Incubators lead the way
The strategic value of cultural heritage as incubator in urban area development

Masterthesis Spatial Planning
Radboud University
Nijmegen School of Management
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July 2017
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Faculty of Management Sciences
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Date: July 2017
Word count: 39,350
Trust is the best medicine for complexity

Confusius (551-479 before Christ)
This is my Masterthesis about the factors which make an incubator function of cultural heritage possible. The phenomenon ‘area incubator’ is the research subject. An area incubator brings forth, steers or fastens a larger urban area development. When an incubator function of redeveloped cultural heritage is successful, it could create types of temporary and permanent value. My interest lies particularly in these two aspects. During my master program I have conducted research for my internship about the redevelopment possibilities for monumental buildings into a hotel. It implies a relative higher investment to invest in redevelopment of existing buildings instead of new developed buildings, especially dealing with cultural heritage. In the Netherlands there is an oversupply of cultural, industrial and religious heritage that lost its function over the years. Redevelopment can serve as a solution, however redeveloping cultural (monumental protected) heritage can be a complex process. In many cases the redeveloped cultural heritage is part of an area development. From a spatial planning point of view I wondered what the strategic value of these cultural heritage objects is and how they can add value to a larger development.

With this research I hope to contribute to the knowledge of an incubator function of cultural heritage and to give insight about the value which can be created by redeveloping cultural heritage for area development. By researching the decisive factors knowledge can be obtained about the crucial conditions for an incubator function.

I would like to thank my supervisor, professor Linda Carton, for the guidance and support throughout the process of writing this Masterthesis. There were many challenges along the way, but they were solved with the help of Linda Carton. Next to this I would like to thank Rogier Claassen, Tom Daamen, Wouter-Jan Verheul and Jesse Wellink for their advices and information about researching incubators. Lastly I would like to thank the respondents in the cases who were willing to cooperate in this research. I came to the results in this research because of the willingness and honesty of these respondents.

Guus Meijer

Nijmegen, July 2017
During the last decennia many buildings have lost their function due to technological, social, economic, cultural and spatial developments. Cultural heritage objects within an area could be used to create ‘area incubators’, which brings forth, steers or fastens a larger urban area development. The phenomenon area incubator can be described as: “a (in the near future) physical present temporary or permanent public accessible function of a building with a strong relation regarding the area development in which this function establishes, which is in an early stage conscious and careful deployed by an area developer, with the aim to steer the course and progress of the area development” (Wellink, 2009, p.31). Area development in the Netherlands has changed over the last decennia. Municipalities were forced to a more facilitating role as a result of the economic crisis in 2008 which showed the financial risks of their land policy. Large scale projects were delayed or cancelled resulting in financial losses for land owners.

Several policymakers and initiators of developments have tried to use the ‘strategic value’ of area incubators to kick-start these delayed or cancelled area developments. An successful initial development could create a new identity and supports new developments in the area. An area incubator could be the initial development, in which an investment in one building could bring a larger area into uplift through social and economic spin-offs. But the projected incubator function does not always succeed, it is very difficult to plan an incubator. Many uncertainties exist beforehand about how and if an incubator function will unfold. Incubator projects could lead to large costs overruns, administrative disputes and disappointing economic and social returns. Area incubators have much to do with identity, therefore it is interesting how this could be used for vacant cultural heritage in the Netherlands. This research tries to identify the parameters which determine whether or not an area incubator is successful. Furthermore, it tries to explain to what extent an area incubator affected the process and outcome of urban area development and by doing so identifying which types of value are created. This resulted in the main research question:

“What are the factors in the redevelopment of cultural heritage to succeed as area incubator for urban area development and what types of temporary and permanent value are created?”

The literature identifies several parameters which determine the success of an incubator function. These parameters can be divided into four categories: contextual factors, redevelopment factors, development expectations and building identity. Contextual factors are ‘constant’ factors which are difficult to influence, consisting of: location, accessibility, market, time, financial resources and land values. They influence the feasibility of a business case for (re)development. The first redevelopment
factor affecting the incubator function is the role of actors, consisting of: risk bearing party, attitude of the area developers, affected stakeholders and target group. Other redevelopment factors of the area incubator are: the position of power, relation between area incubator and program, physical presence in process and connected renewal. The third category ‘development expectations’ consists of four parameters: the desired impact, economic and social spin-offs, intrinsic use of project and value creation and capturing. The last category ‘Building Identity’ consists of the monumental status and the symbolic value as well as the image of the building and area. These are all parameters for success of area incubator function. Projects with cultural heritage have some (potential) failure factors: they are characterized as slow moving and have a high contextual and organizational complexity. These parameters affect the process of area development which in turn results in the effects after development. These are the realized spin-offs and added value in the area.

The degree of success is subjective, in order to research the success multiple perspective of shareholders, stakeholders and target groups are included. Shareholders are directly involved in the development, in many cases they are financially involved as well and operate as risk bearing parties. Stakeholders are indirectly involved in the development, they have little influence but have to deal with the effects of the development. The target group are those for whom the project is redeveloped. The results are compared with parameters identified in the literature. In this research four cases are explored: ‘Zuiderziekenhuis’ in Rotterdam, ‘Cereol’ factory in Utrecht, Soapfactory ‘Rohm & Haas’ in Amersfoort and ‘De Hallen’ in Amsterdam.

The ‘Zuiderziekenhuis’ in the south of Rotterdam is an iconic building, known throughout the district. Many people have an emotional binding with the former hospital, which was almost demolished. Impact Vastgoed bought the former hospital and area with plans to demolish and built housing estate. The former hospital is now being redeveloped by Impact Vastgoed and BOEi into a school and housing. BOEi is a non-profit organization which preserves cultural heritage. These new functions are less connected to the neighbourhood, the realized housing seems too expensive for the residents in the coextensive social housing. The effects are difficult to estimate, as the project has just started the realization phase. However, there are signs that a process of gentrification has started as a result of this project. The Cereol factory in Utrecht has been redeveloped by BOEi. Co-creation and citizen participation were used to develop the area. This resulted in a mixed cultural program in Cereol with a school, a cultural centre, a bar and a library. The connected renewal is very high, which contribute to the success of this project. A well elaborated urban plan was set up before the contracting. The building burned out in 2008, after which BOEi decided to take over the redevelopment which resulted in trust among stakeholder in the development even after the financial crisis.
Rohm & Haas was the initial development within the organic area development in the district ‘Oliemolenkwartier’ in Amersfoort. Rohm & Haas is redeveloped and owned by BOEi. Nowadays the factory houses creative economy functions and a bar. The successful redevelopment created identity for the area, trust in redevelopment and a rise in land values. The redevelopment of ‘De Hallen’ in Amsterdam was such a success that two million people visited the first year. This changed the identity. Former initiatives to redevelop ‘De Hallen’ resulted in a lot of resistance from the neighbourhood. This resulted in the foundation TROM cv, which redeveloped and owns ‘De Hallen’. The exception is ‘Hall 17’, owned and redeveloped by the non-profit organization Stadsherstel NV which redevelops cultural heritage in Amsterdam. At the beginning ‘De Hallen’ was redeveloped for the neighbourhood, but after redevelopment it became a tourist attraction which results in tensions with the neighbourhood.

Redeveloping cultural heritage within an area development is no key for success. The contextual and organizational complexity is very high and these projects are characterized as slow moving, which makes it difficult for market parties to redevelop. It are these sort of projects when a social entrepreneur gets involved. A social entrepreneur is a non-profit organization, which in these cases has as first objective to preserve cultural heritage. This stakeholder has knowledge of how to redevelop cultural heritage (building technical), which public funds are available, how the create a feasible business case and has relatively little financial pressure. These factors combined make the social entrepreneur suited as central actor in these complex project. Aside from their experience and track record of successful redeveloped cultural heritage, they now how to exploit the strategic value of heritage. In urban areas where the area development is approached integral, they incorporate the incubator in the plan in order to reach connected renewal. The connected renewal was one of the most important success factors in the cases of ‘Zuiderziekenhuis’, ‘De Hallen’ and Cereol. In the case of Rohm & Haas there was with the organic development approach more space for the incubator function: other buildings in the area were degraded as well. The created social and economic spin-offs resulted in trust in development. Other buildings took over the incubator function after Rohm & Haas. The approach of the social entrepreneurs BOEi and Stadsherstel NV as well as architects with knowledge of redeveloping heritage played a key role in all of these projects. Other actors, such as area developers and the municipality stuck to their core business. They do not always recognize the strategic value of heritage and have difficulty dealing with the complexity or the slow moving process. Cultural heritage has social and economic value, it can lead to increasing attractiveness of an area. The social entrepreneurs are needed in the process, because they have experience in recognizing and using the strategic value and could create permanent value for an area.
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1. Introduction

1.1 Background
Many Dutch municipalities face a high vacancy rate of cultural heritage, such as monumental housing and protected village and city scenes (CBS, 2017). Instead of just a financial problem for the real estate owners, vacancy is becoming a social problem because vacant real estate decays and thereby has a negative influence on the surrounding area. As a result of technological, social, economic, cultural and spatial developments more and more buildings have lost their function. Examples are jails, factories, churches, schools, monasteries, state monuments and governmental heritage (Janssen-Jansen, 2012). In order to prevent these negative developments in urban areas, the next decade Dutch inner cities have to deal with the increasing rezoning issues. Additionally the Dutch municipalities face a changed role in area development. As a result of the financial crisis, Dutch municipalities shifted from a participating role to a facilitating role. In many municipalities this resulted in a more organic oriented area development. Not just the role of the government changed, the market also had to adapt to the changed circumstances. The financial crisis showed that real estate was too much presented in terms of monetary units, based on financial values in the past (Claassen et al, 2012, p.53). This led to an overvaluation of real estate. Owners of real estate experienced decreasing demand, ultimately leading to structural vacancy of offices, shops and cultural heritage. The overvalued and vacant real estate needs to be dealt with in order to prevent negative developments. When doing nothing or selling is not an option, there is a need for other development strategies.

Due to the financial crisis Dutch municipalities involved in active (urban) area development has suffered substantial losses. Large scale development projects, important for the improvement of the overall spatial quality of cities, were delayed or even cancelled. In order for urban area development to continue these development projects, a smart use of scarce resources is necessary (Claassen et al, 2012, p.53). A popular strategy for area development is ‘organic development’. Small scale initiatives by commercial parties takes place within the area without a detailed urban plan from government institutions. Instead, these government institutions have a broad vision for the area. However, the facilitating role of the municipality and the organic area development practices create a certain dilemma, because a broad vision has to be realized by small scale initiatives, which are difficult to steer (Zaadnoordijk & Claassen, 2011). For each project or initiative the municipality has to decide whether it suits within the vision for an area. The practice of area development shows that the first initiative is very important within an area development, it gives an example which can be followed by other projects (Ibid). If the initiative or project is successful, it will create support and trust for other
Because of this the first redeveloped building within an area development is crucial and could shape the future for the whole area development. This strategy is called ‘scaling up’ and is focused on, (value) development of an area through investing in a single building. This strategy does not only consider the development possibilities of one building, but also the relation between the building and its urban environment (Claassen et al, 2012, p.53). Some examples of successful ‘scaling up’ projects are the ‘Schieblock’ in Rotterdam and the ‘Westergasfabriek’ and ‘NDSM-pilot’ in Amsterdam. When scaling up, cooperation of real estate owners and the local government is crucial. In many cases owners experience difficulties in getting cooperation from the municipality. Moreover, other real estate owners are skeptical about the initial development. These owners tend to wait, until the success of an initial development is proven. If so, they want to profit and attach their building to the (value) development in the area. Scaling up starts when one building, which is developed, is serving as incubator for surrounding buildings (also described as catalyst, puller or flying wheel).

The term ‘incubator’ is used in biological, medical and business disciplines, but the term incubator can also be used in relation to urban area development (Hoogendoorn & Peeters, 2005). Incubators can be described as: “a building that has an integral contribution (physical, economic, social) to the development of a larger urban area” (Claassen et al, 2012, p. 54). The incubator should have at least one of these three contributing factors to the development of a larger urban area. To prevent confusion with the term ‘business incubator’ – a subject which is escorted in its first live phase in an artificial manner under controlled circumstances – Wellink (2009) used the term ‘area incubator’ for the definition of incubators in urban area development. The phenomenon area incubator is described as: “a (in the near future) physical present temporary or permanent public accessible function of a building with a strong relation regarding the area development in which this function establishes, which is in an early stage conscious and careful deployed by an area developer, with the aim to steer the course and progress of the area development” (Wellink, 2009, p.31). This definition takes into account both function, time (temporary and permanent) and the strong relation of the incubator to the area development, steering its course and progress. This definition gives the most complete description of the phenomenon area incubator and will be maintained throughout the research.

The theory of the area incubator concerns the development of a larger area, initiated by investing in a single building. Although cultural heritage has a positive effect on the attractiveness of cities, households tend to have a marginal willingness to pay for cultural heritage (Duin & Rouwendal, 2012). Therefore, especially the identity of a place and its cultural heritage can be used to add value to an urban area development. The history of a place can be seen as a sustainable material for a
rooted development concept (NEPROM, 2016). In this matter, vacant (monumental) cultural heritage can create the uplift of an urban area. In addition, it can possibly start a process of gentrification through the created economic spin-offs. Gentrification is a process of residential rehabilitation as a aspect of economic, social and spatial restructuring (Smith & Williams, 1986). But the projected incubator function does not always succeed, sometimes it can lead to administrative disputes, large cost overruns or disappointing economic and social returns (Verheul, 2013, p. 53). Even though the success of an area incubator is not assured, there is still little research available about the required factors for redeveloping cultural heritage in an urban area development.

Most of the known examples of area incubators focus on industrial heritage such as dockyards or factories. Cultural heritage with a monumental status could be considered prominently suitable to serve as an area incubator because of the cultural identity of these buildings and in many cases the central location in the city. ‘Cultural Heritage’ is a broad concept, but it can be seen as an expression of the ways of living developed by a community which is passed on from generation to generation. This includes custom, practice, place, object, artistic expression and value. Cultural heritage is often expressed as either ‘intangible’ or ‘tangible’ cultural heritage (ICOMOS, 2002). Examples of tangible cultural heritage are artifacts, buildings and landscapes. Although there are several types of cultural heritage buildings, this research focuses on (monumental) industrial and cultural heritage. Industrial heritage can be defined as: “the remains of industrial culture which are of historical, technological, social, architectural or scientific value” (Loures, 2008, p.689). In the Netherlands, four types of monumental heritage exist: national monuments, provincial monuments, municipal monuments and protected city- or village scenes (Rijksdienst voor het Cultureel Erfgoed, 2017). It has yet to be researched what role cultural (monumental) heritage plays in a larger urban area development. The strategic value of heritage could serve as an area incubator for a larger urban area development. Cultural heritage serving as incubator could add value to area developments, since cultural heritage has a positive effect on the attractiveness of cities. In addition households have a marginal willingness to pay for cultural heritage. The created values by area incubators can differ, in both time (temporary and permanent) and the way they are perceived by different actors involved in area development.
1.2 Research aim

The aim of this research is to give insight in the factors of cultural heritage to succeed as area incubator in area development.

The research will be practice-oriented. There are several parameters for heritage to succeed or fail as area incubator. With a comparative casestudy these parameters can be measured for an area incubator. This research focuses on cultural heritage serving as an area incubator in a larger urban development. Especially cultural heritage could serve as area incubator, as these building are centrally located and have in most cases a positive identity and a certain appeal. Cultural heritage is a broad concept, but this research deals with (monumental) cultural and industrial heritage. By conducting interviews, data can be obtained and researched in order to determine the factors for a successful area incubator and how cultural heritage can add value to area development.

Redeveloping cultural heritage could be the new beginning of area developments which were delayed or cancelled. In literature several parameters are identified for incubator success or failure, this research will contribute to the knowledge of these parameters by introducing new cases. The outcomes of the projected incubator effects can vary and therefore the strategy of scaling up can be difficult to deploy in urban area development. The knowledge which is obtained could contribute to introducing successful area incubators in delayed or cancelled area developments. Next to this the research could contribute to the knowledge about how cultural heritage could be used in urban area development. This contributes to investments in redevelopment of vacant cultural heritage and to a municipal policy for kick-starting urban area developments through investments in a single property.

1.3 Research questions

The main research question is:

“What are the factors in the redevelopment of cultural heritage to succeed as area incubator for urban area development and what types of temporary and permanent value are created?”

Sub research questions:

1. What are the factors for cultural heritage to be successful as area incubator?

   o What is the effect of the location on the success of the area incubator?
   o What sort of spin-offs are created by the area incubator?
   o What is the relation between the area incubator and the program of the urban (re)development?
   o How does the monumental status of heritage enable or constrain the area incubator?
What is the strategic value of cultural heritage in area development?
What is the role of identity for an area incubator?
What is the effect of the redeveloped cultural heritage serving as area incubator on the process and outcome of the urban area development?

2. What types of created value can be distinguished and what is the perception of added value by the involved actors in area development projects?

3. To what extent is permanent added value created by an area incubator in the urban area development and how does this differ from temporary value?

1.4 Research relevance
The research relevance can be divided into social relevance and scientific relevance.

Social relevance

The contribution of this research in addressing social problems such as vacancy of heritage. If the success factors of cultural heritage serving as area incubator are identified, it could lead to a kick-start in urban area developments which were delayed or paused. Vacancy of heritage increased ever since historic cultural buildings lost their function due to different societal developments. The areas where these vacant heritage properties are located may experience social or economic problems as a result of vacancy. Especially cultural heritage located in urban areas is attractive for redevelopment because of market conditions. However, redevelopment processes of cultural heritage are very complex and many developers lack the knowledge and experience for redeveloping heritage. If the necessary factors for an successful area incubator are identified, it could add value to the urban (re)development of a larger area and thereby add value to an urban area. Redeveloping cultural heritage also contributes to preserving historical and cultural identity. The research includes the (monumental) identity of buildings and how this identity influences area development. Many people have a certain connection to cultural heritage because of their identity and therefore it can connect to their social values. If cultural heritage objects are redeveloped, it could give these buildings a new function for centuries. The lifetime of redeveloped monumental heritage is relatively long, what can result in a sustainable development.

The cultural heritage in this research is located in urban areas. Residents have to deal with many effects of the redeveloped objects, but do not always have influence in the redevelopment program. The decision making process can be top-down or bottom-up resulting in different residential involvement. Both types of residential involvement are included in the cases in order to compare the processes and their effects on the area development. Their perspective of value is researched in
order to obtain knowledge about how the redevelopment can be connected to the urban area in terms of physical, social and economic aspects.

The research also focuses on the degree of temporary or permanent added value by area incubators. If these values are identified, it could give insight to what extent the area development depends on an area incubator. In this way the research contributes to adding value to area development on the long term as well as social or other non-financial effects of area incubators. Some of the area incubators have an ambition of solving social problems, such as a negative image of a district. Furthermore, the way in which area incubators can contribute to addressing these social problems is considered relevant for society.

**Scientific relevance**

There is not much scientific knowledge about the phenomenon area incubator, especially applied to different sorts of cultural heritage in relation to area development. There are several examples of industrial heritages serving as area incubator, but cultural heritage (with monumental status) is less common in examples of area incubators. In this paper both will be included as research subjects. The physical structure, history and identity of these types of heritage are different, which in turn could lead to different area incubator functions and effects. Processes of area developments with cultural heritage are very complex because the initial investments is higher, finding new feasible uses is difficult, the (in)angible benefits are uncertain and the lengthy duration of the process makes it vulnerable to changes in the external environment (Baarveld et al, 2013, p.172). This results in difficulties in aligning the various stakeholders and creating commitment in the redevelopment. This research describes these processes in order to give insight in how these factors could be addressed.

In addition, there is not much literature on how a single real estate property influences its urban environment. Koppels et al. (2011) showed the financial relation between real estate in terms of vacancy and rents. Researchers and policymakers focus in area incubator projects mainly on the economic spin-offs, as these are most easily measured with quantitative research. These numbers provide insight in the financial yield and the investments in area incubator projects. Nevertheless, only the economic spin-offs is not enough to prove success of an area incubator, as there are many aspects such as the effects of identity and social spin-offs which determine spillovers (Verheul, 2013, p. 55). One of the conditions for an area incubator function to succeed, is that it should result in physical, social and economic developments in the surrounding area (Claassen et al, 2012, p.56). Verheul (2012, p. 31) identifies several other parameters, such as symbolic meaning of the building and providing identity. All parameters identified from the literature will be challenged by interviewing the different involved actors.
This paper will contribute to the knowledge of redeveloping cultural heritage within area development. There are several types of incubators described in literature, but it had yet to be researched how these types take place within different area developments. Two sorts developments are research subjects: organic area development and integral area development. Each approach has different characteristics and a different strategy (PBL, 2012, p.8). Integral area development has a high level of organizational and financial interconnectedness (Buitelaar, 2012). Organic area development on the other hand is more adaptive, developments run through each other. The initial development plays an important role (PBL, 2012, p.8). This paper will contribute to the literature on how a single real estate property and the potential incubator function influences its urban environment.

1.5 Overview

In the second chapter the theories on area incubators and area development are discussed. First the area development in the Netherlands will be briefly explained, including the way the roles of actors have changed over time. Several types of area development are distinguished, influencing the roles of actors and their goals. Also the essence of area development is described. After this the theories on redeveloping cultural heritage and area incubators are discussed. All together this will form the theoretical framework. The chapter concludes with the conceptual model.

The third chapter ‘Methodology’ describes how this research uses methods and research strategies. First the strategy is explained. The following paragraph explains the research methods and how the data is collected and analyzed. The chapter concludes with the validity and reliability of the research.

Chapter four ‘Case Survey’ describes all the selected cases. Firstly the case selection is discussed. The cases were selected in a structural manner. The second paragraph introduces each case and the actors which are involved in the projects.

In the chapters 5 – 8 the empirical results of the cases are described and analyzed. The results are analyzed in the same manner: all of the identified parameters in the literature are discussed, including the way actors experienced the importance of these parameters for an area incubator success. An actor analysis is made in order to help interpret data from these different actors. The actor analyses contains an analysis about the interests and positions of power of all (in)directly involved actors.

Chapter 9 contains the conclusion. Here the research questions are answered. The second paragraph contains a critical reflection upon this research. The chapter concludes with a paragraph about recommendations and possible future research.
2. Theory

2.1 The practice of area development in the Netherlands

Area development lacks a clear definition in the literature, but De Zeeuw (2011) handles a process oriented description: “Area development is the art of connecting functions, disciplines, parties, interests and money flows, in order to (re)develop an area”. The term ‘area development’ has become an all-purpose word such as for example ‘sustainability’. Ever since the start of this century the field of area development has rapidly been expanding in science. To structure the discourse of area development the difference between public and private has been guiding the debate. The question what public and private parties contribute to area development – both in terms of content and process – has determined the course of the debate in the Netherlands.

Land development models or strategies serve three main objectives (Van der Krabben & Needham, 2013, p.775). In the case of a desired development, land must be made available for development. In many cases this requires a form of land allocation, a transfer from passive to active landownership. Active landowner are those willing to develop their land, while passive landownership involves actors which are not taking steps to market or develop their land (Louw, 2008, p.70). The second objective is to recover either completely or at least in part the costs of the public works. The primary condition to recover these costs in area development is a positive balance between the created value by development and the costs to develop a location. The third objective is to capture part of the created value that occurs as a result of change of the land, thus creating higher values or higher building densities (Van der Krabben & Needham, 2013, p.775). This third condition is however much less accepted and subject of debate in many countries (Alterman, 2009). To achieve these goals value, different land development models can be applied. They vary in its relation to planning, land assembly allocation and most important cost recovery and value capturing strategy.

Van der Krabben and Needham (2013) discuss in their paper ‘Public land development as a strategic tool for redevelopment: Reflections on the Dutch experience’ the pros and cons of public comprehensive top-down planning models as opposed to public planning-led quasi market models and private market models. Each of these planning strategies will be discussed with their main goals and pros and cons. A common strategy in the Netherlands is that of public land development, which involving public purchase, ownership and preparation before the land is released for actual development to the private sector (Van der Krabben & Needham, 2013). This strategy guarantees three goals for municipalities: areas are developed according to public policies, full cost recovery of public works can be realized through the sale of building plots and it captures (part of) the increased value of land after change in use (Ibid). Public land development is the core strategy of municipalities...
to achieve their planning goals. The municipalities play an active role in acquiring (agricultural) land, servicing land for future building and supplying it to home builders and other users. By adopting this role municipalities have to take financial risk by first acquiring land, and after development benefit from higher returns by selling the plots. The main reason for adopting this role in area development is that “they want to steer development in a pro-active way and that they want to earn money to finance the costs of public works like streets, sewage systems and public space that are necessary for new urban development” (Needham, 2007, p. 181).

This planning strategy is called ‘the comprehensive top-down model’. This model can be defined as “Public purchase and development of land, in order to guarantee building developments according to public policies, to realize full cost recovery of all public works via the sale of building plots and to capture part of the surplus value of the land” (Van der Krabben & Needham, 2013, p.776). Value capturing was part of the strategy, the profits from land development (in addition to full cost recovery) were used to subsidize less profitable development projects elsewhere. This model was used by most municipalities in the period of prosperity (’90-’08) in planning, however the global economic crisis in 2008 has significantly affected planning, area development and redevelopment in the Netherlands (De Zeeuw, 2011; Van der Krabben & Needham, 2013, p.775). At the end of this period of prosperity the first projects start to strand. With the economic collapse and decreasing market demand high valued projects started to have large delays or crashed in failure. Area developments suffered substantially from 2008 onwards. The property- and land market is tightly coupled with the economic conjuncture and also with the possibility to acquire money on the financial market for new projects (De Zeeuw, 2011, p.407). The acquired building plots for development became a financial risk for municipalities and developers as the impact of the financial crisis and economic recession started to affect the demand for building plots. Many Dutch municipalities lost a lot of money with the public land development. Deloitte Real Estate Advisory shows that all Dutch municipalities might have lost over aggregated three billion euros on public land development, because the demand for building land has dropped as a result of the economic recession (Deloitte Real Estate Advisory, 2011).

The ‘public planning-led quasi market model’ can be defined as “Public purchase of land (and vacant properties) in a specific area and subsequent sale of that land to the private sector, in order to enable a (re)development program for that specific area” (Van der Krabben & Needham, 2013, p.776). In this strategy the municipality does not (re)develop the area, but sells plots with certain demands for (re)development programs. The value of the surplus of land after development is captured by market parties. Public parties still steer development by negotiating terms when they sell the plots. In contrast to the comprehensive top-down approach the planning-led quasi market models operates in
a proactive plan-led area approach, involving the public purchase of land and vacant properties in a
specific area and afterwards sale of that land to the private sector, in order to enable a
(re)development program for that specific area (ibid). In this model semi-public development
companies are often allowed to operate outside the local established planning rules, in order to
guarantee (future) developments in that area. The recovery of investments of public works are
accounted for by developers through developer contributions when building permits are issued.
Value capturing is usually not a goal for the municipality.

Another land development strategy in the Netherlands is that of private development. The private
market model can be defined as “Private purchase of land (and vacant properties) in a specific area,
in order to enable a (re)development program for that specific area” (Van der Krabben & Needham,
2013, p.776). This model relates to a more passive planning approach, whereby zoning is used in
order to prohibit certain developments from taking place. It involves the private purchase of land in
order to realize a (re)development program for a specific area. Value capturing is one of the priorities
for private parties, municipalities mostly have interest in realizing planning goals for the area without
too much financial involvement.

2.1.1 Planning strategies
The Dutch planning tradition is known for its integral and large scale approach of area development
(PBL, 2012, p.8). Integral area development has no unequivocal definition in the literature. Bruil et al.
(2004, p.397) give a summary in which integral area development leads to physical and functional
change in an (urban) area. The degree of integrality is determined by the degree to which the
existing area is changed and in which several aspects such as spatial scale levels, changes of
ownership, preconditions and expertise from different policy sectors, interests of involved parties,
physical-spatial aspects, and technical, legal, political, economic, demographic, ecologic and social-
cultural conditions are approached as one issue. In many cases this integral approach was carried out
by an active land policy by the municipalities in the Netherlands until 2008. However, after 2008
municipalities began looking for alternative planning strategies with less of even none financial risks
and on a smaller scale because these large scale projects were paused of even crashed in failure (De
Zeeuw, 2011). The integral area development is compared with the organic area development in
order to clarify the differences and pros and cons of these strategies.

Integral area development is not necessary obsolete as planning approach, nor is organic
redevelopment the solution to all problematic area developments from the financial crisis onwards
(PBL, 2012, p.8). Integral area development remains very applicable for inner city areas with a high
demand for housing and real estate, just as areas with dominant infrastructural issues (ibid).
However, in general organic development holds some advantages over integral area development. Firstly, organic development includes (end)users (early) in the development and management of the city leading to more diverse urban areas both in appearance and program. Secondly, areas are developed gradually in several timeslots instead of one timeslot, which results in the spreading of future transformation tasks. Finally organic development provides more opportunities to deal with uncertainties (and the associated risks) about demand for housing and real estate. Large scale area development has more difficulty to cope with these uncertainties as it is less adaptive, because of the relatively large organizational and financial interconnection setbacks can easily affect the entire area development (Buitelaar, 2012). Organic area development can be defined as: “the sum of relatively small scale (re)developments, with an open-end process without blueprint, in which developments and management run through each other, with a dominant role for the end-users and a facilitating role for the government” (PBL, 2012, p.8). In organic (re)development the initiatives play a central role in the developments. The first initiative is potentially very important as it affects other developments, it can create a basis and thereby trust in new developments.

This strategy also implies a change in roles of actors and power relation between market and government. The government plays a more facilitating role in organic development: it oversees small scales initiatives and keeps track of the process. The government needs to clear as much obstacles as possible for private and small scale initiatives and where possible introduce incentives to stimulate initiatives (PBL, 2012, p.47).

2.1.2 Success factors area development
Success depends on contextual circumstances, success for one area development does not always lead to success for another area development. Many studies have tried to capture success and failure factors in area development. In ‘Nederland Boven Water’ (2006) by Peter van Rooy et al. these factors for success or failure are divided into twelve aspects of area development. Each aspects is subsequently discussed below:

- Urgency

Only when there are societal tensions in an area that needs to be remedied urgently, then enough vigor can exist to jointly come to a realization of a plan. If this urgency has a tendency to result in area development, then it is necessary to get it on the political agenda (Van Rooy, 2006, p.32). Public parties are crucial, if they are not open for initiatives private parties can only try to get an initiative on the political agenda through the media or a formal citizens initiative.
• Commitment

If area development want to materialize, commitment is necessary from all involved parties. Because of the crucial role of public parties, this applies mostly for local governments executives.

• Representatives

At the end of the area development plan process, the representatives are the ones who take the formal decision about the content of the area plan, the public role in financing and organization of development.

• Inhabitants

Inhabitants and users are usually the most involved with an area as it is their living environment. Because of the democratization and an higher average education level. Inhabitants are more often directly sitting at the table with governments and market parties, co-creating or participating otherwise.

• Market parties

Market parties do not only play an important role in financing the realization of the area development, they can also provide solutions and strategies because of their knowledge about the practice and a level of reality.

• Problem definition

There are signals about problems and these signals are important to come to a problem definition. A clear and broadly supported problem definition is important in order to generate incentives that lead to a solution. If not all actors agree on the problem definition, this may cause administrative disputes.

• Interests

All involved parties have at least one interest and consequently something to gain. It is important to constructively bind as many interests as possible in area development in order to come to a mutual value creation (Van Rooy, 2006, p.34).

• Designs

Behind interests are values. Designers are capable of translating values from involved parties into a representative physical design. This can be the result of interactive sessions in which inhabitants
have their say. The design can hereby represent public pride. Inhabitants are often rooting for full realization of a plan which they made together with architects instead of offering resistance against a plan made by the municipality. It may be interesting for area developments to gain this cooperation from the inhabitants.

- **Process**

Area development is a living story, the level of complexity is very high. The success of an area process starts with installing a project team and creating unity in the organization. They are the most involved and are the contact persons.

- **Land**

Land and specifically landowners are decisive in realizing area development. They have much influence on the process and outcome of the area development. It depends however on their type of ownership, being passive (no interest in developing) or active (interest in developing).

- **Financing**

Area development means in many cases that several parties contribute to financing the realization of an integral area. This increases the complexity compared to financing by one government or market party. The different parties have to negotiate who pays for what. The municipality is the organizing actor in an active planning approach; they negotiate with landowners and developers (one has to be landowner in order to start the conversation about development) about the negotiable developer contribution (Van Rooy, 2006, p.36). These developers have their own development business case and investment model.

### 2.2 Process of area development

In this paragraph the process of area development is described. First, the financial and organizational fundamentals of area development are explained. Secondly the different phases which are distinguished in the process are addressed. Area incubators take place within these phases, so the objects and developments in each phase are analyzed.

#### 2.2.1 Essence of area development

In area development it is common that the government cooperates with market parties, because in most cases multiple transactions of land are necessary. The government sets the public legal conditions and market parties are used to designing and realizing plans and real estate for area development. The question in this process is which agreements are required, at which moment and how the collaboration is realized. The arrangement of our public space has changed over the last
years. The increased complexity and large number of involved actors affected both the pace of the realization and quality of many urban plans (Ministry of VROM, 2011). More collaboration between private and public actors as well as better adjustments of plans should address these effects. This is done by area development, leading to:

- different interests in an area that are better matched with each other;
- public and private functions which are better adjusted;
- realizing an integral business case in which the costs and profits in the framework of the land exploitation can be balanced (Ministry of VROM, 2011).

Creating and capturing value

Area development is a combination of land exploitation and plan development. When these elements strengthen each other it will result in a qualitative and financial added value. In some cases it is necessary to approach developments integral, in order to manage the increasing complexity and the need to keep a qualitative living environment affordable. For this it is necessary that the public space is arranged most efficiently and optimized for the quality of the public space in order to strategically position the real estate. This leads to a higher sale- or investment value, which in turn positively contributes to the exploitation of the land through land allocation (Ministry of VROM, 2011). This makes area development an ongoing process of drawing and calculating in collaboration with the involved actors. The feasibility is much influenced by the collaborated urban plan, especially in complex inner city developments.

2.2.2 Phases area development

The phases of area development can be divided into four phases: initiative phase, feasibility phase, realization phase and exploitation and management phase. Each phase is concluded with a project document. In these documents the involved parties make agreements and determine starting point for the next phase.

Initiative phase

During this phase the desirability of an area development is examined. In order to speak of an area development, the initiative phase should result in an approved plan by the stakeholders. These initiatives may result from a land- or real estate positions and market proposals without position (unsolicited proposal), coalition programs (provinces or municipalities) or from policy ambitions (Ministry of VROM, 2011, p. 13). The initiative phase is concluded with an intention agreement.
Feasibility phase

The feasibility phase is an intensive and complex phase of the area development. Three sub phases can be distinguished. First there is the definition phase from the side of the government defining the desired result of spatial planning and other public legal conditions. The design phase from the side of the commercial party, with the product of design within the set conditions determined in the definition phase. The government develops the public components of the area development. The last subphase is the preparation phase. The product of this phase is the plan for the realization of the design.

This division is important because especially with large urban projects many parallel activities take place. Structuring these activities becomes easier when dividing them into three sub phases. Calculating and designing an urban plan are mainly simultaneously activities during the feasibility phase. In area development this is an iterative process, in many cases the first idea turns out not to be feasible (Figure 1).

![Diagram of Feasibility Phase](source: Ministry of VROM, 2011, p. 14; own adjustment)

One of the obstacles which developers have to overcome is create a feasible project, and by doing so adjusting their ambitions. Many projects had to be adjusted to the changed market circumstances resulting from of the financial crisis in 2008. This is particularly applicable for cultural heritage developments, as their initial investments are higher than greenfield developments (Baarveld et al, 2013, p.172). The feasibility phase is concluded by an realisation agreement.
Realization phase

This phase is focusing on the area development as agreed upon in the feasibility phase. At the beginning of this phase it is clear which actor does what and when. The sharing of responsibilities, the (risk) management and an organization setup during realizing the area development are of great importance. Beside the preparation team, designers and policy makers that are involved in the realization phase, also the involved legal counsel for the procedures around land routing are involved. Before transferring land a valuation by an independent expert should be made if no transparent procedures were followed (Ministry of VROM, 2011, p.14). Transport documents need to be ready for the solicitor etc. The phase is concluded with an exploitation-management agreement.

Exploitation and management phase

The area development is realized in the phase of management. It comes down to management and maintenance, until the moment decisive development make new urban plans necessary. In this phase the different projects within the area development are handed over to the ultimate users or owners: the houses to the buyers, the commercial spaces to investors or private owners, the public space and green spaces to the municipality.

2.3 Cultural heritage in area development

Heritage is found everywhere in all cities. In a short period cultural heritage has become the core of cultural policy and education, national awareness and historical notions (Frijhoff, 2007, p.7). Heritage is both a cult and an industry. This may result in a product, but also as a value and a way to express the physical ways of the past. Nowadays the term ‘cultural heritage’ can serve several objectives, such as the connection between past, present and future or support group identity. Moreover, it helps to create public or private policy focusing on the material culture elements for processes of identity forming (Frijhoff, 2007, p.63). Especially the latter objective of cultural heritage is key in area development. Not only can cultural heritage be used to add value in development, it may also play an important role in the sense of identity for inhabitants. Residents in each city, region or country can be proud on their cultural heritages, as it gives unique value to a place. It can bring personality and raise a form of sentiment. Next to this cultural heritage has economic value, it attracts tourists which contribute to the city and country economy. Despite these advantages it is difficult to precisely define the economic, functional or cultural value of heritage (Smit et al, 2014, p.9).

2.3.1 Value of cultural heritage in area development

In area developments with heritage the focus shifts from historical inner cities to other areas, such as obsolete factory sites which are enclosed by residential areas, former military bases, harbor areas and dock yards, train station locations and other areas with obsolete facilities (Smit et al, 2014, p.9).
These types of heritages cannot be seen separate from their urban context, it is this ensemble of buildings which provide character for the area by cultural and historical value. Cultural heritage (both protected and unprotected) should legally be included in the spatial planning, but how actors in area development deal with cultural heritages is just one of the interests. This depends on the value parties attach to heritage, but despite this uncertainty there are successful projects of heritage in area development such as the NDSM-pilot and Westergasfabriek in Amsterdam. The ambition was not the consolidation of the existing heritage, but to let the heritage contribute to the economic or cultural value appreciation of the respective areas (Smit et al, 2014, p.10).

Preserving existing cultural heritage could add value in urban redevelopment projects, this has already been acknowledged by many stakeholders (Baarveld et al, 2013, p.163). The reason for preservation of cultural heritage differs, cultural historians proclaim the need to preserve the past for future generations, environmentalists see redevelopment as an aspect of sustainable development and social scientists emphasize the relevance of heritage for the identity of a place (Ibid). Cultural heritage can offer opportunities for tourism, leisure and cultural activities and improves the satisfaction of people living in the neighbourhood (Bizzarro & Nijkamp, 1997; Aarsen & Brons, 2010). Despite the benefits for all stakeholders in urban redevelopment projects, many conflicts arise during the planning and development phases (Baarveld et al, 2013, p.163). Projects are characterized as slow moving and practice shows that commitment among stakeholders can be difficult to obtain. Moreover, these urban redevelopment projects tend to have a high contextual and organizational complexity. This results in the need for collaborative interaction between mutually dependent public and private parties and a long timeframe (Bult-Spiering et al, 2005). In many cases the existing heritage is an integral part of redevelopment strategies, acting as an inspiration or catalyst (Murzyn-Kupisz, 2012). The challenge is to find a suitable function for the heritage and to make these projects financially sound.

The changing roles in area development is also reflected in redevelopment of cultural heritage. Governments are faced with shrinking public budgets, while the need for investments to preserve cultural heritage increases (Baarveld et al, 2013, p.164). This results in governments which are increasingly dependent on private parties to achieve their ambitions. In urban redevelopment projects decisions are often dominated by an economic attitude as a consequence of these various developments (Ibid). This attitude is criticized by conservationists, they state that the economic attitude neglects the essential cultural values of heritage. Stakeholders make use of investment appraisal techniques such as cost-benefit analysis. This analysis is frequently used to support investment decisions regarding heritage preservation. Particularly methods that analyse the non-market value are interesting, also known as the positive externalities, as this is an important
component of the economic value created by cultural heritage. Baarveld et al. (2013, p.164) state that especially committing stakeholders in cultural heritage projects is difficult to achieve:

“Many efforts have been undertaken to develop financial and planning tools to align various stakeholders and to create commitment on the restructuring. Planning approaches are based on the idea that urban developments are shaped through the interaction of many stakeholders and tools focus on the ongoing dialogue among all stakeholders, storytelling and role-playing. Interaction is needed to reach agreements over a long-term vision, short-term actions and organizational and financial settlements. Despite the large body of publications, tools and approaches, in practice there is still little understanding of why commitment among stakeholders is hard to achieve in urban redevelopment projects involving built cultural heritage and how this could be resolved.”

Precisely this commitment of stakeholders is needed to kick-start urban area development in impoverished or problematic areas. Thus it is important to shed light on the stakeholders and how they grade and determine the ‘strategic value’ of cultural heritage. Cultural heritage can add value to area development but also can make area developments more complex. Initial investments in redevelopment are higher than greenfield projects, feasible new uses are difficult to find, there are many uncertainties at the start of the process about the benefits (such as spin-offs) and the process is vulnerable to changes by the external environment (Baarveld et al, 2013, p.172).

“Urban redevelopment projects in which reuse of cultural heritage plays an important role appear to be especially complex as: initial investments are far higher than in greenfield development; finding feasible new uses that contribute to the ambition to preserve the unique character is difficult; the tangible and intangible benefits are uncertain at the start of the process and are hard to express in financial terms; and the lengthy duration of the redevelopment process makes it vulnerable to changes in the external environment. The roles of stakeholders, the type of cooperation and the presence of a cooperation agreement vary.” (Baarveld et al, 2013, p.172)

This quote shows that it is difficult to express the benefits from cultural heritage in area development, as these are uncertain at the start of the process. It is important how these uncertainties are dealt with by different actors.
Role of monumental status

The monumental status of heritage can enable or restrain redevelopment, both effects will be discussed. Marlet et al (2015) show in their research ‘The rise of the old city’ that monumental inner cities are popular among both tourist and the working class ever since the beginning of this century. The demand for housing increased, which is mainly beneficial for the surrounding municipalities of monumental cities. This is the result of the limited growth possibilities within these cities because of building restrictions and planned new housing. Monumental cities and their surroundings grow relatively fast in comparison with non-monumental cities (Marlet et al, 2015, p. 78). The result is that housing prices in monumental cities have increased, also compared to the surrounding municipalities that profit from the attractiveness (Vermeulen et al, 2016). The old city is attractive, especially for high educated creative people who appreciate a historic inner city, because they have a need for authenticity (Florida, 2002). The aesthetic value of monuments plays a role in the effects they have. These aesthetic scenes take form in the eighties and nineties in old real estate located in the inner city, resulting in a process of gentrification (Smith & Williams, 1986). Cultural and public functions have more value for a city with historical heritage than the same supply of functions in a new building (Santagata, 2002). This combination of history, culture and public functions has also a practical function: young people like to meet in an aesthetic environment of the monumental inner city (Jacobs, 1961). Many of these monumental cities are located in the Randstad where there is the biggest chance of work and where there is a high level of city facilities, contributing to the attractiveness of these cities (Marlet et al, 2015, p. 82). Built monuments also have one positive effect: an average resident in a monumental building is willing to pay €60,000,- more for the housing (Ibid). However, housing in a monument is difficult to realize.

The restraints for monumental buildings establish within the redevelopment process and are mostly experienced by real estate owners and developers. Monuments are protected by law against demolition or restructuring. The ‘monument law 1988’ forces municipalities to abide the guidelines for adjustments to monuments (Rijksdienst Cultureel Erfgoed, 2013c). The monument division of each municipality judges if certain redevelopment restructuring is possible and if it affects the cultural historical value of the object. This requires a certain flexibility from the municipality, it can be of great importance for a feasible business case if the structure of the building is allowed to be adjusted. Monuments clearly are of value for cities, they attract tourists and the working class. Households tend to have a marginal willingness to pay for housing in or near monumental buildings (Marlet et al, 2015, p. 82). On the other hand monumental rules can be experienced as an obstacle in the redevelopment process, particularly if the developer lacks the knowledge or experience in addressing these obstacles. This could lead to a frustrated development process.
2.4 Area incubator
The urban area development strategy in which an area incubator is introduced is called ‘scale-up’. The essence of this strategy is that it tries to create a (value)development in an entire area through investments in one single property (Claassen et al, 2012, p. 53). Policymakers and promoters try to realize this ambition, but despite some successes the practice shows that the ability of scaling up is difficult to estimate. Promoters often speak of iconic projects which ‘places the city on the world map’. This sort of area development strategy is also called ‘urban boosterism’ (Dovey, 1999; Sklair, 2006). This strategy consists of developing large projects which solve as many social and economic problems as possible. Policymakers and researches want to know how this is possible in order to use the spillovers of these projects as problem solvers. But there can be some critic notes regarding the feasibility of these economic, social and cultural spillovers by large iconic projects. Jane Jacobs (1960) wrote about planned buildings in the name of the city, but which never reached the projected effects for the inhabitants of the city. There are more critical researches regarding large scale projects, like Peter Hall (1980) who described the planning disasters, while Flyvbjerg et al. (2003) described the large costs overruns, the democratic deficit of involved elites (Swyngedouw et al., 2002), the entanglement in the decision-making process (’t Hart, 1994) or when the projected social objectives of a project in relation to its urban area are lost (Majoor, 2009). These critics show that projected spin-offs of large projects does not always lead to the effects which were estimated.

Several researches have tried to grasp the characteristics which differentiated an area incubator(also known as catalyst, puller or flywheel). An area incubator does not only fulfill its own function, but is of importance for a larger area. Zaadnoordijk & Claassen (2011) researched individual buildings with an incubator function in area developments. They identified seven effects coming forth from the first developed building in area development: changing of identity and imago, creating trust, indication of quality, model function, selection, attracting public and an increase of land values. The effects of a first developed building depends on the characteristics of the area, for example a negative or positive association with the area. This highly depends on the status and image of the area. The characteristics of the building are also of importance, this depends on the use of the building. How these characteristics are handled in the development process influences the effect.

A study by Wellink (2008) shows that there are three ideal types of area incubators: a ‘dynamo’ which brings forth a temporary movement in the area development, a ‘key’ which is the precursor for the eventual program and an ‘anchor’ which makes the program distinctive and fixes on the identity of an urban area. The types of area incubators can differ on six parameters (Table 2). These parameters determine to what extend a building serves as incubator and what types of incubators can be distinguished.
The first parameter is that of the actors bearing the risks of the development. The variable ‘risk bearing party’ can be defined as: “The actor which bears the risks of development, they steer the development and are the most important actors in creating an area incubator” (Wellink, 2008, p.23).

In most cases the area developer is the key actor, but there is a difference in who has the risk bearing role in the development (developer, shared or external) and what the relation to the developer is.

The second parameter is “the relation between the incubator and the program of the area development” (Ibid). The area incubator could be an isolated function, part of the area development program or complement to the area development program. The third parameter is the position of power of the area incubator, which can differ from a temporary function early in the process to permanent added value by a function and add value also after development. Wellink (2008, p.17) defines the position of power area incubator as: ‘The position of an area incubator within the area development and the added value for the (process) of area development’. The fourth parameter is the desired impact: “The effects an area incubator should bring forth to the process and program of the area development” (Wellink, 2008, p.24). Area incubators are used to achieve certain goals, such as to accelerate or enrich the area development. The fifth parameter is the physical presence of the incubator: “The moment the area incubator is introduced to the area development which can take place at the beginning, middle or end of the development” (Ibid). The moment of the physical presence of the area incubator has an influence on the area development. The last parameter is the attitude of developers and can be defined as: “The attitude towards the involved actors and the area development, which is shaped in the organization of the process” (Wellink, 2008, p.25). This attitude can be facilitating or (jointly) steering.

Hoogendoorn & Peeters (2005) divide these area incubators in different phases of area development, such as the parameter of physical presence. They state in contrast to Zaadnoordijk & Claassen (2011)
that a building can serve as area incubator in different phases of the area development, not just as a first redevelopment in an urban area. They illustrated with the help of the adoption curve for innovation by Rodgers (1983) that area incubators because of their identity attract certain target groups (Figure 2). In the first phase, innovators and early adapters get drawn to an area because of a specific building. As times passes and the realized program increases, more and more users are drawn to the area (‘Majority’). In this phase the existing area incubator and its identity are changing or replaced by a new identity, until the last phase begins. These phases do not have clear boundaries in both time and building volume, but each development phase of an area contains different types of users and thus different identities (Claassen et al, 2012, p. 56).

As Hoogendoorn & Peeters (2005) divide area incubators in different phases of redevelopment, Claassen et al (2012) makes a distinction into two specific values for an incubator in urban area development. Some buildings create a temporary value in area development, whereas other building throughout a development serve as incubator in an urban area. The second value makes a distinction between area incubators with product- or process value. Some area incubators have a clear product value, defined as a brand and attracting certain target groups which is profitable for other real estate owners in the area. With the pull effect of one building, other function start to emerge in close range. On the other hand there are area incubators with process value. These buildings can be clearly defined in the beginning of the area development, and afterwards are inseparable connected to the area and become assimilated to a bigger urban ensemble (Claassen et al, 2012, p. 57). Buildings with this process value and strong connection to the urban environment add permanent value to the
urban area development. An example is the effects of the NDSM-pilot in Amsterdam-North on its urban environment, which nowadays cannot be traced back to the pilot alone because of all the developments in the urban area (Ibid).

The image- and identity forming of an area development can be influenced by a single building (Van den Berg & Zandbelt, 2005). A building can serve as a pioneer in an early phase or as an anchor in a later stage attracting investors. However, the building as area incubator is difficult to place in a specific phase of area development. In most cases urban area development is an ongoing process in which a building is used as a deliberate intervention by parties. But a building only serves as area incubator when it makes physical, social and economic developments happen in the surrounding urban area (Claassen et al, 2012, p.56; Verheul, 2012). These developments as a result of developing a single building are called ‘spin-offs’. One of the most known international examples is the Guggenheim museum in Bilbao, which created all sorts of spin-offs also referred to as the ‘Guggenheim effect’. Since the Guggenheim was built the city attracted large amounts of international tourists (Gospodini, 2010). Plaza et al. (2009) showed that not only economic spin-offs occurred, but the Guggenheim museum also contributed to the development and spatial achievements of the local art sector. These spin-offs can be identified as the social spin-offs.

Guggenheim is an example of an urban icon. Some (monumental) buildings have so much identity that they could be labeled as ‘urban icon’. Verheul (2012) identified several factors for the meaning of an building to be an urban icon and to have an ‘incubator’ effect in a larger urban area development. First, the building is of symbolic significance and has postcard value. Secondly, it implies to have a sacred significance. Cities have gone from production environments to places where people want to experience and give meaning to their heritage in the current experience oriented economy. Thirdly, they provide identity and give a feeling of public pride. Finally, the area incubator creates economic and social spin-offs. These four functions of an urban icon cannot be seen separated from each other and often occur together. An area incubator does not necessarily contain all of these functions, but for creating social and economic spin-offs it should have iconic value. Verheul (2012) states that iconic projects should add something new to the city, but at the same time should be connected to the spatial and social-cultural identity of a place.

The incubator function of iconic projects can be provoked, especially in less developed neighbourhoods, by starting a process of ‘gentrification’ (Verheul, 2013, p.51). Iconic projects can purposely be used by local governments or market institutions to create an upwards development in the city or neighbourhood (Doucet, 2010). The arrival of an area incubator creates new activities, new houses are being built with new (mostly richer) inhabitants and a new flow of tourism emerges.
This leads to more investments by the local middle class, resulting in a more attractive appearance, which in turn increases the demand for housing and more investments in renovation and new buildings. This whole process is called gentrification. The next quote by Smith & Williams (1986) shows that residential gentrification is linked to several other developments:

“In reality, residential gentrification is integrally linked to the redevelopment of urban waterfronts for recreational and other functions, the decline of remaining inner-city manufacturing facilities, the rise of hotel and convention complexes and central-city office developments, as well as the emergence of modern “trendy” retail and restaurant districts ...” (Smith & Williams, 1986).

This quote shows the value of the process of gentrification for the city. It could lead the uplift of neighbourhoods through investments in the area by renovations and new buildings. But there are some criticism on of the process of gentrification, stating that gentrification could lead to social injustice and inequalities caused by the urban land market.

“Gentrification simply yet very powerfully captures the class inequalities and injustices created by capitalist urban land markets and policies. The rising house expense burden for low-income and working-class households, and the personal catastrophes of displacement, eviction, and homelessness are symptoms of a set of institutional arrangements (private property rights and a free market) that favour the creation of urban environments to serve the needs of capital accumulation at the expense of the social needs of home, community, family.” (Slater, 2010, p. 571).

Especially the low income and most vulnerable classes of society could be the victim of the process of gentrification. Whether or not gentrification is a process which is desirable, developments can set this process in motion without intention. If these effects are the result of gentrification, the question arises how municipalities can deal with these effects.

The financial consequences of the vacancy of one building to its surrounding urban environment has been broadly researched. Research has shown that vacancy of real estate causes lower rents for the surrounding real estate (Koppels et al, 2011). The financial relation between real estate is, in case of vacancy negative. Vacancy leads to less maintenance of the building and ultimately to impoverishment causing a decrease in value of the building and also of other real estate properties in the direct area. The financial relation of real estate is well-known, but the social effects of identity or social spin-offs are not described in the literature about real estate and area development. One of the reasons is that social effects are difficult to measure. Most researched are quantitative based,
focused on economic values of properties. Qualitative research could complement researches about the relation between real estate by also researching the social effects and spin-offs.

2.5 Theoretical framework
Area incubators take place in bigger development strategies. The literature review identified two theories: ‘scale-up’ introduced by Claassen et al. (2012) and ‘urban boosterism’ by Dovey (1999) and Sklair (2006). Scale-up focuses on the relation between a single building and its urban environment, which makes this theory relevant for the research of how an area incubator can influence a larger urban area development. Urban boosterism is explained as a strategy in which large projects have to create spillovers to solve social and economic problems. Especially these spillovers or spin-offs are important to determine the extent of incubator effects. The theory by Claassen, Daamen & Zaadnoordijk (2012) identified several parameters for the area incubator however this was solely about the first developed building in an area. Next to this Verheul (2012;2013) researched the varieties of incubator parameters and functions in area development. The parameters which are identified are:

Wellink, 2008:
- Risk bearing party
- Relation area incubator - program
- Position of power area incubator
- Desired impact
- Physical presence
- Attitude area developers
- Target group

Verheul, 2012/2013:
- Intrinsic use of the project
- Symbolic or postcard value
- Iconic building and imago of neighbourhood/city
- Economic and social spin-offs
- Connection/connected renewal

Potential parameter:
- Monumental status (Marlet et al, 2012)

Potential failure factors (Baarveld et al, 2013):
- Slow moving process
- Difficult to create commitment among stakeholders
- High contextual and organizational complexity
Both theories created parameters for an area incubator function to succeed in urban area development. These parameters could be tested in multiple case studies to answer the research question. The varieties of area incubators could be compared to determine the differences and similarities.

However, the projected area incubator function does not always succeed. Jane Jacobs (1960), Peter Hall (1980), Flyvbjerg et al. (2003), Swyngedouw et al. (2002) Paul ‘t Hart (1994) and Stan Majoor (2009) showed that several factors could make the projected spillovers of large scale projects crash in failure. Apparently these factors can also influence the role of an area incubator in a negative way. Not only parameters for success have to be identified and researched, also the parameters for failure of area incubators. Baarveld et al (2013) described the failure factors of cultural heritage within area development as: slow moving process, difficulty to create commitment among stakeholders and high contextual and organizational complexity.

Most studies regarding area incubators focuses on industrial heritage. Particularly the cultural monumental heritage could serve as an area incubator, as these buildings are centrally located and have identity and appeal. A parameter which is not been researched is the monumental status of heritage. Monuments could also be limiting the redevelopment because of financial aspects and building technical aspects. A theory about buildings with much identity is the theory of ‘urban icons’ (Verheul, 2012). One of the aspects which makes an ‘urban icon’ are the spin-offs that are created. Especially in less developed neighbourhoods the urban icon could be used to provoke the process of ‘gentrification’ (Doucet, 2010). Smith & Williams (1986) argued that gentrification is more than residential rehabilitation, it is integrally linked to the redevelopment of other urban areas. Residential rehabilitation is seen as a facet of economic, social and spatial restructuring. The effect of an area incubator on this process of gentrification could be researched and measuring to what extent the area incubator started and steering the process of area development.

If the area incubator function is successful in urban area development, the question arises what types of value are created for the area development. This could, next to the level of gentrification, be researched by looking to what extent external contextual circumstances play a role in the development and to research how the area incubator influences the area development in any way. For example the process of the development, the timeframe which can influence decisions or the available financial resources. This is of importance to measure to what extent the area incubator result in a permanent added value to the urban area development.
2.6 Conceptual model

A conceptual model has been developed to operationalize the theories and the relations between the factors.

**Conceptual model**

- **Context**: Location, Accessibility, Market, Time, Financial resources, Land values

- **Project redevelopment factors**
  - Actors roles: risk bearing party, attitude area developers, affected stakeholders and target group
  - Position of power area incubator
  - Physical presence in process
  - Relation area incubator – program
  - Connected renewal

- **Development Expectations**
  - Desired impact
  - Economic and social spin-offs
  - Intrinsic use of the project
  - Value creation and capturing

- **Building Identity**
  - Symbolic value
  - Imago of building and area
  - Monumental status

- **Process urban area development**
  - Role of cultural heritage
  - Success of area incubator function

- **Potential failure factors**
  - Slow moving process
  - Difficult to create commitment among stakeholders
  - High contextual and organizational complexity

- **Effects after development**
  - Realized spin-offs
  - Added value area

Each of the parameters for area incubator function are identified in the literature review. Paragraph 2.1 describes the practice of area development. Van Rooy (2006) distinguished the aspects of success factors in area development. Many of these aspects are bound by the context. These factors are named contextual circumstances, such as location, accessibility, market, time, financial resources, land values. They have an influence on the success of an area incubator function, on the relation between incubator and area development and also on the urban area development itself.

In paragraph 2.4 the parameters for incubator functions are described. Wellink (2008) identified seven parameters for an successful incubator function: risk bearing party, relation area incubator – program, position of power area incubator, desired impact, physical presence, attitude area developers and target groups. The parameters regarding actors are unified among the variable ‘actor
roles’. These parameters some together in the box ‘project redevelopment factors’. Except for one, the desired impact, which is an expectation of the development. The variable ‘connected renewal’ is identified by Verheul (2012). Next to this Verheul (2012; 2013) identified several other parameters for an incubator function: intrinsic use of the project, symbolic or postcard value, iconic building and imago of neighbourhood/city and economic and social spin-offs. These factors come together in both development expectations and building identity. All these parameters influence the success of the area incubator function, they are the projected effects. They can have a negative effect on the incubator functions and on the process of urban area development leading to planning disasters (Hall, 1980), large costs overruns (Flyvbjerg et al. 2003), democratic deficit (Swyngedouw et al., 2002), entanglement in the decision-making process (’t Hart, 1994) or when the projected social aims of a project in relation to its urban area gets lost (Majoor, 2009). These critics show that the projected spin-offs of large projects not always lead to the effects which were estimated.

The monumental status for example, could add strategic value to a projected area incubator. Marlet et al (2012) showed that monument increase the attractiveness of cities and the area in which they are located. But there is a limit to the extent of monumental status, it can drive up the financial investments in redeveloping the building and thereby decreasing the feasibility of the business case. The process of urban area development consist out of four phases (Ministry of VROM, 2013). All of the identified parameters affect this process, either positively or negatively. The degree of success of the incubator function is shaped within this process, ultimately leading to the effects after redevelopment.

Baarveld et al (2013) described the conflicts which may arise in the process of cultural heritage redevelopment project. These projects are characterized as slow moving and it is difficult to obtain commitment among stakeholders. Next to this the contextual and organizational complexity is high, as redeveloping cultural heritage requires higher initial investment than greenfield projects, feasible new uses are difficult to find, there are many uncertainties at the start of the process about the benefits (such as spin-offs) and the process is vulnerable to changes by the external environment. These are potential factors for failure of redevelopment initiatives and thereby for potential incubator function of cultural heritage.

If the area incubator function succeeded, the question arises what types of value are created by the area incubator. The added value can be temporary or permanent of nature. An area development could have taken place anyway, also without the area incubator. The relation between the area and area incubator as well as associated renewal play a role in the relation of these factors.
3. Methodology

The central question in this research is as follows:

“What are the factors in the redevelopment of cultural heritage to succeed as area incubator for urban area development and what types of temporary and permanent value are created?”

This research question determines the choice for a research strategy and methods. The first paragraph in this chapter argues the choice for a multiple casestudy. Secondly, the selection of cases for the research will be discussed. In paragraph three the applied methods for data collection in this research strategy will be accounted for. Finally, the validity and reliability of this research will be discussed.

3.1 Research strategy

The research question consist of a descriptive and explanatory part. In the descriptive part the factors for a successful area incubator are described. The explanatory part consist of explanation to what extent an area incubator is accountable for the types (temporary or permanent) of added value. A casestudy is a suitable research strategy for explanatory research (Saunders, Lewis & Thornhill, 2011). Case studies can also be used for explorative research in which a phenomenon can be described in depth (Vennix, 2009). Because this research consists of both descriptive and explanatory components a casestudy is a suitable research strategy.

Saunders et al. (2011) define a casestudy as: “A method for research which makes use of empirical research of a certain contemporary phenomenon within the actual context, in which different sorts of evidence are used”. From this definition some characteristics of a casestudy can be identified. A certain phenomenon is researched within its natural context on location (Saunders et al., 2011; Verschuren & Doorewaard, 2015). The different sorts of evidence refers to the methods and source triangulation. Some other characteristics of a casestudy are the small number of research subjects, it is a labour intensive research approach because of the multiple used methods and sources and it is more in-depth investigation instead of wide research (Saunders et al., 2011; Vennix, 2009). The casestudy is a qualitative research strategy, which means that the data collection method will produce mostly qualitative data.

There are several types of casestudies, which can be distinguished by size of the bounded case and also in terms of intent of the case analysis (Creswell, 2013, p.99). The size of the bounded case differs between holistic or embedded casestudy. A holistic casestudy focuses on the case on its whole, while embedded casestudy focuses on a certain aspect of the case (Yin, 2009). This research will have a holistic approach, as the area incubator will be researched within a larger area development. It is important that the research strategy captures all factors of an area incubator within the area.
development. In terms of intent three variations exist: intrinsic casestudy, single instrumental casestudy and multiple casestudy (Creswell, 2013). In an intrinsic casestudy the focus lies on the case itself, as it is an unique situation (Stake, 1995). In the single instrumental casestudy the researcher focuses on an issue or concern, and one bounded case to illustrate this issue (Ibid). The last type is the multiple casestudy in which the issue or concern is selected, but the inquirer selects multiple case studies to illustrate the issue (Creswell, 2013). Often the researcher selects multiple cases to show several perspectives on the issue. The multiple casestudy is most suitable to describe and compare area incubators. Verschuren & Doorewaard (2015) state that a multiple casestudy enables the researcher to determine the similarities or differences of the results in different cases. The phenomenon of area incubators has different types, making it suited for comparison in a multiple casestudy. Yin (2009) argues to use the logic of replication, in which the inquirer replicates the procedures for each case. In this research a set of parameters for area incubators will be identified in the literature and tested in each case. This will be done from different perspectives of the involved actors. The research has multiple cases, which makes it a comparative casestudy.

A research can have an inductive approach, deductive approach or a combination. In the inductive approach, plans are made for data collection, after which the data are analyzed to see if any patterns emerge that suggest relationships between variables (Gray, 2014). These observations is the basis to construct generalizations, relationships and also theories. With an inductive approach a research can move towards discovering a binding principle. In the deductive approach the researcher uses relevant theories to set up hypotheses, which after testing confirms, refutes or modifies the principle (Ibid). These hypotheses stands for an assertion of two or more concepts to explain the relation between them. This research has an inductive approach, in which the data collection will give the crucial parameters for an area incubator to succeed. This suggests the relationship between variables. Pre-existing theories are used to approach a problem, but the inductive approach does not set out to corroborate or falsify a theory. Instead it attempts to establish patterns, consistencies and meanings through a process of gathering data (Gray, 2014).

With these established patterns the relation between different parameters and the success of an area incubator could be determined. Data has to be collected for each parameter to answer the sub questions of the main research question. In the interviewguide all aspects of the research questions come together. If there is no data collected for a variable, it is not possible to determine any relation to the degree of success of an area incubator. The projected case selection consist of four cases with each three interviews. To cover all aspects of an area incubator, such as physical, social and economic, interviews will occur with different actors in the area development. Wellink (2008) distinguished three types of actors in incubator cases: shareholders, stakeholders and target groups.
Shareholders have an interest in the area development, they have power and bear the financial risks. The group of shareholders are directly involved in the redevelopment. Stakeholders are indirectly involved, they have an interest with the development either positive or negative. Actors within this group are for example the municipality, inhabitants and entrepreneurs in the area. Their interests are affected by the new development. A different group is formed by the users of the functions, the target group. They have no direct interest in the redevelopment, but are important for the success of the function and the area development where the incubator function takes place. This group can exist of (potential) future residents or users of the area as well as neighbours of the redeveloped area. The neighbourhood has to deal with the effects of the development, either positive or negative. This is why the neighbourhood perspective is also researched. In each case with a snowball method new actors and cases could be identified. The landowners are labeled separate from these three types of actors, in order to give a clear picture about land ownership within the area development. Landowners have much influence on the process and outcome of area development.

**How to operationalize a successful incubator?**

Success is subjective, for each actor success can hold different meaning. This depends on several factors, such as interests, goals and values. The strategy chosen in this research is to identify parameters in the literature which determine the incubator function. By questioning different actors and their perspective these variables can be tested to what extent they determine incubator success from the perspective of the actor. In the data analysis these results can be generalized in order to make statements about incubator success.

However, each of the projects is highly dependent on the context. The factors for a successful incubator are difficult to estimate. The factors for failure can to some extent prevent problems, but these factors are dependent on the context as well. This is an uncertainty developers have to deal with when consciously introducing an area incubator.

**How to measure effects of area incubator on process and outcome of area development?**

The effects of area incubators can be measured in quantitative or qualitative grades (Verheul, 2013, p.55). There are many aspects on which incubator projects differ from other development and thereby can be interpreted as area incubator parameters. Quantitative grades can be given for example to the change of land and real estate values and the commercial activities nearby (economic spin-offs). Qualitative grades can be given to more ‘soft’ aspects, such as image, intrinsic use, symbolic value and social spin-offs. The effect of these incubator functions are in turn researched by interviewing involved actors in the development of the project and end-users.
3.2 Research methods, data collection and data analysis

The qualitative nature of the research question and the chosen research strategy, the multiple casestudy, implies the use of qualitative data collection methods. The definition of a casestudy by Verschuren & Doorewaard (2015) imply that multiple sources of evidence are used, which means that multiple research methods and sources are consulted. Different literature (Saunders et al., 2011; Vennix, 2009; Verschuren & Doorewaard, 2015) name the use of multiple methods and sources ‘triangulation’. A distinction can be made between method triangulation and source triangulation (Verschuren & Doorewaard, 2015). Both types of triangulation are applied in this research. Besides this, the next methods are applied in this research: literature review, interviews and nonparticipant observing.

Literature study

Scientific literature is used in order to identify the different types and parameters for area incubators. Some important authors of incubator literature are Claassen, Daamen & Zaadnoordijk (2012), Hoogendoorn & Peeters (2005), Verheul (2012; 2013) and Wellink (2008; 2009). The researched area incubators are cultural heritage objects. Literature by Baarveld et al (2013) and Marlet et al. (2013) describes the complexities and values of cultural heritage in area development. The literature study provides the background for an area incubator to be successful and how they create value for the area development. A theoretical framework with potential success factors and future factors has been developed from the literature.

Actor analysis

An actor analysis is used to understand and identify the different interests of actors in each project. The theory already identifies shareholders and landowners as important actors, but in redevelopment projects there could be many actors involved. A structured actor analysis is used in order to help interpret the results of the interviews. The actors play different roles in each project. The actor analysis helps to describes these actor roles and how they influence the incubator function.

Interviews

By conducting interviews data can be collected from concerned actors. Selection of respondents will also happen through a snowball method, in which the respondent is asked what other persons are interesting to interview (Verschuren & Doorewaard, 2015). The semi-structured interview is chosen as interview strategy, because for in-depth interviews the main focus can be maintained. However, the semi-structured interview allows the researcher to drift from the main focus to a topic of interest.
This method is synoptic but also the researcher can easily come back to the main focus.

The literature study identified three types of actors in area incubator cases. By interviewing shareholders, stakeholders and target groups multiple interests and perspectives can be measured. The neighbourhood could be the target group, but they could also be stakeholder. This is the reason why in each case a neighbourhood perspective is included. Each of the actors has different knowledge, for example shareholders know more about the process of development than the target groups. In return, the target groups have a more clear vision about identity and can motivate why they use certain functions or buildings. In the following list the parameters which will be researched are divided between these actors. This means that not all parameters will be questioned with each of the actors. The effectiveness of the interview is increased by doing so, although it is important to cover as much as possible parameters per interview.

**Shareholder**

- Contextual circumstances redevelopment: Market, Process, Time, Financial resources
- Risk bearing party
- Physical presence
- Relation area incubator – program
- Position of power area incubator
- Urban area development
- Desired impact
- Role of monumental status
- Perception of added value

**Stakeholder**

- Contextual circumstances redevelopment: Market, Process, Time, Financial resources
- Desired impact
- Physical presence
- Attitude area developers
- Target group
- Economic and social spin-offs
- Urban area development
- Connected renewal
- Role of monumental status
- Perception of added value

**Target group (users of functions building)**

- Intrinsic use of the project
- Symbolic value
- Iconic building and imago of neighbourhood/city
- Economic and social spin-offs
- Urban area development
Neighbourhood perspective

- New flow of people in area
- Pressure on parking places area
- New use of urban spaces
- Role of monumental status
- Perception of added value

The interview questions will focus on these parameters. Moreover, a mini survey will be done by introducing statements in the beginning of the interview in which the interviewee can ‘score’ on a five point likert scale to what extent they agree or disagree with the statement (Annex 1). Respondents can score the importance of theoretic factors (statements) on a scale in terms of influence and risk/uncertainty of effects. The statements are based on the theoretical parameters summed up above. In contrast to the parameters these statements will be the same in order to compare the scores given by different actors. The actors can score to what extent they agree or disagree with the statement. These (stated) preferences of the interviewees can be used for the actor analysis.

Nonparticipant observing

In nonparticipant observing the researcher is an outsider of the group under study, watching and taking field notes from a distance (Verschuren & Doorewaard, 2015). During the research the observing role can change, such as starting as nonparticipant and moving to a more participant role (Ibid).

3.3 Validity and reliability of the research

This paragraph consist of the validity and reliability of the research. Next to this the ethics of research will be discussed.

Validity

The validity of research consist of internal and external validity. The internal validity determines to what extent other factors influences the result. These projects and the processes are quite complex, there are many factors for success or failure of projects. The interviews will be held with different actors to obtain different perspectives and factors, in order to get the most holistic approach. It can be questioned to what extent the actors speak out their real motivation, this influences the internal validity. The actor analysis method is used in order to research how decisions are made and what motivations are behind them. Next to the parameters for area incubator, contextual circumstances
are researched to maximize the internal validity. Besides, a consistent set of parameters will be obtained. The external validity determines if the results could be generalized to a larger group. The external validity is tried to maximize by researching four cases with each three interviews, as well as four expert interview in the beginning of the research. However in a case study it is difficult to maximize external validity as the research objects are studied in depth. Besides, projects differ from each other in time, space and identity, making it difficult to generalize results.

Reliability

The reliability of a research consist of the precision of the measurement procedure. To ensure a degree of reliability, the choice for multiple cases instead of basing conclusions on one case (Gray, 2014). The reliability is limited, because these projects change over time resulting in maybe different result. The meaning actors give to a projected incubator can change over time. The in depth research methods by conducting different actors and their perspective give a clear image of the social effects of area incubators. The economic spin-offs are questioned in the research as well, but not with quantitative data such as land values and income of business owners in the area. This limits the reliability for the statements about the economic spin-offs.

Ethics

Each research has to consider ethics. There is not much harm or invasion of privacy for the participants as the research focuses on the meaning they give to an area incubator and how this affects their behaviour or choices. Transparency about economic spin-offs could be limited, not all people want to share financial information. Assuring confidentiality can create trust. Another aspect to consider is how to measure the real motivation of actors, not every respondent could be comfortable talking about the real motivations. The approach of scoring the stated preferences of an actor on a 5-point likert scale is used as strategy to understand the decision making process and underlying choice behaviour.
4. Case survey

4.1 Case selection
The cases were selected in a systematic approach. Each case has to suffice to certain criteria. These criteria consist of: location, a cultural heritage object which is (being) redeveloped, a potential incubator function, a (future) monumental status of the heritage and a larger development of the urban area around cultural heritage. These are important parameters within this research and which are compared to each other.

Some organizations have much experience with redeveloping cultural heritage, such as BOEi and Stadsherstel NV. These are non-profit organizations which have as main goal to preserve cultural heritage. They have good connections with government organizations which grant subsidies and have a network of contractors experienced with redeveloping monuments and heritage. Not only do they have knowledge in terms of process and building technical aspects, they have built up a record of successful redeveloped heritage objects. BOEi is involved in three out of the four selected cases. Stadsherstel NV is involved in the fourth case. The fourth case has consciously been chosen without BOEi to make sure that the level of success of an incubator and area development is also measured without the involvement of a party such as BOEi.

Each case is selected in different cities: they take place in Rotterdam, Utrecht, Amersfoort and Amsterdam. Different cities have been selected in order to research different contextual factors and attitudes of different actors such as the municipality. However, the location within each city is comparable: they all take place near or in the inner city. Three of the cases take place within a neighbourhood, one case is located on an industrial site.

None of the selected cases are known for their ‘failure’, each case involves a successful redeveloped cultural heritage object, the main focus in the selection was the factors of success. However, in each case the actors have also been asked about failure of previous initiatives for redevelopment and the factors which were influencing the failed initiative.
4.2 Cases
In this paragraph the selected cases are described. The description of each case is structured, it begins with the roles of the involved actors after which the redevelopment(-process) of the cultural heritage and the area development are discussed.

- ‘Zuiderziekenhuis’, Rotterdam.

Figure 3 & 4. Before and after development Zuiderhof (Source: BOEi, 2017; Top010, 2017)

- Landowner: Impact Vastgoed
- Shareholders: BOEi developer, Impact Vastgoed, Van Wilsum van Loon architects
- Stakeholders: Residents neighbourhood, Municipality Rotterdam
- Target groups: Residents, School and freelancers (office users)

Impact Vastgoed bought the ‘Zuiderziekenhuis’ with the intention to demolish and to create a new neighbourhood. The municipality issued the demolishment permit, but decided after much political pressure and neighbourhood protest to preserve the hospital. They had to compensate the developer Impact Vastgoed in order to withdraw the permit for demolishment. The municipality involved BOEi to give advice on the redevelopment and the feasibility of the business case. In the process BOEi became developer of the monumental aspect of the area development, Impact Vastgoed develops the new housing in the area.

The vacant hospital in the south of Rotterdam was almost demolished. The building is now promoted as one of the most identity making monuments of South-Rotterdam. The website of the project states that South-Rotterdam can be seen as the Brooklyn of Rotterdam, because this district has positively changed over the last years and is a place of inspiration and innovation with international allure (HetZuider, 2017). The prewar built hospital has been used for generations by the population of Rotterdam-South. The emotional binding with the building is very high, this was made clear by the many protests against the demolishment of the hospital.
Currently the monumental building is being redeveloped by BOEi into 30 city houses, 85 loft-apartments, a school ‘Zuider Gymnasium’, office spaces for freelancers and public functions (Top010, 2017). BOEi is a non-profit organization which invests in redevelopment of cultural heritage. The redevelopment of the vacant hospital takes place within a larger (re)development project of the new neighbourhood ‘Zuiderhof’, the coextensive terrain will be redeveloped by Impact Vastgoed into new housing which will be realized in 2018 (figures above). By 2019 the whole new green neighbourhood Zuiderhof has to be completed, in total 131 new houses next to the new functions in the monumental hospital. With this project the ‘Zuiderziekenhuis’ intends to become the beating heart for this new neighbourhood Zuiderhof.
Cereol Factory, Utrecht

This former oil- and line cake factory is located in the district ‘Oog in Al’ in Utrecht and is nowadays a mixed use living area. In 2001 the factory became a state monument and in 2002 Blauwhoed, Heijmans and the municipality Utrecht began with designing plans for the area, which turned out to be a difficult task. The high land value, a fire in 2008 which burned down large parts of the monumental complex (except the fronts of the buildings) and the economic crisis were obstacles which made the redevelopment process very complex. Along with the burning down of the monument a part of the identity went away, the factory was one of the identity strong holders of the area (Wong, 2015). BOEi decided to buy the Cereol in 2010 and push the plans for redevelopment through. Eventually the fire led to new possibilities: a smaller program for the area and more public functions resulted in a more feasible business case for the area development. The Cereol factory was successfully redeveloped by 2014 and Blauwhoed & Heijmans jointly developed the area in a partnership ‘VOF Meijster’s Buiten’.

Many of the activities in the former factory are organized by residents in the neighbourhood, it is a mix of professionals and volunteers which help their neighbourhood in their free time. The current functions are a school, a library, a daycare for children, a bar, some offices and a theatre. This turns out to be so successful that there are plans for expansion of the functions (such as courses, cooking and more cultural staging). The Cereol factory connects the neighbourhood by its mix of cultural events and residential functions such as the library and school.
Soapfactory Rohm en Haas, Amersfoort

Figure 9 & 10. Backside of the factory before and after development Rohm & Haas (Source: BOEi, 2017)

- Landowner: BOEi
- Shareholder: BOEi
- Stakeholder: Municipality Amersfoort, SchippersBosch, Hogeschool Utrecht
- Target group: Restaurant De Vereeniging, office entrepreneurs, artists with gallery,

The former soap factory lost its function in 2002. The municipality bought the complex in 2005 with a major soil purification issue. Rohm & Haas was almost demolished, but was prevented by the assignment of the municipal monument status in 2008 and the plans by BOEi to redevelop. BOEi took over the complex in 2009 and with some minor construction-technical changes made possible that the factory could be used again. The monumental status was assigned to the large chimney and to the halls to preserve the historical cultural value of the factory. The Prodent factory was redeveloped after Rohm & Haas, at the same time when plans were made for the area development.

Figure 11. Front of the factory with the halls and chimney. (Source: Poolen, 2011).
The Rohm en Haas factory houses different aspects of art, put together by artists which have their atelier in the factory. Next to this entrepreneurs are located in this cultural centre, which is rich of musical and festival events. The Oliemolen district in Amersfoort is also called ‘The new city’, because the redevelopment of the former harbor area gave the city a new impulse. All sorts of culture and creativity result in energy and inspiration in this area. The redevelopment of Rohm and Haas played an important role in the new development in the district. The whole district is organically (plot by plot) redeveloping into a new dynamic area.

This historical soap factory near the centre of Amersfoort is in multiple perspectives the beating cultural heart of the ‘Oliemolen district’. People come to this redeveloped monumental factory to eat before visiting concerts, theater or movies in the city. But also in and around the soap factory are several developments. The Prodent factory was redeveloped into a multifunctional building which houses over 65 functions. The ‘Hogeschool Utrecht’ located a community college in the area and the music platform ‘Fluor’ opened its doors.
For over 15 years the former tram halls were vacant after several initiatives for redevelopment failed. The vacancy endured until successful redevelopment in 2015, when the halls became the beating working heart of the district West in Amsterdam. The balance between social and economic functions within this state monument makes ‘the halls’ a tourist attraction. The complex consists of six large halls and one hall which connects the streets Ten Katemarkt and Bilderdijkstra, now named ‘the passage’. The Halls are located in a high dense build district in the west of Amsterdam. This is one of the reason why former initiatives had much obstacles. In 2005 the municipality began cooperating with developers which wanted to develop the first roofed entertainment(party) centre. The coexisting terrain would be redevelop into residential buildings up to forty meters, a parking garage and new city offices. In 2009 it became clear that the developers could not make the business case financial sound so the developers pulled out. The resistance from the neighbourhoods against the former plans was one of the reasons why in 2010 the development and exploitation was laid upon the foundation ‘Tramremise Onwikkelingsmaatschappij’ (TROM). The new functions are a mix of media, mode, art craft and culture. The choice for these functions is the results of interactive sessions between involved parties, such as the neighbourhood, entrepreneurs, architect Van Stigt and the organization Stadsherstel NV Amsterdam. The most important goal for the redevelopment was that it had to be of value for the neighbourhood by providing urban functions such as a library, daycare and professional crafts centre.
5. Case ‘Zuiderziekenhuis’ Rotterdam

In this chapter the collected data is described about the case ‘Zuiderziekenhuis’ in Rotterdam. The structure of the chapter is as follows: first the context and its factors are described after which the process is explained and the parameters for a potential incubator function of the aspects of redevelopment factors, expectations and identity. The roles of different actors are analyzed in the actor analysis. Moreover, the realization of the project and (projected) effects are described. The chapter ends with the factors of success named by different actors.

Context

Location

The former hospital ‘Zuiderziekenhuis’ is located in The south of Rotterdam, at the edge of the neighbourhood Vreewijk. This neighbourhood consist for a large part out of social housing. The multicultural and low-income households determine the imago of the south of Rotterdam, where social and economic problems occur. The neighbourhood Vreewijk was built between 1913-1942. The neighbourhood has a green character aligning with the planning theory of ‘Garden city’, many houses have gardens and there are parks located throughout the neighbourhood (Figure 14). This neighbourhood is also an protected village scene as it was the first neighbourhood in Rotterdam built from the planning theory of Garden City. The area is well accessible by road, although it is located in a densely built area.

![Map of neighbourhood Vreewijk](Source: Nieuwstop010, 2015).
The location of the hospital within the dense built neighbourhood makes the integral area development approach suitable for the redevelopment. Not only the former hospital is being redeveloped, the whole surrounding area as well. The landowner, Impact Vastgoed, made together with the municipality and architects an urban renewal plan for both the new neighbourhood Zuiderhof and redevelopment of the ‘Zuiderziekenhuis’. This is phase 1. Phase 2 of the area development exist of the terrain of the Daniel de Hoed hospital, which will become vacant in 2018 (Figure 14).

Accessibility

The former hospital is located in a dense built area, however it is accessible from several directions. In the area development there will also be some infrastructural changes, such as a new connection to the park located north of the ‘Zuiderziekenhuis’.

“It is very important for the success of area incubators that an area is introduced among the public and made accessible. This also depends on the location of the area development.”
(Claassen, Personal Communication, 31 March 2017)

There was an open day for people to visit the ‘Zuiderziekenhuis’. The attendance was very high, hundreds of people visited the former hospital out of personal interest or with interest to buy a house.

Market

There is a rising demand for housing in the inner cities in the Netherlands, also in Rotterdam. The functions in this district are well organized. The ‘As van Zuid’ is nearby where many shopping malls and diverse functions are located. This is one of the reasons the developers chose for mainly residential functions and some societal functions in the redevelopment of the ‘Zuiderziekenhuis’.

Time

The area development is in its realization phase. However, the decision making process was quite long. This was because of several reasons: no buyers in the first 10 years, the changing of municipal boards and the changing of the plans from demolishment to redevelopment. The political and public pressure was very high in this project, many people cared for the hospital and put effort in preserving the building.

Financial resources
Impact Vastgoed bought the lands with the purpose to demolish and create new housing. This is their core business and the initial investment in gaining the land fitted in their calculations. However, several factors resulted in a change of plans towards redeveloping the ‘Zuiderziekenhuis’.

“The challenge was the financial picture: the building costs of the former hospital versus the returns. The municipality Rotterdam was also willing to discuss these financial matters, by which an obstacle was taken away. Eventually the municipality was willing to pay 5,8 million in order to preserve the building” (Praagman, Personal Communication, 22 May 2017)

The payment by the municipality to withdraw the issued permit for demolishment was crucial in making the plan financial feasible. The redevelopment costs for the former hospital were estimated at 4 million.

Land values

One of the aspects which made the business case and thereby the development possible was the realization of 131 new houses around the former hospital. These houses are developed for the middle segment of the housing market, which benefits the developer as the margin is relatively high. The municipality specifically wanted no social housing in this area. This will result in higher land values. Future effects and developments may cause the coextensive area to rise in value as well, which will mean that the real estate value (and rents) will rise.

Process description

The project of the former hospital is currently in the beginning of the realization phase. The first building activities have started. Many of the results are about the decision making, as there is not much to tell about the effects yet. Only the desired effects can be described.

The ‘Zuiderziekenhuis’ knows a long history from the moment the hospital was fused with the Klarenhospital in 2000 to a new location: Maaslandhospital. From this moment on the search for a new function started. The hospital was not a monument yet. The sale of the ‘Zuiderziekenhuis’ had to be sufficient to fund (a large part) of the plots of the Maaslandhospital. The municipality Rotterdam granted in 2006 a subordinated payment for the hospitals’ land plots. The municipality became financial involved and thus became a risk bearing party in this development. In 2007 there were several bids on the ‘Zuiderziekenhuis’, but there were no financial interesting bids so the municipality started a tender process. The Green Group, a developer from Rotterdam won this tender. Their first plan was to redevelop part of the building and built new houses for the remaining building plots. When the moment came for The Green Group to develop the situation changed as a
result of the financial crisis. The Green Group decided the development was too risky and pulled out of the purchase agreement.

Meanwhile the Maaslandhospital had much physical management costs of the Zuiderhospital. There was good cause to name the former hospital a monument at the time, but the municipal board wanted to wait until there was a new owner before naming it a monument. In 2014 Impact Vastgoed made a bid to buy the lands with the plan to demolish the former hospital in order to realize new housing (85 houses). The municipality was not happy with this, but a final quick scan pointed out that preserving the former hospital was not feasible as redeveloping the building was estimated at a cost of four million. The municipality was not prepared to invest this and agreed on sale and thereby the demolition. The demand of the municipality was that the front of the ‘Zuiderziekenhuis’ ‘the gatebuilding’ (‘Het Poortgebouw’) should be preserved as it has architectonical value, the rest of the hospital could be demolished. Next to this the municipality also demanded in the negotiation that Impact Vastgoed should try for a period of 3 to 6 months to find a party to redevelop the ‘Zuiderziekenhuis’.

In this period the pressure on the preservation of the ‘Zuiderziekenhuis’ reached its peak because of actions by inhabitants and foundations for preservation of cultural heritage. However, the municipal board was re-elected at this time and one of the election program points was the preservation of ‘Zuiderziekenhuis’. This led to a final try by the municipality to start the conversation with Impact Vastgoed to redevelop the ‘Zuiderziekenhuis’. Meanwhile BOEi had contacted Impact Vastgoed about the possible redevelopment. BOEi has much experience with redeveloping all sorts of heritage and showed in which way the redevelopment business case could become feasible. In quite a short period a ‘gentlemen’s agreement’ was made between the municipality Rotterdam, Impact Vastgoed and BOEi. They took half a year to research the possibilities for redevelopment which resulted in the current urban plan. It was crucial that Impact Vastgoed was financially compensated as a result of the withdrawal of the permit for demolition. The new imput of BOEi combined with the compensation made the new plans for redevelopment feasible. The municipality Rotterdam paid 5,8 million euros for this with the demand that the ‘Zuiderziekenhuis’ should be preserved and already be treated as it is a monument, in order to make it a monument after the redevelopment is completed.

**Project redevelopment factors**

*Position of power area incubator*

The area incubator ‘Zuiderziekenhuis’ has an equipollent position of power. It is part of the larger program, not meant to be superior or subordinate to the developed houses nearby. The
redevelopment of the hospital is set out to be the new beating heart of the neighbourhood. A new
neighbourhood with much character because of the historic and cultural value of the former hospital.

Physical presence in process

The ‘Zuiderziekenhuis’ is redeveloped at the same time as the housing, the area is integrally
developed. This is in the middle of the area development. The second phase is the redevelopment of
the area of the Daniel Den Hoed clinic. The ‘Zuiderziekenhuis’ is such a large redevelopment that it
will happen in phases as well. The most difficult objects to redevelop happen at the end of the
process.

Relation area incubator – program

The ‘Zuiderziekenhuis’ is part of the program. The hospital is the centre of the area, both in terms of
location as well as symbolic terms. The whole area is designed around the hospital, in this
perspective the hospital has some position of power.

Connected renewal

The former functions was very connected in social terms to the neighbourhood. Almost every person
in The south of Rotterdam went to this hospital, this results in emotional binding. However, the new
function has less connection with the surrounding neighbourhoods as the hospital loses its function.
The new functions of the school ensures a certain degree of connected renewal, however the direct
residents in the area are not the target group for the high level of education. The redevelopment is
very connected in terms of physical structure, the architecture of the neighbourhood Vreewijk was
used for the Zuiderhof.

Expectations

Desired impact

The desired impact of the ‘Zuiderziekenhuis’ to the area development is to enrich the program. The
hospital is the beating heart and has to attract people to the area. The open day showed that many
people are interested in the building. The new functions and neighbourhood are expected to become
the stepping stone for residents of The south of Rotterdam by providing possibilities for a residential
and educational career. This should also help to positively change the image of the district.

Economic and social spin-offs

The previous ambition is a desired spin-off. The project is still being realized, so it is difficult to make
statement about spin-offs. There are some indicators, for example developer which bought land
nearby with the prospect of developing it when the value of the area rises. This could set a process of gentrification in progress, thereby created value for the whole area.

Intrinsic use of the project

The question is to what extent the residents in The south of Rotterdam are willing and able to afford housing and education in this area. In time this will be clear as well, but at the moment no houses are completed yet. The postcard value of the ‘Zuiderziekenhuis’ remains with the building, but the function changed. The intrinsic use of the former function gets lost with it. However, architects try by architectonical design of the realized houses to preserve the identity of the ‘Zuiderziekenhuis’ and its area.

Value creation and capturing

The value created mainly consist of the redeveloped housing in the new neighbourhood Zuiderhof. The ‘Zuiderziekenhuis’ is developed as ‘zero’: the costs are equal to the benefits, also with the 5,8 million of public funding. The 131 houses which are developed are the objects which create the value. The value is captured through the sale or rent of these units. There is also a social value created, as the building holds much identity in the district. This is a value which is difficult to ‘capture’, as it cannot be express in terms of monetary units.

Identity

Symbolic value

The symbolic value of the ‘Zuiderziekenhuis’ is very high, it is the most known monumental building of The south of Rotterdam and has much iconic value. Many people are interested in the new housing as a result of the redevelopment of the ‘Zuiderziekenhuis’, they are attracted to the area.

Imago of building and area

The imago of The south of Rotterdam is that of many social and economic problems, although over the last years it is been positively changing. By several iconic projects, ‘Zuiderziekenhuis’ among them, the municipality tries to better this imago.

“A building on itself does nothing, it is just a pile of rocks. But the strategic value of heritage is the meaning people give to them.” (Verheul, Personal Communication, 7 April 2017)

In this way the strategic value of the ‘Zuiderziekenhuis’ is used in order to create both social and economic value in the area.
Actor analysis

*Municipality Rotterdam*

The municipality Rotterdam felt pressure to sale the ‘Zuiderziekenhuis’ because of stalled payment on the location of the new hospital ‘Maaslandziekenhuis’. This financial pressure along with the feasibility of redevelopment played a role in the sale of the plots as well as the permits for demolition. At this time the municipal board changed. One of the important election subjects was preservation of cultural heritage in Rotterdam. The new municipal board wanted to continue with the set course of the previous board, however the resistance from the neighbourhood and foundation resulted in much pressure on the decision-making. The new municipal board decided to put effort in preserving the ‘Zuiderziekenhuis’. This resulted in a payment of 5,8 million euro for the withdrawal of the permit for demolition.

The municipality Rotterdam has some ambitions for the district of The south of Rotterdam. Several appealing projects need to put this district in a better daylight. The case of the ‘Zuiderziekenhuis’ was one of these projects, as it has much identity and can be seen as an icon within the district. The ambition is that on the scale of Rotterdam-South the ‘Zuiderziekenhuis’ should provide the chance for people to make both a residential and education career. The middle income housing and the high school education facility ‘gymnasium’ should realise this. The municipality specifically said that there should not come social housing in this project.

*BOEi*

BOEi is a non-profit organisation with the goal of preserving cultural heritage. In this case BOEi played two role: with their expertise they showed how to make a feasible business case (as it is their core business) and they provided public and politic basis for the redevelopment. The first role speaks to BOEi as a ‘problem solver’ in the complex redevelopment processes of cultural heritage. The second role of BOEi was that they created societal and administrative basis for redevelopment. They are not seen as ‘commercial party’ which exploits the area with one goal that of profits but also societal interests such as preservation of cultural heritage and providing societal functions and thereby a qualitative living environment. Because of the high amount of public funds (5,8 million) there was much to do about how this money was spend. This put pressure on the developer Impact Vastgoed, as they are mostly perceived as a commercial developer which wants to make as much as possible in a short period of time. The involvement of BOEi helped to explain both to public and politic parties that the public funds are used as they were meant: to preserve cultural heritage and to guarantee a degree of quality in the living environment.
**Impact Vastgoed**

The core business of Impact Vastgoed is developing housing. This actor bought the lands of the ‘Zuiderziekenhuis’ with the intention to demolish and to create a new neighbourhood. However, the last effort of the municipality to discuss redevelopment resulted in a gentlemen’s agreement. The permit for demolishment was retreated by the municipality in return for a financial compensation to make the redevelopment feasible. Impact Vastgoed put the redevelopment case on ‘zero’ (as many income as investments). They profit from developing the surrounding houses.

The influence of this actor is strong, as they own most of the plots in the area development. They have an important role in the current plan, together with the municipality, the architect and BOEi. These parties together ‘negotiated’ the urban renewal plan. Each actor have their own interest in the development and stands for certain values in the negotiation. Trust and perseverance are important in this process. Together they can solve (shared) problems, instead of keeping your cards closed and frustrating the process.

**District/Neighbourhood**

The district and neighbourhood have much emotional binding with the former hospital. Almost every person in this district knows the hospital because they have been there or have worked there. The great interest of the district became clear when they held an open day, almost 600 people visited the ‘Zuiderziekenhuis’. The developers (BOEi and Impact Vastgoed) wanted to show the building to the public and explain their redevelopment plans. However, the direct neighbourhood mainly consist of social housing. Most of the people in these houses felt they could not afford housing there. Also they pointed out that the park holds value for them, but with the current plans part of the park will be redeveloped in order to make place for a new entrance to the new neighbourhood.

Many people have a strong connection with the former hospital, however the new plans are from their perspective not connected with the neighbourhood. The developed houses are not affordable for these households and the new functions in the ‘Zuiderziekenhuis’ do not appeal to this group. The target group is mainly middle to high income residents.

**Architect Van Wilsum van Loon**

This architect is specialized in designing cultural heritage designs. The architect was one of the perseverance parties in the development of the urban plans. One of the main goals of the architect was also to let the new neighbourhood connect to the surrounding areas. They implemented the green character of the neighbourhood in Zuiderhof to reach this urban renewal.
Foundation ‘Kuipers genootschap voor monumentenzorg’

Their campaign to preserve the ‘Zuiderziekenhuis’ had its impact on the decision making process and thereby to the preservation of the ‘Zuiderziekenhuis’. Their influence was restricted to the decision making process, after the decision to preserve the ‘Zuiderziekenhuis’ their role in the development stopped.

Conclusion actor analysis

The municipality is both central in the area development and has to some extent influence on the development. They made the redevelopment possible by the financial compensation to Impact Vastgoed. The developer has the most influence, as they own almost all the plots in the area. This strong negotiation position is one of the reasons why the municipality had to pay a high financial compensation (Annex 4). BOEi was introduced to the negotiations and showed how the redevelopment plan could be made more feasible and smoothened the political process of the development by creating basis. The neighbourhood is very central in the development: it affects their living environment. However, they do not have much influence on the development. The only influence was the resistance against demolishment of the ‘Zuiderziekenhuis’ in cooperation with the foundation. The foundation was not central in the development, but had influence by applying pressure on the decision-making process.

Realization project and effects

The ‘Zuiderziekenhuis’ was is not yet a monument until development is concluded. This has consciously been done by the municipality in cooperation with the developers in order to make the redevelopment more feasible. When the monumental status was assigned before the development began, it would make the building technical adjustments more difficult. However, the municipality did have some requirements for the development. The developer had to treat the former hospital as it would already be a monument, only not every brick is monumentally protected.

Ambition municipality

The new neighbourhood Zuiderhof as stepping stone from low-income households to average income households. The municipality wants to offer the people in The south of Rotterdam the opportunity to make a housing career within The south of Rotterdam as well an educational career for the youngsters. However, for many inhabitants of social housing in The south of Rotterdam this career seems out of reach, as they are already struggling with the increasing rents in cities.
Process of gentrification

Already several developers which taken land positions surrounding this area. These developers act on speculation, they speculate that surrounding properties will increase in value. They buy the plots now, in order to redevelop these buildings ten years from now and profit from the increased value/value created by the ‘Zuiderziekenhuis’ redevelopment. This may also cause a process of gentrification: the surrounding area comes in an upwards movement, driving low-income households away and attracting middle to high income households.

Emotional binding neighbourhood

Many visitors which worked in the ‘Zuiderziekenhuis’ or have a history here. This became clear when there was an open day about the redevelopment, when hundreds of people visited the former hospital. It can be seen as an icon within the south of Rotterdam.

Factors of success/failure ‘Zuiderziekenhuis’ within area development

- Risks by developers and municipality. The physical and technical structure of some of the buildings are difficult to redevelop which results in a higher development risk. It is remarkable that Impact Vastgoed started building the surrounding housing without presale percentage. They develop in own risk the first houses in the area. This shows that the have such a faith in the project and market demand that they are willing to take this financial risk. Also the municipality took risks by letting the area development take place by ‘own realization right’ by the landowners. The municipality cannot steer the development in this legal strategy and thereby trust the developer to meet the public goals/demands from the municipality such as quality of the public space. The management of the public space will be taken over by the municipality after development.

- Ensemble ‘Zuiderziekenhuis’. The iconic value of the former hospital is very high, it is one of the most known buildings in the district. Almost every person in Rotterdam-South has been in the hospital or has worked there. Hereby the former hospital results in much emotional feelings with the residents of the district. This became clear with the massive interest by the public on an open monument day.

- Change of municipal board. A new municipal board and mayor with new goals, namely the preservation of cultural heritage in Rotterdam and in specific two projects of which ‘Zuiderziekenhuis’ was one of them.

"The success of the project is largely the result of the changing of the municipal board. If this did not happen, the building would have been demolished. There was already an agreement
for demolishment, so it was crucial that the new board had the goal of preserving cultural heritage and in specific the ‘Zuiderziekenhuis.’” (Personal communication, Paul Theunissen, municipality Rotterdam, 2017).

This led to a final attempt to discuss redevelopment with Impact Vastgoed, the involvement of BOEi and ultimately leading to the plans which are there today. Also there was the discourse of more attention of monuments and buildings with cultural historical value. Many of the cultural heritage buildings have been destroyed in the war, so the public opinion is that the city should preserve the heritage which is left.
6. Case Cereol Factory Utrecht

In this chapter the collected data is described about the case Cereol Factory in Utrecht. The structure of the chapter is as follows: first the context and its factors are described after which the process is explained and the parameters for a potential incubator function of the aspects of redevelopment factors, expectations and identity. The roles of different actors are analyzed in the actor analysis. Moreover, the realization of the project and (projected) effects are described. The chapter ends with the factors of success named by different actors.

Context

Location

The former oil- and line cake factory is located in the neighbourhood ‘Oog in Al’ in district West in Utrecht. It is located along the canal ‘Meerwedekanaal’, in order to enable distribution by water for the former factory. The neighbourhood built in the ‘30’s is located at the edge of the inner city of Utrecht, because of the location and city parks of the neighbourhood makes it popular among families. The neighbourhood consist to a large extent of one family homes. The locations for urban redevelopment are scarce in Utrecht, which is why Heijmans, Blauwhoed and TROM were eager to be part of the development.

Figure 15. Area of the Cereol factory in Utrecht. (Wong, 2015)

Accessibility

The accessibility by road is limited, as the Cereol is located in a dense neighbourhood. Some neighbourhood roads lead to the factory site. However, by foot and bicycle the factory is well accessible. Two bridges over the canal ensure a good connection with the neighbourhood Lombok.
The residents of Lombok also regularly visit the neighbourhood Oog in Al, especially the waterfront, the park and the Cereol factory. Many of the users of the cultural functions in the Cereol are from Lombok.

*Market*

There was a need for neighbourhood functions in Oog in Al, as the neighbourhood consist mainly of residential functions. The families in this neighbourhood had much interest in the functions such as a school or daycare for their children and a café to enjoy the evening. The demand for housing is high on this location, as both the park and canal are within reach and the inner city is five minutes by bicycle. The neighbourhood is popular among residents of Utrecht.

*Time*

The Cereol was tried to redevelop before, however it burned down in 2008 making the former plans not feasible. The plans were adjusted, resulting in less volume and a more diverse urban plan. The basis of the former plan was quite strong, that is why all functions retained in the plan only some in less volume.

*Financial resources*

Integral plan for Cereol. Municipality had 1,6 million available for development. Instead of sober plan, they made an urban plan together far exceeding this amount. In total 10 million was invested in the project by BOEi. This investment consist also for a large part of public funds. Without these public funds were crucial to redevelop Cereol. The terrain around the Cereol factory is developed into 136 houses by ‘VOF Meyster’s Buiten’ consisting of the developers Blauwhoed, Heijmand and VORM.

“The degree of participation is different from the degree of involvement. There has to be a common ground for belief in the potential and a vision of an area. If a municipality does not have budget for contributing to the development, they can help a developer in another way. Their ambitions and preconditions have to match otherwise there is no basis for development” (Wellink, Personal Communication, 11 April 2017)

The municipality had little resources for the development, however they were very open for development and took initiative by inviting Heijmans and Blauwhoed to the table for integral area development.
Many public funds were used for the redevelopment of the Cereol. These public funds came from the Province Utrecht, the ‘K.F. Hein Fonds’, the ‘Prins Bernhard Cultuurfonds’ and the ‘VSBfonds’. These funds were crucial to make the redevelopment feasible.

Land values

By choosing the integral approach the Municipality in cooperation with the other landowners Heijmand and Blauwhoed chose for the most cost efficient area development. The neighbourhood was already popular in Utrecht. After the development the demand for housing was even higher in this area. The location near the inner city and near the water makes it for many people a suitable living environment. This affects the land and real estate values.

Process description

In 2001 the Cereolfactory was bought by the municipality in order to redevelop this industrial heritage to housing. However, project leader Jan den Boer saw potential in this area and chose a different approach. Two developers bought two other industrial objects along the Meerwede kanaal shortly after the municipality bought Cereol. The possibility provided itself to redevelop the area integrally in order to reach more qualitative spatial and financial results. This resulted in some internal struggles within the municipality Utrecht, some divisions wanted to put out the contract for residential functions in the Cereol factory.

“I decided to start the conversation and organize an event for the neighbourhood in which we said: we do not have the financial resources but are willing to research what is possible in terms in the zoning plan” (Boer, Personal Communication, 24 April 2017)

Meanwhile the developers spoke out their intention to develop a high quality area, not just investing in the area to earn money in a short time. No contract of budgets were contracted in the beginning of the process, the municipality just started brainstorming with the involved actors about an urban plan. This resulted in new housing next to the Cereol (same architecture as neighbourhood) and industrial redevelopment of the Cereol. The chosen program was a school, library, cultural functions and a café. This was a process of years, it was difficult to attract ultimate users.

“At some point in the process there were not enough users to rent the spaces in the Cereol. We thought of a floor of residential functions, but this would mean the front of the building would have been adjusted. Eventually the municipality decided to subsidize the gym for the school, a library and partly the cultural organization ‘Het Wilde Westen’. “ (Boer, Personal Communication, 24 April 2017)
A complicating factor was the fire in 2008 and the economic crisis which followed. The original plan was adjusted from 230 houses and a parking garage to 136 houses and spreaded parking. The urban aspect of the plan was strong, which resulted in faith in the development by the shareholders in these economic difficult times.

**Project redevelopment factors**

*Position of power area incubator*

The area was highly affected by the Cereol, the historical meaning was of value for the attractiveness of the area. Not only resulted the redevelopment of the factory in faith in development, it also attracted public to the area and had meaning for the area.

> “The development was fed by the redevelopment of the Cereol. Because of this monument, parties were interested in restoration and to do something special in the area. This was the cause for the choice of developing houses with the historical character of the neighbourhood. If the Cereol would not have been there it would be much more difficult to redevelop. As area incubator it was very important.” (Boer, Personal Communication, 24 April 2017)

*Physical presence in process*

The redevelopment of the Cereol factory happened jointly with the area development, it was part of the integral area development approach. When redeveloped it gave the new developed area already a character with industrial atmosphere.

*Relation area incubator – program*

The cultural and commercial functions in the Cereol were one of the need for the neighbourhood. Housing in this monument was not one of the needs. However, the houses located next to the were very popular among residents in Oog in Al. The area incubator served the function of enriching the area program.

*Connected renewal*

Architectural connected: the new developed houses were in line with the architecture of the neighbourhood and connect to the industrial atmosphere in the area. The functions were to some extent chosen by the neighbourhood, and thus highly connected to the residents. Nowadays the Cereol factory is an icon within the neighbourhood. People work, meet and experience in the Cereol.
“The question is: how can you make sure that a project is connected with the identity and DNA of an area. This is possible in multiple ways, such as historical and spatial identity, social cultural meaning and economic value.” (Verheul, Personal Communication, 7 April 2017)

The redevelopment of the Cereol has for the social connected renewal much value.

**Expectations**

**Desired impact**

The impact of the Cereol on the area development was mainly to enrich the program. By co-creation with the neighbourhood the developers tried to create an area for the neighbourhood. The Cereol factory served as an icon, it is the central part of the area developments. Other (mainly housing) developments are located in such a way that it profits from the Cereol factory.

**Economic and social spin-offs**

The economic spin-offs are limited, as the area is mainly residential. The need for a restaurant/café already existed in the area, when realized in the Cereol this became a success. The café on the other side of the cannal (Lombok) profits from the new flow of people which are drawn to Oog in Al in contrast to the situation before redevelopment.

There are several social spin-offs as a result of the redevelopment of Cereol. Firstly it provided an icon within the neighbourhood, which had a negative identity before redevelopment. People from all over the neighbourhood Oog in Al decided to move to the new developed houses near the factory. They identify themselves with the industrial and social identity of the area. The second spin-off is the cohesion of the neighbourhood. They come together in the Cereol for cultural events, the library, to work or for their children in the school. With residents all over the neighbourhood coming together here increases the social cohesion.

**Intrinsic use of the project**

The intrinsic use of the project is for and by the neighbourhood. They succeeded, many residents in the neighbourhood Oog in Al but also in Lombok use the functions within the project. The ambition for the use of the functions turned out to be as intended: to enrich the neighbourhood with functions such as the school, library and cultural centre. The school and cultural centre are more focused on the scale of the neighbourhood, while the library is a function with a greater service area.

“The greater good for redeveloping the factory is for adding quality to the neighbourhood. The functions are from and for the neighbourhood. People come here for the school of their
kids but also to work, to meet or for recreational purposes.” (Lucassen, Personal Communication, 31 May 2017)

Beside the intrinsic use of the functions by the neighbourhood, it also connects socially and physically the residents from the neighbourhood. This contributes to the fact that the houses were popular among the people from the neighbourhood Oog in Al.

**Value creation and capturing**

The created value consist namely out of the value created by development of housing. The redevelopment business case of the Cereol was not feasible without the public funds. BOEi is a non-profit organization, they invested 10 million in this project. This makes it unlikely that they captured value in financial terms, their goal is to preserve cultural heritage. They are however owner of the Cereol, in the coming 10 years they are having returns on their investment by the rents of users. The greatest benefits of the created value take form in new houses which are located around the factory. People have a marginal willingness to pay for these houses to live nearby the factory (Short interview resident, 2017). In the eventual contract a developer contribution was negotiated by the municipality Utrecht, the amount is unknown. This contribution covers the costs of the realization of the public domain.

**Identity**

**Symbolic value**

The Cereol factory can be seen as icon or as landmark. The factory is nowadays the beating heart for Oog in Al. People come together for all sorts of purposes in or next to the Cereol. The greatest symbolic value is the historic value and the dynamic it creates for the area.

“What you see is that when a city combines historic and cultural heritage with new housing it can result to a certain dynamic in an area which appeals to many people. That is the strategic value of cultural heritage.” (Schaik, Personal Communication, 9 June 2017)

Even though the factory was burned out form the inside, it is rebuild in the same perspective. These industrials and historic symbolic elements can be found throughout the architecture in the area.

**Imago of building and area**

Role of monumental status was the strategic value of the Cereol. The fact that the Cereol is a monument resulted in many public funds which helped to make the redevelopment and urban plan feasible.
“The fact that there is a monument in the area development is important for the area incubator function, because people have a greater willingness to invest. There are much funds available in the Netherlands for redeveloping monuments. It would probably not be possible to create the current developments if the monument would not have been there.” (Boer, Personal Communication, 24 April 2017)

The area development would have been possible if the Cereol was not a monument, but probably in a different way. Also the fact that the Cereol is a monument results in identity value as well as popularity to live nearby Cereol. Perhaps if the factory was not a monument it would have been demolished and replaced by housing.

Actor analysis

Municipality Utrecht

(Role: Owner from 2002-2010)

After the factory closed down the municipality became landowner. From this moment onwards they searched for redevelopment possibilities. Public funds were needed in order to make a business case feasible.

“For municipalities it is difficult to deal with potential area incubator because they think in a different context, area incubators for area development must come from private parties. The municipality fulfills a (temporary) facilitating role and should offer initiators space for development. On the other side they have to steer and contribute to possible development and where possible take away risks.” (Claassen, Personal Communication, 31 March 2017)

Took risk and very involved: when problem attended of no ultimate users they provided subsidy to attract several users such as the school, library and cultural centre. This was an important problem solver. Their influence was extended, as they were one of the three original landowners of the area development.

BOEi

(Role: Owner(2010-current), developer, exploiter and landlord)

From 2006 onwards BOEi was involved in the project. At the beginning only to consult municipality about acquiring public funds. In 2010 BOEi became owner of the Cereol in order to redeveloped the Cereol in their ownership. After redevelopment BOEi stays as landlord for the current end-users. Their influence on the process and outcome was mainly their knowledge about redevelopment
factors for industrial heritage and they created trust in difficult times. They are very central to the development, as the Cereol is the historic and social centre of the area development.

Meyster’s Buiten vof

(Role: Developers area)

Heijmand and Blauwhoed developed housing in the area. They were landowners of industrial sites and office spaces and were together with the municipality the landowners in the area development. Their goal was to gain profits from (re)developing these degraded buildings. However, this was not their only goal. From starting point they were cooperative with the municipality to work together and have an integral area development approach. This was in their own interest as well, because the development of Cereol meant value creation for the whole area/neighbourhood. By cooperating they could profit and capture value by increasing house prices on this location.

Residents Oog in Al

(Role: Co-creation)

From the beginning of the development process residents were involved by interactive sessions about the future of the case area. There was residential participation from the beginning of the development. However, the participation and the influence has its limits. At some point when actors disagree about certain choices, the residents are not the decisive party.

Het Wilde Westen

(Role: End-user)

The neighbourhood organization ‘Het Wilde Westen’ is the centre of the neighbourhood network. They organize several cultural events as well as organizing neighbourhood participation. This organization contributed to the liveliness of the building and its functions, resulting in an energetic centre of the neighbourhood. The influence of this end-user is limited, they have mostly societal effects in the neighbourhood. However, these effects are difficult to grade and thereby they have less influence than other actors.

Realization project and effects

The choice was to redevelop to cultural functions, but also commercial functions. Some commercial functions are important as they differ in rent from societal functions making the business case more feasible. However, this is not top priority for BOEi. This is one of the reasons why there are many cultural functions in the Cereol. The profits are less high for the developer and landowner, but the connected renewal is very high resulting in a proud neighbourhood and positive identity.
Several functions are currently already looking to expand: the school, cultural centre and café are short in space. This is the result of the degree of success by these functions.

**Factors of success/failure Cereol Factory within area development**

- Relation between the incubator and program: first it is important to make a convincing plan, and later on negotiate contracts and budget. This approach worked for the development of the Cereol Factory. They did not commit early in the process to a destination, but approached in a structured way plans for the redevelopment by interaction with different parties.

  “There was 1,6 million available for the exploitation of the land by the municipality. At the end 8 million was invested by different parties through private investments and funds for preservation of cultural heritage. Instead of making a sober urban renewal plan for 1,6 million, a convincing urban plan was made by which value was created for the neighbourhood. The urban plan also created trust in development in economic difficult times. The role of Cereol factory was important in this, even though a fire burned large parts down it was still redeveloped” (Boer, Personal Communication, 24 April 2017)

- Participation: connected urban renewal by giving the neighbourhood the possibility to participate in choosing the program of the redevelopment. This early participation between residents, municipality and developers turned out to be a factor of success, as it created throughout the development trust which was important to execute the project, also in economic difficult times. The project was largely supported by the neighbourhood. This became clear when people moved within their neighbourhood to the new houses of the project.

  “The moment you decide to directly participate with parties such as Heijmans and Blauwhoed, it is vital to realize the project together. The art is to trust other participants and to let them trust you in order to work together on the redevelopment.” (Boer, Personal Communication, 24 april 2017)

- Incubator function Cereol factory. The history of the factory is used to add something new to the neighbourhood. The authenticity and uniqueness of the Cereol as monument attracts the public as well as users and investors. Next to this there could several funds for redevelopment of monuments be used.
• Role of BOEi in the redevelopment. They had two roles in the case of Cereol Factory: they had expertise in redeveloping cultural and industrial heritage. This expertise is supported by their contractors with guts and experience in how to redevelop heritage buildings. The developers could assign this building to BOEi and focus on their core business. This created trust in difficult times when large part of the factory was burned down except of the historical front. The involvement of BOEi and degree of participation was crucial for the trust of developers in the area development. The second role was of financial nature, BOEi attracted several public funds making the business case more feasible.
7. Case Soapfactory Rohm & Haas Amersfoort
In this chapter the collected data is described about the case Neighbourhood Rohm & Haas in Amersfoort. The structure of the chapter is as follows: first the context and its factors are described after which the process is explained and the parameters for a potential incubator function of the aspects of redevelopment factors, expectations and identity. The roles of different actors are analyzed in the actor analysis. Moreover, the realization of the project and (projected) effects are described. The chapter ends with the factors of success named by different actors.

Context

Location
The former soap factory Rohm & Haas is part of a bigger area development, also known as project ‘The new city’ (‘De nieuwe stad’). The district in which this development takes place is called ‘Oliemolenkwartier’ (Figure 16). The development of the Oliemolenkwartier consists of multiple redevelopment projects, as the former industrial area is degraded. The area development is an example of organic development and the bottom-up initiatives, in which private initiatives contribute to the informal urban development. It is a city within a city, a spontaneous city for creative entrepreneurs and residents (Poolen, 2011).

Figure 16. Industrial area ‘Oliemolenkwartier’ with Rohm & Haas and Prodent factory. (Source: DeNieuweStad, n.d.; own adjustment)
The first redevelopment within The new city was the redevelopment of Soapfactory Rohm & Haas, however this was just a small part of the area development. The Prodent factory is the biggest project within the area development.

Accessibility

The area is very accessible by foot and car, the industrial site is near the inner city but also the central train station. From several directions the case area is accessible and by multiple modes of public transport. However, it is not easy to come from the inner city to this area. Figure 16 shows that the area is surrounded by two lane roads and water. People have to be introduced to this area in order to have reason to explore it.

Market

Many of the industrial sites were vacant, however the location near the inner city provides potential and chances to redevelop the area. The potential was shown when Rohm & Haas was successfully redeveloped shortly after the economic crisis. The area is currently being developed plot by plot, adding new functions to the area and thereby changing the dynamics. This is exactly one of the benefits of organic development: area development becomes more adaptive to market changes because each plot is developed separate and in a different time frame.

Time

The organic development of ‘the new city’ has some consequences in terms of time of the development process. The time frame of the area development is quite long, because small scale developments (initiatives) are spread over a long term period. However, this also provides chances. For each phase of the development new functions are needed in order to keep attracting people to the area. The current phase consist of several developments, such as the task to develop the public space in-between the Rohm & Haas factory and the Prodent factory (Figure 16).

Financial resources

The municipality Amersfoort bought Rohm & Haas for 2,4 million in 2005, with a soil purification task at the expense of €620.000,-. However they could not redevelop the factory after the economic crisis in 2008 and allowed in the meantime artists to use the factory in order to keep some maintenance. The financial crisis had much effect on this development, it resulted in losing trust in development and difficulty of gathering financial resources with the banks. In 2009 BOEi bought Rohm & Haas for €900.000,-, with plans for redevelopment against economic tendencies. In 2010 the Rohm & Haas was redeveloped, BOEi invested four million in total (BOEi, 2017).
Land values

The land values were relatively low as the area was degraded as well as the factories. The location near the inner city and near the ‘Eem’ increases the (potential) land values.

“The area development is to some extent the result of the redevelopment of Rohm & Haas, but also a broader area becomes developed. The whole area along the ‘Eem’ is increasing in value, where many industrial halls and buildings remain degraded. The ‘Eem’ serves as a lung for development and increasing in value because of this sorts of developments.” (Wolbrink, Personal Communication, 12 May 2017)

The value creation on this location is potentially high, however it may be difficult to capture all value created because of fragmented ownership and organic development. It is vital for this organic area development that all landowners cooperate in order to prevent free-riding. Each (re)development within this area creates value, affecting the land values positively.

Process description

Until 2002 there was still soap produced in this monument. Morton International BV was owner and wanted to realize houses on this location. They requested a permit for demolishing the factory. This started a process in which there was a struggle about the permit for demolishment. Eventually the permit was refused and in 2003 the factory was requested to become municipal monument to the frustration of Moron International BV. In 2005 they sold the factory to the municipality. In 2007 the municipality presented a plan of action. While awaiting further developments the factory was to be temporary used in order to stimulate the creative industry in the area. Three artists rented space in the closed factory. Vacancy is troubling for preserving quality of the building. Other developments in the area were not possible because of environmental issues of the Prodent factory. In 2008 the complex became a municipal monument. A year later, BOEi contacted the municipality about buying the factory with plans for redevelopment. They paid 900,000 for the factory. BOEi decided to redevelop the factory against economic tendencies. However in phases, as for the white villas they were still searching for users. This happened quickly, the area became known and ‘the place to be’ for residents in Amersfoort. The hot spot of Amersfoort started to take form in this area. Nowadays it provides space for artists, entrepreneurs and a restaurant.

The area development was started in 2015. BOEi, owner of the Soapfactory Rohm & Haas and SchippersBosch, owner of coexisting Prodent factory, approached the municipality about developing the whole area. SchippersBosch took initiative by starting the conversations of area development.
and wanted the municipality to take be directly involved in the development and that they also bear some of the risks. These three parties chose for an organic approach of the area development.

“The choice was made to make no urban plan or blueprint, but leave the existing allocation plans as they are. An ambition document was made for the area in order to have a common goal. All the actors in the area were involved, including residents. This resulted in five ambitions: connected identity, industrial poetry, mix of functions, 18-hour dynamic and innovative sustainability.” (Wolbrink, Personal Communication, 12 May 2017)

Every development which take place in the area is now tested to these five ambitions. Every developed plot must contribute to at least one of these ambitions.

**Project redevelopment factors**

**Position of power area incubator**

Municipality and SchippersBosch own together 95% of the area within the area development. Rohm & Haas is a small parcel of land within this area. Rohm & Haas has some position of power, mainly in terms of identity. It was the initial development in the area. Many people were drawn to the area and the new dynamic which was created. Rohm & Haas showed the potential value of this area and has the ambition of becoming the cultural hotspot of Amersfoort. People in Amersfoort had a reason now to come to the degraded area and see what developments take form. This was important for the initiative phase. To some extent this provided a position of power of Rohm & Haas. However, after the first phase, the Prodent factory was redeveloped in a more diverse program and much larger. They became the second incubator and Rohm & Haas had served its purpose for the first phase. This does not mean that the Rohm & Haas is no longer of use, it has become part of the identity of the area. If the Rohm & Haas would re-locate, it would mean that part of the identity of the area would be lost.

**Physical presence in process**

Early in the process, the redevelopment was a pioneer project. By successfully redeveloping the factory in economic difficult times trust was created that development were possible in this area. Other developers could first see what happened with the Rohm & Haas development before taking risk themselves, and after proven success they want to profit.
Relation area incubator – program

The Rohm & Haas served also as pioneer project for the organic development of the whole area. They started out with some creative industry functions. In 2007 the municipality decided to use creative industry in order to create dynamic in the whole area.

“Especially because of the temporary functions the area was introduced among the public, a temporary functions can potentially be a precursor for the eventual program.” (Claassen, Personal Communication, 31 March 2017)

The temporary housing of artists in the Rohm & Haas resulted in identity value. At some point these artist were important for the identity of the building that they were allowed to stay, however they had to growth into ‘normal’ rents instead of the rents they paid when the Rohm & Haas was vacant.

Connected renewal

Connected to surrounding area, after development it become an inseparable part of the redeveloped area. Rohm & Haas has much social connected renewal, by creating identity for the area and giving an impulse for development. However after several developments it is difficult to link back to the Rohm & Haas. The connected renewal is also realized in terms of economic renewal, as the redevelopment was the precursor for many other development.

Expectations

Desired impact

The ambition for the Soapfactory Rohm & Haas was to result in a first impulse in the area. They wanted to reach this by redeveloping each building within its own identity. The halls alongside the white factory building were redevelop into ateliers for artists. This fits with the atmosphere of these industrial places. The restaurant on the bottom floor was used in order to generate public traffic, attracting people to this area. The rest of the floors of the Rohm & Haas were redeveloped into offices for creative industry. This was one of the demand, not any company could rent these offices.

“If you decide to use heritage as area incubator, the question arises how this could be done successfully. What are the expectations, the financial feasibility and how can you reach the desired impact? I think you need the first investor/entrepreneur in an area in order to give it an impulse, in many cases also public funds are needed for this initial development.” (Verheul, Personal Communication, 7 April 2017)
The desired impact in this case was reached by attracting people to the area and thereby motivating other landowner to invest in redevelopment as well.

*Economic and social spin-offs*

The desired impact has much to do with the economic and social spin-offs. These spin-offs were part of the desired impact. The social spin-offs were mainly to create an identity as cultural hotspot of Amersfoort in order to attract people. The industrial and historic atmosphere of this area was used to create that identity. However, the economic spin-offs were very important in this case. The area was degraded for many years and there was a need for development.

> “The Rohm & Haas was a precursor for developments in the area, it created trust in development. People were drawn to the area after the redevelopment of the factory, Rohm & Haas have an impulse to the area. Landowners wanted to profit from this impulse, they were motivated to redevelop and started to invest in the area.” (Pijnenborg, Personal Communication, 22 June 2017)

After Rohm & Haas other developments took form in the area. The Rohm & Haas had the desired effect on the area. The Prodent factory started to develop organically from 2013 onwards taking over the incubator function. Many functions located in the Prodent factory, currently over 80 functions are located within the buildings of Prodent. Next to this a music stage ‘Fluor’ located itself next to these two factories (Figure 16).

*Intrinsic use of the project*

The use of the factory was solely for creative industry, other functions which did not fit within the creative industry were not allowed. BOEi had a certain vision for the area as well as for the Rohm & Haas. If they allowed all sorts of functions within the former factory, it could take away some of the identity of the Rohm & Haas. The functions had to be connected to the identity of the building, which explained the choice for creative industry.

*Value creation and capturing*

The value created consist that of the restructuring of the area and of the buildings. The new dynamic in the area attracts people, resulting in a potential market for businesses. The organic development of this area consist of multiple small-scale projects. Mainly the municipality and SchippersBosch capture the value created by the uplift of the area, as they are landowners of almost 95% of the area. However, the were the risk bearing parties. After Rohm & Haas was developed, enough trust was created to invest in redevelopment of the whole area.
Identity

Symbolic value

The symbolic value of the former soap factory is limited. The factory does not stand out within the area, it is somewhat hidden. The symbolic value mainly consists of the artists which created a certain imago over the years by their ateliers in the halls of the Rohm & Haas. This was the groundwork for redeveloping the Rohm & Haas to the cultural hotspot.

Imago of building and area

The Rohm & Haas became one of the area identity holders in the first phase of development. The image was very important, it was vital that people were attracted to the area. The Rohm & Haas had to change the negative identity of a degraded industrial area with social problems into the identity of cultural hotspot for everybody.

“A function can be important in the first phase of development in order to make developments happen. At a certain moment this is done and becomes the function less important for the area development and the function can possibly relocate. But there are also functions which earned their place and are inseperable connected to the area that you lose a part of the area identity if they move.” (Wellink, Personal Communication, 11 April 2017)

The Rohm & Haas is now inseparably connected to the area and industrial ensemble, it has become part of the identity of the area.

Actor analysis

BOEi

(Role: Landowner, Developer Rohm & Haas)

BOEi invested in Rohm & Haas against economic tendencies. They created trust for development by the redevelopment of Rohm & Haas. The role of BOEi in the whole area development is limited, as the Prodent factory covers most of the area. Their influence was extensive in the first phase of development, however this influence decreased when the Prodent factory was developed. They became the new area incubator affecting the process and outcome of the development.

Municipality Amersfoort

(Role: Landowner)

The municipality has much influence in the area development, they own almost 40% of the land of the area development. They oversee the organic developments in the area and steer the course of
the development. Not the whole area is developed at once, plot by plot is developed according to market demand. This led however to more administrative work, but resulted in a more multifunctional area as well.

“"The municipality Amersfoort and SchippersBosch own both almost half of the land in the area, but SchippersBosch is also buying plots from the municipality making them landowner of almost 75% of the area.” (Wolbrink, Personal Communication, 12 May 2017)

Many parties want to develop the remaining plots. SchippersBosch and the municipality have a strong position of power in the area. This is one of the reasons why some of the remaining plots are developed by SchippersBosch instead of other developers.

*SchippersBosch*
(Role: Landowner, Developer Prodent)

SchippersBosch own most of the lands in the area development. Together with the municipality they made a vision for development for the area. They have much influence as they own the most land in the area development. Their negotiation position is very strong because of their landownership. They took risk by developing the Prodent factory. The Rohm & Haas development showed potential for the area, but the Prodent factory was a different development in terms of scale and program.

*Hogeschool Utrecht*
(Role: Landowner, End-user)

Hogeschool Utrecht own the building in which the community college is located. They are an ultimate user, but took one of the building of the Prodent factory in their ownership. They contribute to the bigger area development by the societal function, but have little influence in the process or outcome of the development.

*Neighbourhood Gildekwartier*
(Role: Residents coexisting area)

The Oliemolenkwartier has no residents, so the neighbourhood perspective in this case consist of the perspective of the neighbourhood on the other side of the ‘Eem’. This is the Gildekwartier, in which many relatively new housing blocks have been developed. They have little to none influence on the development, however they benefit themselves by it. Many people make use of the new functions. They experience some of the created new value, but most residents are not very central in the development. The Eem serves as a physical barrier.
Realization project and effects

- The redevelopment of Rohm & Haas gave the area the first impulse. By attracting public the area was both introduced to the public and gained an identity.

“The Prodent factory has much more public functions and is because of this more an area incubator in the further process of area development. In particular the enormous mix of activities and interaction between companies which result in the incubator effect” (Wolbrink, Personal Communication, 12 May 2017)

The value created by Rohm & Haas was mostly temporary: it enriched and accelerated the area development. This mostly fits within the described area incubator ‘Dynamo’ by Wellink (2008), except for two parameters. This type of area incubator has an early physical presence in the area development. It is mostly an entrepreneur which starts the development. In this case BOEi started developing the Rohm & Haas. The municipality was skeptical at first, they did not saw any value in the Rohm & Haas. The development of Rohm & Haas became part of the program.

- By developing Rohm & Haas trust was created for next developments in area. The theory of ‘Scale-up’ described the obstacles in the beginning of a process. After initiative by one entrepreneur other landowners are skeptical and the municipality is prudent with cooperating to the development. However, after proven success there is a basis for development and other landowners want to profit from the created value. The value created by Rohm & Haas consists of both social and economic value.

Factors of success/failure Rohm & Haas within area development

- Momentum. The development of Rohm & Haas and the following developments took place at the right moment. The municipality Amersfoort pays much attention to industrial and cultural heritage. The national discourse was that the industrial sites near the inner city hold much potential for redevelopment and value creation (Poolen, 2011).

- Common goal and interests. The common goal and interests by actors in the area was vital for the success. A point on the horizon works stimulating for actors and gives focus in a complex process with many uncertainties. Other developments with an integral approach are not flexible enough, the program and organization has been contracted. Endless contracts and negotiations makes the process more complex and makes it difficult for parties to stay enthusiast and keep their trust in the development. A precondition of this approach is that actors need to deal with many uncertainties, there is no cooperation agreement between
parties but they can accomplish many things without contracts. This requires a flexible attitude by both the municipality and developers/landowners.

- Ultimate user in process. It is important to include ultimate users early in the process in order to adapt to the wishes of potential renters. However, this results in many uncertainties which is difficult for the municipality and developers. One of the uncertainties is the profit. Organic development is highly process dependable, which is why it is difficult to estimate costs and profits. The municipality and developer need to take this risk in order to make developments successful. These parties were more desperate in times of economic crisis and experimented with this approach.
8. Case ‘Tramremise De Hallen’ Amsterdam
In this chapter the collected data is described about the case ‘De Hallen’ in Amsterdam. The structure of the chapter is as follows: first the context and its factors are described after which the process is explained and the parameters for a potential incubator function of the aspects of redevelopment factors, expectations and identity. The roles of different actors are analyzed in the actor analysis. Moreover, the realization of the project and (projected) effects are described. The chapter ends with the factors of success named by different actors.

**Context**

**Location**

The former tram halls of storing trams is located in the west district of Amsterdam. This is a dense residential area at the edge of the inner city of Amsterdam. Before the development of ‘De Hallen’ there were not many visitors of these neighbourhoods, except the residents itself. This was really ‘a village’ neighbourhood within the city: not much happened in the evening, there was little dynamic. However, when ‘De Hallen’ developed this dynamic changed and many people were drawn to this area which was not the case before.

![Figure 17. Aerial photo of ‘De Hallen’ in Amsterdam. (Source: BNA, n.d.)](image)

The former tram halls are part of a larger development, the coexisting terrain is redeveloped into housing blocks (Figure 17). There was some conflict about the height of these housing blocks. The zoning plans restricted landowners to build higher than three floors, however these housing blocks
have five floors. This was one of the topics on which the residents in the neighbourhood disagreed with and offered resistance.

**Accessibility**

The accessibility is good, by both car and public transport. However, because of the dense neighbourhood many problems arise regarding traffic and parking. Car and cycle parking are two main issues in this district. These issues were to be solved within the halls and by a parking garage.

**Market**

After the economic crisis it became increasingly complex to redevelop the halls because developers had to be creative with financing and the redevelopment. At some point the economic market began to restore and more and more actors saw the potential of these historic and cultural heritages. The new functions is highly dependable on the market as well. The entrepreneurs, assembled in ‘De Hallen’ are continually changing with the market conditions and demands. These creative entrepreneurs are evolving with the latest trends of food, drinks and culture.

**Time**

For over 15 years ‘De Hallen’ were vacant. There was much potential for a feasible redevelopment of these halls, however the redevelopment is very complex because the location within the dense area. The complexity (contextual and organizational) combined with the large size of the halls resulted in the failure of former initiatives.

**Financial resources**

There were many subsidies used to redevelop the former tram halls, because it is a state monument. State monuments are suitable for many subsidies. The former halls were redeveloped by TROM cv, a collaboration between several parties. They have private funds as well as loans for the development of the former halls. At some point in the development the municipality Amsterdam wanted TROM cv to also redevelop hall 17, but this was too much for them. They already had two loans of 10 million from banks. There is a great difference between developing with own funds and loaned funds. TROM cv had to confirm each move/choice with their money suppliers, which costs time in the process. This was not the case for Stadsherstel NV, they developed hall 17 with their own funds and could act fast when this was required.
Land values

The land values are relatively high in Amsterdam. This is one of the reasons why there was much potential for redevelopment in this area. For over a decade the demand for housing far exceeds the supply of housing. This results in very high housing prices in and around Amsterdam. Developers gain strategic positions throughout Amsterdam in order to profit from these market circumstances.

Process description

For almost 15 years ‘De Hallen’ were vacant. There were two initiatives in this time which did not make it. One of them was the initiative by Harry de Winter, which wanted to commercially exploit the former tram halls to a nightclub. This resulted in much resistance by the neighbourhood. Right from the start there was tension between this commercial developer and the residents. They did not want to have a nightclub in their neighbourhood, causing trouble at night. During the day the nightclub is silent, however at night many people are drawn to such a club. This resistance, combined with the economic crisis, resulted in the failure of the initiative. Because of the economic crisis some of the investors went away, the financial risk of the investment was too high for them.

“The economic crisis is not just negative. Because of the crisis the initiative for a nightclub failed and they had to search for a more creative program in order to make an initiative feasible. This led to the residents which formed an alliance together and contracted the architect Van Stigt.” (Kieft, Personal communication, 7 June).

They searched for creative solutions to redevelop the halls and to attract ultimate users. Involved residents wanted to help with the redevelopments, which is why the founded TROM cv consisting out of multiple parties. This unique coalition of a non-profit foundation, the neighbourhood, the architect as entrepreneur and users have made a special financial construction with private parties in order to finance the project. The municipality oversees and facilitates the project, making ‘De Hallen’ an example for citizen initiatives.

In 2014 the redevelopment was completed. It resulted in a diverse program, both cultural and commercial functions. These commercial functions (hotel and food theme hall) were needed in order to finance the project. Other cultural functions such as the library, cinema and artists galleries were not enough to make the plan feasible, the financial resources are scarce. In the first years almost two million people were drawn to the area.

“It was a coincidence that the cinema located in the former tram halls. The saw the opportunity and took the risk. It turned out to be a huge success, for both visitors from
outside Amsterdam as for the residents in the area. Taking risk and entrepreneurship are important to make such a project succeed.” (Kieft, Personal communication, 7 June).

Project redevelopment factors

Position of power area incubator

The Halls are superior to the area, the housing blocks are developed in addition to the redevelopment of ‘De Hallen’. Many people are attracted to this area because of this project, almost two million visitors were drawn in the first year. Many people are attracted by the new dynamic in the area. However, not every resident is happy with this development.

Physical presence in process

The physical presence was in the middle of the development. The housing blocks are developed after the redevelopment of ‘De Hallen’ was completed. These housing block are currently being developed, while ‘De Hallen’ is already attracting many visitors to the area.

Relation area incubator – program

The program is additional to the redevelopment of ‘De Hallen’. In order to make a feasible plan housing blocks were developed alongside ‘De Hallen’. The incubator function was to attract people, both visitors and residents. However housing is demanded throughout Amsterdam so developers have much trust that the houses will sell. The question is to what extent people are willing to pay more for these houses because of the location near ‘De Hallen’. It turned out to be part of the motivation, but there were many factors such as the location in regard to the centre and residents which were happy to have the possibility as the waiting lists are quite long.

Connected renewal

The connected renewal was very high. The neighbourhood participated by founding TROM cv. They determined the functions which established in ‘De Hallen’ and in which way it would fit within the neighbourhood and character of the building. The result was that many cultural functions located within the halls.

Expectations

Desired impact

The desired impact of the project consist of three elements: enforce identity and iconic value, stimulate the environment as well as the livability and social cohesion. ‘De Hallen’ is a state monument. This has much cultural and historic value, but also much protection. The redevelopment
was done with almost no physical changes to the structures, instead the consisting structure was used to make a unique concept of separate halls with each its own theme. This is an example of solving a problem in the redevelopment process by using the existing building to its own strength.

**Economic and social spin-offs**

‘De Hallen’ were an economic boost for the area. Almost two million people were drawn to the area, which benefits the entrepreneurs in the neighbourhood as well. The house owners in the area benefit from the added value.

The social spin-offs are mainly the iconic value and increasing identity of the area. Almost everyone in Amsterdam is now familiar with this project. Before redevelopment the neighbourhood was a residential enclave within the city.

**Intrinsic use of the project**

The intrinsic use of ‘De Hallen’ was to fulfill the need for public functions in this area for both residents and visitors. Nowadays mainly tourist come to ‘De Hallen’. Residents think the prices are too high for food and drink. They mainly use the library or cinema. Other functions are barely used by direct resident.

“Intrinsic use of project ‘IJ museum’ in Amsterdam was that it should create employment opportunities for the district. However, from the staff of the museum nobody knew persons from the Amsterdam-North. There was a discrepancy between ambitions and actual functioning, in practice it is difficult to realize desired effects. The question is how these effects can be enforced.” (Verheul, Personal Communication, 7 April 2017)

‘De Hallen’ was intended to increase the social cohesion. However when the target group changed to tourists over the years it resulted in less value for residents. The flow of people had effect on the livability and prices of products. The overload of visitors was the result of the success, perhaps there was too much success.

**Value creation and capturing**

The economic spin-offs create an added value. This value is captured by landowners, entrepreneurs and the developer of the housing block. The entrepreneurs in the area profit from the created flow of tourists towards ‘De Hallen’. The direct area of ‘De Hallen’ profits because the development positively influences their housing prices. However, the housing prices are increasing throughout Amsterdam. Development of ‘De Hallen’ does contribute to the increase, it is not the only factor.
Identity

Symbolic value

The former tram halls were for decades the working place for many people in Amsterdam. This history of the building contributes to the symbolic value. In the redevelopment many aspects of this history come back, throughout ‘De Hallen’ there are pictures from ‘De Hallen’ before redevelopment. The story of the building is told by these pictures.

Imago of building and area

Many people in the area know the tram halls from their past. It was . The old doors are used and the tram trail are preserved. This provides a certain feeling of identity. This is one of the reasons why the project is appealing for the people.

“The iconic value is very important for cultural heritage. However, in some cases the iconic value could lead to attracting tourists which could lead to ‘touristification’. Mainly in Amsterdam this is a topic.” (Verheul, Personal Communication, 7 April 2017)

This iconic value creates tension as well. Many tourists visit ‘De Hallen’, creating much dynamic throughout the day. Not all residents in the area are happy with the development, as the bicycles increase and the neighbourhood becomes more busy.

Actor analysis

Municipality Amsterdam

(Role: Facilitate development, administrative role)

The municipality has indirect influence with their planning tools such as restrictions and zoning plan. Because the land values increased over the last years they have to steer many developments in order to stop for example the development of a hotel on every street corner. They facilitated the development of ‘De Hallen’ by also placing ultimate users in the building: the library. They were important in their decision-making and to address the concern of the neighbourhood about this development.

TROM cv

(Role: Landowner, developer)

The citizen participation initiative ultimately led to the coalition TROM cv. Their influence was first limited to protesting the initiative, after which they gained an active role in the development. Their participation was very influencing on the development.
This is an unique coalition in which many actors come together in order to achieve two goals: redeveloping the halls and to create value for the neighbourhood.

**Stadsherstel NV**  
(Role: Landowner, developer)  
Stadsherstel own just one of the halls, ‘Hall 17’. They bought this hall in order to redevelop it separately form the other halls. Stadsherstel NV already had a role of advising TROM cv. TROM cv could not make the redevelopment feasible after they were asked by the municipality to also develop hall 17. This is the reason Stadsherstel NV stepped in.

**Van Stigt architects**  
(Role: Architect, entrepreneur)  
This architect is experienced with the redevelopment of monumental buildings. They were not only the architect but also involved as an entrepreneur. Their knowledge about how to redevelop ‘De Hallen’ and their vision were determinate in the eventual program.

**Neighbourhood Oud-West**  
(Role: residents area)  
The residents experience many effects of the redevelopment. To this day they actively participate in order to stand up for their ideals and how the municipality should act on certain developments. However, not every resident is convinced about their participation influence. They are provided platform, but a lot of effort does not always lead to desired effects. This is a difficult process, because other actors have their own interests as well.

**Realization project and effects**

- Economic spin-offs: the development created a boost for the area. ‘De Hallen’ became the centre for the neighbourhood: both in physical, culture and economic terms. The development created new walking routes in the area, it provides identity and has iconic value and the land values increased. Moreover, the profits of entrepreneurs increased as a result of the attracted flow of people.
- Tourist attracted by ‘De Hallen’: the attracted flow of tourists resulted in parking problems, much traffic and trash on the streets etc. There are so many hotel and catering/restaurant functions in the area that no more of these functions are allowed in the area.
Factors of success/failure ‘De Hallen’ within area development

- Communication with residents. Former initiatives had little interaction with the neighbourhood resulting in bad relation between the developer and residents. The area in which the development takes place is highly urbanized, the building density is very high. This makes that residents experience many effects of the redevelopment. TROM cv had a good relation with the residents, resulting in little interference by the residents in the redevelopment process.

- A creative program attracts people and attends to the trend to experience and the need for multifunctional areas. The mix of functions in ‘De Hallen’ has a good balance, functions are located in the former halls for all sorts of target groups. This creates a pleasant dynamic within the building and the area. The theme of the food halls played an important role in the success, this hall attracted many people to this area. Entrepreneurship is crucial, new people are attracted to the halls because of creative entrepreneurs.

- Location. ‘De Hallen’ is well located within Amsterdam, ten minutes from the Museum square. Many tourist combine their visit to these museums with a visit to ‘De Hallen’.

- Architect André van Stigt. This architect was involved in the redevelopment by TROM cv. The starting point of the project was to adapt the functions to the building, instead of the building to the functions. This approach has proven more suited, as former initiatives implied a lot of building technical changes. The residents in the neighbourhood resisted against these changes. Van Stigt gives priority to the monumental building, he recognizes the value of the building and has experience how this value can be used in the redevelopment.
9. Conclusion
The conclusion of the research is described in this chapter. The first paragraph answers the research questions, beginning with the contextual factors and sub questions after which the main question is addressed. The second paragraph is a critical reflection upon the research. The chapter ends with recommendations and possible future research topics.

9.1 Research questions
The next factors are related to the context circumstances and to what extent they influence the process and outcome of the area development.

Contextual circumstances

Accessibility
The location is one of the factors which influences the accessibility. An area needs to be accessible if an area incubator wants to attract people in order to give the area an impulse or the desired social or economic spin-offs. In each case there was a need to introduce the people to either the area or the building.

The accessibility is also of importance for the choice of functions. Some functions are more dependable on accessibility than others. For example a hotel function needs to be accessible for their users, but a library or school within the neighbourhood is less dependable on this accessibility. Functions which generate traffic in a high density neighbourhood need to consider parking places. The municipality demands that parking for these sorts of functions is solved on their own plots, there is an assessment for the amount of parking places in relation to the amount of users a function attracts. A parking garage is a solution, but these extra investments put pressure on the feasibility of the redevelopment.

Market
After the economic crisis there was much pressure on the practice of area development, however the last few years the economy is recovering as well as area development and market demand. The demand for housing in inner cities increases because of societal developments such as urbanization, resulting in lucrative business for developers. In the case of Cereol in Utrecht the developers saw opportunity after the municipality Utrecht bought Cereol to strategically take land positions around Cereol in anticipation of future development.

The demand for housing and its lucrative business model also results in many housing near cultural heritage objects. Every case except for Rohm & Haas has new housing developed around the
redeveloped heritage but not always within the heritage itself. This has several reasons: the physical structure of heritage is not suited for housing, a large target group is excluded (visitors/tourists) and people are also willing to pay relatively more for a house in the area of a (monumental) heritage object. People are attracted by the provided identity and the functions aligning with this identity. Housing does not fit within the industrial identity of many buildings, but cultural or societal functions do fit.

The economic crisis did not only had negative effects. In the case of Rohm & Haas it provided BOEi the opportunity to become owner with a low initial investment. They bought the Soapfactory Rohm & Haas for €900,000.-. In the case of ‘De Hallen’ investors pulled out of the development, but ultimately this resulted in TROM cv and they created a more diverse program of functions.

Time

Many initiatives failed in time. The process of development takes long, as it is complex. Two initiatives failed in redeveloping ‘De Hallen’, in time they could not make the business case financially sounds or the protests from the residents resulted in failure. Each initiative endured for years because of these reasons, ultimately resulting in the withdrawal of the initiative taker. The organic development of an area, such as in project ‘The New City’ in Amersfoort, has a long time frame in which developments take place. This ensures a certain adaptive role: changed market circumstances have less influence on the development. It does however lead to more administrative work and is a less cost efficient approach. Redevelopments in the other cases took place within neighbourhoods, where this approach is less suitable. However, the incubator function within the organic development has potential for creating trust in other developments. People had to be introduced to the area development of ‘The New City’ in Amersfoort, they needed to see what developments take place and have reason to come to the area. This is where an area incubator can function as accelerator of the area development.

Integral area development approach has a shorter timeframe. The whole area is developed into one or several phases, with the goal to use the public space and real estate as cost-efficient as possible. This approach is used for the developments within a highly urbanized area. The goal of the area incubator in such is mainly to create an identity for the neighbourhood, as it consist of a large part out of residential functions. Another goal may be to start a process of gentrification, in order to create an uplift in a degraded area. The timeframe of integral area development with cultural heritage is however relatively long, as these processes are more complex because of the redevelopment of cultural heritage.
Financial resources

Initial investments are higher with the redevelopment of cultural heritage than greenfield developments. This puts pressure on the business case, one of the challenges is to find feasible new uses for the redeveloped cultural heritage. In all of the cases many public funds were used. These funds were necessary in order to make redevelopment feasible. These funds are used to close the gap of the negative exploitation balance. The Netherlands has much public funds for real estate with cultural and historic value, however not all developers have knowledge about which funds could be available and the process of acquiring these funds. This is one of the expertise’s of a non-profit organization such as BOEi, they have a good connection with the network of actors which grant these public funds.

The economic crisis had its influence on the financial resources for area developments, let alone area developments with cultural heritage objects. Investors were forced to take less risk and were careful in their investments. Investors pulled out of the development because of the financial crisis in the case of ‘De Hallen’. The involved parties were forced to creatively search for functions and a financial construction to finance the development, after which they set up TROM cv. Area developments can still take place, whether or not financial resources are available at the municipality. In the case of Cereol the municipality had 1,6 million available for exploitation of the land. They chose to first make a strong fundament for an urban plan and afterwards put the contracts out. Starting-point was that if the urban plan is strong and if there is trust in this plan, the investments will follow. Eventually almost 8 million was invested by private parties in the case of Cereol.

Another factor of financial resources which influence the process of development is the difference between owned financial resources and loaned financial resources. In some cases developers are faced with loans in order to obtain the needed financial resources for redevelopment. This was the case for TROM cv, they had two loans of 10 million with banks. The consequence of such loans is that whenever a developer is faced with an important decision (which may costs money) that the money supplier needs to approve each decision, as it is their investment in the redevelopment. This may cost valuable time in the process. Developers with owned financial resources may still have to approve decisions with their investors, but this differs from a developer with loaned money.

Land values

Land values influence the area development process and outcome. ‘De Hallen’ in Amsterdam is located near the centre of Amsterdam, where the land values are relatively high. This results in much potential for development, especially for developing housing. The development of the housing blocks creates much value, mostly captured by the developer.
The land values also influence to a great extent the initial investment, a high land value drives the initial investment up. If this is the case, it becomes more difficult to make a feasible business case for redevelopment. The municipality Amersfoort bought Rohm & Haas in 2005 for 2.4 million euro. In 2009 they sold the factory to BOEI, but the high value in their books was not a realistic selling price any more as a result of the financial crisis and the degraded area. The municipality Amersfoort had to significantly lower the selling price in order to increase the feasibility of a redevelopment business case. In some cases this was a criteria for a feasible business case, the municipality Rotterdam had to compensate the developer in the case of ‘Zuiderziekenhuis’ in order to make the redevelopment feasible.

**Sub question 1. What are the factors for cultural heritage to be successful as area incubator?**

- What is the effect of the location on the success of the area incubator?

The location of the redeveloped cultural heritage serving as area incubator is very important for many factors in the process of area development. The location of cultural heritage influences the land values and renting prices. It determines to some extent the feasibility of the business case for the redevelopment of cultural heritage. Cultural heritage objects hold more (potential) economic value if they are located near the inner city. There are some limitations to these central location: it could lead to pressure on the urban area. Case ‘De Hallen’ is an example with much potential: the redevelopment is profitable, however the location within the urban area results in complexities. The location is suitable for commercial functions which attract people, but all sorts of commercial functions are not desirable by residents in the area because many residents already complain about the many activities and how these activities influences them. This brings a certain tension between on one side the potential of a location in terms of functions and on the other side the relation to its urban area. This possible tension makes it important to embed the redevelopment project in the urban DNA in order to create a basis for development.

The balance between the functions within a location and an urban area is important. The mix of functions were more balanced in the case of Cereol in Utrecht. A basis within the neighbourhood was created by adding more societal functions in the program. However, commercial functions are crucial for the feasibility of a redevelopment business case. The only commercial function was the café on the ground floor. This was a desired commercial function by the neighbourhood, there were not yet functions like these in the area. The balance between commercial and social functions tipped towards commercial functions in the case of ‘De Hallen’, which was needed to make the project feasible. However, the success of these commercial functions such as the ‘Food Halls’ created much tension with the urban area, resulting in traffic issues and increasing prices. The need for these
functions by the residents was much less than the case of Cereol, which is why the societal basis differs much between these cases.

The redevelopment of cultural heritage could create value in an area, especially in areas which are degraded because they may start a process of gentrification. In the case of Rohm & Haas the redeveloped factory served as pioneer, creating trust for development of other factories in the area. Cultural heritage is often seen as real estate objects with much cultural and aesthetic value. Where these buildings are located is one of the factors which determine to some extent the iconic value. The ‘Zuiderziekenhuis’ was located on the crossroads where many people see the building, next to the fact that the former function of the hospital was well known among the residents of the district. But the soap factory Rohm & Haas was more hidden within the area, their objective was to become more known and attract people to the location. The location has much influence on the goals and impacts of an area incubator function.

- What sort of spin-offs are created by the area incubator?

The created spin-offs by an area incubator can differ between social and economic spin-offs. The social spin-offs vary: redeveloped cultural heritage could lead to identity making for the area or district, it provides iconic value and in many cases cultural functions are located in the redeveloped heritage which have social value for the neighbourhood. In order to ensure (one of) these spin-offs it is important that the ‘story’ is told about the heritage object. Visitors of cultural heritage buildings have a need for experiencing, especially the atmosphere makes cultural heritage special. The industrial or cultural feeling these building provide can be used to add value to the functions within the building. One of the preconditions is that the functions need to be adapted to the structure of the building, not the other way around. These functions have to ‘fit’ with the provided identity. These are two elements handled by a social entrepreneur in each case. The case of Rohm & Haas focused on creative industry functions within the factory, other functions were not allowed as they could take away the identity. These functions provided identity for the building as well as the area. It became the cultural hotspot, where all sorts of creative artist are placed and where the restaurant in Rohm & Haas attracted people to the area.

The iconic value also contributes to the social spin-offs. The ‘Zuiderziekenhuis’ was an example of a building with much iconic value. For generation people visited this hospital, for better or worse. The emotional binding with the former hospital contributes to the social value: many people are proud to have this cultural heritage object in their neighbourhood or district. However the ‘Zuiderziekenhuis’ is an example of where the new functions are less connected to the area. Many residents in the neighbourhood valued the preservation of the ‘Zuiderziekenhuis’, but have less binding with the new
residential and educational functions. The connected renewal and social spin-offs could have been increased if some societal functions (focused on the needs of the neighbourhood Vreewijk) would have located in the ‘Zuiderziekenhuis’.

The economic spin-offs vary between increasing business for entrepreneurs and the rise of land values after redevelopment which can possibly result in the process of gentrification. One of the effects in the case of ‘De Hallen’ was that almost two million tourists visited ‘De Hallen’ in the first year after redevelopment. This does not only creates revenue for the entrepreneurs in ‘De Hallen’, but also for entrepreneurs in the whole district.

In every case the created value by redeveloped cultural heritage is captured by realizing housing near the object. Residents are not only willing to pay relatively more for housing in a monumental building, but also in the direct area of the monumental building because of the social effects. This results in the rise of land values and possibly starting a process of gentrification. The gentrification effects may be difficult to estimate in the cases where the redevelopment just started or has just been realized. The land values rises, but this does not always lead to gentrification. However, there are some indications of the starting of the gentrification process. Smith & Williams (1986) concluded that these processes could especially be started in low-income neighbourhoods. This is the case with the ‘Zuiderziekenhuis’ in Rotterdam. Residents of social housing already struggled with the increased rents for social housing, which is an development throughout Rotterdam. This is one of the ambitions of the municipality, to create a uplift both economically and socially in the area. Some developers bought degraded real estate in the direct area of the ‘Zuiderziekenhuis’, anticipating future value creation and developments.

Landowners and real estate owners in the direct area profit from the economic spin-offs, but residents which rent their house may experience rising rents as a result of the developments in the area. This could force residents to move. This is exactly the social injustice Slater (2010) described: low-income households face the consequences of the economic developments in the area, after which they have to move out their home or be evicted. So especially house owners profit from economic spin-offs, the renters of houses do not.

- What is the relation between the area incubator and the program of the urban (re)development?

The literature described three relations between an area incubator and the program of the area development: occasional collaboration, part of the program and additional, each as an indication for different types of area incubators. The Rohm & Haas served as area incubator in a very early stage,
where the area development still had to be introduced. This relation between Rohm & Haas and the development was occasional collaboration: after Rohm & Haas served its purpose as area incubator, the Prodent factory took the incubator function over. This may indicate that occasional collaboration also results in temporary effects of the area incubator.

The Cereol factory, the ‘Zuiderziekenhuis’ and ‘De Hallen’ were part of the program in contrast to Rohm & Haas. This has much to do with the approach, these area developments were integrally approached: resulting in a different relation between the area incubator and the urban area development. All of these buildings were part of the program, which is one of the factors why they could continue adding value to the area after development. The relation strongly depends on the goals of the area incubator and the area development.

- *How does the monumental status of heritage enables or constrains the area incubator?*

The monumental status is no key to success. It adds value to the identity and iconic value, by protecting the building from physical changes. It depends on the perspective whether or not the monumental status is seen as constraint. The literature identified the value of monuments for the city and the direct area, but developers experience mainly the constraints in the redevelopment process. There are many rules and procedures protecting these objects from technical changes, limiting developers to the consisting structure of the building and frustrating the redevelopment process. This affects their possibilities for potential new functions. Developers experience this as constraints, however there are actors which know how to deal with redeveloping monument. In the cases these actors were either an architect (such as ‘Van Stigt’ or ‘Van Wilsum Van Loon’) or a social entrepreneur (such as BOEi or Stadsherstel NV). However, these actors also prefer a monumental status after redevelopment instead of before.

There are ways how this constraint could be prevented. In the case of ‘Zuiderziekenhuis’ and Rohm & Haas the buildings were not monuments yet but were in the process of becoming one. The developers and landowners in these cases negotiated with the municipality that the buildings did not become monument until the redevelopments was completed. In the case of ‘Zuiderziekenhuis’ the municipality did constrain the developer to some extent by forcing them to threat the building already as monument in order to prevent substantial structural change. However, not every brick is monumentally protected and minor changes were allowed which result in a smoother redevelopment process.
In the case of Cereol and ‘De Hallen’ the building was already a monument before redevelopment. Cereol burned almost down in 2008, only the front of the building remained. This provided opportunity to rebuilt the building in a more efficient structure. In the case of ‘De Hallen’ the developers had to keep the monumental rules in mind. But the monumental status does not always have to constrain developers. Actors such as BOEi or in the case of ‘De Hallen’ Van Stigt architects or Stadsherstel NV which are experienced with redeveloping monuments play an important role. They have knowledge about procedures and how to act when dealing with redevelopment of monuments. Next to this many public funds are available for redeveloping state monuments in the Netherlands. Municipal monuments have less possibilities for public funds, this has to be negotiated with the municipality which has in many cases not much public funds available for these developments. The reason for this is that state monuments hold relatively more iconic value than municipal monuments, as their value is limited to the municipality. All of these effects enable or constrain the redevelopment of cultural heritage, but has little influence on the incubator function and effects. A monumental status solely serves to protect the cultural heritage from demolishment or damage.

- **What is the strategic value of cultural heritage for the area?**

The strategic value of cultural heritage differs for each area, depending on which effects are desired and the value it can create. In the case of ‘Zuiderziekenhuis’ a new neighbourhood is created, however it already has a character because of the monumental and historic ‘heart’ of the neighbourhood. The ‘Zuiderziekenhuis’ provided identity and has a pull effect for people to live in the area. The Cereol had strategic value by becoming the social and physical centre of the neighbourhood: it provides many social function and cohesion for the neighbourhood. Rohm & Haas attracted people to the area and created trust for other developments. After Rohm & Haas was developed the land prices started to increase. The social value of heritage is that people are attracted to the social sphere it provides, they have emotion with these old buildings which tell a story. ‘De Hallen’ is an example of how heritage is used to create liveliness and a new dynamic in the area, both having social and economic effects. It is difficult for many actors to estimate and capture this strategic value, in many cases demolishment is the first option despite proven effects of cultural heritage and its strategic value. Developer Impact Vastgoed wanted to demolish ‘Zuiderziekenhuis’ in order to develop new housing and the municipality Amersfoort leaned towards demolishing Rohm & Haas.

The cases are examples of how the strategic value of redeveloping cultural heritage can be used, but this strategic value is not always recognized. It requires knowledge and experience of redeveloping these objects in order to create and use the strategic value. For the municipality and developers it is
difficult to use cultural heritage strategically, as it is not their core business to redevelop these sorts of objects. They prefer to sell or demolish it, in order to realize new housing with a greater revenue model. These ‘worlds’ are very separated: on one hand there are parties such as Stadsherstel NV, BOEi and architects specialized in redeveloping monuments which know how to deal with these objects, and on the other hand there are parties which prefer to stick to their core business and are not willing or able to take the risk of exploiting the strategic value.

- **What is the role of identity for an area incubator?**

The identity is very important for cultural heritage objects, it is part of their value to an area and the city. In some cases the identity had to be changed, as the building had a negative imago. The Cereol caused much tension with the neighbourhood because of the dangerous substances which were used in the factory. The identity of this factory completely turned around to a building of which the neighbourhood speaks proudly. In every case it was important how the story was told. Not only the redevelopment played its part, an identity had to be changed or enforced in order to attract people to the area. In order to show this identity it was vital that the building was (temporary) opened for the public. Not every building is suited for a temporary functions, but a temporary function can add value because the people can see what the (often very special) structure of the building looks like and experience the sphere and identity in such a building. People have to be introduced to the building and area as soon as possible in the (re)development. The process of identity making already plays a role at the very beginning of development, people start talking about the developments in the building. This may result in more success when the building is realized.

To a large extent this identity is determined by the target group and users of the building. For example ‘De Hallen’ in Amsterdam started out as a redevelopment for the neighbourhood, after proven success the tourists took over as target group. Over two million people visited ‘De Hallen’ in its first year, slowly attracting the majority and becoming a tourist attraction. The residents stopped using many functions as they are either too busy or expensive. This changed the association people have with ‘De Hallen’. They value the building and some functions, but repel the flow of tourist. The new target group tourists changed the building identity for the perspective of residents.

**Empiric results of success factors**

There was a crucial factor for incubator success in the redevelopment of cultural heritage next to the factors identified in the literature. Next to this the conceptual model for success factors has been adjusted, based on the empiric results and analysis.

**Social entrepreneurship**

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The empiric results and actor analysis identifies a crucial factor for success in each case: the role of social entrepreneurship. A social entrepreneur is characterized in these cases as a non-profit organization with the goal of preserving the cultural heritage. BOEi is involved (in different roles) in the ‘Zuiderziekenhuis’, Cereol and Rohm & Haas. Another example is Stadsherstel NV, who was involved in project ‘De Hallen’. They both had influence of the process and success of the redevelopment of cultural heritage and thereby its incubator effects. It appears that social entrepreneurs are involved in the projects which are very complex, both financially and organizational. These projects with cultural heritage objects are difficult to develop for the market. Because of experience and knowhow they can take the lead in the redevelopment of heritage, either with or without a monumental status. They act as a ‘central actor’. They have a good connection with the government, they have built up experience and reliability because of their track record of successful redevelopments. They act as a non-profit organization, which makes it easier to arrange and account for the public funds. There is in most cases much political attention when a commercial party receives public funds, in order to prevent misuse. A non-profit organization which uses these public funds is less likely to misuse these funds, as their main goal is to preserve heritage and not to make profit. This is one of the reasons why they also have much societal basis: residents are more skeptical towards a commercial developer than a non-profit organization for preserving heritage.

Their financial situation allows these organizations to have more patience with development. BOEi gathers financial resources out of revenue (rents) in owned redeveloped objects and loans against low interests with banks. BOEi (in the case of Rohm & Haas) sets as goal to have a positive cashflow after 10 years, instead of a developer which wants a positive cash flow after several years. This creates a pressure for developers to make a business case feasible, they have to find ultimate users quickly and choose if possible the most profitable functions. A non-profit organization has less difficulty with redeveloping these objects, as time is less an issue with their investments. BOEi and Stadsherstel NV also look in a different perspective to these buildings compared to other project developers. BOEi and Stadsherstel NV have a similar approach, they start with opening the building for the public through temporary functions or an open monument day. They choose the functions which fits in the area and the building, instead of the most profitable. Mostly they prefer societal functions, and where needed they add commercial functions to make a business case feasible.

**Conceptual model incubator function**

The conceptual model has changed after the empiric results and analysis. The factor of social entrepreneurship plays an important role in these complex projects and has been added to the model. The desired effects are placed after the process of urban area development and incubator
success. These factors are the result of the process and therefore belong at the end of the conceptual model. The monumental had not much effect on the redevelopment of heritage. The role of the monumental status depended more on the way an actor used it, but not on the success of the incubator function. This factor is removed from the conceptual model.

The new conceptual model is as follows:

**Context:** Location, Accessibility, Market, Time, Financial resources, Land values

**Project redevelopment factors**
- Actors roles: risk bearing party, attitude area developers, affected stakeholders and target group
- Position of power area incubator
- Physical presence in process
- Relation area incubator – program
- Connected renewal

**Building Identity**
- Symbolic value
- Imago of building and area

**Social Entrepreneurship**
- Central actor. Role of problem solver, creating trust
- Strategic value cultural heritage

**Process urban area development**
- Role of cultural heritage
- Success of area incubator function

**Potential failure factors**
- Slow moving process
- Difficult to create commitment among stakeholders
- High contextual and organizational complexity

** Desired effects development**
- Desired impact
- Desired social and economic spin-offs
- Added value area
- Value creation and capturing
- Intrinsic use of the project

The conceptual model can be applied to integral and organic area development. Each case is located within a larger area development, with an integral or organic area development approach. The factory Rohm & Haas is located in an industrial degraded area, an area development which is approached organically. The Cereol, ‘De Hallen’ and ‘Zuiderziekenhuis’ are located in dense neighbourhoods near the inner city, which is why the integral area development approach is more suited. These approaches do not only differ in strategy of area development, but it also results in a different role of an area incubator. The most important factors are discussed for each area development approach.
What is the effect of the redeveloped cultural heritage serving as area incubator on the process and outcome of the urban area development?

**Difference of area incubator role in integral and organic area development**

One of the most important factors of an incubator in integral development is the connected renewal. Each redevelopment in integral area development is located in a dense neighbourhood. The renewal needs to be connected to the neighbourhood in physical and functional terms, in order to create commitment from residents. If the connected renewal is missing it will influence the incubator effects and could result in resistance from the neighbourhood. Resistance from the neighbourhood may result in a slow moving process in these already complex processes. The social entrepreneur intervenes in these cases to create residential commitment to the development. The relation between the area incubator and area development is similar in each case. The area incubator is part of the program, in most cases the centre of the area development. New housing is developed around the redeveloped cultural heritage in order to make the project profitable. The area incubator provides much identity for the area. The neighbourhoods consist mainly of residential functions, which is why the mix of functions in the area incubator adds a new unique dynamic to the area. The effects are similar in each case: land values rise and the area incubator provides identity for the area. These effects may set a process of gentrification in motion in the cases ‘Zuiderziekenhuis’ and ‘De Hallen’.

Organic area development has more possibilities for development spin-offs and incubator functions. Several industrial heritages objects were vacant in the area of Rohm & Haas in Amersfoort. Other redevelopment factors than connected renewal play a more important role, such as the physical presence in the process, position of power area incubator and the relation with the program of area development. These factors determine the (desired) incubator effects. Several developments and buildings had an incubator effect in this case. It started with the development city beach ‘Zandvoort aan de Eem’, followed by the redevelopment of the Rohm & Haas and finally the redevelopment of the Prodent factory. The first initiatives and incubators are important in organic area development, because they attract people to the area, create identity for the area and create trust for development. The economic spin-offs take form by the rise in land values, which could lead to more development. The social spin-offs are that it creates identity for an area which was degraded before and becomes attractive again.

The next model is applied by Hoogendoorn & Peeters (2005) for the incubator effects on the transformation and innovation of a building.
This model fits with the case of ‘De Hallen’. First the building was redeveloped for the
neighbourhood as a multifunctional and cultural building. The residents and first visitors were the
innovators and early adaptors. ‘De Hallen’ became more known and started attracting many tourists
which are the early majority. This changed the identity of ‘De Hallen’ to a tourist attraction.

Moreover, this model can be applied to the incubators in the organic area development in
Amersfoort. The municipality Amersfoort created an ambition document for the area. Each
development has to suffice to five conditions which align with the ambitions. It started with the city
beach ‘Zandvoort aan de Eem’, which attracted people to the area. This was more a first impulse
than an area incubator. The incubator function of Rohm & Haas attracted the innovators and early
adaptors to the area. Rohm & Haas created trust for development and created identity with the
creative economy functions. The large scale redevelopment of the Prodent factory took the
incubator function over after Rohm & Haas, attracting the early majority.

**Sub question 2. What is the effect of the area incubator on the process and outcome of the urban
area development?**

The effect of an area incubator depends on the desired effects: the way cultural heritage in used in
area developments determines its effect. The Rohm & Haas was used to give the area an impulse
which it needed, the area was degraded and there was little commitment for development by
landowners. Rohm & Haas started creating economic and social value in the area, accelerating the
process of area development. The outcome is partly affected by the identity set by Rohm & Haas,
many creative economy functions located in the area. The effects of the redevelopment of Rohm &
Haas were the strongest in the beginning of the area development, after this they became part of the industrial ensemble and the Prodent factory took the incubator function over.

The ‘Zuiderziekenhuis’ incubator functions largely influenced the process and outcome of the area development. The new housing is designed around the ‘Zuiderziekenhuis’, functioning as centre for the new neighbourhood. The iconic value and identity of this building results in many social spin-offs, such as the pull factor for people all over The south of Rotterdam to live there. The ‘Zuiderziekenhuis’ enriches the area development, otherwise it would have been just another new built neighbourhood.

The Cereol has a similar function to the area development, all over the neighbourhood Oog in Al people moved to the new housing near the Cereol. The effects of the Cereol differ because of the choice for different functions. Cereol houses much more public functions, such as the cultural centre and library. It functions as cultural heart of the neighbourhood, where people come together. The public space within the area development has been adjusted in such a way to facilitate this function.

‘De Hallen’ served an economic purpose for the area development: it gave an economic boost to the area. The process of the area development was affected in such a way that developments along the area of ‘De Hallen’ did not happen until ‘De Hallen’ was redeveloped. The building was vacant for over 15 years, while the coexisting terrain degraded. After successful redevelopment new housing blocks were developed and many people were drawn to the area, creating an economic impulse for ‘De Hallen’ and the entrepreneurs and landowners in the area. ‘De Hallen’ mainly put developments in motion and thereby affecting the outcome of the area development.

**Sub question 3. To what extent is permanent added value created by an area incubator in the urban area development and how does this differ from temporary value?**

In many cases it was desirable for owners of vacant cultural heritage to house a temporary function. This functions could potentially be a precursor to the eventual program of have as a goal to start attracting people to the area and providing an identity. The second effect happened with Rohm & Haas: artists were housed in the Rohm & Haas with their galleries in the halls along the street. This resulted in a certain movements, people started to talk about these artists and visit the area. After some years the artists were inseparably connected to the building and the identity that they were allowed to stay. The eventual program built upon this creative economy identity, all of the new functions should have some sort of connection to the creative economy. The temporary function was important for the eventual program. Developers in the area built upon the provided identity of creative economy, it turned out to attract many people. A successful temporary function can have
much temporary value, but also determines to a great extent the added permanent value. It was not the artists alone in the Rohm & Haas which provided this identity, but they were however the innovators (Figure 18). The Prodent factory was the second area incubator.

The other cases did not house temporary functions because of it was either not allowed in terms of safety rules or in the case of Cereol in which the building was destroyed from the inside by a fire. They started with the redevelopment of the cultural heritage after which some sort of value was created. In contrast to the case of Rohm & Haas, these projects had to think of different ways to introduce people to the area before development. This is important in order to gain identity and to ensure that people know what development takes place. They used an private open day to attract people, the countrywide open monument day or made sure residents could participate in the redevelopment. These are important factors for creating identity.

The choice of functions also determine to what extent permanent value is created. Each functions determines to some extent what dynamics take place within an area. An office function provides dynamic in the morning and afternoon, but nothing in the evening. A well balanced mix of functions creates a dynamic which is important for the value of an area.

The main in research question is:

“What are the factors in the redevelopment of cultural heritage to succeed as area incubator for urban area development and what types of temporary and permanent value are created?”

This research question comes down to how the strategy of area incubator can successfully be used in area development and the values it creates. The redevelopment of cultural heritage served a purpose in each case, there were goals (desired effects) and after redevelopment there were realized effects. The factors will be discussed which ensured in these cases how the desired effects came closest to the realized effects and by doing so contributing to how the (potential) incubator function of cultural heritage can successfully be used as strategy in area development.

Redevelopment cultural heritage as area incubator

Redeveloping cultural heritage is no guarantee for the desired social or economic effects, the redevelopments processes are very complex. Not all cultural heritage objects have potential to functions as area incubator. A certain degree of identity and iconic value in needed, a basis for redevelopment. This depends on social factors, the former function(s) of heritage and contextual factors such as location. The demolishment of some cultural heritage buildings are barely noticed to many people, but for instance the demolishment plans for the ‘Zuiderziekenhuis’ caused many
people to protest. Redevelopment may be the best option, if a cultural heritage serves a certain value for its area.

The landowner is crucial in the process towards redevelopment. The strategic value cultural heritage can have is not recognized by all landowners, there appears to be a separated world when it comes down to cultural heritage in area development. Owners of cultural heritage objects often have little knowledge about the process of redevelopment of these objects, of the available public funds or what contractors are able to redevelop these buildings in a cost-efficient way. BOEi is an actor which knows how to realize a feasible business case for redevelopment and is experienced with the (possible) roadblocks in the redevelopment process.

**Binding shareholders and investors**

Binding shareholder to the redevelopment of heritage is difficult, there is much risk and high finance versus low feasibility. This is one of the reasons why in each case houses are development in the area in order to have returns for their investments. However, this requires investors which are willing to take some risk. Several factors separate from their intrinsic motivation for investment were identified as crucial in gaining financial resources. First, it is very important to have a convincing urban plan. In the case of Cereol the plan resulted in faith in development, also after the economic crisis and when the fire destroyed parts of the Cereol. Secondly, the involvement of a non-profit party such as BOEi in the redevelopment with a track record of redeveloping cultural heritage. They create trust in difficult times and are experienced in dealing with these developments. In each case BOEi was identified as problem solver.

**Feasibility plan**

At the core of every development is the object to make the business case feasible, otherwise it is difficult to start the process of development. The contextual complexity in each case resulted in difficulties to realize a feasible plan. In many cases the feasibility was increased by adding some commercial functions with higher rents to the program and by developing houses next to the cultural heritage. These houses were developed for middle- and high income residents. Contracting commercial or social functions can be difficult, as turned out to be in the Cereol and the ‘Zuiderziekenhuis’. In these cases it took years before ultimate users were contracted. The municipality can serve an important role: they can subsidize functions such as a library, school or cultural centre. By doing so they make sure a level of societal functions are realized in the redevelopment as well. The municipality can assume the role as problem solver, their role in the development effects the process and outcome to great extent.
Well collaborated urban plan and entrepreneurship crucial

The mix of functions within the redeveloped cultural heritage has much effect on the incubator functions. It is crucial that there is a well balanced mix of functions, both commercial and public functions. Public functions attract people to the area, creating dynamic and leading to an impulse. The chosen functions within the cultural heritage objects need to have a certain ‘fit’, if the functions does not belong within the identity of the building it could take away part of the identity. This is where entrepreneurship is important.

Trust among involved actors

In the redevelopment process of cultural heritage it is important to have problem solvers such as BOEi, but also to have a certain degree of trust and perseverance. Cooperation between public and private actors is important in every development, otherwise an (area) development cannot succeed. The degree of cooperation can differ. Each actor has its own interests and goals, the put effort into reaching these goals. Their perseverance and involvement in important to see the development through, also in difficult economic times. The involvement needs to come from every actor, otherwise the process will be frustrated or it may result in backing out of the cooperation. Actors have to be open about their problems in order to solve them together. This is very difficult in practice, many ‘problems’ contain sensitive information. The result and pace of the process will be maximized if all actors have a certain degree of trust, and take the risk of disclosure.

 Desired versus realized effects

If a cultural heritage object holds potential for the area incubator functions, the question arises how the desired effects can lead to the realized effects. This is a very important indicator for success. Estimating the effects of the redevelopment is very difficult as it depends on many factors, however there are some constant factors. It is crucial to see the redevelopment within its urban context, the connected renewal on the aspects of physical, social and economic has much influence on the eventual effects.

Social entrepreneur

The social entrepreneur is an actor which gives priorities to social goals before the commercial goals. In the cases the social entrepreneurs consisted of BOEi, Stadsherstel NV and architects. BOEi and Stadsherstel are non-profit NGO’s which commit themselves to preserve cultural heritage. The architects can be seen as social entrepreneurs because they value the preservation of cultural heritage as well, even though they have financial interests. The contextual and organization complexity is very high in area developments with cultural heritage, they are characterized as slow
moving. The social entrepreneur has in contrast to commercial parties less difficulty dealing with complexity and the slow moving process. They have less financial goals and profitable loans with banks, which is why they can afford to have a positive cash flow in 10 years instead of three. Their experience with redeveloping is an advantage in these complex processes. Over the years organizations such as BOEi and Stadsherstel NV built up a track record. This gives them credit with municipalities and developers. The social entrepreneur is also well connected to public funds authorizations (to increase feasibility) and is the central actor in the redevelopment. In each case the social entrepreneur had a role as problem solver. Social entrepreneurs have an similar strategy to exploit the strategic value in the cases where they redeveloped the building on their own.

- For the success of the incubator it is important that people are introduced to the building and identity: they search for temporary functions when possible. If this is not possible they open the doors for the public and invite residents to see what developments will take place.
- They prefer social functions and research which functions fit within the building (and not the other way around) and the area.
- They are very adaptive in choice of functions in a building instead of sticking to one core business (housing or schools for example).

The social entrepreneurs are crucial in the cultural heritage redevelopment project which are too complex for market parties or municipalities, because they have the means and experience to redevelop heritage objects. Furthermore they recognize and use the strategic value in order to create permanent value for an area.
9.2 Critical reflection

Using area incubator as strategy for value creation in an area is very complex and depends on many factors. This is one of the reasons why the area incubator effects are difficult to estimate. Every heritage object is unique and differs in the context of which it is placed and can be used. This influences the internal validity of the research. In the interviews are as many factors as possible discussed but it could be possible that not all factors were revealed. Sensitive information such as economic values or political issues is not always provided by respondents. They may prefer to keep their opinion to themselves and respond very objectively. This preference was tried to achieve by using the mini-survey next to the interview, however the mini-survey consisted of only positive stated statements. It could have been valuable to use both negative and positive statements in order to increase the value of the survey. The strategy to gather data from multiple actors in each case was effectively to gain insight in multiple perspectives. In this way the subject could be approached from multiple perspectives giving a more complete picture of the process and effects.

The theory of Claassen et al. (2012) was not used for the parameters in the conceptual model, their theory regards only initial developments as area incubator. The area incubator in this paper is researched in all phases of area development. There was also a practical reason that the paper would become too substantial. However, it may have been relevant to have used this theory instead of the ‘developer expectations’, which turned out to be consist mainly of effects of the incubator function. Perhaps the relevance and results in this research would have been increased if this theory was included.

One of the factors which was researched was the role of the monumental status. This was also done from multiple perspectives, however every cultural heritage object in the cases had a monumental status. Perhaps the added value or experienced constrains could have been better measured if one heritage object in a case would not have a monumental status. The same could be stated for the choice of a failure case. This would have increased the validity of the research. The statements for failure factors have less value because all projects ‘succeeded’ in the redevelopment of cultural heritage. The projects differ much and have a certain dependence on the local context, which could constrain the comparability of the cases. This is however always the case in area and project development. Three cases are located within an area which is approached by integral area development, in contrast to one case approached by organic development.

Contribution to theory development

Wellink (2008) identified seven parameters for an successful incubator function: risk bearing party, relation area incubator –program, position of power area incubator, desired impact, physical
presence, attitude area developers and target groups. The parameters regarding actors are unified among the variable ‘actor roles’ in this research. Wellink (2008) distinguished three types of area incubators (Table 2).

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Dynamo</th>
<th>Key</th>
<th>Anchor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk bearing party</td>
<td>Entrepreneur</td>
<td>Area developer</td>
<td>Alliance</td>
</tr>
<tr>
<td>Relation area incubator - program</td>
<td>Occasional collaboration</td>
<td>Part of the program</td>
<td>Additional</td>
</tr>
<tr>
<td>Position of power area incubator</td>
<td>Subordinate</td>
<td>Equipollent</td>
<td>Superior</td>
</tr>
<tr>
<td>Desired impact</td>
<td>Accelerate and enrich</td>
<td>Accelerate</td>
<td>Enrich</td>
</tr>
<tr>
<td>Physical presence</td>
<td>Early</td>
<td>Middle</td>
<td>Late</td>
</tr>
<tr>
<td>Attitude area developers</td>
<td>Facilitating</td>
<td>Steering</td>
<td>Jointly steering</td>
</tr>
</tbody>
</table>

Table 2. Ideal types of area incubators (Source: Wellink, 2008; own adjustment)

The empiric results showed that multiple combination are possible between the parameters. Rohm & Haas fits partly in the type of dynamo, as BOEi is the social entrepreneur, Rohm & Haas is subordinate to the area development, the physical presence is early in the process and it accelerates and enriches the area development. However, Rohm & Haas sets the identity for the area and is more part of the program. The other three cases score more varying on the parameter of ‘Relation area incubator - program’. They fit mostly within the characteristics of ‘anchor’, but are part of the program. The physical presence scored ‘middle’ in the case of ‘Zuiderziekenhuis’. The second phase of the area development has to be realized after the redevelopment of the ‘Zuiderziekenhuis’. These parameters showed to be very important for an area incubator in organic area development.

Verheul (2012; 2013) identified several other parameters for an incubator function: connected renewal, intrinsic use of the project, symbolic or postcard value, iconic building and imago of neighbourhood/city and economic and social spin-offs. These factors were very important for incubator success in the cases with integral area development. Verheul (2012; 2013) states that these effects may be difficult to estimate, as these projects are very complex and depend on contextual factors. These parameters differed between integral and organic area development in level of importance for the success of an area incubator.

Baarveld et al (2013) researched the role of cultural heritage within area development and identified (potential) failure factors. They stated that these area developments are characterized as slow moving and have a high contextual and organizational complexity. Redeveloping cultural heritage requires a higher initial investment compared to greenfield projects, it is difficult to find new feasible users, there are many uncertainties at the beginning of the process (about benefits or spin-offs) and
the process is vulnerable to changes by the external environment. It is important how these parameters are used in the redevelopment of cultural heritage serving as area incubator. The empiric results and actor analysis resulted in the missing link: the social entrepreneur. A non-profit organization with the priority to a social goal such as to preserve heritage. This sort of organization has experience with redeveloping cultural heritage and knows how to exploit the strategic value, such as the incubator effects. The social entrepreneur acts as a central actor in the development and has a role as problem solver or develops/owns a cultural heritage object on its own.

Wellink theory extended

Wellink (2008) described several actor roles which differ in ideal types of area incubators (Table 4). They do not all fit with the area incubators in the research, but Wellink describes the ideal types. The actor analysis in this research contributed to the insights into the parameters about actor roles. In many cases trust was named as important factor during the process of development. There needs to be a well collaborated urban plan and entrepreneurship is crucial. The functions within the redeveloped cultural heritage influence to a large extent the effects and added value. These factors are influenced by the social entrepreneur. The social entrepreneur is the central actor in the cases, obtaining the role as problem solver in the process. This is the addition to the theory of Wellink.

Verheul theory extended

The described incubator function parameters in the theory of Verheul (2012; 2013) returned in the results of the cases. The connected renewal appeared to be crucial in the cases with an integral area development approach, while the economic and social spin-offs were of greater importance when the area was developed organically. The addition of this research to the theories of Verheul (2012; 2013) is the difference between integral and organic area development approach. Stakeholders have to focus on different parameters if an area incubator is used as strategy in one of these approaches.

Baarveld et al. theory extended

The social entrepreneur could be extended to the theory of Baarveld et al. (2013) as central stakeholder which is tasked to prevent (potential) factors of failure. Because of their experience the social entrepreneur can deal with the contextual and organizational complexity. Social entrepreneurs have good connections with government authorities, which is why they find more easily suitable public funds to increase the feasibility. The municipality can contribute by finding new feasible users, such as a library, school or cultural centre. Lastly they have the knowhow for redeveloping cultural heritage and a track record to show for it, which helps to bind stakeholders to area developments with cultural heritage. However, not all stakeholders such as developers or municipalities recognize
the strategic value of heritage yet. The social entrepreneur needs to convince stakeholders. The social entrepreneur could be added to the theory of Baarveld et al. (2013).

**Combined theory framework**

The described ideal types of area incubators by Wellink (2008) could be used as strategy in urban area development. The parameters described by Wellink (2008), Verheul (2012; 2013) and Baarveld (2013) influence the area incubator and the degree of success. The parameters are descriptive, they do not explain how these effects could be reached or how the strategy of area incubator could be used in area development. The next parameters are added by this research in order to come to a combined theory for success factors of area incubators.

- Binding shareholders and investors
- Redevelopment cultural heritage as area incubator
- Feasibility plan
- Well collaborated urban plan and entrepreneurship crucial
- Trust among involved actors
- Desired versus realized effects
- Social entrepreneur

A redevelopment project starts with binding shareholder and investors. These are important actors for a successful development. The social entrepreneur could play a part in binding shareholders by convincing them of the strategic value of cultural heritage. The parameters of area incubator types of Wellink could be used to explore what type of area incubator is suited for redeveloping cultural heritage within an area development. Verheul identified important parameters for the incubator function, the importance of these parameters depends on the approach of the area development. The connected renewal is crucial in integral area development and the social- and economic spin-offs are crucial in organic development. The other parameters play a role as well, but are less decisive in the level of success. With this knowledge the social entrepreneur is directly or indirectly involved in order to increase the feasibility of the redevelopment and the desired effects of the area incubator. The involvement may vary between giving advice on building technical aspects and available public funds or investing themselves in redevelopment. The social entrepreneur is the central actor, together with the other actors a well collaborated urban plan is created. Trust among involved actors is important, for the shareholders themselves as well as for the role of the social entrepreneur as problem solver. Concluding the social entrepreneur has as task to prevent throughout the process the establishment of the (potential) failure factors identified by Baarveld.
9.3 Recommendations

It is important to bind shareholders to the redevelopment of cultural heritage in order to fulfill an area incubator functions. However, there appears to be separated world when it comes down to estimate and use the strategic value of cultural heritage. Organizations such as BOEi, Stadsherstel NV and architects recognize the potential social and economic value of heritage in area development, but this is not always the case with municipalities or developers. The direct effect of investments in redevelopment of cultural heritage in the cases resulted in multiple spin-offs. Parties could become more aware of the strategic value of cultural heritage through this analysis of the economic en societal benefits. In combination with taking away risks and to cover as much potential failure factors as possible could contribute to more involvement of shareholder in redevelopment of cultural heritage.

Recommendations for the practice

1. Close the gap between separated worlds: developers, municipalities need to recognize strategic value of heritage, as social entrepreneurs do. Social entrepreneurs need to bind developers and municipalities to area developments with cultural heritage by proving the strategic value of cultural heritage.

2. Organizing a platform for residents to give their opinion about the development is valuable. It may contribute to reach the connected renewal. However, it is unlikely that every resident will be satisfied. There has to be a balance between vigorous actions and a basis within the neighbourhood.

3. Many problems arise during these complex processes. The results have shown that shareholders need to be open about their problems in order to solve them together, instead of distrusting other actors and arguing their own interests. This requires a certain degree of trust, because it may involve giving insight in their books or revealing part of their strategy.
This research could be the stimulus for further research. The next paragraph contains recommendations for further research.

Recommendations for further research

1. Factors in decisions making investing in cultural heritage: how to bind investors to development? Many investors and developers stick to their core business with less risk than developing or investing in cultural heritage objects. However, if this gap between two world is researched it may contribute to binding investors to redevelopment of cultural heritage. The role of social entrepreneur in this process could be researched.

2. A research about the economic spin-offs of area incubators in both organic and integral area development. The could be similarities or differences in the change of land values after development. This could also be measured for the revenue of entrepreneurs in the area.

3. A research about the importance of social entrepreneurship in area development. Is it crucial in these developments that a non-profit organization is involved or can a commercial entrepreneur oriented on the social goals play a role as well? What characteristics should a social entrepreneur have? What role can they play in area development and which values in spatial planning could be created by social entrepreneurs?
References


**Personal communication:**


**Short interviews:**

Each case (if possible) minimum: five residents area and three new residents area after development.
### Annex 1. Interview guides

#### 1. Interviewguide shareholder

In onderstaande tabel kunt u aangeven in hoeverre u het eens of oneens bent met de stelling.

<table>
<thead>
<tr>
<th>Stelling</th>
<th>(1) Zeer oneens</th>
<th>(2) Oneens</th>
<th>(3) Neutraal</th>
<th>(4) Eens</th>
<th>(5) Zeer eens</th>
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</thead>
<tbody>
<tr>
<td>De identiteit van het gebied wordt afgeleid van het herontwikkelde gebouw</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Het gebouw heeft symbolische waarde</td>
<td>1</td>
<td>2</td>
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<td>4</td>
<td>5</td>
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<tr>
<td>Het gebouw heeft een aanzuigende werking: men wil graag in de buurt wonen</td>
<td>1</td>
<td>2</td>
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<td>4</td>
<td>5</td>
</tr>
<tr>
<td>De functie van het gebouw is in belangrijke mate van invloed op het succes van het project</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Het gebouw is verbonden met de functies in de omgeving</td>
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<td>5</td>
</tr>
<tr>
<td>De doelgroep van het gebouw en haar functies zijn bepalend voor het succes van het project</td>
<td>1</td>
<td>2</td>
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<td>5</td>
</tr>
<tr>
<td>Het project is sterk verbonden met de gebiedsontwikkeling</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
</tr>
<tr>
<td>Het gebouw zorgt voor een gevoel van publieke trots</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
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<tr>
<td>Het project voegt iets nieuws toe aan de stad</td>
<td>1</td>
<td>2</td>
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<td>5</td>
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<tr>
<td>Het project is zowel ruimtelijk als sociaal-cultureel verbonden met de identiteit van het gebied</td>
<td>1</td>
<td>2</td>
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<tr>
<td>Sinds het gebouw herontwikkeld is zijn er nieuwe ontwikkelingen in het gebied</td>
<td>1</td>
<td>2</td>
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<td>5</td>
</tr>
<tr>
<td>Zonder het project was de gebiedsontwikkeling niet van de grond gekomen</td>
<td>1</td>
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<td>5</td>
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<tr>
<td><strong>Het gebouw:</strong></td>
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<tr>
<td>- roept historie op</td>
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<tr>
<td>- creëert betekenis voor het gebied</td>
<td>1</td>
<td>2</td>
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<tr>
<td>- creëert vertrouwen voor ontwikkeling</td>
<td>1</td>
<td>2</td>
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</tr>
<tr>
<td>- trekt publiek aan</td>
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</tr>
</tbody>
</table>

**Introductie**

- Uitleg over eigen onderzoek
- Verwerken gegevens

Kunt u mij vertellen wat uw rol is in het herontwikkelingsproject?

**Het project / de gebiedsontwikkeling**

Welke partijen hebben directe belangen in uw project?

Wat is de programmaopzet van het project?
In hoeverre is de nieuwe functie van het herontwikkelde gebouw permanent?

Waarom heeft u, gezien de kenmerken van het gebouw, gekozen voor een herontwikkeling naar deze functie(s) en niet een andere?

In hoeverre speelt locatie een rol bij de keuze voor de huidige functie?

Wat is het beoogde effect van uw project?

In hoeverre heeft het project effect gehad op economische of sociale problemen in het gebied?

Financieel

Welke partijen hebben er geïnvesteerd? Hoe zijn de investeringen verdeeld?

Was er sprake van een subsidie voor uw project?

Waarom heeft u gekozen om te investeren in cultureel erfgoed?

Wat was de go/no go beslissing om te investeren in dit project?

Wat is uw verwachte terugverdientijd?

In hoeverre heeft u het programma moeten aanpassen om het project haalbaar te maken?

Herontwikkeling erfgoed als gebiedsincubator

Wat is het doel van de aanjager in gebiedsontwikkeling?

Wie is/zijn in de gebiedsontwikkeling aan te merken als sturende partijen?

Wie is de initiatiefnemer van de incubator?

Heeft uw pand een monumentale status? Zo ja, in hoeverre draagt deze status bij aan of beperkt de herontwikkeling?

Hoe maakt u gebruik van identiteit in het herontwikkelingsproject?

Wat is volgens u de strategische waarde van het gebouw?

Proces

Hoe verliep (het verkrijgen van) de medewerking van de gemeente in de initiatieffase?

In hoeverre is de houding van gebiedsontwikkelaars van invloed op het proces?

In hoeverre is de gemeente van invloed geweest op het herontwikkelingsproces?

Wat is de relatie tussen uw project en de invulling van de gebiedsontwikkeling?

Heeft het gebouw verschillende gebruikers gehad in het herontwikkelingsproces? Zo ja, welke?

Wat was het effect van de culturele waarde van het gebouw op de herontwikkeling?

Wat maakt volgens u het project succesvol?
In hoeverre is de doelgroep van invloed op dit succes?

**Gebedsontwikkeling**

In welke fase binnen de gebiedsontwikkeling is uw project afgerond?

In hoeverre heeft u in een vroege fase van de gebiedsontwikkeling het gebouw herontwikkeld met de gedachte om de gebiedsontwikkeling te sturen en/of versnellen?

Welke partijen hebben indirecte belangen in uw project?

In hoeverre heeft het project een fysieke, economisch en/of sociaal bijgedragen aan de gebiedsontwikkeling?

In welke mate is er sprake van een integrale bijdrage aan de ontwikkeling van het gebied?

In hoeverre speelt de identiteit van het gebied een rol in de herontwikkeling?

Welke positie heeft uw gebouw in de gebiedsontwikkeling? (apart – onderdeel – bepalend)

In hoeverre heeft het herontwikkelingsproject in uw mening de gebiedsontwikkeling versneld of gestuurd?

In hoeverre zijn ontwikkelingen in het gebied in gang gezet door uw herontwikkelingsproject?

*Zijn er nog dingen die u mij mee wilt geven voor mijn onderzoek? Zijn er bepaalde aspecten die nog niet behandeld zijn?*

**Afsluiting**

*Bedankt voor uw tijd en moeite voor het interview.*
2. Interviewguide stakeholder

<table>
<thead>
<tr>
<th>Stelling</th>
<th>Zeer oneens</th>
<th>Oneens</th>
<th>Neutraal</th>
<th>Eens</th>
<th>Zeer eens</th>
</tr>
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</tbody>
</table>

**Introductie**

- Uitleg over eigen onderzoek
- Verwerken gegevens

Kunt u mij vertellen hoe u betrokken bent bij het project?

**Het project**

Wat vindt u van de keuze voor herontwikkeling in het project?

Wat was uw eerste mening bij het genomen initiatief voor herontwikkeling? Was u sceptisch in het begin?
In welke mate heeft de gebiedsontwikkelaar u betrokken in het ontwikkelingsproces?

Welke effecten hoopt u dat het project teweeg brengt?

In hoeverre heeft het project effect gehad op economische of sociale problemen in het gebied?

Heeft het initiatief van het project voor u als inspiratiebron gediend?

**Herontwikkeling effecten**

In hoeverre ervaart u voordelen van de herontwikkeling in uw gebied?

In welke mate denkt u dat de gebiedsontwikkelingen van invloed zijn op de vastgoedprijzen in de buurt? Hoe ervaart u dit zelf?

Wat waren voor u redenen om in dit gebied te wonen of ondernemen?

In hoeverre merkt u dat mensen die zich identifieren met het gebouw en haar functies in het gebied verblijven?

Zijn er ontwikkelingen in het gebied in gang gezet door de herontwikkeling van het gebouw?

**Identiteit**

Wat is volgens u de identiteit van het gebouw?

Welke rol speelt de cultureel-historische waarde hierin?

In hoeverre creëert het gebouw betekenis voor het gebied?

**Gebiedsontwikkeling**

In hoeverre heeft het project een fysieke, economisch en/of sociaal bijgedragen aan de gebiedsontwikkeling?

In hoeverre zijn ontwikkelingen in het gebied in gang gezet door het herontwikkelingsproject?

Wat is de rol van de identiteit van het gebied in uw keuze om hier te wonen/ondernemen?

Welke positie heeft het gebouw in de gebiedsontwikkeling? (apart – onderdeel – bepalend)

*Zijn er nog dingen die u mij mee wilt geven voor mijn onderzoek? Zijn er bepaalde aspecten die nog niet behandeld zijn?*

**Afsluiting**

*Bedankt voor uw tijd en moeite voor het interview.*
### 3. Interviewguide target group

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**Introductie**

- Uitleg over eigen onderzoek
- Verwerken gegevens

Kunt u mij vertellen hoe u betrokken bent bij het project?

**Het project**

Van welke functies binnen dit gebouw maakt u gebruik?
In hoeverre is het gebouw een stedelijk icoon in uw mening?

Wat is volgens u het effect van de herontwikkeling op het gebied?

In hoeverre heeft het project effect gehad op economische of sociale problemen in het gebied?

Identiteit

Wat is uw mening de identiteit van het gebouw? Waarmee associeert u het gebouw?

Heeft u met het gebouw ook een andere associatie gehad dan deze identiteit? Zo ja, welke?

Welke rol speelt de cultureel-historische waarde van het gebouw hierin?

Wat is het imago van deze buurt?

In hoeverre vindt u dat het gebouw verbonden is met het gebied?

Heeft u een gevoel van publieke trots voor dit gebouw? Waarom wel/niet?

Effecten herontwikkeling

Wat is de impact van de herontwikkeling van het gebouw op het gebied?

In welke mate bent u meer tot het gebied aangetrokken sinds de herontwikkeling van dit gebouw?

In hoeverre vindt u dat het gebied aantrekkelijker is geworden sinds de herontwikkeling van het gebouw?

Zijn er andere functies in het gebied waar u gebruik van maakt?

Zijn er nog dingen die u mij mee wilt geven voor mijn onderzoek? Zijn er bepaalde aspecten die nog niet behandeld zijn?

Afsluiting

Bedankt voor uw tijd en moeite voor het interview.
4. Interviewguide experts

Introductie

- Uitleg over eigen onderzoek
- Verwerken gegevens

Wat is uw huidige functie?

Hoe heeft u ervaring opgedaan met aanjagers in gebiedsontwikkeling?

Aan welke voorwaarden moet een gebouw voldoen om een aanjager in gebiedsontwikkeling te zijn?

In uw werkervaring met aanjagers in gebiedsontwikkeling, hoe wordt er omgegaan met potentiële aanjaagprojecten?

Cultureel erfgoed als gebiedsincubator

Wat is volgens u de strategische waarde van cultureel erfgoed?

Hoe kan een aanjager in gebiedsontwikkeling idealiter gefaciliteerd worden door de overheid?

Waarom is het moeilijk om een gebiedsaanjager als strategie in gebiedsontwikkeling in te zetten?

Wat zijn de meest voorkomende spin-offs bij aanjagers in gebiedsontwikkeling? Waarom?

In hoeverre denkt u dat er een proces van gentrificatie kan optreden bij aanjaagprojecten?

In hoeverre denkt u dat het leegstaande culturele erfgoed in Nederland kan dienen als gebiedsaanjagers?

Factoren in incubatorprojecten

Wat zijn volgens u de belangrijkste succesfactoren in aanjaagprojecten?

In hoeverre speelt identiteit een rol in het succes van een project?

In hoeverre speelt een monumentale status een rol in de aanjaagfunctie van een gebouw?

Waar ligt de grens van de meerwaarde van een monumentale status voor een herontwikkeling?

Welke factoren belemmeren een aanjaagfunctie van een gebouw in een gebiedsontwikkeling?

Voorbeelden barrières:

- Verkeerde keuzes in planningsproces
- Het niet halen van de beoogde effecten
- Democratisch tekort partijen
- Een ingewikkeld besluitvormingsproces
- Financiële kosten te hoog
- Tegenvallende economische en culturele spillovers
- Uit het oog verliezen van maatschappelijke doelstellingen voor het gebied
In hoeverre kunnen deze belemmeringen voorkomen worden?

Hoe kan de overheid een herontwikkeling van erfgoed binnen een gebiedsontwikkeling faciliteren?

Afhankelijkheid tussen project en gebiedsontwikkeling

In hoeverre kan het proces of uitkomst van een gebiedsontwikkeling beïnvloedt worden door een aanjager?

In hoeverre denkt u dat cultureel erfgoed met aanjaagfunctie als strategie in de toekomst bewust ingezet kan worden in gebiedsontwikkeling?

Zijn er nog dingen die u mij mee wilt geven voor mijn onderzoek? Zijn er bepaalde aspecten die nog niet behandeld zijn?

- Gerichte vragen over mijn onderzoek.

Afsluiting

Bedankt voor uw tijd en moeite voor het interview.
Annex 2. Short interview residents

5. Vragenlijst bewoners

<table>
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<tr>
<th>Stelling</th>
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<tbody>
<tr>
<td>Het gebouw sluit aan bij de identiteit van de wijk</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Het gebouw heeft symbolische waarde</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>De bewoners in de wijk zijn trots op dit gebouw</td>
<td>1</td>
<td>2</td>
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<td>4</td>
<td>5</td>
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<tr>
<td>Sinds het gebouw herontwikkeld is, zijn er nieuwe ontwikkelingen in de wijk</td>
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<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Zonder het gebouw was de wijk niet veel anders dan dat het nu is</td>
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<td>2</td>
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<td>5</td>
</tr>
</tbody>
</table>

Wat is uw mening over het project?

Maakt u wel eens een gebruik van een van de functies?

Wat is volgens u het imago van het project?

Welke veranderingen in de wijk zijn opgetreden door het project? Is het positief of negatief?

Welke waarde voegt het project toe aan de wijk in uw mening?

6. Vragenlijst nieuwe bewoners

<table>
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<tr>
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<tr>
<td>Het gebouw voegt iets unieks toe aan de wijk</td>
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<td>2</td>
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<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Zonder de culturele activiteiten en/of gebouwen was ik hier niet gaan wonen</td>
<td>1</td>
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<td>5</td>
</tr>
<tr>
<td>Ik ben bereid om relatief meer te betalen voor een woning met cultuurhistorische waarde dan voor een nieuwbouwwoning</td>
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</tbody>
</table>

Wat waren voor u redenen om hier te komen wonen?

In hoeverre speelt imago een rol in uw woningkeuze?

Maakt u zelf veel gebruik van alle functies in het projectgebied?

Wat is in uw mening het effect van het project op de wijk?
### Annex 3. Actor analysis

#### 7. Actor analysis ‘Zuiderziekenhuis’ Rotterdam

<table>
<thead>
<tr>
<th>Actor name/organisation</th>
<th>Actor name and function person</th>
<th>Mission</th>
<th>Targets, tasks, responsibilities</th>
<th>Role in the process?</th>
<th>Interests?</th>
<th>Means/instrument and how deployed?</th>
<th>Chances/threats for project</th>
</tr>
</thead>
<tbody>
<tr>
<td>The municipality</td>
<td>Paul Theunissen project leader</td>
<td>Redevelopment hospital</td>
<td>Create new neighbourhood around former hospital</td>
<td>Relatively little influence on process and outcome, no landowner</td>
<td>Steer private development to ensure quality area</td>
<td>Anterior agreement with developer</td>
<td>Create new identity for Rotterdam-South. Little influence on process, own development landowner</td>
</tr>
<tr>
<td>Impact Vastgoed developer</td>
<td>Marco Praagman project leader</td>
<td>Development is core business, capture value creation</td>
<td>Preserve hospital, outsource to BOEi</td>
<td>Deploys area with BOEi</td>
<td>Capturing value creation</td>
<td>Through selling developed new housing</td>
<td>Spin-offs lead to value creation. Threat: projected spin-offs fail</td>
</tr>
<tr>
<td>BOEi</td>
<td>Martijn Bok</td>
<td>Preserve former hospital and</td>
<td>Responsible for feasible redevelopment former hospital</td>
<td>Created basis for development</td>
<td>Experience and knowledge in redevelopment</td>
<td>Preservation of hospital</td>
<td>Almost none public funds, smart use resources and maximize profits to make plan feasible</td>
</tr>
<tr>
<td>Foundation</td>
<td>-</td>
<td>Protest against demolition Zuider zieken huis</td>
<td>Protest against demolition Zuider zieken huis</td>
<td>Put pressure on decision making municipality</td>
<td>Preserving former hospital</td>
<td>Protesting, decision makers felt political pressure on choice</td>
<td>Made it possible that municipality had to choose for redevelopment</td>
</tr>
<tr>
<td>Neighborhood</td>
<td></td>
<td>Preserve park and former hospital</td>
<td>Preserve park and former hospital</td>
<td>Little connection to new functions</td>
<td>Emotional value with building</td>
<td>Protested with foundation against demolition</td>
<td>Make housing or educational career. Threat: discrepancy ambition and effects</td>
</tr>
<tr>
<td>Van Wilsum Van Loon Architects</td>
<td>-</td>
<td>Design for new function hospital</td>
<td>Design for new function hospital</td>
<td>Design for new function hospital</td>
<td>Connect new housing to former hospital</td>
<td>Experience with design-ing monuments</td>
<td>Connected renewal of area. Threat: disconnection</td>
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</tbody>
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### 8. Actor analysis Cereolfabriek Utrecht

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<th>Chances/ threats for project</th>
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<tr>
<td>Municipality Utrecht</td>
<td>Jan den Boer</td>
<td>Redevelopment of degraded area</td>
<td>Bottom-up approach, participation by residents</td>
<td>Oversee development and steered course of process</td>
<td>Desired development area with minimum financial involvement</td>
<td>Not much financial means: co-operation with developers and neighbourhood</td>
<td>Societal basis versus vigorness</td>
</tr>
<tr>
<td>Meijster’s Buiten VOF (Heijmans and Blauwhoed)</td>
<td>-</td>
<td>Develop area in order to capture value</td>
<td>Strategic land position after municipality bought Cereol</td>
<td>Develope area and steered development</td>
<td>Financial interests</td>
<td>Combined instruments of two developers, shared development housing</td>
<td>Financial resources for the area development. Threat: too much land positions</td>
</tr>
<tr>
<td>BOEi</td>
<td>Peter van Schaik</td>
<td>Develop Cereol to preserve heritage</td>
<td>Develop Cereol in order to create dynamic area, functions for neighbourhood</td>
<td>Created trust in development during economic crisis</td>
<td>Preserving Cereol and finding new sustainable uses</td>
<td>Experienced in developing heritage and monuments. Arranged public funds and good basis with residents</td>
<td>Problem solver in process. Threat: less ambitious plans than developers</td>
</tr>
<tr>
<td>Het Wilde Westen</td>
<td>Dorothé Lucassen</td>
<td>Expand cultural centrum and commit residents to organization</td>
<td>Commit residents to put effort into cultural program and events to create cohesion</td>
<td>Ultimate user and involved during process</td>
<td>Creates societal basis of development, wants more space for functions</td>
<td>Not much instruments, conversations with shareholder to convince them of value organization</td>
<td>Subsidized by municipality and creates social cohesion. Threat: feasibility</td>
</tr>
<tr>
<td>Residents neighbourhood</td>
<td></td>
<td>New use of Cereol and with functions for residents</td>
<td>New use of Cereol to fulfill needs</td>
<td>Participation: choice of functions in Cereol</td>
<td>Functions for the residents: school, library, bar etc</td>
<td>They participate: their voice is heard</td>
<td>Support development of Cereol. Threat: no real power</td>
</tr>
<tr>
<td>Public fund parties</td>
<td>-</td>
<td>Preserving cultural heritage</td>
<td>Preserving cultural heritage</td>
<td>Public funds for redevelopment Cereol</td>
<td>Preserving cultural heritage</td>
<td>Public funds for redevelopment Cereol</td>
<td>More feasible development</td>
</tr>
<tr>
<td>Actor name /organisation</td>
<td>Actor name and function person</td>
<td>Mission</td>
<td>Targets, tasks, responsibilities</td>
<td>Role in the process?</td>
<td>Interests?</td>
<td>Means/ instruments and how deployed?</td>
<td>Chances/ threats for project</td>
</tr>
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</tr>
<tr>
<td>Municipality Amersfoort</td>
<td>Jeroen Wolbrink – project manager</td>
<td>Create quality in area by steering developments and public space</td>
<td>Organizing organic development area</td>
<td>Owns almost half of the area, much effect on the process and outcome area development</td>
<td>Steer initiatives and develop area plot by plot – 5 starting points</td>
<td>Owns half of the area and can steer these developments, other developments need permits for buildings</td>
<td>Creating diverse area by organic development. Threat: Administrative complex development</td>
</tr>
<tr>
<td>BOEi</td>
<td>Sylvia Pijnenborg – project manager</td>
<td>Preserve Rohm &amp; Haas</td>
<td>Redevolvement Rohm &amp; Haas, create dynamic in area</td>
<td>Attracted people to the degraded area, beginning of the area development</td>
<td>Preserve heritage of Rohm &amp; Haas</td>
<td>Bought Rohm &amp; Haas cheaply, development more feasible</td>
<td>Success creates trust – failure creates distrust</td>
</tr>
<tr>
<td>SchippersBosch</td>
<td>Landowner area and Prodent factory</td>
<td>Developing area as core business</td>
<td>Develops Prodent and other plots area</td>
<td>Own half of the area, much effects on the process and outcome area development</td>
<td>Financial goals development and create new attractive area</td>
<td>Developing buildings in ownership, such as Prodent factory</td>
<td>After Rohm &amp; Haas trust in potency area</td>
</tr>
<tr>
<td>Hogeschool Utrecht</td>
<td>User and land owner in area</td>
<td>Locate community college in Amersfoort</td>
<td>Uses large part of Prodent</td>
<td>Attracts young people to area, creates dynamic</td>
<td>Creative community college in creative area</td>
<td>Bought part of Prodent to be independent – support of municipality</td>
<td>Creates new flow of people. Threat: disconnect to area</td>
</tr>
<tr>
<td>Neighbourhood Gildekwartier</td>
<td>Minimize negative effects by developments</td>
<td>Minimize negative effects by developments</td>
<td>Very little, they experience not much effects</td>
<td>Make area attractive again</td>
<td>They use the functions in the area, contribute to success</td>
<td>They use the functions in the area, contribute to success</td>
<td></td>
</tr>
<tr>
<td>ZEEP architects</td>
<td>Jan Poolen - Architect</td>
<td>Design area for redevelopments</td>
<td>Involved in process Rohm &amp; Haas, precursor for area</td>
<td>Temporary user Rohm &amp; Haas, designs for area</td>
<td>Steer developments towards own design</td>
<td>Pitched ideas to landowners area, steered course of process</td>
<td>Design was well elaborated. Threat: no support developers</td>
</tr>
</tbody>
</table>
### Actor analysis ‘De Hallen’, Amsterdam

<table>
<thead>
<tr>
<th>Actor name/organisation</th>
<th>Actor name and function person</th>
<th>Mission</th>
<th>Targets, tasks, responsibilities</th>
<th>Role in the process?</th>
<th>Interests?</th>
<th>Means/instruments and how deployed?</th>
<th>Chances/threats for project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Municipality Amsterdam</td>
<td>Marianne Kieft – area real estate agent</td>
<td>Handling the business which is entrepreneur related</td>
<td>Contact person for entrepreneurs in the area</td>
<td>Accepts or rejects initiatives by entrepreneurs</td>
<td>Create a lively area with a diverse supply of shops</td>
<td>Permit for entrepreneurship. Deployed when plan is well elaborated.</td>
<td>Create a diverse area with the functions – threat is that the area becomes too busy</td>
</tr>
<tr>
<td>TROM cv</td>
<td>-</td>
<td>Redevelopment of ‘De Hallen’</td>
<td>Leads redevelopment ‘De Hallen’</td>
<td>Very important Took initiative for redevelopment</td>
<td>New use of ‘De Hallen’ and financial interests</td>
<td>Cooperation between multiple parties with private funds</td>
<td>Creating a new plan for the area with support of neighbourhoo d. Threat: democratic entanglement</td>
</tr>
<tr>
<td>Stadsherstel NV</td>
<td>Paul Morel</td>
<td>Redevelopment Hall 17</td>
<td>Leads redevelopment Hall 17</td>
<td>First advice on project, after which Hall 17 was bought</td>
<td>Preserving monumental buildings in Amsterdam</td>
<td>Experienced in redevelopment monuments: problem solver in process</td>
<td>Bought Hall 17 when TROM cv could not redevelop this hall as well. Threat: separate development</td>
</tr>
<tr>
<td>Architect Van Stigt</td>
<td>-</td>
<td>Created design of ‘De Hallen’</td>
<td>Advice on how to make feasible design for redevelopment</td>
<td>Contributed to TROM cv on how to redevelop and design</td>
<td>Architectural new design for iconic building</td>
<td>Experienced with designs for monuments: problem solver in process</td>
<td>Ambition of creating urban icon. Threat of too ambitious plans</td>
</tr>
<tr>
<td>Inhabitants Old-West Amsterdam</td>
<td>Oncko Grader</td>
<td>Protect interests of residents</td>
<td>Protest against developments with negative effects on neighbourhood</td>
<td>Protest against former initiatives laid pressure on municipality</td>
<td>Preserving the livability in the neighbourhood and minimize the negative effects of developments</td>
<td>Legal complaint against development and put pressure on decision-making municipality by protesting</td>
<td>Protest and legal complaints could frustrate the redevelopmen t process, which costs money for the investors</td>
</tr>
</tbody>
</table>
Annex 4. Interview reports

For this research 16 interviews were conducted, as well as 8 short interviews (conversations) with residents in each case.

<table>
<thead>
<tr>
<th>Interviewee</th>
<th>Organization</th>
<th>Case</th>
<th>Date of interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>T. Daamen</td>
<td>TU Delft</td>
<td>Expert interview</td>
<td>28 March</td>
</tr>
<tr>
<td>R. Claassen</td>
<td>Peak Development</td>
<td>Expert interview</td>
<td>31 March</td>
</tr>
<tr>
<td>W.J. Verheul</td>
<td>TU Delft</td>
<td>Expert interview</td>
<td>7 April</td>
</tr>
<tr>
<td>J. Wellink</td>
<td>Panta Real Estate</td>
<td>Expert interview</td>
<td>11 April</td>
</tr>
<tr>
<td>J. den Boer</td>
<td>Municipality Utrecht</td>
<td>Cereol</td>
<td>24 April</td>
</tr>
<tr>
<td>P. Theunissen</td>
<td>Municipality Rotterdam</td>
<td>‘Zuiderziekenhuis’</td>
<td>25 April</td>
</tr>
<tr>
<td>J. Wolbrink</td>
<td>Municipality Amersfoort</td>
<td>Rohm &amp; Haas</td>
<td>12 May</td>
</tr>
<tr>
<td>S. Pijnenborg</td>
<td>BOEi</td>
<td>Rohm &amp; Haas</td>
<td>15 May</td>
</tr>
<tr>
<td>M. Praagman</td>
<td>Impact Vastgoed</td>
<td>‘Zuiderziekenhuis’</td>
<td>22 May</td>
</tr>
<tr>
<td>J. Poolen</td>
<td>ZEEP architects</td>
<td>Rohm &amp; Haas</td>
<td>23 May</td>
</tr>
<tr>
<td>D. Lucassen</td>
<td>Het Wilde Westen</td>
<td>Cereol</td>
<td>31 May</td>
</tr>
<tr>
<td>M. Kieft</td>
<td>Municipality Amsterdam</td>
<td>‘De Hallen’</td>
<td>7 June</td>
</tr>
<tr>
<td>P. van Schaik</td>
<td>BOEi</td>
<td>Cereol</td>
<td>9 June</td>
</tr>
<tr>
<td>M. Bok</td>
<td>BOEi</td>
<td>‘Zuiderziekenhuis’</td>
<td>16 June</td>
</tr>
<tr>
<td>O. Grader</td>
<td>Activist neighbourhood in the west of Amsterdam</td>
<td>‘De Hallen’</td>
<td>20 June</td>
</tr>
<tr>
<td>P. Morel</td>
<td>Stadsherstel NV</td>
<td>‘De Hallen’</td>
<td>4 July</td>
</tr>
</tbody>
</table>

All reports and audio files are available at request. For contact, mail to guus.meijer94@gmail.com