THE SPINE
Researching spatial interventions to strengthen the vitality of Zoetermeer as a residential city on the long term

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P5 Thesis report

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This thesis report is the final product of my graduation project at Delft University of Technology, faculty Architecture department Urbanism. Growing up in a city which is a clear result of policies, planners and urban designers, Zoetermeer, I always wondered why this place was totally different opposed a city like Delft. Which raised the question why a certain urban place works and looks the way it does. Therefore it was a logical decision to study Urbanism in Delft. During my studies I learned many approaches to address urban places and development. I decided to choose my hometown, Zoetermeer, as the main subject for my graduation thesis, so I could assembles all the different approaches I learned at the University in order to answer my main question. However, I realised their is no single answer to this question, as urban development is such a complex process. Anyhow I gained many tools to approach this complexity.

I want to thank my graduation mentors Francisco Colombo, Arie Romein and external mentor Sara Stroux for their accurate accompaniment and patience.

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Sander van Venetie

Tilburg, 2015
INDEX
The municipality of Zoetermeer (124,000 residents) wants to enhance the vitality of the residential town on the long term. One of their focus points is attracting and retaining a young and highly educated population, as this part of the population stimulates the local economy and a lively city center through their urban lifestyle.

The city offers many qualities for its residents, like a green and spacious residential environment, an extensive shopping center and good car and public transport connections with cities like The Hague, Leiden and Delft. However the city lacks coherence and a vital city center, the reason for this maybe dedicated to the short period in which the city expanded from a small village into a middle sized Dutch town, like Delft or Leiden, in terms of population. Due to this extensive expansion in a period when suburban residential environments were popular, the city lacks historical layers and diversity, resulting in a monotonous suburban field. The spatial qualities of the city focus on living and all the comforts involved, like low dense/green neighbourhoods with single-family dwellings, an efficient shopping center well reachable by car, public transport and bike/foot, offering the daily needs. For the more diverse, lively, historic city centers, the residents of Zoetermeer have to travel to cities like The Hague, Leiden or Delft. Therefore, Zoetermeer is well connected with these cities by car and public transport.

But as the young and highly educated part of the population prefers cheap apartments within a lively city center, they leave Zoetermeer for cities like The Hague and Leiden. Besides, developments in and around the city threaten the present qualities of the city. New competing residential environments in the region attract the (upper) middle class population of Zoetermeer, causing the increase of the underclass population in Zoetermeer. More close to the city, the development of BleiZo, an extensive national office district at the border of the city, well connected with other cities in the Netherlands, causes the exodus of the city center of Zoetermeer.

As the city lacks coherence, urban residential environments, a diverse housing stock (including cheap apartments for example) and a lively city center, the city its vitality is in danger on the long term.

This thesis introduces a strategy which enhances the coherence of the city including a lively city center. Special focus is on attracting highly educated starters by making the city center more appreciated by them to live. In this way, it is hoped the city will become more appreciated by all its residents on the long term.
1. INTRODUCTION

Dutch new town Zoetermeer deals with an unbalanced population; the upper middle class leaves the city, while under class moves in. Besides, the population is aging. The lack of a young and highly educated population leads to socio-economic problems threatening the city its vitality (Reijndorp, Bijlsma and Nio, 2012; Reijndorp et al., 2011). However, the last decades the highly educated part of the population increases in the Netherlands. And as they bring liveness to the city and strengthen the local economy, municipalities starts to focus on retaining and attracting this part of the population to their city. This also applies to the municipality of Zoetermeer, in the Structuurvisie 2030 (2008) the municipality of Zoetermeer mentions the importance of providing a future perspective for a young, ambitious population. A population group which contributes to social and economic prosperity of Zoetermeer. In other words, Zoetermeer would like to be an ‘emancipation machine’ (Reijndorp, Metaal, Huis and Naafs, 2011, p.4). Overall, Zoetermeer would like to remain an attractive residential town for the entire population (Gemeente Zoetermeer, 2014).

However the young and highly educated population seems to leave Zoetermeer due to a lack of education, culture, liveliness and affordable housing. Besides, external developments threaten the present spatial qualities of Zoetermeer. Extensive peripheral office development at the border of Zoetermeer, might lead to exodus of the city center. And the leave of upper middle class citizens to competitive residential environments in the region, causes the decay of some of the green suburban neighbourhoods of Zoetermeer.

To retain the decline of the vitality of Zoetermeer as a residential city, this thesis researches spatial interventions strengthening the appreciated spatial residential qualities of the city, focussing on highly educated starters.

This thesis starts with an introduction (chapter 1) explaining the build-up of the research, based on the main research question. The theoretical framework (chapter 2) and the empirical research (chapter 3) are the base for the research. In chapter 4, a strategy is proposed determined by confronting the theoretical framework and the empirical research, followed by a design outcome (chapter 5 & 6) based on the strategy. Finally, in chapter 7 a conclusion is made by examine the design outcome to the main research question. Besides a reflection is made on the process of this research and on the wider social relevance of this thesis.
1.1 Societal Relevance

Like Dutch cities as Almere and Haarlemmermeer, Zoetermeer is a new town. As they share the same short historical development, these Dutch new towns share the same socio-economic problems. (Reijndorp, Bijlsma and Nio, 2012). For example, they all have an unbalanced population structure. While a young and/or highly educated population is under-represented (figure 1.1 & 1.2), the Dutch new towns deal with aging and under class population. Some warn the Dutch new towns for a serious ‘brain drain’ (Reijndorp, Metaal, Huis and Naafs, 2011, p.99).

However, the highly educated population is the fastest growing part of the Dutch population in general (figure 1.3). For cities it is attractive to attract a young and highly educated population. This part of the population enhances the urban vitality as they use the city for social and cultural activities. Besides they provide for a well educated work force. In other words, the presence of a young and highly educated population contributes to the attractiveness of the city for investors indirectly (Wouters, 2010).

It is for this reason that the municipality of Zoetermeer focuses on retaining and attracting a young and highly educated population (Gemeente Zoetermeer, 2008). This thesis elaborates on this goal by researching spatial interventions which could strengthen the by highly educated starters appreciated spatial residential qualities of Zoetermeer, to the benefit of the vitality of Zoetermeer as a residential city on the long term.

1.2 Scientific Relevance

This thesis combines 1. the existing research concerning the Dutch new towns issues with 2. existing research concerning urban vitality with 3. existing research concerning the preferred spatial residential qualities of highly educated starters, in order to research spatial interventions which strengthen vitality of Zoetermeer as a residential city on the long term.

As their quick growth and their (often negative) image fascinates many, the Dutch new town is discussed in many researches and publications. This thesis focuses mainly on publications by the International New Town Institute (a non-profit scientific research institute based in Almere, dedicated to improving the quality of urban development of new towns all over the world) approach the problems from a sociological and political perspective mainly. One of their recent publications, Atlas Nieuwe Steden: de verstedelijking van de groei- kernens (Reijndorp, Bijlsma and Nio, 2012) discusses influence of the historical development of the Dutch new towns on its current socio-economic position. In this book, Arnold Reijndorp emphasizes the unique quality of the Dutch new town, which he calls suburban urbanity; a mix of suburban spatial qualities like low dense residential environments in an urban context of urban facilities and related activities.

Also the Dutch national government discusses the Dutch new town. Nieuwe steden in de Randstad: Verstedelijking en suburbaniteit (Reijndorp, Bijlsma, Nio and Wouden, 2012) is a publication by Plan Bureau voor de Leefomgeving (PBL) and discusses the future role of the Dutch new town within the development of the Randstad, referring to the unique quality of suburban urbanity. New Town Roots: geboren en getogen Zoetermeerders over hun stad (Reijndorp, Metaal, Huis and Naafs, 2011) focuses especially on the Dutch new town Zoetermeer and discusses appreciated qualities by the born and raised residents of the city, to show the potentials of the city.

The latter connects to the topic urban vitality. Many publications are written on the vitality of an urban place. This thesis focuses on different aspects of this topic. Jan
Gehl’s *Life Between Buildings* (1987) is discussed regarding the influence of spatial quality of public space on the activities taking place in that public space. Stephen Read’s *Intensive urbanisation: Levels, networks and central places* (2013) is discussed regarding the influence of different networks on the vitality of a place. *Space, Density and Urban Form* (Berghauser Pont and Haupt, 2009), is discussed regarding the influence of density on the vitality of the place. *De nieuwe stad. Stedelijke centra als brandpunten van interactie* (Gastelaars and Hamers, 2006) and *De Hollandsche Metropool: Ontwerpen aan de kwaliteit van interactiemilieus* (de Hoog, 2012) consider vital urban places as interaction environments; nodes with an optimal spatial quality where interaction takes place.

Elaborating on the topic of urban vitality, this thesis focuses on highly educated starters on the housing market. As their presence in a city might lead to a stronger socio-economic position of the city, this thesis discusses different researches and publications focusing on which spatial residential qualities highly educated starters prefer, like *De aantrekkelijke stad* (Marlet, 2010), *Slimme steden: waar jonge hoogopgeleiden et aantrekkelijk vinden om te wonen* (Wouters, 2010), *De nieuwe stad. Stedelijke centra als brandpunten van interactie* (Gastelaars and Hamers, 2006) and *Waar woont de “creative class” van Nederland? Een empirisch onderzoek naar de woonwensen van Nederlandse softwareontwikkelaars* (Weterings, 2005).

By combining the research concerning the Dutch new town issues with research concerning urban vitality and research concerning the preferred spatial residential qualities of highly educated starters, in order to research spatial interventions to strengthen the vitality of Zoetermeer as a residential city on the long term.

Therewith this thesis adds new dimensions to previous graduation theses within the TU Delft, Faculty of Architecture researching spatial interventions to the benefit of the future development of the Dutch new town (Lievenoogen, 2011, Stobbe, 2012, Wolves, 2013).

### 1.3 Problem statement

Zoetermeer deals with the typical Dutch new town problems, facing socio-economic problems due to the lack of a upper middle class population. As the other Dutch new towns, Zoetermeer would not be urban enough. Zoetermeer would lack urban qualities, historical layers and a differentiated population. At the same time, the city would not be suburban enough, with low dense green residential neighbourhoods. However, it seems to be better not to focus on what the city lacks, but to focus on its qualities. The city its qualities lie precisely in its interesting mix of urban and suburban qualities (Reijndorp, Bijlsma and Nio, 2012; Reijndorp et al., 2011). However, the appreciated spatial residential qualities of the city are threatened (Reijndorp, Metaal, Huis and Naafs, 2011), threatening the vitality of Zoetermeer as residential city on the long term. For example the development of an extensive peripheral office area at the border of the city, causes the exodus of Zoetermeer its city center. Besides the upper middle class citizens leave the city for competitive residential environments in the region, which causes the decay of the green suburban neighbourhoods of Zoetermeer. Therefore the problem statement of this thesis is:

*The present spatial residential qualities of Zoetermeer are threatened by external developments. This causes the leave of the upper middle class population, in particular the highly educated starters. This threatens the vitality of Zoetermeer as residential city on the long term.*

### 1.4 Objective

The problem statement suggests a direct relation between strengthening the appreciated spatial residential qualities of Zoetermeer and retaining and attracting highly educated starters. However it is not clear in what way these spatial residential qualities should be strengthened. Therefore the aim of this thesis is:

*to research possible spatial interventions which could strengthen the by highly educated starters appreciated spatial residential qualities of Zoetermeer, to the benefit of the vitality of Zoetermeer as a residential city on the long term.*

The objective is based on a set of terms which will be elaborated in this thesis:

- **spatial interventions**: crucial adjustments in the existing built environment in order to achieve the objective
- **highly educated starters**: people with a Bachelors degree or Masters degree and working in the science industry, creative industry or business services. The most interesting is to focus on this part of the population that is about to move. Therefore is chosen for the age category of 23 years - 28 years, as this part of the highly educated population is about to graduate or just graduated and therefore start to move and thus are ‘starters’ on the housing market. They could be single or living together, as research does not show a difference of great significance regarding the moving behaviour (Wouters, 2010, p.39). Families with children are disregarded as they are under represented in this part of the population.
- **spatial residential qualities**: divided in the residential typologies and the residential environment, sub in the divided spatial quality of the neighbourhood and the facilities in the daily urban system.
- **Zoetermeer**: the context defining the specific spatial problems and specific spatial interventions to be made
- **vitality**: devied in terms of social vitality like safety and liveliness and in terms of economic strength like attractive and flexible.
- **long term**: from 20 years and more

Although the main objective of this thesis is to enhance the vitality of Zoetermeer as a residential city on the long term, there are some underlying objectives as well, concerning the role of the Zoetermeer in the South Wing metropolitan region in the future. Implicitly this thesis researches spatial interventions to strengthen the according Arnold Reijndorp unique quality of suburban urbanity. By researching these spatial qualities, a strong complementary role of Zoetermeer as residential city within the South Wing metropolitan region could be defined.

### 1.5 Methodology

As the objective defines, this thesis researches possible spatial interventions which could strengthen the by highly educated starters appreciated spatial residential qualities of Zoetermeer, to the benefit of the vitality of Zoetermeer as a residential city on the long term. To research these possible spatial interventions, a main research question is defined:

*What spatial interventions strengthen the spatial residential qualities of Zoetermeer in a way highly educated starters are retained in / attracted to the city, to the benefit of the vitality of Zoetermeer as a residential city on the long term?*
To operationalize the main research question, the thesis is divided into three research parts: a theoretical framework, an empirical study and a design (figure 1.5). The main product of this thesis is the masterplan for the city center of Zoetermeer, as part of a broader strategy for the city to the benefit of the vitality of Zoetermeer as a residential city. De Jong and Van der Voordt (2002) describe this as a *design study*: a study in which a design is made in a relatively well-known context of political, economic, social and spatial restrictions (Figure 1.4).

The theoretical framework (chapter 2) provides insight in the question what is searched for. The empirical research (chapter 3) provides insight in the question what is present at the study area. The conclusions of the theoretical framework and the empirical research will be confronted with each other, defining a strategy (chapter 4) on which the design (chapter 5 & 6) is based. In the conclusions (chapter 7.1) the design outcome is confronted with the main research question. In chapter 7.2 a reflection is made on the process of the thesis and on its position within a broader perspective.

In order to answer the main research question, seven sub research questions are defined, coinciding the theoretical framework and the empirical research. Below, the sub research questions, including the used method of research, will be presented in relation to the different research parts.

**Theoretical Framework (literature review)**
- What processes influence the vitality of a space?
- What spatial residential qualities do highly educated starters prefer?

**Empirical Research (literature review, data analysis, mapping)**
- What spatial qualities of Zoetermeer influence the city its vitality?
- What are the spatial residential qualities of Zoetermeer currently?
- What spatial developments provide an opportunity or pose a threat for the current vitality of Zoetermeer as residential city?
- What spatial qualities are lacking in Zoetermeer in order to strengthen its vitality?
- What spatial residential qualities are lacking in Zoetermeer in relation to the preferences of highly educated starters?

By answering these sub research questions, a S.W.O.T. analysis and confrontation matrix are compiled, in order to propose a spatial strategy for the city, on which the general spatial development of Zoetermeer and finally the masterplan for the city center of Zoetermeer will be elaborated. The design of the masterplan is made by sketching and precise drawing, evaluating the outcome with the strategy back and forth.

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**Figure 1.4: Types of design-related study (De Jong and Van der Voordt, 2002, edited by author)**

<table>
<thead>
<tr>
<th>CONTEXT</th>
<th>Determined</th>
<th>Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design research</td>
<td>Design study</td>
<td></td>
</tr>
<tr>
<td>Typological research</td>
<td>Study by design</td>
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DEFINING THE RESEARCH

Motivation
The absence of highly educated starters in the city of Zoetermeer

Problem statement
Specific spatial residential qualities of Zoetermeer are underdeveloped through which parts of the population like highly educated starters move out, threatening the vitality of Zoetermeer as a residential city on the long term.

Objective
To research possible spatial interventions which could strengthen the appreciated spatial residential qualities of Zoetermeer in order to retain and attract a highly

Research question
What spatial interventions strengthen the spatial residential qualities of Zoetermeer in a way highly educated starters are retained in / attracted to the city, to the benefit of the vitality of Zoetermeer as a residential city on the long term?

EMPIRICAL RESEARCH

Theoretical Framework
- theories on urban vitality
- research on the spatial residential qualities highly educated starters prefer
  Method: literature review

Empirical Research
- research of spatial residential qualities of Zoetermeer
  Method: Mapping, official planning documents review, literature review

Conclusions
To define the problems and the potentials concerned the research question

Strategy
Derived from the conclusions of the research, a strategy is defined to set the base for the design

DESIGN STUDY

Spatial implementation of the strategy
- Alternative spatial configuration of Zoetermeer in order to enhance its vitality on the long term

Masterplan for the city center
- To strengthen the spatial residential qualities to retain and attract highly educated starters, in order to enhance the vitality of Zoetermeer as a residential city on the long term

CONCLUSIONS AND REFLECTION

Conclusion of the thesis by comparing the design outcome to the research question. Reflection of the process and broader social relevance of the thesis.
2. THEORETICAL FRAMEWORK

This chapter positions the thesis in the academic field, by reviewing different academic researches and publications. According to the sub research questions of this thesis, this chapter is divided in two parts. The first part focuses on urban vitality, trying to answer the sub research question *What processes influence the vitality of a space?* The second part focuses on highly educated starters, trying to answer the sub research question *What spatial residential qualities do highly educated starters prefer?*

Wrapping up this chapter, the findings of this reviewing are concluded at the end, defining the approach of this thesis.

The first part discusses different publications concerning urban vitality. Jan Gehl’s *Life Between Buildings* (1987) is discussed regarding the influence of spatial quality of public space on the activities taking place in that public space.

Stephen Read’s *Intensive urbanisation: Levels, networks and central places* (2013) is discussed regarding the influence of different networks on the vitality of a place.

*Kopf* and Haupt’s *Space, Density and Urban Form* (2009), is discussed regarding the influence of density on the vitality of the place.

*De nieuwe stad. Stedelijke centra als brandpunten van interactie* (2006) and *De Hollandse Metropool: Ontwerpen aan de kwaliteit van interactiemilieus* (2012) are discussed as they describe the vitality of a place in a comprehensive way, by referring to *interaction environments*; nodes with an optimal spatial quality where interaction takes place.

The second part discusses different publications concerning highly educated starters.

Starting point is Richard Florida’s bestseller *Rise of the creative Class* (2002), in order to clarify a general definition of the highly educated starters and positioning them within the discussion of urban vitality.

To specify the definition and the position of the highly educated starter, Gerard Marlet’s *De aantrekkelijke stad* (2010) is reviewed.

From this point, the spatial residential qualities highly educated starters prefer are defined by reviewing *Slimme steden: waar jonge hoogopgeleiden et aantrekkelijk vinden om te wonen* (2010), *De nieuwe stad. Stedelijke centra als brandpunten van interactie* (2006) and *Waar woont de “creative class” van Nederland? Een empirisch onderzoek naar de woonwensen van Nederlandse softwareontwikkelaars* (2005).
2.1 Urban vitality

Vital urban places could be seen as interaction environments (de Hoog, 2012), or as Gasterlaars and Hamers argue: "cities can be seen as junctions where human interaction, seminars, confrontation and transactions take place" (2006, p.12). Human interaction provides social quality (recreation, meeting) and safety (control). But also, everywhere where human interaction takes place, conventions are organized and transactions occur, they strengthen the economy of that place. Interaction environments are the vital places within a city, but De Hoog also emphasizes the position of interaction environments within the metropolitan context by appointing that not just a singular, but a large diversity of interaction environments will specialize the metropolis (De Hoog, 2012, p.34).

In Stephen Read’s ‘Intensive urbanisation: Levels, networks and central places’ (2013) a model is introduced (figure 2.1) which emphasizes the importance of bringing together different networks and the vitality of a place where they intersect. For example, a place that is only connected to a local network has only a local market. A place that is only connected to a nationwide network (eg, a peripheral office location along a highway) has a nationwide market, but is missing the connection to the local market. Places where all these different networks come together will be the most vital, according to Read. Read’s model emphasizes the relationship between the central location of a place and the vitality of that place. However, he does not focus on the influence of its spatial quality and its effect on the vitality of the place, nor does he give insight into the activities that occur within the interaction environment.

In Life Between Buildings, Jan Gehl (1987) discusses the different kinds of outdoor activities in the public place, and the way design and buildings influence these activities. Gehl distinguishes between three categories of activities: necessary activities, optional activities and social activities. Necessary activities include activities that are more or less compulsory, like going to school or to work, shopping, waiting for a bus or a person, running errands, distributing mail. They are therefore more or less independent of the exterior environment.

Optional activities are “those pursuits that are participated in if there is a wish to do so, and if time and place make it possible. Think of taking a walk to get a breath of fresh air, standing around enjoying life, or sitting and sunbathing. These activities take place only when exterior conditions are optimal.” (Gehl, 1987, p.365)

Social activities depend on the presence of others in the public space and therefore evolve from the other two activities. Social activities include children at play, greetings and conversations, communal activities of various kinds, and finally - as the most widespread social activity - passive contacts, that is, simply seeing and hearing other people. Social activities vary in intensity. Life between buildings represents primarily the low-intensity contacts, like ‘see and hear’ contacts. Opportunities related to those kinds of activities include:

- contact at a modest level
- a possible starting point for contact at other levels
- a possibility for maintaining already established contacts
- a source of information about the social world outside
- a source of inspiration, an offer of stimulating experience.

If activity between buildings is missing, these low-intensity contacts also disappear.

Therefore it is important to provide the right quality of space in order to enhance the right necessary and optional activities and increase the chances of their occurrence (and the associated social activities). Gehl emphasizes that the public spaces providing a view on other activities causes new activity, as
people are attracted to activity. Think of benches that have a good view of surrounding activities, sidewalks cafés and shops that have a direct relationship to other people.

Density is also considered an important factor for urban vitality. Berghauser Pont and Haupt (2009, p.15) state: “today high densities and the compact city are often seen as prerequisites for sustainable urbanization and economic growth”. They discuss the many ways the concept of density in urbanism is used, and propose a new approach to the concept. The parameter that is often used is the number of houses by hectare. However, according to Berghauser Pont, Haupt and Kooij (2002), this is not sufficient in defining density, they propose the Spacemate. The Spacemate is a tool which connects spatial quantity with spatial quality. It uses four parameters to define density, which are the Floor Space Index (FSI), Ground Space Index (GSI), Open Space Ratio (OSR) and the average height. The parameters express respectively the density, compactness, openness and building height of an area (figures 2. - 2.).

2.2 Highly educated starters

In Richard Florida’s “The Rise of the Creative Class” (2002) he emphasizes that the economy runs more and more on creativity and less on natural resources. This new form of economy is accompanied by the rise of the creative class, a class consisting of scientists, engineers, architects and designers, teachers, artists, musicians and artists. Their economic function is to create new ideas, new technology and / or new creative content (Florida, 2002, p.8). According to Florida, it is important that cities start to focus on the housing needs of this creative class.

Gerard Marlet emphasizes in ‘De aantrekkelijke stad’ (2010) the relationship between the stock human capital (human capital) in a city and its economic growth. Marlet indicates that the highly educated (which in his research includes the creative class) would be more productive, spend more in the local economy and are more likely to start their own business. “Moreover, towns with a lot of human capital possibly adjust more easily to new economic conditions (Marlet, 2010, p.356).” Marlet adds that it is not business but the population that plays a pivotal role in the city. “The composition of the population of a city is the crucial link between agglomeration benefits and housing attractions on the one hand, and the local economy on the other (Marlet, 2010, p.352).” In other words, companies follow the inhabitants and therefore it is essential for a city to optimize its demographics. In the research into people’s wishes concerning spatial qualities of their residential area, people are generally grouped according to the following traditional variables: household composition, age, income and education. In the scope of this thesis, the values for each variable are:

- Household composition: single or living together
- Age: 23 to 28 years old
- Income: almost graduated or working in the science industry/creative industry or business services,
- Education: Bachelors degree or Masters Degree

However, it is now increasingly understood that in addition to the traditional variables a certain ‘lifestyle’ would play an important role in the field of employment, housing, consumption and leisure (Weterings, 2005; Wouters, 2010).

The US economic geographer Joel Otkin would assign the economic miracles to the so-called ‘nerds’ (people with a job in ICT). Richard Florida would expect, within his creative class thinking, the most economical effect from the ‘bohemians’ (artists) (Marlet, 2010). However, according to Marlet these groups has not been very important for the urban economy of the Netherlands.
Therefore, in the scope of this thesis there will be no differentiation between these demographic sub-groups, although the lifestyle variables will be held more generally. The lifestyle of the highly educated starter is characterized by frequent absence from home, with the purpose of acquiring new knowledge and insights and the development of a personal relationship network (Gastelaars and Hamers, 2006, p.9).

The spatial quality of the residential environment could be divided into different dimensions. Anet Weterings suggests that, on the one hand, the choice for a residential environment is based on the physical and social structure of the neighbourhood, also the so-called ‘site’. On the other hand the choice is based on the relative location of the house, and the ‘situation’ relative to locations where other domestic activities take place, like: jobs, school, shopping and recreation (Dieleman & Mulder, 2002 cited in Weterings, 2005, p43). The ‘situation’ can be divided into ‘proximity’ and ‘space’. The ‘proximity’ defines the distance between the house and daily facilities, like a supermarket and school, within the total ‘space’ of the living location (Fillon et al., 1999 cited in Weterings, 2005, p43). In this context, Gerard Marlet distinguishes between the following levels: house, neighbourhood, city and region (Marlet, 2010).

For highly educated starters the main reason for their choice of habitat is proximity to jobs (Wouters, 2010, p.62). This accounts for both the city and the region. Highly educated starters want to settle in a region where a large amount of jobs in knowledge-intensive sectors is present (Gastelaars and Hamers, 2006, p.67). Good access to the city by car and/or public transportation is a necessity. In addition, the presence of like-minded friends and peers in the same city play an important role.

Furthermore, presence of leisure activities plays an important role in the choice of their living environment. For the Universit\-\(y\) (MSc.) graduates the presence of theatre venues is highly appreciated, the other graduates of tertiary education (Hbo) mostly appreciate a good offering of culinary experiences. To a lesser extent, the proximity to nature is also appreciated (Wouters, 2010, p.44). Another important factor seems to be the presence of specialized shops. Furthermore, it seems that the presence of a historical city centre is an important argument for the highly skilled starter to move to certain city. Far less important is the variety of study specialisations being offered, because they have already, or almost finished their study (Wouters, 2010, p.62). Important to note is the fact that the image of a city, for instance because of a certain football team, has a great influence on the choice of highly educated starters for which city to live in (Wouters, 2010, p.50).

In terms of their way of life outside the home, the lifestyle of the educated starter can be considered that of a consumer. To increase the number of interactions outside home, the so-called “care time” is decreased by use of, for example; laundry services, dry cleaning services and dining out. As they like to have face-to-face interaction outside their own homes, they can often be found in cafes and lunchrooms for business and private meetings (Gastelaars and Hamers, 2006, p.79). They prefer to limit their daily habitat to the older parts of the city (Gastelaars and Hamers, 2006, p.87) and hence search in these areas for small and affordable housing, as they only have a limited budget. It should be noted that it is desirable to have ample luxury urban homes in the city, so that the successful highly educated starters can move within the city and do not have to move to another city for a luxurious house (Gastelaars and Hamers, 2006, p.9). Highly educated starters do not need to pay attention to a child-friendly environment for their children to grow up in because often there are no children yet (Wouters, 2010, p.62).

2.3 In conclusion

Vital urban place

Urban vitality could be explained according the amount of human interaction occurring. Therefore, vital urban places are considered as interaction environments: junctions where human interaction, seminars, confrontation and transactions take place. The more networks of different levels intersect on a place, the more vital that place is. Besides, the density of the place influences the vitality of that place. Not only the houses by hectare affects the spatial quality, but also the compactness, openness and building height do so.

Next to density, the spatial quality of a place affects the activities occur in the public space. In general, activities occur when the public space and buildings view other activities in the public space.

Highly educated starters

Because of their out-of-the-house consumer lifestyle, highly educated starters contribute to the liveliness and the local economy of their residential town. They choose their environment primarily based on the presence of jobs. Good accessibility of jobs by car or public transport within the city and the region is of great importance too. In addition, the highly educated starters prefer a city with a wide range of cultural and culinary facilities. Furthermore, it is important that cities offer small and affordable housing options, preferably in the old city centre and surrounded by cheap restaurants, cafés and laundries / dry cleaners, and other facilities. In addition there has to be sufficient public space where they can easily meet friends and peers.
3. THE SPATIAL RESIDENTIAL QUALITIES OF ZOETERMEER

This chapter describes the spatial residential qualities of Zoetermeer. A clear overview is defined by answering the sub research questions:

- What spatial qualities of Zoetermeer influence the city its vitality?
- What are the spatial residential qualities of Zoetermeer currently?
- What spatial developments provide an opportunity or pose a threat for the current vitality of Zoetermeer as residential city?

Chapter 3.1 gives a short overview of Zoetermeer. Chapter 3.2 presents the historical development of Zoetermeer, in order to explain in what way the current spatial residential qualities came about. Chapter 3.3 - 3.6 describes the current spatial residential qualities, followed by an overview of the spatial developments affecting the current spatial residential qualities of Zoetermeer in chapter 3.7. In chapter 3.8 a conclusion is made regarding the spatial residential qualities of Zoetermeer.
Figure 3.1: Location of Zoetermeer in the Netherlands. Drawing by author.
3.1 Context

Zoetermeer is a city of about 124,000 inhabitants (Basis Registratie Personen, 2015), located in the Randstad metropolitan region. Within the Netherlands, the Randstad metropolitan region is the most dense urban region, housing the biggest part of the population, jobs, educational-, cultural - and recreational amenities. Therewith, the Randstad metropolitan region can be seen as the economic center of the Netherlands. A complex system of highways and railways within the Randstad metropolitan region operates the region itself and connects it with the rest of the Netherlands and even with the ‘Flemish Diamond’ region (Belgium) and the ‘Ruhr area’ (Germany) (figure 3.1).

The Randstad metropolitan region is divided into a northern and a southern part: the North Wing and the South Wing. The North Wing is characterized by the monocentric region of Amsterdam. The South Wing is characterized by a polycentric region of Rotterdam, The Hague and Zoetermeer (figure 3.2).

Population total and per city (Rotterdam, The Hague, Leiden, Delft, Dordrecht, Gouda, Alphen, Zoetermeer) jobs?
Figure 3.1 The historical evolution of Zoetermeer, divided in four periods. Source: (Reijndorp, Bijlsma, Nio, & Wouden, 2012) edited by author
3.2 Historical spatial evolution of Zoetermeer

In order to understand what spatial residential qualities are present in Zoetermeer, it is important to understand in what way the city spatially developed through years. Therefore a brief historic overview of the spatial development of Zoetermeer is presented in this section. The historic spatial evolution can be roughly divided in four periods, related to the focus of the development (figure 3.1):

1. Pre growth core period
2. Growth core for the Hague
3. Complete city
4. Network city in the polycentric region

PRE GROWTH CORE

The first settlement of the village Zoetermeer dates back about 1000 years. During the centuries, it grew to a village of 7500 residents in 1960s.

Before the 1850s, the village has a regional position. At the crossing of two water courses connecting the village with The Hague, Leiden, Delft and Rotterdam (Figure 3.3 & 3.4). After the 1850s this changes, when the village is connected to the national railway system at the south side, accompanied by a the national highway ‘A12’ in the 1930s (Figure 3.2).

The village is centred around the ‘dorpsstraat’, a street with butter factories, shops and houses from the 1900th century. The village is known for its extensive butter production; many butter factories are situated in the village. Firstly in the ‘dorpsstraat’, later when the connection with national railway is made, a large factory for ‘Nutricia’ is built at the south side of the village, next to the train station. This results in urban development to the south of the Dorpstraat in the first half of the 20th century (Figure 3.5 & 3.6). Before the World War II, this expansion is characterized by small streets formed by small workers houses. Right after the World War II (1950s), this expansion is characterized by 4 storey apartment blocks.
In the 50s of the last century it was predicted that the Netherlands would go through a huge population growth and economic progress in the upcoming decades. At that time a large migration of the work force to the Randstad takes place and suburban residential areas are extremely popular to live in. This started a national discussion about how the rural areas should be handled in the Randstad at that time.

In the 60’s, in the first and second Note on Spatial Planning, the concept of “concentrated deconcentration’ was introduced; suburban development would be focused around an existing or newly built small urban centre in the green area. This concept was further elaborated in the ‘groeikernenbeleid’ in the third Note Spatial Planning (1974). The usually small villages that were designated as urban growth centres, experienced an exceptionally large growth for the purpose of a nearby larger city (Figure 3.7). Besides, the inner cities of these large cities were often degenerating. By offering inhabitants a safe haven in modern homes in the nearby green growth centre, the major cities could focus on the restructuring of their inner cities. The village of Zoetermeer was designated as a growth centre of The Hague in 1962. The target was to let a village of 7500 inhabitants grow to a city of about 100,000 inhabitants in 20 years time. Because of its position on the national road network (A12) and the railway the Hague - Utrecht, the inhabitants of the new growth centre would be well positioned to move across the country by car and train.

Bundled deconcentration
The policy of the bundled decentralization (Note 1 and 2, 1960s) was engaged in the preservation of green space in the region. For this purpose, low-rise buildings were concentrated around an urban centre in green surroundings. The thoughts about urbanization changed dramatically at that time. Urbanization would not occur within the urban area anymore (where the daily traffic and relocations take place within a city and its suburbs), but at regional level (metropolitan area). Partly due to the increasing mobility (car), urbanization would no longer be equated with the public space, but with an urban lifestyle (Reijndorp, Bijlsma and Nio, 2012, p37). In other words, the daily life of an individual would no longer take place only within a city. Living, working and leisure would take place throughout the entire region. In the 60s this resulted in a structural set-up for Zoetermeer, in which the regional accessibility became a core value; a regional road network connected the different districts of the city of The Hague, Leiden, Delft, Gouda and Rotterdam (Figure 3.8). In addition, the ‘sprinter line’ was planned: a new train connection (which looks more like a light railway) which connected the different districts of the city directly to the centre of The Hague. Despite the idea that urbanization is spreading out across the region, most of the daily movement was expected between residential town Zoetermeer and work / leisure city The Hague (Figure 3.9).

City
True to the legacy of modernism, the structural set up introduces a city following strict segregation of duties; living, working and leisure are separated. In addition, a complete city with the same facilities is no longer required, as urbanization is now defined at the level of the region; living, working, shopping and leisure are available everywhere in the region instead. This is why in the structure set-up the historical city centre is ignored. At the time of modernism they did not want to have anything to do with the past, in addition, preserving the historical centre as an urban center would not be beneficial for the regional mobility. A new centre (with basic facilities) was planned, separate from the historical centre, and...
linked to the regional infrastructure (the new city centre was only realized in the 80s). Around this new centre new residential areas were planned, linked through regional infrastructure (figure 3.10). On the outskirts of the city recreation areas were planned, with the exception of the regional well-connected edges of the city where business and small industry were planned.

Neighbourhood
In the 60s the first new districts of Zoetermeer were developed, entirely according to the modernist principles (figure 3.11). In the neighbourhoods Palenstein, Driemanspolder and Meerkwartier, there were mainly large apartment flats systematically being ‘stamped out’ in the public green. Another part of the neighbourhoods was covered with terrace houses with gardens. Again, the green public space dominated. The car would ensure quick access to the regional road network. In the mid 1970s there was much international criticism towards the large-scale, systematic scale residential areas; they were considered inhumane (Reijndorp, Bijlsma and Nio, 2012, p260). As a result urbanization was no longer defined at the level of the region, but at the level of the neighbourhood. This resulted in the Netherlands in neighbourhoods with low density terrace houses centered around local facilities; the so-called ‘cauliflower districts’ (figure 3.12). Unlike their ‘inhumane’ predecessors, the residential areas Buytenwegh the Leyens’ and ‘Seghwaert’ were set up as ‘small villages’. They were centrally located near a shopping centre with daily facilities in the living area (bakery, butcher, supermarket), health care (doctors, dentists, pharmacy) and education (primary school, local library). These facilities are easily accessible on foot or by bike. A station of the “sprinter line” was conveniently positioned in the shopping centres, by which all the inhabitants of the neighbourhood were very well connected to The Hague. In addition, the car remains the key to rapid access to the regional road network.
**COMPLETE CITY**

In the 1980s new trends in the family structure (individualism) and lifestyle (the increasing popularity of urban living in the historic inner cities) made the predominantly suburban new towns like Zoetermeer less popular to live (Reijndorp, Bijlsma and Nio, 2012, p260). The national growth core policy gradually comes to an end, while new policies focus on the regeneration of the (historic) inner cities. Underlying argument is strengthening the international competitive position of the Randstad region.

No longer Zoetermeer can be depended on the facilities of the region and has to become a ‘complete city’ in order to compete with the other cities within the Randstad. In this perspective, the city starts to strengthen its national potential. Therefore, the national train station area is redeveloped, in order to improve the connectivity of the city with the national scale (figure 3.14). Dominated in this redeveloped is the ‘Mandelabrug’, a slowtraffic bridge connecting the city with the national train station. Besides, the main road network in the city is completed in order to connect the citizens with the national highway.

This is reflected in the development of new residential areas as well. New residential areas Rokkeveen and Noordhove are not connected with the regional infrastructure, but (indirectly) with the national infrastructure. Especially Rokkeveen, which is located to the south of the national highway and train station (Figure 3.15).

As the city focuses on its national potentiality, the regional focus weakens. Unlike the original structuurplan of the 1960s, the regional road network is not extended to Delft and Rotterdam, which means Zoetermeer is only well connected with The Hague within the region.

**City**

In order to remain an attractive residential town, Zoetermeer starts to develop a completely new city center in the heart of the city, called the ‘Stadshart’ (Figure 3.16 & 3.17). The Stadshart includes public services (town hall, library), commercial services (shops), recreational (bars, disco, restaurants, sports), and housing (apartment blocks) (figure). Besides, to become a ‘complete city’, Zoetermeer starts to focus on employment by means of offices. These offices are built in the Stadshart. Due to its national focus, the national ministry of education and knowledge is built at the Stadshart. For the same reason, office development starts to arise at the transformed national station area. Above the Stadshart, the national train station area becomes the economic center of Zoetermeer (Figure 3.19)

**Neighbourhood**

The ‘Bloemkoolwijken’ turn out to be unclear and are considered as ‘truttig’ (frumpy). Therefore, the new residential areas Rokkeveen and Noordhove are built according a clear orthogonal structure (Figure 3.20). Otherwise, these neighbourhoods are characterized by terraced houses and local facilities located in the center of the neighbourhood.
Figure 3.16: During the 1980s, in order to become a ‘complete city’, Zoetermeer develops a new city center called the ‘Stadshart’. Map by author.

Figure 3.15: During the 1980s and 1990s, two more residential areas are developed, Noordhove (at the north) and Rokkeveen (at the South). Map by author.
During the 1990s and 2000s national and regional policies start to see the Randstad as polycentric region; a region in which various center complement each other (figure). This is introduced in the Fourth Note Spatial planning Extra (VINEX) in 1991. In this perspective, a city or town should be no longer 'complete'. This means that daily activities of a citizen will not be restricted to its home place any longer. Such a citizen can be characterized as a network urbanite (Reijndorp, Bijlsma and Nio, 2012, p260). In this perspective, Zoetermeer only focuses on its national potentiality in the context of the bigger South Wing region. The clear separation between cities within the South Wing region fades away (figure 3.22). Therefore, it is not essential to focus on its national connection only, but on its connection within South Wing region (again). Therefore Zoetermeer starts to upgrade and expand its regional infrastructure system. In the first decade of the 21st century, the ‘sprinterlijn’ is transformed into the RandstadRail network, connecting Zoetermeer with the Hague and Rotterdam by a lightrail connections. The regional road system is extended to the Hague, Rotterdam and Leiden (Figure 3.22 & 3.23).

City
Due to it is complementary function in the South Wing region, Zoetermeer starts to focus on adding specific program the region lacks of. In this perspective, Zoetermeer presents itself as Leisure city and IT city of the South Wing. In order to do so it adds large leisure program (like indoor ski centre ‘Snowworld’) and IT related business at the borders of the city, well connected with the regional road network (Figure 3.24 & 3.25). The city its city center is expanded with more shops and luxurious apartment buildings (figure 3.26).

Neighbourhood
During this period, more diverse residential environments are devoloped, both urban as very rural. The expansion of the ‘Stadshart’ focusses on an urban residential environment, with highrise buildings, a diversity of shops and an urban dynamic.
VINEX residential area Oosterheem is similar to Rokkeveen in its structure, but provides a wider diversity in residential environments, from rural and suburban to rustic urban (Figure 3.29). Besides, an extensive shopping centre is developed with local shops and some clothing stores, as the ‘Stadshart’ is far away (Figure 3.28).
Figure 3.22: By expanding its regional infrastructure, Zoetermeer becomes better integrated within the region. Map by author.

Figure 3.27: VINEX area ‘Oosterheem’ is developed to the east of Zoetermeer, well connected with the regional infrastructure system. Map by author.
3.3 Transport Infrastructure

Car

By car, Zoetermeer is directly connected with the national highway A12 (figure 3.3.1 & figure 3.3.2), which makes Zoetermeer well connected with the whole country via the national highway network. It is even directly connected with the German ‘Ruhr’ area. Through its location next to the A12 highway, the city is especially well connected with cities like the Hague and Utrecht by car.

Next to the national highway network, Zoetermeer is well connected within the South Wing metropolitan region through an extensive regional road network (figure 3.3.3). This network crosses the whole city (figure 3.3.4), connecting Zoetermeer directly with cities as The Hague, Leiden and Delft. Besides, cities as Rotterdam and Alphen a/d Rijn could be reached indirectly through this network. The city itself is connected through the
Figure 3.3.3: regional road network South-Wing. Map by author

Figure 3.3.4: regional road network crosses Zoetermeer. Map by author
Figure 3.: Diversity of residential environments within the South Wing. Map by author.
3.4 Morphology and Housing Capacity

The morphology of an urban areas can be described in dimensions as density and building typology. Due to its history, Zoetermeer knows many similar urban areas in terms of morphology. The biggest part of Zoetermeer exists of low dense residential neighbourhoods built between the 1960s and present day. Three types of morphology can be distinguished in the context of residential neighbourhoods:

- **1960s modernism**
- **1970s structuralism: ‘cauliflower’**
- **1980s VINEX**

Next to this residential neighbourhoods, Zoetermeer knows some specific morphologies, like an historic village, 1980s shopping center, office zone and large leisure clusters.

The historic core of Zoetermeer is characterized by a dense village like morphology (figure). Next to the historic core, a new shopping center is built since the 1980s, the Stadshart (figure). It is morphology varies widely from the morphology of the historic core. Large urban blocks are centered around a central pedestrian zone, providing an efficient way of shopping.

**Office zones**

**Leisure>Buytenpark**

residential neighbourhoods

- 1960s (Palenstein)
- 1970s (Seghwaert)
- 1980 - current

**Density/Building typologies/Public vs Private**
3.6 Program

Employment
South Wing

manufacturing: harbor, Schiedam, Delft schie oever, Binckhorst, Vliet,
food production: green/glasshouses, farmers
logistics: prins clausplein
science industries > TNO, Leiden, Den Haag, Rotterdam, landbouw school bleiswijk?, Zoetermeer ICT city (Stadsgewest Haaglanden, 2008, p.38)
offices > Den Haag centrum, Rotterdam centrum, Mandela, Delft, Leiden,

City
light industry/logistics > cardealers,
offices: A12 zone, Boerhavelaan, Stadshart, DIF
3.7 Current spatial development influencing the spatial qualities of Zoetermeer

The Netherlands

Currently, the Dutch population remains moving to the Randstad metropolitan region. Till 2040, national policy focusses on adding 154000 new houses and substitute 121000 existing houses in the the Hague region (Ministerie van Infrastructuur en Milieu, 2011, p.67). This is growth is of direct influence on the Zoetermeer and will lead to an enormous pressure on the housing market of Zoetermeer.

South Wing

Focus on knowledge axis, Leiden, The Hague, Delft, Rotterdam. Zoetermeer is seen as a regional residential city, providing green residential environments for the workers in the knowledge sector (figure 3.) (Rijk en Zuidvleugelpartners, 2013).

Strengthening the polycentric region by expanding the regional public transport networks (new lines and stops) and intensify on regional hubs with jobs, leisure and houses (Provincie Zuid Holland, 2014). For example projects like Stedenbaan (regional train system, by expanding the existing railway network) and R-NET (a high quality regional bus network).

Till 2020, ‘regio Haaglanden’ (the Hague conurbation, of which Zoetermeer is part) focusses on adding 55000 new houses on inner city locations close to regional public transport hubs.

Further, the province focuses on a regional green-blue connection, connecting Delfland, via Zoetermeer with the dunes (figure 3.) (Provincie Zuid Holland, 2014).

City

In the context of the regional policy, the new train station ‘BleiZo’ is added to Zoetermeer, a regional hub at the border of the city combining regional train, the A12 highway and the RandstadRail. Besides the regional transportation hub, 80000m2 offices will be added. Besides, m2 leisure and retail program will be added. This new development is at the expense of 80000m2 offices in the city center of Zoetermeer. Also 30000m2 Factory Outlet Center (FOC) was planned at BleiZo, but this plan is cancelled. Currently the 30000m2 FOCs planned in the city center of Zoetermeer, of which 23000m2 will be placed in an existing shopping mall: ‘Woonhart’ (furniture and kitchens). An extra 7000m2 will be added to a new building next to the ‘Woonhart’ (figure 3.).

In order to strengthen the city center of Zoetermeer, the municipality plans to develop a pedestrian friendly connection between shopping center ‘Stadshart’ and the historic core. This project is called ‘Culturele As’ and used to involve new program like the Stadsforum: a collective building for the library, museum and restaurant/bar. However, this plan is cancelled and the project involves a single bridge between the ‘Stadshart’ and the historic core only.

Next to the ‘Culturele As’, at the wasteland at the eastside of the ‘Stadshart’ the project called ‘Cadenza’ will be developed as the east entrance of the ‘Stadshart’. The project involves 3000m2 supermarket, 1300 bars/restaurants, 1000m2 leisure, 100m2 retail and 69 new starters apartments.

Further, the municipality wants to transform vacant office buildings in the city center (Italielaan and Engelandlaan) into 120 student apartements. The municipality focusses on another 200 student apartments on inner city locations/vacant buildings.

At the Katwijkerlaantrace (wasteland in the neighbourhood Roekkeveen) the municipality wants to add 64 care-apartments and 40 lifecourse suitable-apartments. In total, the municipality wants to add 2000 new houses on wasteland and in vacant
Neighbourhood

As the older residential neighbourhoods of Zoetermeer start to decay, some of them will be regenerated. Currently, the oldest residential neighbourhood ‘Palenstein’ is regenerated. By focusing on a younger population, new building typologies are introduced. Besides a qualitative connection is made between the neighbourhood and the city center by adding ‘Park Palenstein’.
3.8 Conclusions of the analysis

The Netherlands
Zoetermeer is a city that nationally reasonably well connected is. The accessibility of the A12 and station Zoetermeer (however, no swift train station) makes that Zoetermeer relatively well connected is with large cities as Den Haag and Utrecht. The effi Ient road network within the city ensures that the residents of Zoetermeer are well connected with Den Haag and Utrecht. The RandstadRail is an outstanding public transport facility that carries the residents of Zoetermeer per public transport v from Zoetermeer.

As station Zoetermeer gets the status of a swift train station back, the connection with Den Haag and Utrecht will only get better and the demand for more houses and businesses in the city will increase.

South Wing
Within the South Wing region, Zoetermeer is within a special position. Although it has the number of residents of a medium sized Dutch city, it is not the same as Leiden or Delft. It is missing urban spatial qualities, like a lively historic city center, major science and business centers. No national function. Not a center. Not in highly urban knowledge axis (figure).

But! having a positioned as green residential city for the region. Vanuit zijn oorsprong is groeikern Zoetermeer ge richt op de regio. Een uitstekend regionaal verkeersnetwerk verbindt de inwoners van alle wijken van Zoetermeer direct met Rotterdam, Den Haag, Delft and Leiden. Ook het RandstadRail netwerk is verbindt de inwoners van bijna alle wijken per openbaar vervoer direct met Den Haag en indirect met Rotterdam.

Verder is Zoetermeer omringd door recreatieve parken en boerenbedrijven, waarmee het via een fietsnetwerk goed verbonden is. Het realiseren van de groen-blauwe slinger maakt dit alleen maar aantrekkelijker.

City
suburbaan vs urban reijndorp p. 26

Neighbourhood
Zoetermeer consists mainly of residential areas with a suburban character: low-rise, green and daily provisions centrally in the wijk. Echter gaat de kwaliteit van een aantal van deze woonwijken snel achteruit, omdat aantrekkelijke woonmilieus in de regio worden ontwikkeld. Dit leidt ertoe dat kansrijke huishoudens Zoetermeer verlaten voor deze nieuwe woonmilieus (figure 3.). Daarnaast verlaten veel jonge inwoners de buurten bij gebrek goedkope starterswoningen en verhuizen daarom naar de goedkope, binnenstedelijke woningen in steden als Rotterdam, Den Haag, Leiden en Delft (figure 3.). Dit resulteert erin dat sommige verouderde wijken alleen nog aantrekkelijk zijn voor ouderen en kansarme huishoudens, waardoor deze wijken snel achteruit gaan. Door deze problemen vestigen bedrijven zich minder snel in de stad (Gemeente Zoetermeer, 2014).

Transformatie van de oudste wijk Palenstein moet meer jonge starters aantrekken en de wijk weer nieuw leven inblazen.

House
Door zijn snelle groei bestaat de woningvoorraad van Zoeter meer voornamelijk uit grondgebonden rijtjeswoningen uit de jaren ’70, ’80 en ’90 van de vorige eeuw. Ook is er een groot aandeel jaren ’60 appartement flats. Het aanbod vooroorlogse woningen is relatief beperkt alsmede het aanbod studentenwoningen/starterswoningen en vrijstaande woningen. Bij gebrek aan geschikte woningen trekken kansrijke huishoudens en jongeren de stad uit en blijft de stad aantrekke-
lijk voor een select deel van de bevolking, iets wat gezien de omvang van de stad niet wenselijk is.
This chapter answers the sub research questions:

- What spatial qualities are lacking in Zoetermeer in order to strengthen its vitality?
- What spatial residential qualities are lacking in Zoetermeer in relation to the preferences of highly educated starters?

By doing so, this chapter confronts the conclusions of the theoretical framework (chapter 2) with the empirical study of Zoetermeer (chapter 3), in order to define the problems and the potentials concerning the attractiveness of Zoetermeer for highly educated starters and the city its vitality. These problems and potentials are used to define a spatial strategy in order to strengthen the attractiveness of Zoetermeer as residential city for highly educated starters and to enhance its vitality as residential city on the long term.

In chapter 4.1 the problems and potentials are defined by using a SWOT analysis and confrontation matrix. In chapter 4.2, the recommendations of the confrontation matrix are used to define the strategy and set up the program requirements.
4.1 Conclusions of the research

Conclusions of the research concerning the vitality of an urban place

According the network model of Stephen Read, Zoetermeer does not have any vital central place. Although the city has a so-called city center, it is not located central according Read his network model. This can be dedicated to the efficient infrastructure, connecting the residents of Zoetermeer with the region. Because of this are almost no junctions with other networks. Besides, Zoetermeer lacks a clear network gathering the city.

According Gehl, many places in the city lack a spatial quality providing a view on the activities in the public space. Back-sides and green bushes deprive the people from their view on activity.

According the Spacemate, Zoetermeer is a low dense city, which does not encourage the vitality.

With regard to de Hoog, Zoetermeer lacks interaction environments; junctions of different networks, within a high quality public space, providing a variety of activities and program. The clusters present are often peripheral locations, focused on its accessibility by car, making it impossible for people to stay.

Conclusions of the research concerning the residential preferences of highly educated starters

Strengths
Zoetermeer provides in the most important factor for highly educated starters choosing their residential environment, as Zoetermeer is well connected with science industries and business services within the South Wing metropolitan region, both by car as by public transport. Also the city itself provides employment in business services. Especially the presence of the Dutch Innovation Factory and the office developments of BleiZo are of great significance for highly educated starters, although these are not a motivation to live in Zoetermeer, as they are well connected with other residential environments within the region.

Besides the presence of cultural facilities and the good connections with nature/parks in the surroundings makes Zoetermeer attractive for highly educated starters to live. Also the presence of an historic core, makes Zoetermeer attractive for highly educated starters to live. Important to note, is that the historic core is relatively small.

Weaknesses
Zoetermeer lacks affordable apartments for starters. The city is dominated by terraced single family homes. Therefore it is difficult for highly educated starters to find a suitable house in Zoetermeer. As noted before, the historic core of Zoetermeer is very small, so the amount of pre war houses is very low. Although Zoetermeer does have a city center with shops, restaurant and bars, it is not very lively. It lacks places to stay and the shops are unilaterally.

Opportunities
Within the the Hague region, there is a high demand for new houses on inner city location. Till 2020 their is demand for 55000 houses.
Within Zoetermeer, there is space for 2000 new houses. Besides there are many vacant offices. Therefore, the municipality transforms these vacant offices into 322 student/starters apartment.
The office development on BleiZo, will increase the amount of jobs in business services in Zoetermeer.

Threats
Inner city residential environments within the region are still more attractive to highly educated starters than those present in Zoetermeer. This causes the leave of many highly educated starters and as highly educated starters appreciate to meet peers, the leave of others does not make it very attractive to live in Zoetermeer.

Invest
A great strength of Zoetermeer is the good connections with jobs in the region and in the city. Therefore it is important to invest in these connections. Besides it is important to invest in the cultural facilities and the connections with the nature/parks in the surroundings. It is also important to invest in the spatial quality and accessibility of the historic core.

Decide
As the housing supply of Zoetermeer does not supply many affordable starters apartments, but as their is still much under-developed area in the city and many vacant offices, it is wise to consider investing in new affordable starters houses and attractive residential environments for highly educated starters. For example in and around the historic core. The increase of employment due to BleiZo is an argument for this investment.

Defend
The leave of highly educated starters to inner city residential environments within the region a might affect the spatial quality of the spatial qualities of the city, like the cultural facilities, the nature/parks and the historic core. Therefore it is essential to retain highly educated starters in order to defend the these spatial qualities from decay.

Damage control
The lack of a pre war, affordable houses and a lively city center does not benefit from the fact that cities in the region like The Hague, Leiden or Delft are more attractive to highly educated starters. This fact cannot be changed. Therefore it is better to focus on the city its potentials than on its weaknesses.
**STRENGTHS**
1. The residential areas are well connected with employment and education in the country and South Wing region.
2. Many cultural and (green) recreational facilities in and surrounding Zoetermeer.
4. Zoetermeer has a characteristic historic core.

**WEAKNESSES**
1. Lack of affordable housing for highly educated starters.
2. Lack of prewar housing.
3. Lack of a lively city center, with bars, cheap restaurants and good quality public space to stay.
4. The historic core is small and does not function as the city's center.

**OPPORTUNITIES**
1. Demand for 55,000 new houses within the Hague region on inner city locations till 2020.
2. Demand for 400 new student apartments.
3. Space for 2,000 new houses in the inner city.
4. Many vacant offices in and around the inner city which could be transformed into starters housing or other programs.
5. Office development in BleiZo increases the employment in the proximity of Zoetermeer.

**THREATS**
1. Residential environments in the vicinity of Zoetermeer offering better opportunities for young people (affordable housing, education, cultural and recreational activities and future job opportunities).
2. Mainly low income households move in Zoetermeer and causing social and economic problems.

**INVEST**
1. In maintaining the good connections of the residential areas with the national and regional scale level by adding new houses on inner city locations, well connected with the national and regional infrastructure.
2. In maintaining the employment, cultural and (green) green recreational qualities of the city by connecting them with each other and adding new houses on inner city locations, well connected with these qualities.

**DEFEND**
1. The decline of the spatial quality of residential environments.
2. The decline of the employment in the city.
3. Decline of the cultural and (green) recreational facilities in and surrounding Zoetermeer.

**DECIDE**
1. To add affordable student and starters housing on inner city locations well connect with the national scale level as with the regional, city and neighbourhoods scale level.
2. Involve the historic core within the city center of Zoetermeer.

**DAMAGE CONTROL**
1. Of the lack of affordable housing and attractive residential environments for a highly educated starters.
2. Lack of an extensive lively historic core with variety of program.
3. Of the decreasing spatial quality of the residential neighborhoods.
4.2 Strategy

In order to invest in the vitality of Zoetermeer as residential city in the long term, investments should be made in its potential strengths. Section 4.1 recommends to invest in the connections with jobs in the region as within the city itself and to invest in the spatial quality and the connections with the cultural facilities, the surrounding nature/parks and the historic core. Besides, section 4.1 recommends to consider to invest in new affordable starters apartments and residential environments appreciated by highly educated starters. In order to translate these recommendations into a strategy for Zoetermeer, the recommendations are combined with the conclusions from the research concerning the vitality of Zoetermeer. The strategy living. The next chapter will present the way this strategy is implemented in the city.

Het framework verbindt de stedelijke kwaliteiten en bestaande suburbane woonmilieus van de stad met elkaar in 1 systeem (plaatjes).
4.3 Program requirements

The implementation of the strategy is strongly associated with intensification of central places. Therefore, a clear set of program requirements is defined, proposing new program and residential typologies being implemented on the central places. The set of program requirements is partly based on the proposed program by the municipality and partly based on the conclusions of the research of this thesis.

Program proposed by the municipality
- 30000m² Factory Outlet Center, 2000 parking lots
- 5000m² hotel
- 5000m² food experience center, 250 parking lots (5 / 100m²)
- 625m² scuba diving center ‘Scuba Planet’, 12,5 parking lots (2/100m²)
- 2000m² horeca
- 3000m² supermarket,
- 170m² retail

The municipality proposes to build a total of 2000 new dwellings on inner city locations till 2024. The municipality proposes:
- 322 Student apartments on innercity locations/former office buildings
- 69 Starters apartments 50m² - 100m² (Gadenza)
- 64 care-apartments
- 40 lifecourse suitable-apartments

It is not clear what the other 1400 dwellings will be like. A specific calculation will be made in chapter 5.3

Program proposed by this thesis
- 1000m² public square (including local farmers market)
- 4000m² exhibition and business center, focused on art and IT
- 200 starters grongebonden woningen
- 400 kavels (100m²) op binnenstedelijke locaties

- 400 Zelfstandige Studenten studios 40m² met keukenblok en badkamer. Gezamelijke buitenruimte (dakterrass) en directe relatie met straat
- 400 Starters appartementen 90m²
- 200 Starters grondgebonden woning 100m², mogelijkheid bedrijfsruimte op BG, tuin, parkeren in het blok, voordeur aan straat
- 400 Vrije kavels met relatief veel buitenruimte. Bebouwing mag niet hoger worden dan 3 lagen en de bebouwing mag niet direct grenzen aan de publieke ruimte, waarmee het groene karakter behouden van de buurt behouden blijft.
- 60 levensloopbestendige woning 90m², veel semi privé buitenruimtes, directe relatie met voetganger veilige openbare ruimte.
5. IMPLEMENTING THE STRATEGY

In this chapter, a proposal is made in order to implement the strategy defined in chapter 4. In chapter 4.1, the proposal and plan area for implementing the strategy in Zoetermeer are introduced. In chapter 4.2 a spatial analysis of plan area is made. By confronting the current spatial qualities of the plan area with the strategy, the spatial conditions for implementing the strategy in the plan area are defined in chapter 4.3. In chapter 4.4 ‘the spine’ is introduced; the spatial implementation of the strategy in Zoetermeer.
5.1 The revaluing of an historic spatial structure

Several spatial structures within the city are the remains of pre-growth core period. These spatial structures are perfect for implementing the strategy in Zoetermeer (figure 5.1). According the strategy three interventions have to be implemented in order to strengthen the city its vitality as residential town on the long term:

1. enhance existing urban (spatial) structures connecting the different neighbourhoods of the city with each other and with the city center.
2. intensify and diversify in order to enhance the liveliness and enlarge the city center.
3. enhance the connections with the country and the South Wing by connecting the railway station and the RandstadRail stops with the urban the structures.

By using the different spatial structures for implementing the strategy, the different spatial structures can become ‘the spines’ of the city. As the implementation of the strategy over all the spatial structures is extensive and unrealistic, this thesis focusses on ‘the spine’ that could work as a catalyst for the development.

This spine is formed by two historic lines ‘Leidsewallen’ and ‘Delftsewallen’ and by the less recognizable ‘Katwijkerlaan-tracé’ (Figure 5.2).

This spatial structure has several potentials to become the main spine of the city:

1. it crosses the whole city from north to south, passing the ‘Stadshart’, the historic core, a set of residential areas and the recreational areas ‘Balijbos’ in the south and ‘Noord Aa’ in the north (figure 5.3).
2. many underdeveloped areas are an opportunity for intensification (figure 5.4)
3. it crosses some major infrastructure networks like the RandstadRail, the Australieweg and the NS train station. By connecting the spatial structure with these infrastructure networks, the accessibility of the city with the South Wing and the country will be guaranteed and even enhanced (figure 5.5).
4. the spatial structure could be extended to the Leiden en Delft, connecting the city directly with those cities and the recreational areas within the region (figure 5.6).
5.2 Spatial analysis of the spatial structure

The ‘Leidsewallen’ and ‘Delftsewallen’ are historic lines, connecting the historic of the city with Leiden and Delft through waterways. However, they do not function like that anymore, as the waterways are interrupted on many places. The ‘Katwijkerlaantracé’ is a reserved area for a potential extension of the RandstadRail network to the residential neighbourhood Rokkeveen and even Rotterdam. Lately, these plans have been cancelled.

Currently the spatial structure does not perform in a way the strategy demands. To understand why it does not perform that way and to change the spatial conditions in a way it will perform in the way the strategy demands, a spatial analysis is made of the whole spatial structure in its current state. The spatial analysis focusses on: infrastructure, morphology and program.

Infrastructure

Car traffic
Except for the northern part, there is no road along the spatial structure. This northern part is accompanied by a 70km/h road. Therefore their is almost no relation with the rest of the spatial structure.
Major car infrastructures as the A12 highway and the Australieweg regional road do cross the spatial structure, but do not connect with it. However, the highway even roughly interrupts the spatial structure.
Local car traffic crosses the spatial structure on some places, but does not make any connection with it.

Public transport
Except for th

Slow traffic
Except for th

Figure 5.7: The spatial structure is abruptly interrupted by the national infrastructure. Drawing by author
Public transport
Except for th
morphology

Noord Aa
FSI: 344 - GSI: 34 - OSR:

Hospital
FSI: 344 - GSI: 34 - OSR:

Stadshart
FSI: 344 - GSI: 34 - OSR:

Historic core
FSI: 344 - GSI: 34 - OSR:
Underdeveloped areas
incl buildings to be transformed
program
jobs
retail
education & healthcare
culture
leisure
Figure 5.6: Although crossing, the national infrastructure is not connected with the spatial structure, but forms a major barrier. Drawing by author.

Figure 5.9: Drawing by author
Conclusion

strengths and weaknesses of the spatial structure concerning the strategy
- continuity of the spatial structure
- recognizability of the spatial structure
- possibility to enter the spine
- connection of the spine with local and regional networks, creating accessibility of the residents of Zoetermeer within their neighbourhood, with the rest of the city, with the South Wing
- different clusters/interaction environments (strengths/weaknesses in relation to strategy)
the spine
infra
intensify; program, housing
connections
clusters
what will happen:
6. ENHANCING THE CITY CENTER
6.1 Spatial analysis of the city center

Car traffic
Currently all car traffic enters the city center in a very hierarchically way. As the local car traffic network of the city center knows many interruptions and is almost not connected with surrounding neighbourhoods. This results in ‘local’ islands, only accessible via the regional road network (Australieweg, Europaweg and the Afrikaweg) (figure). These roads are an efficient trafficader for car traffic, but a major interruption for slow traffic flows from the surrounded residential areas to the city center.
This means that all car traffic, both car traffic from all over the country, from the South Wing region as from other parts of the city enter the different parts of the city center via the Australieweg and the Afrikaweg. Even car traffic moving between the different parts of the city center (Stadshart, historic core, schools, residential areas) goes via the Australieweg and or Afrikaweg (figure). Car traffic visiting the Stadshart, is leaded directly from the Europaweg and Afrikaweg to the free parkings at the edge of the Stadshart.
This infrastructure network creates a very efficient way to reach the city center, especially for visitors from outside the city. However between surrounded neighbourhoods and the city center and even within the city center it is hard to get from one place to another. Besides, the lack of alternative routes to and within the city center, results in high concentration of traffic on the Europaweg, Australieweg and Afrikaweg.

Public transport
The city center is connected by RandstadRail and local and regional buslines. The RandstadRail connects different parts of the city center with the other neighbourhoods of Zoetermeer, with The Hague (including the city center and VINEX residential area LeischeRijn), with Rotterdam (including the city center, the Zoo) and the in between residential areas as Pijnacker and Nootdorp. The central stop of the RandstadRail is called ‘Centrum West’, a stop at the west side of the city center where RandstadRail network splits in two directions, one to the north of Zoetermeer and one to the south of Zoetermeer. To the north it first stops at the central square of the Stadshart, where municipality and library are located. This stop is located below the square, a very unclear situation (figure). The next stop is at the border of the residential area Palestein and both next to three highschools.
To the south, the Randstadrail stops in between residential area Driemanspolder and the expansion of the historic core. This stop functions as the stop for the historic core as well. However, it’s badly connected with the historic core (figure). At ‘Centrum West’ is the main busstation located as well. From this busstation, regional buslines connecting the city center with Delft, Leiden, The Hague and villages like Pijnacker, Benthuizen arrive and depart, as local buslines connecting the city center with the neighbourhoods of Zoetermeer (including Rokkeveen and Noordhove, which are not connected with the RandstadRail network.

‘Centrum West’ is presented as the main public transport stop as both regional as local lines come together. However, it only functions as the center of the west part of the Stadshart.
The historic core does not have a clear stop.

The different residential environments at the city center are connected with the national highway and the national train station through car, public transport and slow traffic infrastructure.
The car infrastructure is focused on the regional road network; every single residential neighbourhood is connected with this system. To reach the national highway and the national train system, car traffic goes through the regional network (figure 6.1). The RandstadRail connects the different residential neighbourhoods of the city center with the national train station. However, some of the neighbourhoods do not have a direct connection with the national train station by the RandstadRail (figure 6.1).
Some slow traffic routes (bicycle and pedestrian) directly connect the different residential neighbourhoods of the city center with the national train station.
6.2 Spatial development

Main issue for the new masterplan for the city center is creating centrality by combining different networks (derived from Read), intensification and diversification. Therefore, a new central place is introduced. This central place will be a centrality for the city center itself, by locating it central between the Stadshart, Historic core as the highschools. Also it will be a centrality for the whole city by locating it central along the spine and connecting it with surrounding areas. And it will be a centrality for the region, by moving RandstadRail stop “Stadhuis” to the central place and introduce a R-Net busstop. The centrality which is created gives the opportunity to add more and different program and residential typologies, presented in new environments.

Car Traffic
The city center should be reached by car in more ways. Besides, the connections for car traffic between the different parts of the city center (Stadshart, historic core, schools and residential areas) should be improved in order to strengthen the coherence of the city center. Therefore, the hierarchical way car traffic enters the city center currently should be decreased, by introducing new ways to enter the city center by car. This is achieved by introducing new traffic junctions, combining different networks with each other. Besides, new car traffic routes are introduced, to complete incomplete traffic networks. Especially local traffic networks do

Public transport
Introduction public transport hub at the spine. Moving RandstadRail stop “Stadhuis” to the spine. Introducing

Bicycle
F

Pedestrian
F

Program
Defined in the masterplan for the spine, the city center will be intensified and diversified by adding new program. This program will be added around the new central place. The proposed 30.000m2 Factory Outlet Center (currently planned for the Woonhart) will be realized between the central place and the Stadshart, as a connector between those two and addition to the existing retail of the Stadshart. This includes 2000 parking lots, which will be located underground, well connected with the central place.

PROGRAMMA
- 30.000m2 FOC programma bij centraal punt ipv woonhart
- 4000 m2 multi functioneel gebouw in oud kantoorpand italielaan, gelegen bij centraal punt
- 1000m2 hotel
- 2000m2 wellness centre langs as
- 500m2 horeca bij centraal punt
- 500m2 horeca langs as
- 2000m2 lokale winkels, incl supermarkt
- park langs as
- publieke parkeerplaatsen centraal punt
- publieke fietsenstalling centraal punt

Residential typologies

WONINGEN
- starters en studenten appartementen bij centraal punt
- kleinschalige starters woningen langs as

Spatial quality
6.4 Masterplan

Being the key project for the spine of Zoetermeer, the masterplan for the city center will facilitate the possibility to become the vital city center of the residential city of Zoetermeer. Therefore the masterplan introduces intensification and diversification in order to strengthen the city center itself, but also to strengthen the spine of the city and even strengthen the South Wing by intensifying and densifying around the new RandstadRail station in the city center. The masterplan is explained in connectivity, program, residential typology and spatial quality.

Car Traffic
Car traffic from the all over the Netherlands, including the South Wing region visiting the city center of Zoetermeer (for example the Factory Outlet or the Wellness center) arrive from the Australieweg at the north of the city center. By a new traffic junction in the Australieweg, the car traffic enters the city center by a green boulevard (which is part of the spine). At the height of the new square, the entrances and exits for two underground parkings can be found. By several pedestrian exits around the square, the car drivers enter the city center by foot.

Car traffic from other parts of Zoetermeer can arrive the city center at the same way. The car traffic arriving from the surrounded neighbourhoods, can enter the city center via new roads, connecting the surrounding neighbourhoods with the new square directly. From this roads, the underground parking can be entered by several entrances.

The residents of the city center...

Public transport
The masterplan introduces a major public transport hub. By moving the RandstadRail stop "Stadhuis" to the spine, a new centrality is created. In this way, both residents of the city center as residents of are parts of the city (by moving along the spine) are well connected with the South Wing region. The other way around, visitors from the South Wing can easily enter the city center of Zoetermeer and find their way to the rest of the city as well, by moving along the spine.

Besides, the R-Net busline, introduced along the spine,
Building typologies
7.1 Conclusions

The outcome of this thesis is a new masterplan for the city center of Zoetermeer and should give an answer to the main research question:

*in order to strengthen the by highly educated starters appreciated spatial residential qualities of Zoetermeer, to the benefit of the vitality of Zoetermeer as a residential city on the long term*

In order to answer this main research question, a set of sub research questions is defined which are researched in chapters 2 till 4. The sub research questions are and their answers are:

- What is the vitality of an urban place?
- What spatial residential qualities do highly educated starters prefer?
- What are the spatial residential qualities of Zoetermeer currently?
- What spatial developments provide an opportunity or pose a threat for the current spatial residential qualities of Zoetermeer?
- What spatial residential qualities is Zoetermeer missing in relation to the preferences of highly educated starters?

Concluding the answers to the sub research questions, a strategy is proposed in chapter 4. With this strategy, an alternative spatial structure for Zoetermeer is proposed in chapter 5 and finally a masterplan for the city center of Zoetermeer is created in chapter 6. This masterplan is the product with which the main research question will be answered.

The Intention of the strategy, is to strengthen the spatial qualities of living to the benefit of the citizens of Zoetermeer. The design focuses especially on the desires of highly educated starters, by adding affordable housing and (public) facilities and spaces for outdoor activities.

Evaluating the design to the guidelines, it can be concluded that the design succeeded. It provides and strengthens the desired spatial qualities of living of highly educated starters, like affordable housing, a diverse and extensive city center providing many outdoor activities and good connections with the city center. Besides the design meets the requirements of the municipality and region in building specific living environments at inner city locations close to regional hubs. However it can be discussed if the design is realistic in the way it proposes to retain and attract highly educated starters. Although the design tries to strengthen spatial quality of living of the city center in terms of diversity, outdoor activities and connectivity with the citizens of Zoetermeer, the large-scale intervention might not be feasible to retain and attract highly educated starters. Despite the proposal for the city center, Zoetermeer could not be compared with cities as Delft and Leiden (with universities, knowledge industries and a spatial quality providing many outdoor activities). In this context, the intervention might be too expansive and unrealistic for Zoetermeer in order to retain and attract a young and highly population. However, less large-scale interventions might be feasible if they:

1. strengthen spatial qualities of the city center in order to create a vibrant place
2. improve the connections between the spatial qualities of the city center and the citizens of Zoetermeer
7.2 Reflection

This thesis has been carried out in the Complex Cities graduation studio, 'Metropolitan Spatial Structures' research theme. At first, the process of the graduation was a research on its own. It gave many new insides in the way I am working on a project. However it was a hard time, I did learn to rely on my abilities and dare to choose. In the end I realized that such a constructive approach results in a more complete product than when I remain exploring all the problems and possibilities (which a total unrealistic approach at all).

Regarding the research topic, the city of Zoetermeer was studied according the studio its multi scalar approach, in order to find an answer to the research question. There is a close relation between this approach and the research topic concerning the vitality of the city, as this is definitely a matter of scale. Therefore this multi scalar approach set the base of the thesis, in order to link the research and the design outcome as much as possible. Although this was helpful to underpin some design decisions, making a design includes many other factors based on experience and sense. It may be clear that the research does not lead to one single design solution, many other designs might be a better solution to solve the problem. Anyhow, this thesis includes a relevant research within a wider social context. The lack of social diversity within the Dutch new towns is a real problem for the social safety and future perspective of its citizens. Besides, this problem does not limit to the Dutch new towns itself. As most of the Dutch new town provide an important part of the residential environments in the Randstad metropolitan region, which population remains increasing, makes this problem a regional problem as well.

From the start it has been tried to keep the thesis as close as possible to this problem; what spatial interventions enhance the vitality of Zoetermeer as a residential city on the long term. In order to frame the research, this thesis focused on retaining and attracting highly educated starters to the city. This part of the population is under represented in most Dutch new towns like Zoetermeer, while this part of the population increases remarkably in the Netherlands in general. The fact that this group enhances the local economy, makes this research relevant by focusing on this group.

In the end, the main focus of this thesis are all the residents of the city, it are not the highly educated starters only. However, more research on the attractiviness of a residential city in general might have led to a more convincing research. Besides, it is not unlikely that the proposed intervention will threaten the vitality of other parts of the city.

Overall, the intention of this thesis is not to promote social problems like social segregation and gentrification. On the contrary, it is hoped this thesis researches ways to strengthen the vitality of Zoetermeer as a residential city in total.
LITERATURE:


POLICY DOCUMENTS:


REPORTS & DATA:


