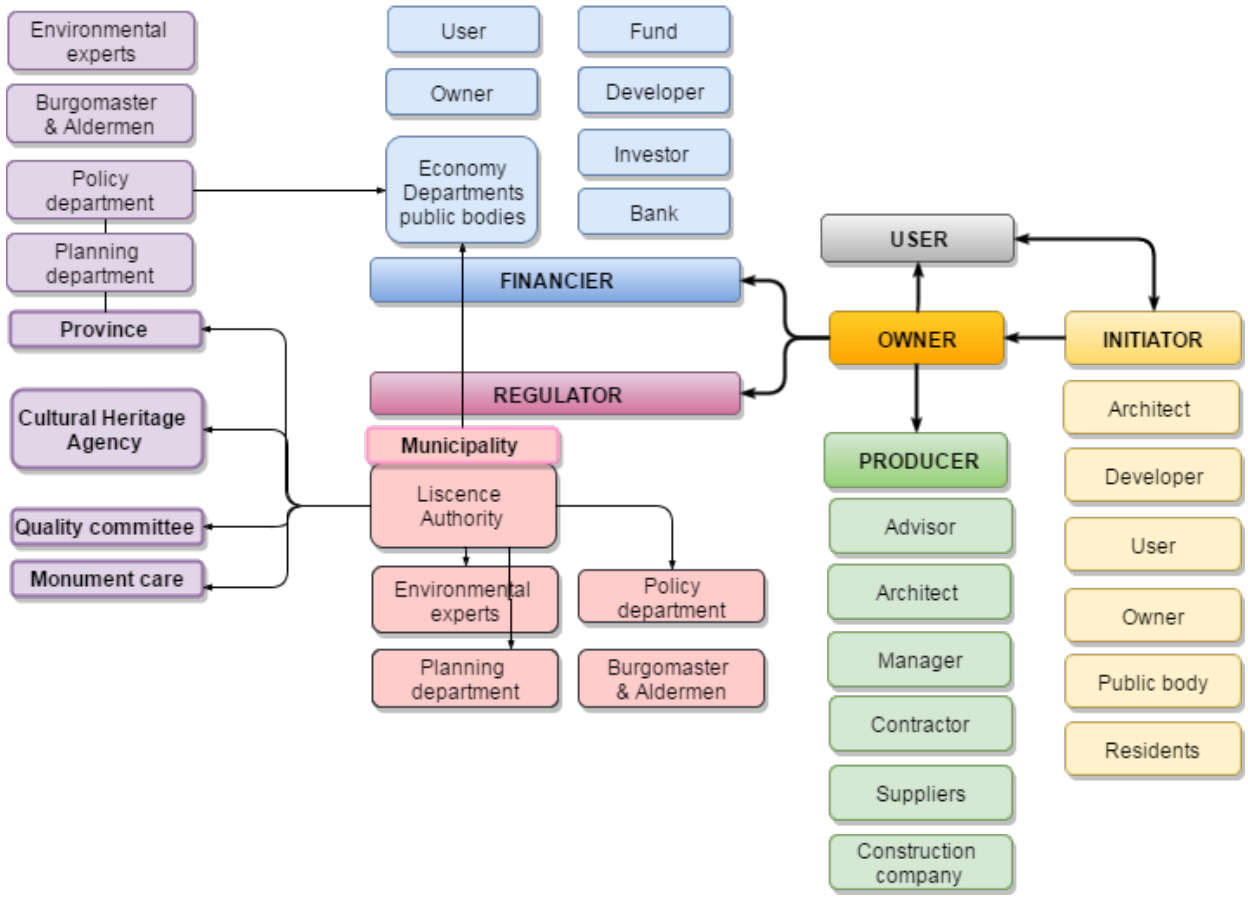
Element of complexity	Example of issue			CHV	De Ploeg Part I	De Ploeg Part II	De Hallen	BK-City
Mission	Long timescale			++	++	-	++	-
	Large scale, high value, high importance, high urgency			o	+	++	+	++
	Large number of constraints – legal, health and safety, security			++	o	+	++	-
	High level of interaction and interdependency with other projects			++	o	-	++	-
	High level of uncertainty – novelty, implications and side effects			++	+	o	++	+
Organisation	Lack of face to face communication between stakeholders			-	o	-	+	-
	Ongoing organizational restructuring			++	+	-	++	-
	High level of change in the organization			+	-	-	++	-
Delivery	Lack of common or appropriate project management method			++	+	-	-	-
	Lack of effective governance for decision-making			-	+	-	++	-
	Problematic communications in the project team			+	o	-	++	-
	Lack of clear or timely decision-making			-	++	o	++	-
	Lack of flexibility for the project manager to respond to changes			-	+	o	++	o
Stakeholders	Large number of stakeholders with different requirements			+	+	o	++	+
	Lack of commitment by key stakeholders			o	+	-	++	-
	Interference in the project by key stakeholders			+	o	-	++	-
	Lack of relationships with key stakeholders			o	+	-	++	-
	Problematic inter-relationships between stakeholders			++	+	o	++	-
	Competing priorities of stakeholders			+	+	o	++	o
	No shared understanding of the project aims			o	+	-	+	-
Team	Lack of leadership shown by project manager			-	++	o	o	-
	Cultural and other differences between stakeholders			+	+	o	+	o
	Low level of motivation of team			-	+	-	o	-
	Lack of project, technical and business experience in the team			o	++	-	+	-
Legend	**very high**	++	2					
	high	+	1					
	medium	o	0					
	low	-	-1					
Total				14/24	21/24	-11/24	36/24	-13/24
Average complexity (high, medium, low, non-existing)				med./ high	high	low	very high	low

Table B.2. The complexity assessment frameworks combined and ranked (based on Maylor, 2010, pp. 38-39 and Maylor, Vidgen, & Carver, 2008, pp. 19-23).

C. Focus group documentation

1. Relation structure general

Figure C.1. The general relation structure (own image, 2017).



2. Roles and responsibilities

ROLES

The owner: Owns the real estate asset, is the contracting authority and therefore makes the end decisions in the process. The owner earns his right for the decision-making through the ownership of the building. He can mandate this power to another role. He is also responsible for the long-term maintenance of the building.

The regulator: Tests the plan against the legislation in force. The regulator can restrict the project in order to guard public values and to safeguard quality norms. The ambition of the regulator is based on a vision on city, provincial or national level. Boundaries are set for the quality of the end product, the preservation of heritage, the added value of the building and function for the neighbourhood and city, safety issues and social needs. The consequences of the development have to be analysed thoroughly in order to set the appropriate standards. The regulator has regulation as power tool to fulfil its ambitions.

The producer: Only has an executive role: he produces the building to the wishes of the owner and/or user, within the limits of the regulator, with the (economic) help of the financier and the initiator. This role includes setting up the statement of requirements and executing it in the best way possible. The producer role includes a lot of knowledge and expertise about heritage re-use developments and a network of stakeholders that are specialised.

The financier: Finances the project. He sets the boundaries for his investment with corresponding frameworks and preconditions. The financier finances the project whenever the ambitions of the project are in line with these boundaries. In order to set an own ambition, the adaptation potential and state of the building is analysed in a financial way, to make a first assessment of the financial returns possible and the involved risks within the project. Subsequently, the market potential and market risks are researched, which give an indication for the return of the investment. The financier has the investment budget as powerful negotiation tool in the process.

The user: Eventually uses the developed building, and pays back the investment to the financier in the long-term. Whenever the user is present in the initiative phase he can explain the ambition and define the function(requirements). The ideas, knowledge and experiences of the user can then be integrated in the conceptual design. The user can be involved in increasing the support base and attracting stakeholders for the development from an early basis, due to the long term commitment to the project and the end result. This speeds up the process.

The initiator: Takes the initiative of the development. The role of the initiator includes conveying the passion for the project. The initiator takes the initiative out of personal interest and shares this enthusiasm with potential stakeholders. This way, a group of interested stakeholders can be formed rather naturally. The role includes gathering financial resources, creating a support base for the new development, getting residents and users involved and aligned and searching for solutions for specific challenges in the process.

RESPONSIBILITIES (Nieuwenhuis, 2003-2010; Zwikael & Smyrk, 2011)

Whenever multiple stakeholders are involved in the same activity, it is interesting to understand the way in which they work together within this activity. Nieuwenhuis (2003; 2010) indicated five responsibilities that have to be fulfilled in construction processes in the RASCI model: RASCI is an abbreviation for Responsible; Accountable; Supportive; Consulted; Informed.

Responsible: This stakeholder is responsible for implementation. The responsible is held accountable by the stakeholder who is accountable for the task. It is either the stakeholder who is carrying out the work himself, or the one that has the work performed by contracted stakeholders.

"A responsibility arises when a role is based on a formal agreement by the relevant entity to participate in certain activities." (Zwikael & Smyrk, 2011, p. 29).

Accountable: This stakeholder has the (final) responsibility; he is competence and approves the result. The accountable must be able to form the final judgment, have veto power. There is only one person Accountable.
"An accountability arises when a responsibility is subject to agreed rewards/penalties. An accountability must be accompanied by one or more authorities (powers to take specific actions or make particular decisions). Without authorities, accountabilities collapse into responsibilities." (Zwikael & Smyrk, 2011, p. 29).

Supportive: This stakeholder is supportive for the result. The supportive role is similar to the consulted role; however, this stakeholder is less attached to the project.

Consulted: This stakeholder provides direction. This person shall be consulted before decisions or actions are made (obligatory). This is two-way communication.

Informed: This stakeholder will be informed about the decisions of the progress, achievements etc. This is one way communication.

When these responsibilities are added to the preliminary collaboration model, it becomes clear who should be doing what at which moment. In the preliminary collaboration framework, the responsibilities should be inserted as R, A, S, C and I.

References

Nieuwenhuis, M.A. (2003-2010). The Art of Management (the-art.nl), 978-90-806665-1-1, 2003-2010.

Zwikael, O. & Smyrk, K. (2011). Project Management for the Creation of Organisational Value. London: Springer-Verlag.

Collaboration framework	I	O	R	F	P	U
Initiative						
Diagnosing current building state	R	A			R	
Value assessment building / complex : cultural, historical, architectonic	R		A			
Preliminary assessing adaptation potential	A				R	
Determining extension possibilities	R	A				
Identify potential users	R					S
Assessing financial expenses and resources in combination with risks and uncertainties		A		C	R	
Advice on best form for development					A	
Attract financier	A	R		I		
Acquire building complex		A				
Idea forming						
Gathering involved parties	R					
Defining ambitions for development for several stakeholders	R					
Scenario planning	R	A	C			
Setting up concept for development	R	A			S	
First sketches (conceptual)		A			R	
Feasibility						
Research market need / synergies	R				R	
Research willingness of potential visitors / attractiveness concept	R				R	
Research competition field	R				R	
Attracting potential users	R	A				S
Defining relationship of building with other buildings and functions		A	R			
Detailed diagnoses current building state		A			R	
Searching for stakeholders with specific knowledge and experience, suitable for development	A				S	
Identifying revenues and expenses		A				
Researching legislation potential uses		A	C			
Researching legislation potential interventions		A	C			
Analysing possibilities within possible zoning plan		A	C			
Identifying risks and uncertainties		A				
Identify and attract potential users	A					S
Research / discuss aims of (potential) users	R					C
Preliminary design		A			R	
Refining ideas						
Determine degree of interventions	S	A			R	
Set up intervention plan for execution		A			R	
Attract (additional) finances	A	R		C		
Definitive design		A			R	
Contract negotiations						
Apply for permits		A	C		R	
Identification of stakeholders for execution	R				S	
Tender procedure		A				
Set up and sign contracts users/ producers	R	A			I	I
Research solutions for design challenges	R				R	
Aligning project stakeholders	R					

Resultaat Focusgroep 19 April – Erfgoedcomplexiteit.

Bespreking overzicht rollen en verantwoordelijkheidsverdelingen - 16:00-17:30, Julianalaan 134, Delft. 01.w.620

Aanwezig:

Wim Haarmann: Erfgoedfabriek.
Ilse Rijneveld: Gemeente Delft, monumentenzorg, advies
Erik Jutte: Stad in de Maak Rotterdam
Tjeerd Deelstra: Stichting De Witte Roos
Thijs Evers: Onafhankelijke Vastgoed Adviseur
Notulist: Judith Wolswinkel
Gesprekleider: Rosan Pallada

1. Het stromingsdiagram (relatieschema) is onduidelijk:

- Te academisch opgezet, niet handig voor mensen uit de praktijk. Tjeerd kent mensen die hier niet eens naar willen kijken;
- Onduidelijk wat de rollen zijn en wat de actoren zijn;
- De initiatiefnemer /hero komt nog niet zo goed naar voren;
- Het plaatje benadruk de complexiteit, wat in de praktijk niet zo hoeft te zijn: Nu is het een heel compleet overzicht. Maar niet alle actoren die in dit schema staan hoeven altijd betrokken te zijn bij herbestemmingsprojecten in de praktijk;
- Het draagt niet bij aan het geven van een duidelijk overzicht, vooral niet voor een leek. Een goed overzicht zou voor iedereen leesbaar (moeten) zijn;
- Sommige actoren hebben meer invloed dan andere, misschien de blokjes een gewicht geven. Of inkleuren aan de hand van motivatie;
- De gevoelswaarde die bij monumenten komt kijken is nu doodgeslagen in het schema. Daardoor is het nu niet duidelijk wat hergebruik van monumenten nu complexer maakt dan gewone hergebruik of nieuwbouw processen: Het zijn gewoon een aantal blokjes meer;
- Je zou de waarde van cultureel erfgoed middenin het schmea kunnen zetten en alle stakeholders kunnen interviewen over hoe je dat ziet? Dan zie je de complexiteit en het gedeelde belang.

2. Het verantwoordelijkheidsraamwerk is duidelijker:

- Dit geeft wel een goed overzicht van de stappen die doorlopen moeten worden;
- Het is vrij volledig, al mag er meer gefocust worden op de waarden van erfgoed en het (achterhalen van het) verhaal;
- Het geeft aan dat meerdere rollen gezamenlijk taken kunnen voldoen; dit kan leiden tot fricties maar ook tot mogelijkheden voor samenwerking;
- Het geeft verder aan dat elke rol meerdere taken vervult.

3. Over het algemeen:

- Het overzicht is heel erg vanuit een management perspectief opgezet;
- Het is nog niet goed te begrijpen waar je moet beginnen met kijken;
- De vraag is of dit soort processen te sturen zijn. Uit de schema's blijkt dat dit niet werkt met blauwdrukken. Bij deze aanpak zie je dat het gewoon niet goed past op erfgoed (ivm de waarden);
- Voeg 'waarde' toe aan de schema's; daar draait het allemaal om;
- Kijk naar de specifieke drive waarom heritage hergebruikt wordt;
- De motivatie van de stakeholders zou nog veel inzicht kunnen brengen in de gezamenlijke ambitie, maar ook in de botsende motivaties.

Oplossingen hoe om te gaan met complexiteit in erfgoed herbestemmingsprojecten

Wat maakt erfgoed herbestemmingsprojecten complex?

1. Erfgoed waarden respecteren, of zelfs sterker maken, is een spannend proces, dat moet je met elkaar aandurven;
2. Actoren spreken verschillende talen (de één praat over rendement, de volgende over de noodzaak van behoud of de sociale waarden). Er moet dus nog een vertaalslag gemaakt worden;
3. Capabele mensen vinden voor het proces is lastig (zij moeten vaak op inhoud overtuigd worden; maar dit hangt sterk van de (persoonlijke) context af);
4. Er is veel geduld / een lange adem nodig;
5. Financiering blijkt vaak nog lastig;
6. We zitten zelf in een leerproces.

Oplossingsrichtingen

1. Kartrekker: Er moet gezocht worden naar een kartrekker / initiatiefnemer met lange adem die het process stuurt.

2. (Koop)voorwaarden opstellen: De kartrekker zou gevonden kunnen worden door een duidelijke (koop)voorwaarde op te zetten: Door het verhaal van sociale meerwaarde kun je de mensen filteren die je wil. Het is belangrijk bepaalde competenties en criteria eraan de gewenste betrokken actoren te hangen.

a. Een belangrijk onderdeel is een goed exploitatieverhaal; dan gaat de financieerder ook mee. (Er zijn meerdere initiatieven geweest waarin studenten worden ingezet om plannen te maken dit lijkt goed te werken).

b. Hiervoor moet er eerst een initiatiefnemer zijn die deze (koop)voorwaarden beschrijft en op zoek gaat naar de kartrekker (en andere actoren).

c. De selectie van mensen die samen een team moeten vormen is lastig. Sommige mensen kun je gewoonweg niet kiezen (bijvoorbeeld een wethouder).

3. Focus op het voortraject: Beweging creëeren en mogelijkheden uitzoeken helpt erg bij het vinden van de juiste mensen en bij het vlugger doorlopen van het process. Tijd en geld zijn hier wel belangrijke middelen voor (in de beginfase).

a. Socioloog / mediater toevoegen aan het begin van het proces: Het verhaal uitvinden en daaruit een gemeenschappelijk belang bepalen met de rest van de stakeholders. Dit is de vertaalslag die gemaakt moet worden.

b. Overlegtafel v.s. hierarchische structuur: Iedereen moet uit zijn eigen 'silo' komen, iedereen aan een tafel. "Jij wil het redden; jij wil het kopen, waar moet het dan aan voldoen?". Dus geen structuur met hierarchie maar een tafel.

4.Veranderende kijk op regelgeving: Herbestemming is relatief nieuw en regelgeving loopt achter. Als je voor wil lopen, loop je altijd tegen bestaande regelgeving aan. Vanuit de publieke instanties moet meer gekeken worden naar wat het doel is wat men wil bereiken.

a. Tijdelijke functies makkelijker maken: tijdelijk gebruik (bijvoorbeeld organisch ontwikkeld) totdat iemand gevonden wordt die daadwerkelijk de kar trekt. Tijdelijk gebruikt helpt bij het bij elkaar brengen van mensen om de initiator te vinden.

b. Mogelijkheden in bestemmingsplan: Om leegstand tegen te gaan en initiatieven te vergemakkelijken zou het rijk een percentage van de leegstand moeten bestempelen voor maatschappelijke initiatieven: Een percentage leegstaande panden weggeven aan hen met een goed idee, maar niet zo'n grote portomonnee. Hier kan weer gestuurd worden op de inhoud en het behoud van het monument.

i. Rotterdam: In Rotterdam geld er een nieuwe regel dat initiatiefnemers met een functie mogen komen voor het gebouw, waarbij even niet gekeken wordt naar het bestemmingsplan. Het haalbare plan heeft dus voorrang op de heersende regelgeving.

ii. SER ladder: Eerst leegstand opvullen, dan bijbouwen; maar dit geld alleen in het buitengebied en kan per gemeente verschillen.

c. Private initiatieven:

i. Stichting Sint Jacobs Godshuis: Verhuurd monumentale hofjeswoningen aan alleenstaande vrouwen voor een zeer lage prijs. Deze prijs dekt nog niet eens de onderhoudskosten van de woningen. Ze kunnen zo goedkoop worden aangeboden doordat de stichting subsidie biedt: Deze gelden komen voort uit giften en sponsorschap.

ii. De Organisatie Vrijkoop in Nederland, die is afgeleid van het initiatief Community landtrust Brussels: Hier kopen grote investeerders deze gebouwen op, aangezien zij een lange termijn investering zoeken met een sociaal maatschappelijke achtergrond (zoals pensioenfondsen); blijft het gebouw in eigendom van de investeerder (en blijft de functie vaak gelijk); maar gelden de gebruikers als actief participerende huurders – 'ze huren van zichzelf'. In deze vorm zijn vele juridische mogelijkheden te vinden. Door de langdurige investering kan de business case over een zeer lange periode worden uitgestrekt, wat de financiele haalbaarheid erg verhoogd.

iii. Vergroten betrokkenheid buurt en gebruikers: Dit kan ervoor zorgen dat de kosten aanzienlijk verminderd worden (Voorbeeld: Stad in de Maak).

D. Case study interviews

1. Semi-structured interview protocol

Heritage re-use processes - Interview protocol TU Delft

The following parties are interviewed:

1). Erfgoedfabriek Province North Brabant: Project Leader CHV
2). Erfgoedfabriek Province North Brabant: Project Leader De Ploeg
3). Noordkade Ontwikkeling: Owner CHV complex
4). Municipality Bergeijk: Project leader
5). Neighbourhood council Bergeijk
6). Wooninc.: Previous owner De Ploeg
7). Bruns B.V.: Owner De Ploeg
8). Architecten Cie: CHV & De Ploeg
9). Leenders Architecten: CHV
6). Municipality Veghel:Project leader
11). Cultural Heritage Agency: De Ploeg
12). Cultural Heritage Agency: CHV
13). Diederendirrix: Architect De Ploeg
14). Municipality Veghel:Alderman

1. Short introduction

Heritage re-use project are called complex processes as stakeholders are dealing with more uncertainty, extensive risks and many involved parties. Over the years, many attempts have been made in order to decrease the complexity and to increase the insight and transparency within the process. This research focusses on the collaboration between stakeholders in heritage re-use projects and tries to understand the relationships between stakeholders, the division of roles and responsibilities and the allocation of risks and yields during the process.

2. Position questions

1. What was your personal motivation to start this project?
    a. Did you achieve your personal goal?
    b. How? Or Why not? What was the most important reason that your goal was or wasn't achieved?
2. Did you have any experience with heritage reuse projects before?
    a. Which ones?
3. When did you start this project (date, year) and when did you finish (date, year)?
4. How did you get involved in the project?
5. What did you find the most interesting part of this project?
6. Do you determine this project as a success? Why?
    a. What were success factors of the project?
        i. Who was responsible for this success according to you?
    b. What were bottlenecks within the project?
        i. Who was responsible for these specific bottlenecks according to you?

3. Process

1. Can you give me a short overview on the process?
    - How did it start?
    - What were important steps that are taken?
    - What environmental / physical, social-cultural and political aspects in the context have influenced the project?
2. What was your main role/task in the re-use process?
    - Which tasks did you execute, when?
    - Where were you responsible for? (end-responsible / execution / etc.)
3. Which tools did you have available to achieve your goal(s)?
    - When did you use them?
    - Were they successful?
4. Were you content with your role, contribution and influence in the project?
    - Why (not)?
5. How did you handle bottlenecks in the process?
6. What did you invest in the project?
    - Time
    - Energy
    - Money
    - Other, …
7. What did you get out of the project?
    - Financial return, …
    - Social return, …
    - Improved (company) image, …
    - Other, …
8. Are you content with this end result?

4. Collaboration

1. With whom did you collaborate mostly?
    - How did this collaboration go?
    - What were their main tasks?
    - Where lay interdependencies?
2. Did you feel like you had enough power to execute your tasks?
3. Were you content with the roles, contributions and influences of other actors during the process?
4. Were future users or current residents involved in the process?
    - In what way?
    - Did it influence the outcome of the process? In which way?
    - Did you collaborate with them personally (or your company?)
        - How did you perceive this collaboration?

5. Concluding questions

1. Do you have anything else that you would like to contribute?
2. Do you know any other parties that I should contact for interviews or documentation

2. Summaries of conducted interviews

The summaries are only made available in the digital print of this thesis meant for the supervisors, due to confidentiality.

HERITAGE RELOADED

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Graduation master thesis
Pallada, R.
June 30th, 2017
TU Delft

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