# HUMBOLDT-UNIVERSITÄT ZU BERLIN



# Institute of Geography

# **Master Thesis**

# On the Role of Greening Projects in Urban Development - An Analysis of the "Parkbogen Ost" in Leipzig

Submitted by:

# Alexandra Konzack

566660

M.A. Geography of Big Cities konzacka@hu-berlin.de

First Supervisor: **Prof. Dr. Dagmar Haase**, Humboldt University of Berlin, Institute of Geography

Second Supervisor: **Prof. Dr. Dieter Rink**, Helmholtz Center for Environmental Research - UFZ

September 2017, Berlin



# **Declaration of Authorship**

I hereby declare that the thesis submitted:

"On the Role of Greening Projects in Urban Development - An Analysis of the *Parkbogen Ost* in Leipzig"

is my own unaided work. All direct or indirect sources used are acknowledged as references. I am aware that the thesis in digital form can be examined for the use of unauthorized aid and in order to determine whether the thesis as a whole or parts incorporated in it may be deemed as plagiarism. This thesis was not previously presented to another examination board and has not been published

# Selbstständigkeitserklärung

Hiermit versichere ich Eides statt, dass ich die vorliegende Arbeit:

"On the Role of Greening Projects in Urban Development - An Analysis of the *Parkbogen Ost* in Leipzig"

selbständig angefertigt habe. Die aus fremden Quellen direkt und indirekt übernommenen Gedanken sind als solche kenntlich gemacht. Ich weiß, dass die Arbeit in digitalisierter Form daraufhin überprüft werden kann, ob unerlaubte Hilfsmittel verwendet wurden und ob es sich – insgesamt oder in Teilen – um ein Plagiat handelt. Diese Arbeit wurde weder einer anderen Prüfungsbehörde vorgelegt noch veröffentlicht.

Alexandra Konzack
4

# **Reading Notes:**

- 1. The following thesis is written in English to contribute to the international debate and research on greening in cities and green gentrification. Still, the case study has been conducted in a German context.
  - a. Therefore, many important German expressions as well as proper names will be introduced from the first mention and afterwards used in German throughout the thesis.
  - b. To ensure an unambiguous interpretation, the German names for specific laws, programs or institutions, will be indicated too.
- 2. The area to which is referred in this thesis as Leipzig east, does not relate to the district of Leipzig east, but to an informal association of different neighborhoods. Whenever the district of Leipzig east should be meant, it will be indicated. The specific concept will be explained in the course of the thesis.

# **Table of Content**

Lis	t of Figures and Tables	6
Lis	t of Abbreviations	7
l Ir	ntroduction	8
	1.1 Preface	8
	1.2 Problem Definition and Research Interest	8
	1.3 Research Question	10
	1.4 Structure of the Thesis	11
II 7	heoretical Framework	13
	2.1 Sustainability Efforts	13
	2.2 Environmental Justice and Greening Measures	14
	2.2.1 Greening Measures	14
	2.2.2 Environmental Justice	16
	2.3 Green Gentrification	18
	2.3.1 Definition and Development of the Concept	18
	2.3.2 State of the Art	21
Ш	Methodology	23
	3.1 Research Design: Explorative Case Study	23
	3.2 Research Strategy: Qualitative Methods	23
	3.2.1 Interviews	24
	3.2.2 Observation	26
	3.3 Conduct of Data Collection	27
	3.4 Transcription and Analysis	28
	3.5 Ethical and Methodological Considerations	28
IV	Presentation of the Case Study	30
	4.1 Context: Leipzig	30
	4.1.1 Historical Urban Development until 1990	31
	4.1.2 Recent Urban Development after 1990	34
	4.1.3 Leipzig Today	39
	4.1.4 Green Leipzig	40
	4.2 Context: Leipzig East	42
	4.2.1 Urban Planning Leipzig East	42
	4.2.2 Housing Market and Rental Trends	45
	4.2.3 Socio-spatial Developments	47

4.2.4 Greening in Leipzig East	50
4.3 Portrait of the Project: Parkbogen Ost	51
4.3.1 Background	51
4.3.2 the Master Plan	52
V Results	55
5.1 Stakeholder's Perceptions of Leipzig East	55
5.1.1 Images	55
5.1.2 Changes and Challenges	57
5.1.3 Strategies and Hopes	61
5.2 Observations concerning Leipzig east	63
5.2.1 The Presentation of Leipzig East at the Tag des Städtebaus	63
5.2.2 Structures Observed in the Lene-Voigt Park Quarter	64
5.3 Stakeholder's Perception of the Project Parkbogen Ost	68
5.3.1 Participation and Knowledge on the Project	68
5.3.2 Potentials of the Parkbogen Ost	70
5.3.3 Challenges for the Parkbogen Ost	72
5.4 The Role of Green in the Urban Planning of Leipzig	75
5.4.1 Valuation of Urban Green	75
5.4.2 Challenges for Urban Green	77
VI Discussion	79
6.1 The Rapid Transformation of Leipzig East	79
6.2 The Unhealthy Real Estate Market and Gentrification	80
6.3 The Parkbogen Ost as Engine	81
6.4 The Parkbogen Ost: Stuck Between Past and Present Urban Planning Strategies	83
6.5 Urban Greening: A Hailed and Threatened Strategy	84
6.6 Brief Outlook	85
VII Conclusion and Final Reflections	86
VIII References	88
IX Annex	94

# **List of Figures and Tables**

Fig. 1: Working steps of data collection	27
Fig. 2: Map of Leipzig's location	30
Fig. 3: Demographic development of Leipzig from 1600 to 1900	31
Fig. 4: Demographic development of Leipzig from 1900 to 1990	33
Fig. 5: Demographic development of Leipzig from 1989 to 2000	34
Fig. 6: Demographic development of Leipzig from 2000 to 2016	38
Fig. 7: Map of assisted areas in Leipzig east	43
Fig. 8: Neighborhoods of the inner east and related strategic approaches of the city administration	n 44
Fig. 9: Comparison of vacancy rates and market active vacancy rates in Leipzig	45
Fig. 10: Base rents in Leipzig 2015	45
Fig. 11: Quoted rents in Leipzig 2016	46
Fig. 12: Rent load in Leipzig 2015	47
Fig. 13: Map of the Parkbogen Ost course	54
Fig. 14: Map - Usage of buildings at the Lene-Voigt park quarter	65
Fig. 15: Map - Construction types of buildings at the Lene-Voigt park quarter	66
Fig. 16: Map - Condition of buildings at the Lene-Voigt park quarter	67
Fig. 17: Example of balconies attached at the Lene-Voigt park quarter	67
Fig. 18: Map - Availability of balconies at the Lene-Voigt park quarter	68
Tab. 1: Subordinate research questions	11
Tab. 2: Stakeholder groups interviewed	24
Tab. 3: Relevant statistics for the inner eastern neighborhoods from 2012-2015	48
Tab. 4: Population structures of the inner eastern neighborhoods	49
Tah 5: Defined targets for the Parkhogen Ost project	52

# **List of Abbreviations**

ASW	Department for Urban Renewal and Housing Promotion	
BauGB	Baugesetzbuch	
DAMID	Federal Ministry for the Environment, Nature Conservation,	
BMUB	Building and Nuclear Safety	
cf.	compare	
CO <sub>2</sub>	Carbon dioxide	
e.g. For example		
DM	Deutsche Mark	
ead.	The same female author	
EJ	Environmental Justice	
ERDF	European Regional Development Fund	
et al.	And others	
EU	European Union	
f.	And following (singular)	
ff.	And following (plural)	
fig.	figure	
FörderGG	Fördergebietsgesetz	
GDR	German Democratic Republic	
ha	hectare	
i.a.	amongst others	
id.	the same male author	
IEKO	Integrated Development Concept	
l.	line	
LULU	Locally Unwanted Land Uses	
LWB	Leipziger Wohnungs- und Baugesellschaft	
NGO	Non Governmental Organization	
NPS	National Projects of Urban Construction	
QM	Quarter Management	
SQ	Sub Questions	
STEK LeO	Integrated Neighborhood Development Concept Leipzig East	
tab.	table	
UN	United Nations	
US	United States	

# **I Introduction**

### 1.1 Preface

Nowadays cities face many challenges to comply expectations from the top down as well as from the bottom up level. By designing urban change and development, they have to follow concepts like sustainability and environmental justice to stay competitive and simultaneously keeping in view the needs of their residents. Still, city governments are struggling in providing equal living conditions in all districts and neighborhoods. To tackle the problem of environmental injustice, governments often make use of public parks or green infrastructure projects. This strategy plays a key role for the sustainable development of cities, provides residents with recreational greens and is often expected to be accompanied by various positive impulses.

In Germany, the city of Leipzig holds a large-scale master plan for the reconstruction of its eastern neighborhoods, to become a greener living environment. In January 2017 the city council of Leipzig passed the master plan for a project called "Parkbogen Ost" which provides the concept for a long stretched green belt, surrounding the inner eastern neighborhoods of Leipzig, with a total length of more than 5 km (Stadt Leipzig, 2016). This park construction is scheduled for the next 20 years and should be combined with locally adjusted social and economic projects (id.). Leipzig east provides little natural green amenities and parks for their residents, compared to other parts of the city. At the same time the eastern districts show several challenges, listed by the city after a socio-spatial monitoring. In 2013, the area was characterized by a higher number of unemployed people, a big share of unrefurbished buildings as well as stagnating real estate prices and a below average establishment of companies (Stadt Leipzig, 2013a). The implementation of the park project and the connected reconstruction of the area is presented as a chance to improve the living conditions in Leipzig east. The idea of the Parkbogen Ost was given by citizens itself and included by the city administration in order to enable a mega greening project for Leipzig east.

# 1.2 Problem Definition and Research Interest

Greening projects enjoy a high popularity and topicality when it comes to urban planning and redevelopment (Rößler, 2015). They offer a good solution to address the problem of environmental inequalities while the city's image is profiting simultaneously. This often implies high expectations of stakeholders involved for the final impact of the project (Gould and Lewis, 2017). Moreover, green or sustainable development is often equally seen as an entirely positive development (id.). This may lead to a more naive handling of greening projects from cities' perspectives and a more naive attitude of citizens towards green projects. Although the effects of trees, lakes and green spaces on human

health are uncontroversial positive (e.g. reduced mortality and lower rates of early childhood asthma) and in addition green amenities have an important impact on climate adaptation and mitigation (cf. Haase et al., 2014), greening strategies in densely populated areas can have negative side effects: physical improvements of the neighborhood could trigger a general upgrading process, resulting in an increase of real estate prices and therefore even in the displacement of the economically weak (Gould and Lewis, 2017). The process of displacement triggered by an urban greening event is observed in several cities and nowadays referred to as green gentrification (i.a. Anguelovski, 2016; Dooling, 2009; Gould and Lewis, 2017). Still, we find a research gap when it comes to the social impact of projects that were originally conceptualized for an ecologic improvement (Dale and Newman, 2009). The concept of green gentrification brings the social perspective back to the agenda. The first and most discussed example is the High-line Park in Manhattan, New York. After neighboring citizens' groups fought for the activation of the old and unused railway tracks, it got overflowed by tourists while the surrounding, already gentrified, neighborhood got even more attention (Gould and Lewis, 2017). The Parkbogen Ost project in Leipzig represents also a mega undertaking, able to affect various neighborhoods and residents, although the urban environment is clearly different to the case in New York. The case study on the Parkbogen Ost in Leipzig was chosen, since it represents a mega greening project in a disadvantaged area, within a dynamically growing city. At the same time, the inner east of Leipzig represents a particularly interesting area as rents are still low and many neighborhoods are (still) undersupplied with well connected green spaces (Stadt Leipzig, 2013b). Therefore, the perception of the greening project Parkbogen Ost could differ from similar projects, which had been already developed in Leipzig. Beforehand, it is crucial to understand the expectations of stakeholders, as well as challenges seen. Only by knowing the intentions of different stakeholders, it is possible to guarantee a successful and transparent implementation process and further, to interpret the future impact appropriately.

Since the drafting of the master plan has been recently finalized and the project has only been partly implemented, the research was conducted in an explorative and open way. It focuses on stakeholders involved into the project on the one side and real estate agents as potential benefiters on the other. Therefore, the following work aims to provide an outline of important stakeholders' reflections on the project, which implies capturing potentials and hopes as well as challenges and threats seen. A qualitative approach was chosen, in order to interpret the expressed feelings towards the project. Moreover, a descriptive presentation of the case study, including the field of observation and the master plan, will help to imbed the collected data into an overall picture of Leipzig east and the Parkbogen Ost project. Finally, results could help to react on challenges before they occur and to integrate stakeholder's expectations stronger into the implementation process.

# 1.3 Research Question

Since the issue of green gentrification, especially in the German context, is rarely empirically researched and the chosen case study of the Parkbogen Ost depicts a completely new undertaking in Leipzig, a very open approach to the subject has been applied. To analyze possible effects in the context of greening projects and urban development in Leipzig east, one main research question has been developed:

# Which positive and negative expectations does the targeted project Parkbogen Ost entail for different stakeholders?

This research question was developed very openly with the purpose of approaching a new topic and concept in an explorative way. The issue of expectations is thereby the focus of the analysis, which can be related to expectations regarding the process of implementation as well as regarding the impact of the project. Further, the kind of impact is not narrowly defined and expectations regarding the impact on a personal level as well as on a neighborhood or city level will be taken into account, following the concept of green gentrification. While "positive expectations" refers to any positive idea or potential stakeholders can imagine related to the project, "negative expectations" refers to any negative association they could make to the planning or implementation process of the project, possible side-effects or the future impact on the development of the neighborhoods. It will further often be related to "potentials" or "hopes" for the positive expectations and "challenges" or "fears" concerning the term of negative expectations. The term "stakeholder" relates to any group of people or individuals, that are influenced by the project or even able to influence the project (Grimble and Wellard, 1997; Jepsen and Eskerod, 2009). Therefore, their inclusion into the analysis of the Parkbogen Ost project is essential, since their interests, relationships and actions are crucial for the successful implementation of the project. The specific selection of stakeholder groups for the analysis will be further explained in chapter 3.2.1.

The following sub-questions (SQ) have been developed to outline the interest of the main research question further and will be equally answered and discussed in the chapters 5, 6 and 7. Besides the respective sub-questions, methods targeted for the analysis are presented in table 1.

Tab. 1: Subordinate research questions

No.	Question	Method used
SQ1	How do stakeholders rate the condition of the present-days inner eastern neighborhoods, in which the project will be implemented?	Interviews/ Observation/ Mapping/
SQ2	Which challenges and strategies are seen for the future development of the inner eastern neighborhoods?	
SQ3	How are expectations concerning the Parkbogen Ost project and expectations regarding the development of Leipzig east interlinked?	Interviews
SQ4	How do expectations vary between different groups of stakeholders?	Interviews
SQ5	What role do greening strategies play for the urban development of Leipzig east and Leipzig?	Interviews

The sub-questions presented here include important questions for the area of investigation, in which the Parkbogen Ost project will be implemented. To understand perceptions on the inner eastern neighborhoods is crucial, in order to evaluate the expectations of stakeholders. Further, expectations on the Parkbogen Ost and the development of the inner eastern neighborhoods could be highly interlinked, which will further be analyzed as part of this work. Also, it will be considered during the analysis, in how far the expectations of different stakeholder groups differ and finally, how greening strategies in Leipzig are perceived in general by stakeholders.

#### 1.4 Structure of the Thesis

The present thesis is divided into seven main chapters following the research interest defined, and aiming to answer the research question presented in **chapter 1**.

Chapter 2 presents the theoretical framework, introducing three major theoretical concepts shaping the discourses around greening projects in urban landscapes and representing different viewpoints on greening. In chapter 2.1 the sustainability approach is introduced, referring to the wider context of greening and open spaces strategies in present-days cities. In chapter 2.2 different greening measures as well as the environmental justice movement are presented, which started to observe different land uses more critically. Those viewpoints lead over to the concept of green gentrification (2.3), its demarcation from the classical gentrification approach and the present state of the art.

The methodological approach will be explained in **chapter 3**, including the design as case study, the data collection, the analysis and ethical and methodological considerations.

In **chapter 4**, the case study will be presented in detail on three different levels: The city of Leipzig, from the historical development to present-days urban planning, is presented in **4.1**. A close-up of Leipzig east, including the housing market, the socio-spatial development and greening strategies, follows in part **4.2**. Finally the project Parkbogen Ost is presented in **4.3**.

The presentation of results takes place in **chapter 5**, whereby the results are divided into three subchapters: perceptions concerning Leipzig east (**5.1**), perceptions concerning the Parkbogen Ost (**5.2**) and the perceived role of urban greens (**5.3**).

The given results will be discussed in **chapter 6**, including a brief outlook, and concluded in **chapter 7**.

# **II Theoretical Framework**

The theoretical framework will present different theoretical approaches, which need to be understood before analyzing the complex strategy of urban greening. Sustainability, environmental justice and green gentrification represent different viewpoints on urban greening projects, criticizing different processes or missing actions. The approach of green gentrification presents thereby the newest concept to examine and discuss greening critically and will be used as major lens for this work. Although it does not directly build on the two concepts introduced first, sustainability and environmental justice discussions can help to understand the present-days urban planning as well as the development of the green gentrification approach.

# 2.1 Sustainability Efforts

If today one searches for sustainable cities in the internet, there is hardly a city without sustainability act or sustainable development plan. Newspapers, research institutes and NGOs publish rankings to elect the most sustainable or the greenest city and cities like Amsterdam, Copenhagen or Singapore are appreciated for their high rates of cycling and their efforts for cleaning up industrial pollution or being carbon neutral (Gould and Lewis, 2017). The reason behind is the ongoing ecological crisis, posing a threat to our present lifestyles, especially in dense and rapidly growing cities (Gould and Lewis, 2017). The global extent of the crisis required an overall strategy, which needed to be integrated into political decision-making as well as everyday routines.

The concept of sustainability offered a new approach overcoming the idea of simple conservation. It was developed when Gro Harlem Brundtland became the chair of the World Commission on Environment and Development in 1984 (Drilling and Schnur, 2012). The commission criticized short-term oriented development strategies and argued for a sustainable development, "which implies meeting the needs of the present without compromising the ability of future generations to meet their own needs" (United Nations, 1987).

In the years after the Brundtland-Report, consolidated through the conferences in Rio de Janeiro (1992) and Johannesburg (2002), sustainability became the main paradigm for the 21st century. Based on the idea of permanent development, sustainable development means "keeping a system or process going through acts of negation (and meanwhile) enhancing the conditions of social and natural flourishing" (Magee et al. 2013: 22). Thereby, it equally focuses on ecological, social and economic aspects, being able to adapt to any relevant dimension of society (Drilling and Schnur, 2012). Still it is often argued, the concept is too fuzzy and empty to serve as a global strategy for ecologic, social and economic improvements and researchers disagree on definitions as well as on measurable indicators (Drilling and Schnur, 2012; Magee et al., 2013).

Meanwhile, the debate on sustainability initiated a discussion on the increasingly important role of cities. What the Agenda 21 started in 1992, was followed up by several conferences and charters focusing on the local and city level: the Aalborg Charter in 1994, UN-Habitat II in Istanbul, 1996, URBAN 21 in Berlin, 2000, the UN-Istanbul+5-Conference in New York, 2001, and many more (Drilling and Schnur, 2012). While environmentalists once criticized cities for their unnatural and unsustainable character, a consensus had been reached that cities are a necessary part of the solution (Tretter, 2013). Common guiding principles and action recommendations for cities are needed, since cities accommodate more than half of the world's population and are responsible for more than 70% of global carbon dioxide emissions (UN-Habitat, 2016).

# 2.2 Environmental Justice and Greening Measures

#### 2.2.1 Greening Measures

Greening strategies became an important tool for area and urban planning and moved into the focus of the highest level of decision making. In this work, greening is used to refer to the practice of increasing the amount green spaces. This includes public green spaces, like parks, but also private land, where owners are encouraged to green their buildings or grounds (Gould and Lewis, 2017). Greening owes its fame to relatively new concepts: The idea of ecosystem services and the concept of green infrastructures (Flitner, 2017). In 2013, the European Union (EU) adopted a strategy for green infrastructures to promote investments on green elements like e.g. green roofs, fish ladders or floodplain forests EU-wide (European Comission, 2013). Also the German government invented a strategy on green infrastructure (Bundeskonzept Grüne Infrastruktur), following the European concept and the "National Strategy on Biological Diversity" to present the new significance of natural elements (Bundesamt für Naturschutz, 2017; Flitner, 2017). Those strategies also focus on the inclusion of certain ecosystems and ecosystem services, following the Millennium Ecosystem Assessment (2005) of the UN. The report classified services of ecosystems into four subcategories following the benefits for humans: supporting, regulating, providing and cultural services (Millennium Ecosystem Assessment, 2005). The publication of the report had a big impact on the international scientific community and triggered further studies and stakeholder involvement (Flitner, 2017; Haase et al., 2017). The idea of those quantified benefits of ecosystems goes hand in hand with the implementation of green infrastructures, at the countryside level as well as in cities. Functioning ecosystems, e.g. support the pollination of plants, produce clean water, regulate the microclimate and bind carbon dioxide (CO<sub>2</sub>) in trees and soils (Millennium Ecosystem Assessment, 2005). To prevent the destruction of healthy ecosystems, especially in cities, it seems necessary to include them into urban planning as a part of urban infrastructures. In the 1990s, the notion of green infrastructure became popular in the planning sector, when it was used by planners like Benedict, McMahon and Walmsley. They specified amongst others new greenway structures emerging in cities of the United States (US) as green infrastructures (Benedict et al., 2001; Flitner, 2017). The concept was taken up from planning and conservation practices from the 19th century (Benedict et al., 2001). What was new about this discussion: for the first time nature or natural components were comprehended as infrastructural elements. While a greenway just describes the combination of a green park and a parkway, the notion of green infrastructure implies a high societal benefit

(Walmsley, 2005). The image of infrastructure is mainly connected to steel and concrete used for roads, pipes and buildings, whereby green remains as a residual for the left over spaces. The new definition of green space as an infrastructure, makes an emphasis on its economic benefit clear (Flitner, 2017).

Benedict, Edward, and Mcmahon describe green infrastructure as the following (2001, p. 6):

"Our nation's natural life support system — an interconnected network of waterways, wetlands, wood-lands, wildlife habitats, and other natural areas; green-ways, parks and other conservation lands; working farms, ranches and forests; and wilderness and other spaces that support native species, maintain natural ecological processes, sustain air and water resources, and contribute to the health and quality of life (...)".

Walmsley (2005, p. 257) summarizes it as "green infrastructure implies something that we *must have* instead of green space that is something *nice to have*". Further, this definition can be complemented by the idea, that green infrastructure, to be called as such, needs a holistic design and planning approach, that allows an inter-connection of natural systems (Walmsley, 2005). So different green elements, due to their individual function or the benefits of the total network, can act together as green infrastructure. Ponds, moors, small woodlands as well as green stripes and rooftops can all be part of a green network (Benedict et al.,

#### Info Box 1:

#### **Pocket/ Neighborhood Park**

it is a small park, often just build on one vacant housing lot, open to the general public. Often they are constructed in dense urban areas, offering important qualities for the surrounding residential population. The concept is common in US-American cities, but gets increasingly popular in Germany (National Recreation and Park Association, n.d.)

# Public Garden / Community Park (Volksgarten/-park)

Community gardens developed during the 19th century in Germany and brought a big change to the urban distribution to green. Before, parks were mainly intended for the small upper class. Community gardens/parks differ highly in size and equipment, but are much bigger than pocket parks, offering many qualities for a big amount of urban residents (Rößler, 2010)

#### **Urban Forests**

Urban Forests can be designed in very different forms and sizes. They are implemented whenever open spaces should be transformed long lastingly into green or in some cases, when open spaces have been neglected by humans for a long time. Urban forests can even appear as part of big urban parks. They offer high benefits for urban animals and climate protection and serve humans as recreational space (Rößler, 2010).

2001). Depending on the location, resources and political targets different elements and park types are implemented, which differ in shape and function. Besides, the often implemented linear park, pocket/neighborhood parks, community parks and urban forests (see info box 1) are common elements in urban areas.

The linear park seem to be highly researched, when it comes to forms of urban green. Linear Parks (also referred to as greenways or landscape corridors), are often an element of post industrial cities or areas (Kullmann, 2011). They are designed in urban landscapes, on closed-down railway tracks or along urban riversides (Crewe, 2001). In many cases they offer solutions for urban problems in combination with economic benefits. Linear parks can serve ecological needs as fresh air corridors and a network of habitats (ead.). At the same time, they can offer alternative transport routes and connect different neighborhoods as well as landmarks or historic sites (Crewe, 2001; Walmsley, 1995). Depending on their location and the attractiveness of trails and viewpoints, linear parks can also become tourist attractions (Mell, 2008). Typically they serve as inner-urban possibility for jogging, hiking and cycling or offer space for inner-city promenades (Crewe, 2001). There is a long list of linear parks in US-cities, also given by the regular checkerboard pattern of their streets and the post-industrial reconstruction of many neighborhoods (Walmsley, 2005). The most famous and recent example is the "High Line Park" in Manhattan, New York, constructed since 2006 on elevated abandoned railway lines (Friends of the High Line, 2017). Popular examples of linear parks in Europe are the "Jardines del Turia" in Valencia, a more than 9 km stretched park, embedded in a dried out riverbed (Turismo Valencia, 2017), "la Promenade Plantée" with a length of 4.5 km in Paris (Benfield, 2011) or the "Mauerpark" in Berlin, which was developed on the former death strip of the Berlin Wall (Freunde des Mauerparks e.V., 2016). Studies on the function and use of parks or certain green elements are subject of different scientific fields like urban planning, architecture, health, urban ecology and have a long tradition. Although the impact of linear parks on some neighborhoods has been researched, Crewe (2001) criticizes that studies rather focus on positive effects than on drawbacks. Thereby, empirical long-term studies on social, political and economic impacts of those park projects have to be carried out. In recent years several new urban linear park projects followed, like the Bloomingdale Trail in Chicago, and others are in planning, like the Parkbogen Ost in Leipzig, giving new material for further studies.

#### 2.2.2 Environmental Justice

Green strategies aim to make cities and regions more resilient, to adapt to possible impacts of climate change and they are obviously needed and welcomed by urban residents (Kabisch and Haase, 2014). But the current greening of our society is more than just a response to climate change. It also

has to do with marginalized groups, living next to contaminated waste-sides and toxic soils. While sustainability "has become the dominant regulating principle in the formation of urban policy and planning theory" (Tretter 2013: 298), an environmental movement moreover influenced today's urban greening strategies (Anguelovski, 2016). The early environmental justice (EJ) movement emerged in the 1970s and 1980s in the USA and proceeded against locally unwanted land uses (LULUs) (Anguelovski, 2016). Thereby, the fight against the unequal exposure to risks and the unequal access to green, mobilized people worldwide and became an international movement. Since then, several statistics have proven, that certain groups are more frequently exposed to risks and at the same time less able to participate (ead.). Those findings established in the Anglo-American language use into some kind of slogan: "black, brown, red, poor, and poisoned" (cf. Hornberg et al., 2011). During the 2000s, research further focused on correlations between access to parks and recreation areas, the maintenance of parks and different income and ethnic groups (Dahmann et al., 2010; Pham et al., 2012). Findings showed that privileged groups having more access to green as low income groups (Anguelovski, 2016). Taken from studies in US-American cities, EJ-Research also developed in Europe and Germany (Hornberg et al., 2011). In Germany, the term of environmental justice for the first time showed up in 2001, evoked by the publication of Werner Maschewsky (Hornberg et al. 2011). Maschewsky states that environmental injustice often appears, since power elites with high environmental expectations and high conflict ability, acquire the best environmental conditions. He defines three different actions, used by elites and creating environmental injustice (cf. Maschewsky, 2001, p. 78):

- Using of superior financial means to buy goods with certain environmental qualities (e.g. apartments, houses) on related markets
- Using of superior political influence (e.g. companies, town councils, even friends or relatives) to influence decision making concerning the own environmental qualities
- Using good access to media (e.g. TV, newspaper, education) to direct attention to decisions, compromising the own environmental qualities

The German social federal system permits socio-spatial disparities less extreme, as in heavily segregated US-American regions, due to the small-area of the BRD and certain rules (Maschewsky, 2001). Still, there is a threat of exposing low income groups to areas with bad air quality, high noise levels and an undersupply of green infrastructure and thereby menacing social stability (Böhme and Bunzel, 2014). Activities like *Healthy Cities*, *Local Agenda 21* and especially *Soziale Stadt* started to follow the idea of environmental justice (Umweltbundesamt, 2015). Meanwhile, more research projects focused on the concept of EJ in cities, like e.g. the pilot project "environmental justice in urban areas" of the German Federal Environment Agency in 2015. The project indicated several

action fields in different pilot municipalities, like Berlin and Leipzig. Results reinforce an actual trend of urban redevelopment and the final report demands, amongst others, stronger action for air improvements and local climate, environmental friendly mobility and the creation of green and open spaces (Umweltbundesamt, 2015).

Availability of green infrastructure and access to urban green spaces became an important target for German cities, aiming to become sustainable and environment-friendly living spaces, at the same time they seem to unite the interests of environmentalists, EJ-activists and urban planners (Kabisch and Haase, 2014; Walmsley, 1995). Still, the question remains open, whether new trade-offs of enormous park projects are preventable. Or whether, like Anguelovski (2016) noticed, in times of urban densification, even parks and green amenities are able to become LULUs for some actors.

## 2.3 Green Gentrification

#### 2.3.1 Definition and Development of the Concept

In recent years the debate on green gentrification was born in the US. Literature offers different names for the concept like green gentrification, eco gentrification or environmental gentrification. In the present thesis, the notion of green gentrification is preferably used, emphasizing greening processes in our cities and following Gould and Lewis (2017). In contrast to the classical gentrification theory, the green gentrification-discussion did not developed in first place to criticize an economic and social shift led by wealthier tenants, but rather to discuss an ecological one. Since the debate on green gentrification uses evidences from longstanding research on gentrification processes, it is crucial to examine and understand the classic theory of gentrification.

## **Excursus Gentrification:**

The term gentrification was developed by the British urban sociologist Ruth Glass. She analyzed in the 1950 upgrading processes in working class neighborhoods of London, where social structures changed rapidly after the increased influx of middle class families. She used the term gentrification for that phenomenon derived from processes in the 18th century, when parts of the lower nobility (gentry) moved back, from quiet suburban settlements to the city center (Riemann, 2016). Today the term is used frequently to describe fundamental processes in capitalist cities of the post-war period (Lees, 2008). Since Ruth Glass developed the concept, more than 1000 works all over the world have been published, presenting a variety of theories, definitions and models and proving the popularity of the topic (Holm, 2012). Since urban processes represent a highly complex topic, gentrification models would miss their goals if they were put to simple and if they would not be constantly

expanded (id.). The common understanding describes an upgrading process of a former downgraded neighborhood, through the influx of wealthier people which leads to an increase in housing costs (Haase and Rink, 2015). This is followed, as gentrification proceeds, by the displacement of residential, mostly poorer, population and a cultural re-evaluation of the area (Rink, 2015). Whereas the real-estate look on the phenomenon describes a physical-spatial upgrading followed by increased profits, the socio-spatial view on gentrification sees a particular form of segregation (Üblacker, 2015). Crucial actors of this process are pioneers and gentrifiers. In the general model of gentrification pioneers are seen as the trigger, attracted by low rents and high centrality of the neighborhood (Riemann, 2016). They have low financial resources, but often better education and a better social standing, plus high flexibility and risk tolerance on the housing market, compared to long-established residents. Typical pioneer groups are students, creative workers or self-employed, which change the character of a neighborhood and cause in some cases

#### Info Box 2: Instruments at the Local Level for the Attenuation or Prevention of Gentrification:

#### I The Preservation Statute (*Erhaltungssatzung*):

The prevention statute is a special right of the urban planning legislation. It may be used for the preservation of area-related urban structures (Riemann, 2016, p. 19).

#### 1.1 Milieu Protection (Erhaltungsrechtlicher Milieuschutz) (according to article §172 paragraph 1 BauGB):

As a consequence of modernization and the establishment of residential property, certain residents could be threatened. Milieu protection indicates that the composition of residents needs to be protected (e.g. high number of students, elderly, low-income groups). The need for protection could be caused by certain infrastructures, which are adapted to certain groups (Henckel et al., 2010). Milieu protection does not signify to hinder development of the area, but type and amount of conversion can be controlled in some cases. Finally this instrument hardly influences rent prices and it is not able to individual residents (Riemann, 2016).

#### **1.2 Pre-emptive Rights (Vorkaufsrecht)** (according to article §24 paragraph 1 BauGB):

The municipality holds the first right of buying, if property inside of a declared preservation area should be sold. Still, this pre-emptive right is just valid in case the common purpose can be justified (Riemann, 2016, p. 50f). It is an important instrument insofar as upgrading processes occur especially after the trading of objects in preservation areas. At the same time, the municipality can avoid speculative purchases within this area. Nevertheless, the pre-emptive right can just be applied for the buying of constructed land. So municipalities are not able to buy undeveloped land by the pre-emptive right for the covering of housing needs. Finally, many municipalities are not making use of their rights, since administrative expense is high and deals can cause financial burdens for the city or town (Riemann, 2016)

#### **II Other Housing Policy Instruments:**

To fight the scarcity of apartments and therefore the displacement of residents, many cities and municipalities count on the construction of new buildings or the rehabilitation of old uninhabitable buildings. Further, the increase of social housing and the support of housing project can play an important role (Henckel et al., 2010; Stadt Leipzig, 2014).

increased public and private investments in the district (ibid). Due to improved physical appearance and the image transformation, the neighborhood moves into focus of higher income groups, which are able to provoke economic upgrading and the displacement of economic weaker tenants (Huber, 2011). Displacement can show different expressions: residents can be forced to leave indirectly by increased housing costs exceeding their budget or they can be directly displaced through contract termination or even harassment (Huber, 2013). Before initiating, it is hardly predictable whether a neighborhood will become object of gentrification, still certain internal and external qualities of neighborhoods contribute to a higher possibility. Important internal qualities of apartments are an appropriate size, special immutable characteristics like bay windows, balconies and terraces or decorated facades. Moreover, high environmental qualities, an attractive housing environment and good connection with infrastructural elements, like public transport and roads, services and green spaces are the basic external factors (Falk, 1994). In recent years the role of urban policies is considered more closely, since governments could initiate monitoring of threatened neighborhoods and have the power to limit or even trigger gentrification processes through laws and regulation tools (Holm, 2012). To get an overview of possible and applied instruments and laws in Germany see also info box 2. Further, the term of gentrification was long time avoided by actors from politics, real estate and the financial sector. Smith (2002, p. 445) designates it even as "dirty word", whereby "the language of regeneration sugarcoats gentrification". As gentrification seems to become a normal circumstance of international urban development (Holm, 2012), the question arises which further events or interventions in urban development are able to trigger gentrification.

#### Green Gentrification:

Since greening initiatives emerge all over the world and country, supported by governments, NGOs and scientists, the claim for a critical look on processes and consequences is becoming insistent. When sustainability strategies justify greening events, green gentrification questions whether the social pillar of sustainability is considered as well, especially after implementation. The movement around the concept asks further to understand, who are the main benefiters of greening events, that aimed once to enrich the whole society (Gould and Lewis, 2017).

The concept of green gentrification criticizes in the same way the explosive increase of rents and land prices which lead to marginalization and displacement of economically weaker residents of dynamic and attractive inner-city locations. Still, the approach does rather question the targeted instrumentalization of environmental amenities, attracting gentrifiers intentionally, than the influx of pioneers and gentrifiers. Gould and Lewis (2017) define green gentrification as a subset of urban gentrification. It is often started by greening initiatives trying to improve or create environmental amenities (Gould and Lewis, 2017). Simply put, these new green amenities attract wealthier groups

of residents, which are able to force lower-income residents out of the neighborhood (id.) This effect can occur, whether greening initiatives arose bottom-up or top-down. Meanwhile gentrification leads to a further upgrade of the affected neighborhood, often connected to an increase of green infrastructure and projects, the concept of green gentrification puts the greening event on the beginning (ibid). "The production of urban nature is deeply political" (Anguelovski and Martínez Alier, 2014, p. 168). At the same time, greening projects are wrapped into a bigger story, called sustainable development.

Green gentrification can be defined as:

"the implementation of an environmental planning agenda related to public green spaces that leads to the displacement or exclusion of the most economically vulnerable human population (...) while espousing an environmental ethic" (Dooling 2009: 630).

Critical geographers, urban sociologists and political ecologists claim more vehemently during the last decade, to look behind significant greening events in certain neighborhoods and to analyze how they could trigger gentrification (Dooling, 2009; Gould and Lewis, 2017). The approach aims to start analyzing, where environmental justice studies end: with the implementation of green infrastructure for neighborhood improvements (Gould and Lewis, 2017). As Anguelovski (2016, p. 27f) states, there exists a strong correlation, proven by literature on land and real estate, between "urban land cleanup; investment in park or open space creation or rehabilitation, waterfront redevelopment or ecological restoration; and changes in demographic trends and neighborhood property values". Nevertheless, (green) gentrification processes are highly complex and causalities are not easy to tease out. Greening events, urban reconstruction, the influx of pioneers and gentrifiers can temporarily overlap (Üblacker, 2015). Finally the concept of green gentrification sees urban greening as a catalyst of gentrification, still other interventions in urban structures can trigger gentrification at the same time. Different to the classical concept, green gentrification has not been researched a lot. There exists no model for the typical course of green gentrification and empirical studies are rare. Still scientists from various fields, like geography, anthropology and urban planning took up the subject during the last ten years.

#### 2.3.2 State of the Art

In their recently published work "Green Gentrification - Urban Sustainability and the Struggle for Environmental Justice" Gould and Lewis (2017) remarked that only a handful of scholars researched on the topic of green gentrification. Still many scholars observed this new form of gentrification without actually naming it. Already Atkinsons (2004) points out the relationship between state led urban revitalization and sustainability practices in the UK and gentrification. Sustainability policies,

actually reducing diversity and equity in neighborhoods were observed within the revitalization program of Toronto's waterfront (Bunce, 2009) and within given examples of Toronto, Victoria and Vancouver (Dale and Newman, 2009). From a geographical perspective Quastel (2009) describes processes of gentrification in Vancouver city, calling it "third-wave gentrification" and "eco gentrification", initiated by sustainability strategies and the Onni Garden project. He argues that in times of increasingly competitive neoliberal real estate markets, "ecological discourses, planning policies and consumption practices are related to gentrification" (Quastel, 2009, p. 719). Pearsall (2012), as well a geography scholar, conducted an empirical study, focusing on resilience strategies against environmental gentrification in three neighborhoods of New York City. As well in 2012, Curran and Hamilton published their long-term study "just green enough" on Greenpoint, Brooklyn, claiming that environmental gentrification is not an inevitable process (Curran and Hamilton, 2012). Within their analysis of greening strategies in US-American and Chinese cities, Wolch et al (2014) point out the paradoxical effect of green spaces and demand for more integrative sustainability policies. With an urban planning background Dooling (2009) and Anguelovski (2016) observe environmental gentrification as well in the US-American context. Dooling observes the eviction of homeless from parks in Seattle, because of city revitalization programs and argues that urban ecological planning needs to be improved following Harvey's concept of "producing spaces of justice, nature and difference" (Dooling, 2009, p. 621). Further, Anguelovski argues how green amenities can become LULU's itself, representing unequal access or displacement (Anguelovski, 2016). In her famous essay "Wiped Out by the 'Greenwave'" Melissa Checker debates the paradox concurrence of environmental justice activism, sustainable urban development and environmental gentrification, evidence drawn from ethnographic research results on Harlem, New York City (Checker, 2011). Gould and Lewis (2017) finally name the phenomenon "green gentrification" referring to common greening strategies in urban neighborhoods. In their study they analyzed five greening events in Brooklyn, the biggest and demographically most dynamic borough of New York City. Within those five case studies, they were able to hold variables like economic changes and the demographic shift constant, therefore isolated the consequences of urban environmental amenity implementation and examined green gentrification (Gould and Lewis, 2017). Besides the high number of Anglophone scholars observing mainly examples from the United States and Canada, Roberta Cucca (2009) described eco gentrification in Copenhagen, Vienna and Vancouver. Finally an interdisciplinary research team of mainly European scholars discussed green gentrification, giving examples of European neighborhoods, partly post-socialist cities (Haase et al., 2017). They observed "the disconnection between the green space and the social space" (Haase et al., 2017, p. 42) and introduced prerequisites for socially inclusive urban green spaces.

# III Methodology

# 3.1 Research Design: Explorative Case Study

The underlying idea of this work is an explorative case study, whereby no clear set of outcomes is expected from this research. A case study can be defined as an analysis of several data collected for one single specific case. Thereby, the investigated details will be explained regarding their interrelation with each other and under integration of the total environment so that concluding a new, in itself consistent, logic can be generated (cf. Brüsemeister, 2008). It is called explorative, since the object of interest represents a new and rudimentary investigated subject, so that at this point no hypotheses can be formulated (cf. Mayring, 2010). The format of the case study was chosen, since the individual project Parkbogen Ost represents the focus of interest and the context of the project is highly important for the interpretation of result. The inner eastern neighborhoods as area of implementation, including historical, economic and social circumstances have to be first presented in form of a descriptive case study analysis. Furthermore, the complex project Parkbogen Ost can be analyzed, through the lens of stakeholders involved and stakeholders affected. As part of a case study, more elements from different sources can be observed and integrated into the research (Baxter and Jack, 2008). The approach fits perfectly to the research interest presented here, since, more than just an analysis of indicators, the interrelation of different stakeholders with the project and the area of implementation should be analyzed. The descriptive case study further plays a key role for the later interpretation of results, applying the critical lens of green gentrification.

### 3.2 Research Strategy: Qualitative Methods

Within the analyzed case study two different qualitative methods were used to extend the gained perspective on the subject. Since perceptions of urban change are a highly emotional, controversial and sensitive topic, the utilization of qualitative methods was considered appropriate. Qualitative approaches offer the chance to go beyond verifying or falsifying hypotheses, but to present messages which explain difficult relations and circumstances (Vogelpohl, 2013). Therefore, stakeholders have been interviewed, neighborhoods and certain events have been observed and finally a part of the already implemented and observed Parkbogen course has been mapped. The undertaken mix of methods was a crucial element of the case study, since interviews as well as observations contain certain weaknesses. Due to the combination of both, those weaknesses could be minimized.

#### 3.2.1 Interviews

Interviews represent a common method of social sciences and a wide range of different approaches has developed over the last decades (Hildebrandt et al., 2015a; Mey and Mruck, 2010). Interviews have the advantage that the interviewer is able to collect information in a spontaneous and easy communicative way. Still interviews are prone to subjective bias, so interviewees could be influenced due to interactions with the interviewer. Finally, interviews are labor-intensive in their transcription and analysis (Bortz and Döring, 2006).

#### Interviewees

Tab. 2: Stakeholder groups interviewed

Stakeholder Group	Number of Interviews	Type of Interview
City Administration	2	Expert Interview
Initiative Parkbogen Ost	2	Expert Interview
Citizens' Club	1	Expert Interview
Gardening Project	1 (2 interviewees)	Expert Interview
Real Estate	5	Stakeholder Interview

During the survey period eleven stakeholders had been interviewed, from February to June 2017. Those stakeholders belonged to different stakeholder groups (see table 2 and Annex 3 for detailed information). From politics two representatives of city administration have been interviewed. They played a key role in understanding the planning and implementation character of the project, as well as possibilities and challenges in Leipzig east and to understand the perspective of urban politics. Further several interviews with civil society actors were conducted, which belonged to the Parkbogen Ost initiative, citizen clubs or gardening projects. Those interviewees gave insights in their feelings towards the project and had often strong background knowledge on the study area or the project itself. Finally an important perspective was opened by interviews with real-estate companies, knowing and operating in the project area, Leipzig's inner east. This stakeholder group was integrated into the analysis, since actors of real estate may have totally different expectations on green infrastructure implementation than other stakeholders. At the same time they often have high capital available and strong power influencing urban redevelopment and housing and therefore gentrification. Out of twelve real-estate companies contacted, only five people could be interviewed. Those interviewees belonged to different kinds or real estate companies: four of them belonged to the group of real estate agencies renting and selling apartments and houses and one office specialized on the refurbishment and selling of listed buildings. Only two real estate companies had 10 or more employees, the other three companies employed less than four people. In total, two interviews have been recorded and transcribed, two interviews could just be noted and one interviewee filled out his answers in written form.

#### The Semi-Structured Interview

The conducted interviews followed prepared guidelines, which had been tested and improved in the beginning. Guided interviews follow a guideline, containing a list of questions to be asked. Still, the order of questions is flexible and depended on the interview situation (Bortz and Döring, 2006). At the same time the interviewee has the possibility to emphasize points made or even space to bring in new aspects (Mey and Mruck, 2010). Guided interviews are suitable for explorative approaches and the given guideline makes results from different interviews comparable in the end (Bortz and Döring, 2006; Stier, 1999). Interview guidelines (see Annex 1 and 2) were prepared in a clear, open and neutral form following the concept of Gläser and Laudel (2004:127ff.): Guidelines did not exceed one to two pages and eight to 15 questions. It was designed for interviews of around 30 minutes length. Suggestive questions have been avoided and guidelines contained fact questions as well as opinion questions (Gläser and Laudel, 2004; Witzel, 2000).

Thereby, questions were ordered, for the majority of interviews into four thematic blocks:

- Background of the interviewee and related institutions
- Perceptions and experiences related to the study area, Leipzig east
- Perceptions and experiences related to the project Parkbogen Ost
- Individual and further questions.

Wherever possible, those interview guidelines had been sent to the interviewees in advance and interviews were conducted personal or via telephone. The interviewed stakeholders can be grouped into two different types of interview partners: regular stakeholders and experts. All interviewees are considered to be stakeholders, since they are in some way concerned by the implementation of the Parkbogen project.

#### **Expert Interviews**

Within the total of eleven interviews, six expert interviews have been conducted. Experts are defined as such, following the sociological perspective, because of their special knowledge on a research-related subject, whether it is related to the personal or professional background of the interviewee (Fehlberg, 2013; Mey and Mruck, 2010). So more than just the knowledge of facts, expert knowledge can be defined as action, process or interpretative knowledge (Bogner and Menz, 2009). Still the

application of expert interviews and the classification of experts is an controversial issue in social sciences and needs to be justified related to the research interest (Bogner and Menz, 2009). Those six stakeholders are qualified as experts in the conducted case study, since they have specified knowledge on the project Parkbogen Ost and are or have been involved in some way into the conceptualization, planning or implementation process. Chosen experts were selected from the city administration and civil society, representing crucial background knowledge, information and experiences for the research (see also Annex 3).

#### 3.2.2 Observation

The three months of fieldwork were accompanied by different observations in the course of one major event and during the mapping process of the Lene-Voigt Park. Further, brief observations were noted during interview situations. This method was seen as an essential supplement to interviews, as stated perceptions of interviewees could be reproduced and comprehended. Vice versa, observed processes and objects could be explained by the interviewees and therefore the risk of misinterpretations was minimized (Flick, 2011). Further, the observation of stakeholders and neighborhoods, offered the possibility to gather data through all the senses (O'Leary, 2004). The open character of observations allows the researcher to get closer to the object of analysis than it is possible with prescribed analytical frameworks (Lamneck, 2005; Mousa, 2013). Insights of the research process can be therefore steadily integrated into the work and further it helps to interpret the perspectives of interviewees (Mousa, 2013).

Two different kinds of observations had been carried out:

1. Participatory Observation during the *Tag des Städtebaus* (day of urban development promotion):

The observation was participatory and open since the observer was part of the activity (cf. O'Leary, 2004). The field of observation was an expert discussion on gentrification processes in Leipzig east, whereby the objects of interest were interactions between different stakeholders, participation and arguments. Still observation was conducted in an unstructured and open way and observations had been written down in form of mental notes directly after the event (cf. Bryman, 2016; cf. Lamneck, 2005).

2. Mapping of the Lene-Voigt Park Surrounding, Including Housing Types, Conditions and Additional Infrastructures (see also maps in 5.2.2).

Maps are powerful "multifunctional tools for exploring spatial variations" (Dunn and Roberts, 1997, p. 254) Therefore it is important to define the desired representation from the beginning. Concerning the mapping process, clear objects of interest had been defined before mapping was conducted.

Those objects were developed based on criteria, Falk (1994) defined as internal and external criteria of neighborhoods which are gentrified more likely (see also chapter 2.3.1). The following categories had been involved into the mapping process:

- the degree of refurbishment
- the building type and age
- balconies attached
- gastronomy

Those events have not been audio recorded, but observations were written down as soon as possible in a qualitative way and pictures have been taken during the mapping process (see digital Annex c) (cf. O'Leary, 2004).

## 3.3 Conduct of Data Collection

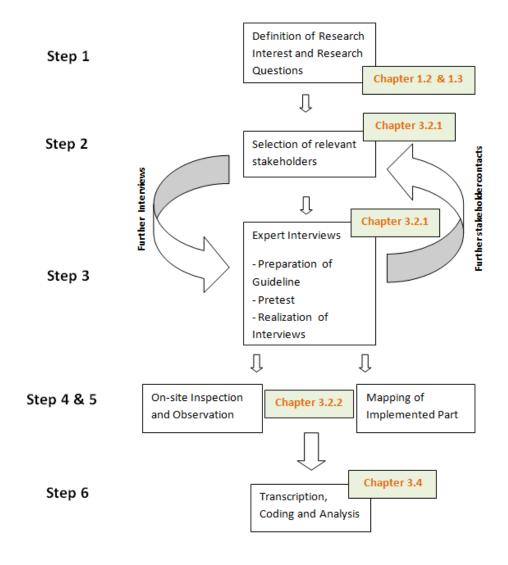


Fig. 1: Working steps of data collection - author's illustration

Figure 1 shows all working steps and methods used during this research work represented in six steps. Still research has not been conducted in a linear way. Especially the analysis of stakeholders and the realization of interviews were strongly correlated as interviewees often referred to new stakeholders, which were interviewed afterwards if proven appropriate and available. Moreover for the interviews with real estate actors, stakeholders had also been selected during the observation and mapping process. Due to signs at apartment buildings and construction sites, real estate actors presently operating in Leipzig east have been located. To comprehend represented steps in detail, related chapters are listed in the figure.

# 3.4 Transcription and Analysis

All interviews taken in the course of research had been transcribed fully if complete recording was available (see digital Annex b). Before transcription recommendations of Dresing and Pehl (2010, p. 727f) had been considered, so it was reconsidered well which emotions and emphasis could be important for later analysis. Therefore, emotions like anger, enjoyment or grief and (reflection) pauses or rushed talk are indicated within the transcript. Additional interviews which have not been recorded upon request, were transcribed in a selective way. This means that only crucial information was written down during or/and after the interview (Dresing and Pehl, 2010).

Further, the analysis of data was performed in an interpretative—reductive form following the concept of Mayring and under inclusion of the interview situation (Bortz and Döring, 2006). Therefore, the software MAXQDA has been applied (see digital Annex e for the MAXQDA project). The analytical approach followed the strategy of summary with a reduction of text, whereby the same information should remain, therefore the important text passages were first paraphrased, then generalized and finally different examples reduced to one category (see also digital Annex f) (Hildebrandt et al., 2015b). So analytical categories have been built inductively and have been tested under the consideration of further interview transcripts (Hildebrandt et al., 2015b).

# 3.5 Ethical and Methodological Considerations

Different ethical considerations have to be pointed out concerning the conduct of interviews as well as the interaction with stakeholders researched. The ethical principles stated by Bryman (2016, p. 125ff) had been applied to interview situations, so interviewees had been informed about the purpose of the study, the background of the researcher, the sending institution and the level of confidentiality. Before the beginning of the interview, interviewees were asked to allow or deny the recording and further it was given the option of anonymity (cf. Bryman, 2016). No person

interviewed asked for anonymity, but some interviewees denied recording or demanded to be informed, in case direct citations want to be included into the thesis. Moreover, since not every interview could be transcribed, information maybe got lost during selective transcription and intonation and emotions related could rarely be noted. Further only half of the interviews could be conducted personally. Especially interviews with real estate actors were done by telephone due to limited time and resources as well as required flexibility. In the real estate sector, many stakeholders had been selected and contacted, but only five out of twelve have been disposable for interviews. In particular bigger real estate companies denied cooperation, maybe because of limited time capacities or bad experiences. Out of five interviewed real estate stakeholders, only two agreed on recording of the interview. One interviewee even filled out the interview guideline, sent before via email and claimed scarceness of time as reason. Another disadvantage concerning interviews within the real estate sector, was that the Parkbogen Ost project was still hardly known. Therefore, interviewees had to be asked for the already implemented parts to get a general understanding of their perception of green infrastructure and the importance for their business. Another important point to mention is, that the term "gentrification" was avoided during presentations and interviews, unless it was mentioned by stakeholders itself. This approach was decided, since the term is still, especially in the real estate sector or politics, negatively connoted and could have been understood as kind of reproach. Therefore, terms like "upgrading process" or "image Improvement" had been used to explain the research interest. This strategy of rapprochement was consciously used to get into interaction with stakeholders and to understand feelings towards the project without strong influence in the beginning.

Also the approaches for the observation of space and interactions have to be discussed critically. Observations always implies that the observer gets closer to the object of research, so to leave his everyday reality while maintaining objectivity (Lamneck, 2005). This objectivity tries to be assured by the documentation of research processes and the triangulation of methods and data. Finally the production of maps was undertaken with the awareness that maps can only represent parts of reality. While focusing on some elements and analytical layers others have to be excluded due to presentability. Further some data could not be collected because of lacking access or visibility from street level.

# **IV Presentation of the Case Study**

The following chapter aims to give a deep insight into the concrete case study on three different levels, introducing and clarifying all relevant circumstances, which have to be considered for the analysis of the subsequent results. It is necessary to explore and explain the greater area of investigation, the city of Leipzig, as well as the meso-level, Leipzig east, and finally the micro-level, the project Parkbogen Ost, since those different scopes are influencing each other strongly. Furthermore, a historical summary is crucial for the reader's comprehension of actual chances and challenges seen by the stakeholders interviewed. Finally the role of such a wide-ranging project like the Parkbogen Ost in a dynamic city like Leipzig, can just be defined by understanding the city and the neighborhoods.

# 4.1 Context: Leipzig

The city of Leipzig is located in the federal state of Saxony (see fig. 2), Germany and was built in the lowlands were the rivers Weiße Elster, with its natural sidearms Luppe and Nahle and the tributaries Pleiße and Parthe join together (Gränitz, 2013).



Fig. 2: Map of Leipzig's location - author's illustration

It is the largest city of Saxony, also Dresden represents the state capital (id.). Leipzig has a long history of urban development, accompanied by several turning points in terms of demography, economic situation and the housing market, which need to be understood for the discussion of present urban trends and challenges.

The scholar Garcia-Zamor (2008, p. 75) argues, that Leipzig's distinctive and proud identity is strongly related to four important historical events: the development of the fair, the defeat of the Napoleonic army in October 1813 (battle of nations), the development of Leipzig's enormous railway junction and the Monday's Prayers in 1989. Those symbolic events together with Leipzig's image as city of composers and books, have a lasting effect on Leipzig's citizens up to the present time (Garcia-Zamor, 2008).

## 4.1.1 Historical Urban Development until 1990

#### Leipzig's Early History

On the basis of its beneficial location, Leipzig rapidly grew to a connecting point for supra-regional trade and the medieval settlement received the town privileges around the year 1165 (Gränitz, 2013). When the Leipzig University was founded in 1409, the city turned into an university and education site. It further obtained different privileges, which triggered the city's flourishing and let a traders bourgeoisie establish: the safe conduct for traders travelling to Leipzig from 1268, the

exposition privilege in 1497 and the staple right in 1507 (ead.). Traditional economic sectors of the town especially included trade, trade fairs and handcraft (Rink, 1995). The positive economic climate led to investments and therefore shaped the urban development and appearance of the early Leipzig and moreover led to a population increase within the town fortification. Given by the early industrialization in the 18th century, population grew and expanded further so the increased need for land became obvious and

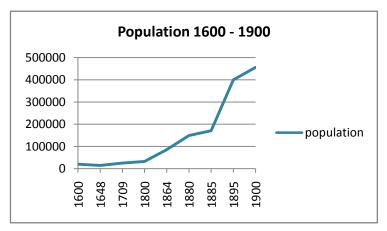


Fig. 3: Demographic development of Leipzig from 1600 to 1900 - author's illustration, data source: (Gränitz, 2013; Kulturbund der DDR, 1990; Letzel, 2016)

resulted in the deconstruction of the medieval fortification (Gränitz, 2013). The newly vacant area was transformed into gardens, today's *Promenadenring*, which ranks among the oldest landscape parks in Germany (Gränitz, 2013).

## Industrialization and Urban Growth

During the 19th century, Leipzig prospered because of the formation of the German Customs' Union in 1834 and due to its beneficial geographical location (Garcia-Zamor, 2008, p. 74). The flourishing trade was followed by the development of a significant banking system in 1838, which helped finance the construction of the first railway line in continental Europe (Scholz, 1996). The first line linked Leipzig and Dresden in 1839 and within the next 15 years, Leipzig became the main railway junction, connected to all major German and many European cities. (Garcia-Zamor, 2008, p. 74; Gränitz, 2013). In that time differently characterized districts emerged in Leipzig and in 1889 the first incorporation of suburban settlements modified the size of Leipzig (Gränitz, 2013). Thereby the eastern districts (Reudnitz, Anger-Crottendorf, Thonberg, Neureudnitz, Neuschönefeld, Neustadt, Volkmarsdorf and Sellerhausen) together with Gohlis and Eutritzsch were first incorporated, followed by southern and western settlements (e.g. Plagwitz, Connewitz, Lindenau) (Gränitz, 2013; Scholz, 1996). This first incorporation-phase took from 1889 to 1910 and Leipzig reached a size of 73.4 km<sup>2</sup> and 717,000 inhabitants in comparison to 17.6 km<sup>2</sup> and 295,025 inhabitants in 1890 (see fig. 3) (Kulturbund der DDR, 1990, p. 60; Scholz, 1996). Moreover, big industrial sites in the sector of mechanical engineering and metal ware settled, especially along the railway tracks, which were typical for Leipzig's production profile of the 19th century (Rink, 1995). Those newly developed large-scale industry, needed totally new location factors and large industrial areas were founded in the western part of the city (id.).

The rapid growth of the city resulted in the expansion of traffic and public infrastructure and Leipzig became an attraction for tourism (Kulturbund der DDR, 1990). Leipzig's inner city that time was shaped by *Gründerzeit* (Wilhelminian) houses, which were characterized by broad block perimeter structures, integrating handcrafting in residential areas and big factory sites alongside (Breuste, 1996). Finally, new functional buildings developed and companies' headquarter as well as a new exhibition hall opened up in the inner city, integrating Leipzig increasingly into the international market (Nuissl and Rink, 2003).

#### The 20th Century

Even after the first World War the demographic and economic growth of Leipzig did not break in (Glock, 2006). Further incorporations followed in 1915, 1922, 1930 and 1935 and extended the urban area again by 66 km² (Scholz, 1996). In the 1930s, it reached the peak of population growth and with 713,000 inhabitants Leipzig took on the title as 5th biggest city of Germany, in terms of population and economic importance (Glock, 2006). The discovered deposits of brown coal in the surroundings of the city, turned it into the center of industrial chemistry (Glock, 2006, p. 98). Also the trade fair continued to play a leading role until the beginning of the second world war (Garcia-Zamor, 2008).

After the National Socialist takeover, Leipzig was further developed as a center for brown coal, chemical industry and aviation industry (Glock, 2006). Therefore, industrial plants became a strategic target for airstrikes of the allies and also the fair buildings did not survive the war. In 1945, Leipzig's population had diminished to 584,000 due to war and hunger and more than 1/5 of the total flats had been destroyed (Breuste, 1996; Glock, 2006, p. 99). Still, large parts of the historic building stock overcame the attacks, given by the fact that no carpet bombing took place. Therefore, the functional structure of the city could be maintained also due to wide-ranging recovery measures until the end of the 50s (Kabisch, 1996; Scholz, 1996).

The following period changed socio-political conditions fundamentally, especially because of socialism as new national objective (Scholz, 1996). After the Soviet Occupation Zone turned into the

German Democratic Republic (GDR) in 1949, Leipzig, alongside the whole federal state of Saxony were clearly disadvantaged by the resource allocation of the government. The industrial sites of Leipzig stayed on the level of the 1930s and the GDR mainly invested in the extension of chemistry and brown coal mining (Glock, 2006; Rink, 1995). Moreover, the city suffered from the exodus of several service providers, like banks, insurance companies and headquarters, leaving Leipzig and relocating in western Germany (Nuissl and Rink,

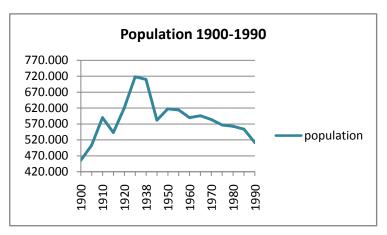


Fig. 4: Demographic development of Leipzig from 1900 to 1990 - author's illustration, data source: (Gränitz 2013; Kulturbund der DDR 1990; Letzel 2016)

2003). Therefore, it lost many functions, whereby some increase in significance could be achieved in 1950, when it became a GDR-district town (Rink, 1995). Besides, living conditions and environmental conditions worsened. High smog values, because of obsolete production plants, were nothing unusual and environmental damage moved steadily closer to the southern city as mining did (Glock, 2006). Historical residential neighborhoods had been allowed to lapse, given the fact that resources were scarce in the later GDR and further the old opulent buildings were seen as the heritage of capitalism (Choa, 2007). Also due to resource scarcity 53,000 Gründerzeit houses could not be demolished, although it was intended by the GDR-government (Kabisch, 1996). Towards the end of the socialist period, 25,000 housing units stood empty, because of uninhability (Stadt Leipzig, 2005a). The housing policy of the GDR focused on the construction of new buildings, in form of industrial modular constructions, offering equal housing standards for a big part of the population. Those were first built in the inner city. Later on, huge residential complexes, like Grünau, had been constructed

outside the inner core for the further expansion of the city (Glock, 2006). Although the decay of buildings and environmental pollution had been a problem in many cities of the GDR, Leipzig represented an extreme case. Moreover, Leipzig was the only city that had to cope with a steady population decrease since the 1960s (see fig. 4) (Rink, 1995). In summer of 1989, thousands of Leipzig's citizens left the city by crossing the GDR border (Glock, 2006). At the same time, the regular Monday Prayer's became a symbol for Leipzig's peaceful revolution against the communist dictatorship (Garcia-Zamor, 2008). In the context of German reunification and the related political and economic transformation, the city of Leipzig had to face several challenges. At the first *Volksbaukonferenz* (Conference for Public Construction) in 1990 the question became obvious, whether "Leipzig could still be saved" (Glock, 2006, p. 101). The participants answered this question with a positive vision for Leipzig and initiated first strategies for the preservation of the old building stock (Glock, 2006; Stadt Leipzig, 2005a).

# 4.1.2 Recent Urban Development after 1990

The opening of borders in 1989 and the following transition phase held many challenges for the citizens of Leipzig as well as for the local and national government. The government had to restructure completely and the rapid introduction of the western German currency, the *Deutsche Mark* (DM) let the export oriented GDR derail (Glock, 2006).

Almost overnight, the unemployment rate mushroomed due to sudden competition with West Germany and the integration into the world market. In various industrial branches, especially in the traditional textile industry and mechanical engineering, between 70%-90% of the jobs had vanished

until 1995. The industrial areas became brownfields, spreading out inside and outside the city (Glock, 2006; Nuissl and Rink, 2003). Further, an "demographic revolution" complicated urban planning (Nuissl and Rink, 2003, p. 21) (see fig. 5). After travel restrictions were abolished, around 25,000 people migrated from Leipzig to western Germany within the first four years, while the migration to Leipzig was too low to be

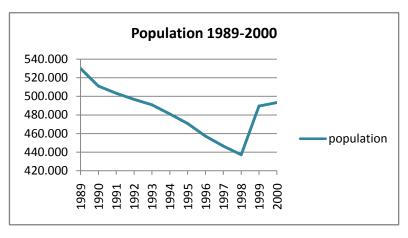


Fig. 5: Demographic development of Leipzig from 1989 to 2000 migration to Leipzig was too low to be - author's illustration, data source: (Gränitz, 2013; Letzel, 2016)

counted (Glock, 2006). At the same time, also natural population growth stagnated, and the number of deaths exceeded the birth rate (in 1993, 7,100 deaths compared to 2,730 births) (Glock, 2006; Nuissl and Rink, 2003).

The urban development of the 90s in Leipzig can be described in five phases (Choa, 2007):

Phase I (1990-1992) was marked by thousands of investors, flowing in mainly from western Germany and trying to get a share of the newly developing market (Nuissl and Rink, 2003). Lessors had to calculate their rents from now on cost-covering, made them rise from 1.30 DM/m<sup>2</sup> to 8.50DM/m<sup>2</sup>, in 1991 (Gormsen and Kühne, 2000). The real estate prices in the residential sector also increased, since housing shortage became a dragging problem in terms of missing quantity as well as quality. The widespread fear of never-ending rent increases added to general uncertainty (Gormsen and Kühne, 2000). In 1990, 196,000 housing units (76%) out of 258,000 in total needed wide-ranging refurbishments. Many of them, primarily Gründerzeit houses, have been in disastrous structural conditions and did not have sanitation facilities included, neither modern heating infrastructures (Stadt Leipzig, 2005a). Leipzig has a very high Wilhelminian building stock: 45 out of 100 houses are Wilhelminian constructions, in comparison to 19 out of 100 houses in the average German city of the west (Kabisch, 1996). After reunification, the government immediately saw a need in the protection of the Gründerzeit housing stock (Stadt Leipzig, 2005a). In 1992, it had been agreed on 13 redevelopment areas, which contained 505 ha of the city's area. Those redevelopment areas were mainly financed by housing promotion funds of the federal state of Saxony and the joint program of the federal government and state for urban development strategies (Stadt Leipzig, 2005a). Leipzig got the federal state's agreement to determine redevelopment areas, partially ten times bigger as first prescribed by the free state Saxony, due to the omnipresent problem (Stadt Leipzig, 2005a). Still, redevelopment and residential construction only proceeded slowly, caused by unclear property rights and missing institutional frameworks (Choa, 2007). Therefore, many investors that time focused on construction activities in the commercial sector, like suburban shopping malls, making use of the weakened bureaucracy (Nuissl and Rink, 2003). Concerning the social reality in 1989, no clear facts on the socio-spatial situation of Leipzig during the GDR-period existed. Small-scale research after 1989 on the inner east, the Waldstraßen quarter and western industrial areas like Plagwitz showed that some kind of educational segregation existed in the former GDR, between better educated citizens in the new constructed modular buildings and lower educated in the old housing neighborhoods. After the reunification, those former working class districts were represented by above average numbers of unemployed (Steinführer, 2004). Following estimations on income structures, 40 out of 100 households had a claim for social housing. At the same time 10,000 apartments were absent in 1993 and the city did not have big financial means for large rehabilitations. The selling of municipal housing properties should help to fill the municipal coffers (Kabisch, 1996).

Phase II (1994 - 1997) was characterized by special tax depreciations (following § 4 FörderGG) and other tax benefits for private investors, triggering a construction and purchase boom in the real estate sector. In 1997 this boom had reached its peak and Leipzig carried the title of "Boomtown Leipzig". Thereby, capital investors from the west, rather focused on short-term tax benefits than on the location or the quality of buildings (Choa, 2007). Apartments created that time, often did not follow the needs of Leipzig's housing market, but rather tried to address the wealthy middle class. Often new apartments and houses have been constructed at the urban fringe, where required areas were easily available (Nuissl and Rink, 2003; Stadt Leipzig, 2005a). Simultaneously, hundreds of big property developers accumulated capital by buying existing objects and selling single units again to investors. Those as well were mainly investors from the old West German states, who were more experienced in juridical and financial terms, but equally less interested in the rental business and the neighborhoods (Stadt Leipzig, 2005a). This huge transfer in ownership left only a little amount of housing units available for locals. Moreover, Leipzig's housing market developed more and more into a "tenant market", as rents decreased steadily, making the purchase of apartments again less attractive (Steinführer, 2004). Combined with socioeconomic and environmental drivers, these processes fueled suburbanization: citizens moved into new constructed buildings at the edge of the city, searching for higher living quality and western standards (Nuissl and Rink, 2003). The city tried to tackle those problems by the strategy of "gentle urban renewal" (Behutsame Stadterneuerung), which aimed the counseling of Leipzig's citizens in terms of self maintenance, property acquisition and awareness for Gründerzeit buildings as well as the further rehabilitation of the old building stock (Stadt Leipzig, 2005a).

Phase III (1998 - 1999) was introduced by the stagnation of the construction boom, since special tax depreciations (following § 4 FörderGG) expired. Rehabilitation activities of the housing stock continued further, because depreciations due to historic preservations were still profitable and one third of Leipzig's Gründerzeit houses were still unrefurbished (Choa, 2007). However, the inner city neighborhoods had reached higher living quality, due to refurbishment efforts of the past years and the attractiveness between the inner core and the periphery had leveled out (Nuissl and Rink, 2003). Especially during the 90s, combined with smaller incorporations in 1979 and 1984, Leipzig regained around 15000 ha until 1999 by incorporating further suburbs (Gränitz, 2013). But although the amount of residential suburbanization had stagnated in 1997 for the first time since 1989, the extend

of population loss became visible in 1999: excluding the further incorporation, Leipzig counted 100.000 inhabitants less compared to 1989 (Nuissl and Rink, 2003; Stadt Leipzig, 2005a). Moreover, in 1998 the most import special regulations and funds (Solidarpakt I) for East Germany expired, also some continued until 1999, due to a new investment allowance law (Solidarpakt II). From 1991 to 2000, Leipzig was able to make use of 287 Mio. Euro of urban development funds, still further investments in urban development were unavoidable in 2000 (Glock, 2006).

At the end of the decade (Phase IV - 2000) construction boom and the rehabilitation measures, combined with the population shift, have led to an oversupply of housing. The rents decreased and Leipzig's tenants had free choices for neighborhoods and building types (Choa, 2007). But the freedom of choice also showed negative impacts concerning social structures, local economies and urban development. Leipzig was becoming a perforated city: people able to move left for better homes until the city became partially segregated (Choa, 2007; Steinführer, 2004). Growth and shrinkage from now on happened side by side, what Doehler and Rink describe as "city of two velocities" (1996, p. 284). The need for governmental control became urgent again, this time because of high vacancy rates. Vacancy rates differed strongly depending on the type and the age of housing units. Mainly old, not yet refurbished houses stood vacant, although a tendency towards the quitting of large housing blocks already become visible (Choa, 2007). The housing market of Leipzig consisted now of different submarkets: the prefabricated housing blocks were mainly owned by public housing associations or cooperatives, while the major part of old houses was reprivatized. Those private actors (old owners, capital investors and professional owners) built a heterogeneous group and their interests and intentions were hardly predictable for urban planning (Steinführer, 2004). High vacancy rates triggered widespread discussions on the new "vacancy capital" and the government organized a city workshop to discuss the further handling of the programs "gentle urban renewal" and "new Gründerzeit" and elaborated a city-wide development plan for housing and urban renewal (STEP W+S) (Stadt Leipzig, 2015a, 2005a).

In 2002, (Phase V - "Stadtumbau") the Stadtumbau Ost (urban redevelopment east) started with the focus on dismantling and upgrading. The joint program of federation and state was initiated to react on high vacancy rated in eastern German cities. By implementing the program it was intended that half of the funds were used for demolition and dismantling measures and the other half for upgrading (Rößler, 2010). The Stadtumbau Ost was a distinctive program in the history of urban development in Germany and in the following years, 13,000 apartment units had been dismantled in Leipzig (Stadt Leipzig, 2015a). During the last years, funds for urban (re-)development had decreased steadily for the 14 redevelopment areas and Leipzig's financial situation worsened, making difficulties

related to municipal co-payments omni-present (Stadt Leipzig, 2005a). The government had to make use of a new mix of funding instruments: integrated funds like Soziale Stadt, URBAN II and ERDF were applied for different action fields. Thereby, focus areas with high inputs of funds were from now on Leipzig east, Leipzig West and Grünau (Stadt Leipzig, 2005a). The renewal philosophy of the EU counted besides constructional measures on the improvement of living quality and economic development, and in the following years, high quantities of ruins and brownfields were transferred into urban green (Stadt Leipzig, 2005a). Besides redevelopment areas, Leipzig was making use of the historic preservation program (Städtebaulicher Denkmalschutz). Main preservation areas were since 1995 the inner city and the Waldstraßen neighborhood and since 2001, the Bachstraßen neighborhood and the inner eastern city. Simultaneously to state-led programs, Leipzig's citizens initiated new forms of interim and subsequent use. A famous example is the establishment of Wächterhäuser (guardian houses) by the association Haushalten e.V.. They aimed to link vacant buildings and creative users, that were able to make use of the given space by protecting and maintaining the building at the same time. Those guardian houses mainly developed in Leipzig east, west and north over the years (HausHalten e.V., 2017).

After 2001, the number of inhabitants started to increase again for the first time since the 1960s.

Due to immigration gains the city has been approaching half a million inhabitants in 2004 (see fig. 6). Especially areas already undergone redevelopment and "Stadtumbau" programs were characterized by very positive immigration (Stadt Leipzig, 2005a). Still, 64000 apartments stood vacant in 2002, which comprised 20% of Leipzig's total apartments (Stadt Leipzig, 2009). Low rents and good infrastructures as well as centrality turned

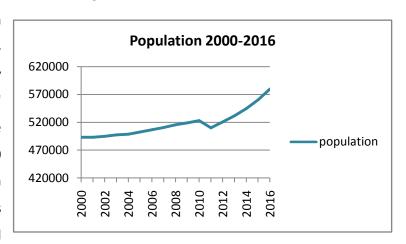


Fig. 6: Demographic development of Leipzig from 2000 to 2016 - author's illustration, data source: (Letzel, 2016; Stadt Leipzig, 2017a)

individual neighborhoods increasingly attractive for students and families. Immigration into those neighborhoods led to an increase of the education level and a rejuvenation of the residential structure.

As Haase and Rink argue (2015), Leipzig's development cannot be classified by one single theory or concept: During the 90s, shrinkage and upgrading happened simultaneously, like during the years of 2000 gentrification and reurbanization processes did. Since 2000, the concept of reurbanization was used by media and politics to explain the new inner-city transformation, whereby after 2010 the

public observed ongoing neighborhood changes more critically and the concept of gentrification seemed to be adequate for neighborhoods like the Waldstraßen quarter and the Südvorstadt (Haase and Rink, 2015; Wiest and Hill, 2004). At the same time, Wiest and Hill (2004) noted an ethical segregation proceeding in the eastern neighborhood Neustadt-Neuschönefeld, whereby the future outcome was hardly predictable. Different to many western cities and related to Leipzig's story of shrinkage, Leipzig did not experience gentrification processes during the 90s. That time, only constructional upgrading processes took place, since the group of high income population was not as strong as in Western cities and possible gentrifiers got absorbed by the suburbs (Choa, 2007). Scholars like Hill and Wiest (2004, p. 362) talked that time about a "soft gentrification" proceeding in Leipzig, since certain neighborhoods have been upgraded, but rental apartments have not (yet) been transferred into condominiums and established residents have not been pushed out.

## 4.1.3 Leipzig Today

During the last decade, Leipzig was able to manage the high vacancy rates and the reverse the loss of function and image in many neighborhoods. The city still receives funds, like Soziale Stadt and ERDF for selected areas, whereby the focus has shifted over the years from the inner city and the south to the western and eastern neighborhoods. Reurbanization has become an uncontroversial phenomenon in Leipzig, as apartments become scarcer in every district. Since 2011, Leipzig was able to register an annual growth rate of 9,000 - 12,500 people and vacancy rates have halved from 40,000 flats in 2011 (12%) to 19000 flats in 2015 (6%), whereby the active market vacancy rate only counted 3% (Stadt Leipzig, 2017b, 2015b). In 2016, Leipzig counted 579,530 inhabitants and had a migration gain of 13,193 people (id.). This population increase took mainly place in the age categories from 25-35, 6-18 and 35-45 year old, which means that especially young people are attracted by the city. Moreover, the dynamic population growth influenced once again activities on the supply side of the housing market: in 2015, 1837 apartments had been finalized and 2,286 building permits have been granted (compared to 1,064 and 848 in 2012) (Stadt Leipzig, 2017b). Moreover, the government is following new strategies related to housing, since demographics changed enormously. In the housing policy concept (Wohnungolitisches Konzept) and the STEP W+S, the city administration mentions objectives like supporting the new Gründerzeit further, maintaining and creating affordable housing for low-income households and simultaneously it promotes townhouses (Stadthäuser) for higher income owner-occupiers. The increase in living quality aims also to lead to higher competiveness with other German cities. As overall guiding principle, the government's publications name the sustainable growth of Leipzig in terms of social, economic and ecologic aspects, whereby the target of affordable housing for everyone, increased competiveness in

the housing sector and the energetic restoration, as many others, could lead to trade-offs (Stadt Leipzig, 2015b, 2011).

It is important to emphasize, that tendencies and numbers mentioned here, differ highly depended on the neighborhood. In the following chapter on Leipzig east it will be clarified in detail, how actual vacancy rates, population increase and actual rents differ on a small-scale level and related maps will be presented.

## 4.1.4 Green Leipzig

The natural environment of Leipzig and the high amount of green, represent an important puzzle piece for the understanding of the city's identity. It has unique natural landscapes, like the enormous meadow system that stretches from the northern to the southern urban area. Many protected and rare species live in Leipzig's Auwald (riverside forests) (Haferkorn, 1996). In spite of long urban development, Leipzig could maintain important natural areas and today, especially residential neighborhoods in the southern and western part profit from the proximity to those. Nevertheless, during the last century, Leipzig's natural green was threatened by industrialization and population increase. In 1990, Leipzig was far away from ecological oriented development. Still, Breuster (1996) argues, that time eastern German cities had the unique opportunity to follow a new path of ecological development, without repeating western cities' mistakes. Since the 1990s, green infrastructures changed a lot and changing demographics as well as related vacancies offered new chances for urban green. Moreover, urban green became a leading strategy for Leipzig's reconstruction in times of shrinkage (Stadt Leipzig, 2012). Therefore, the city of Leipzig developed in 1999 a certain instrument to guarantee and simplify interim uses, e.g. gardening projects, called Gestattungsvereinbarung (Rink and Behne, 2017). In the period of Stadtumbau Ost, around 300 of those interim agreements have been made, with a minimum duration of 10 years. Today, many of those agreements have already expired and empty lots are used for new constructions, responding to the increasing influx into Leipzig (Rink and Behne, 2017). Moreover, after the transformation the city administration had to develop several new plans. The preparation of Leipzig's first land use plan (Flächennutzungsplan) proceeded in 1993, followed by the first, but outstanding landscape plan for the city in 1994, which was renewed in 2013 and contains all information on the development potential of open spaces and their recreational function (Breuste, 1996; Stadt Leipzig, 2017c). It has different concepts integrated. The integrated development concept (IEKO) defines targets and objects of protection and highlights competing spatial demands (Stadt Leipzig, 2017d; Stadtplanungsamt, 2009). Moreover, the concept of compensatory areas prepares the governance of compensatory measures in urban redevelopment areas by giving recommendations for potential development of compensation areas (Rößler, 2010). Leipzig supports several sustainable strategies

for example the Leipzig Agenda 21 and the alliance for biodiversity and wrote concepts for a low-traffic inner-city and the promotion of cycling (Stadt Leipzig, 2013c). The government counts increasingly on high living quality in the city and in 2013, 3.4 % of the urban area were public green. This number excludes allotments, forests and municipal cemeteries. In 2017, the city of Leipzig presented for the first time an "open space strategy" (Freiraumstrategie), which addresses all green and blue infrastructures and includes all places that are not built-up and mainly unsealed. It proposes ideas for the further linkage of open spaces and the connection of residential areas with green and open spaces. Further it targets the improvement of green spaces in certain neighborhoods (Stadt Leipzig, 2017e).

The guiding principle for the city is traditionally the maintenance of its "Ring-Radialen-System" (ring-radial system). Three different rings characterize the city of Leipzig (Rößler, 2010; Stadtplanungsamt, 2009):

- 1. The Promenadenring, which encloses the inner city core
- 2. The urban or middle ring, which lies between the densely built core city and less dense neighborhoods of the suburbs. This ring links big green spaces as e.g. the northern and southern Auwald
- 3. The urban-rural-ring, containing and linking agrarian landscapes, forests and lakes as well as opencast mining landscapes

Radial elements, were traditionally streets, railroads and linear industrial zones, which linked Leipzig's center and old town to the surroundings (Scholz, 1996). Today those infrastructural elements offer a high potential to be transferred into linear parks, offering new links between periphery and core city.

Especially Leipzig east is targeted for improvements within the next years, also since linkages with Leipzig's ring-radial system are badly developed. In fact, the German average on green supply per inhabitant is fulfilled in Leipzig (15.9m² per inhabitant), but it's neighborhoods show still an unequal distribution of green (Stadt Leipzig, 2013c). Leipzig's inner east contains many neighborhoods, like Neustadt-Neuschönefeld, Volkmarsdorf and partially Reudnitz and Anger-Crottendorf, which are traditionally planned and constructed for dense population and mixed used. Especially those are in focus for the further linkage with open spaces and green infrastructure, whereby railway and industrial sites becoming fallows offering a new chance for conversion (Stadt Leipzig, 2013c, 2005b).

# 4.2 Context: Leipzig East

As described briefly in the context of Leipzig's history, the neighborhoods of Leipzig's inner east took in many terms a different development path than other quarters in Leipzig. Therefore, they need to be observed in more detail, since processes happening here cannot be explained on city level. Further, those neighborhoods joined together to the concept of Leipzig east provide very different local qualities, which makes a careful handling of the concept necessary. The term Leipzig east is an artificially produced concept, uniting a heterogeneous set of neighborhoods in the inner east, which are benefitting from the same public funds (Stadt Leipzig and Amt für Statistik und Wahlen, 2014). Due to selective redevelopment measures, differentiated profiles of the quarters even carved out increasingly (Wiest and Hill, 2004). Following the STEK LeO, Leipzig east comprises the following Graphisches Viertel, Lene-Voigt, Rosa-Luxemburg-Straße, Volkmarsdorf Süd, Reudnitz, Rabet, Anger-Crottendorf, Gregor Fuchs Straße, Wurzner Straße Süd, Wurzner Straße Nord, Bülow quarter, Volkmarsdorf Nord, Neustädter Markt, Wichernstraße, which belong to the official districts east and southeast (see also fig. 8) (Stadt Leipzig, 2013b). This heterogeneous area comprises 340 ha and is today characterized by high amounts of Gründerzeit architecture and low rents (Stadt Leipzig, 2017f). Since the concept of the inner east does not correspond with the official district east, statistics will be sourced if possible from quarter or neighborhood level. The mentioned neighborhoods of Leipzig's inner east have been part of the city since 1889 and have a long tradition as industrial and railway neighborhoods, where the working class settled between 1870 and 1910 (Kulturbund der DDR, 1990, p. 53). Still today, Leipzig east is hardly comparable to other neighborhoods of western or southern Leipzig, concerning the image and problems facing as well as new dynamics. Economic, social and environmental indicators lie below the urban average and important social and cultural infrastructures are missing (Stadt Leipzig, 2013a) At the same time, the inner eastern neighborhoods registered a very high influx during the last years especially of young people and students (Stadt Leipzig and Amt für Statistik und Wahlen, 2016).

## 4.2.1 Urban Planning Leipzig East

The neighborhoods of Leipzig east moved into the focus of urban reconstruction after the year 2000, whence they are undergone a rapid and steady change due to the integrated funds (see fig. 7). Only Neustädter Markt and Reudnitz were already during the 90s declared as redevelopment areas, since high amounts of Gründerzeit houses were threatened by collapse (Stadt Leipzig, 2013a). Still, the government mentions many challenges related to the area Leipzig east. The bad image remained - it could not change as fast as reconstruction programs proceeded. The neighborhoods surrounding the Eisenbahnstraße, are still famous for high crime rates, often related to drug trafficking, reproducing

the bad image of Leipzig east in the media. Compared to other districts, the east has still an over-average stock of unrefurbished buildings (Stadt Leipzig, 2013a). Especially along the Eisenbahnstraße, some of them are used for housing projects and *Wächterhäuser*, since no investors had been interested yet (HausHalten e.V., 2017). Next to vacant buildings and housing projects, the city started to promote townhouses (e.g. around the park Rabet) to attract wealthy owner-occupiers, representing a neighborhood of contrasts. (Stadt Leipzig, 2011).

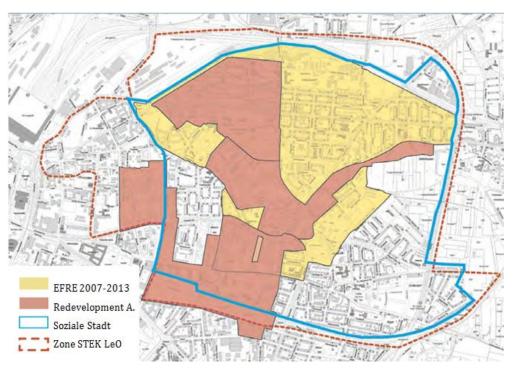


Fig. 7: Map of assisted areas in Leipzig east - source: (Stadt Leipzig, 2013b, p. 9), author's translation

Neighborhoods like Volkmarsdorf and Neustadt-Neuschönefeld have a three times higher rate of people with migration background and higher unemployment rates than the average of Leipzig, whereby the government sees the strong need for social intercultural and support (Stadt Leipzig,

2013b). The STEK LeO of 2013 therefore developed a wide-ranging catalog of measures, planning coordinated approaches on quarter-level. Thereby the government relies on strategies to reinforce the local economy, improve the interurban connectivity, develop the education infrastructure and to invest in a future-oriented housing-profile and location qualities. The different quarters are therefore grouped into six categories, which indicate the main action strategy (see fig 8) (Stadt Leipzig, 2013a). The table indicates again, how heterogeneous population and constructional conditions in the eastern quarters are. While quarters like e.g. the Lene-Voigt Park underwent a very positive development as well as an image transformation since the years 2000, e.g. Rabet and Reudnitz still need further marketing for the better popularity of site qualities. Quarters like the Bülow quarter have residents with high degrees of engagement and owner-initiatives that need to be supported. Those residents also initiated the idea of the Parkbogen Ost. Other parts on the contrary (Kreuzstraßen quarter, Volkmarsdorf Süd) need a stronger enforcement of its population and social infrastructures. Still, in spite of high diversity, overall aims for the total inner east exist, like the

development of an image as good residential area. Thereby the improvement of connectivity plays an important role, since especially professionals of surrounding research institutes and companies should be attracted by the sites (Stadt Leipzig, 2013a). This year, the annual "day of urban development promotion" focused on Leipzig east, which again indicates the high actuality and interest in processes and changes in the area. The city administration has different impulse projects on the agenda, which intend to influence the whole area long-lastingly, like e.g. the development of a neighborhood center in the old fire department, the reopening of a theater and the mega project Parkbogen Ost.

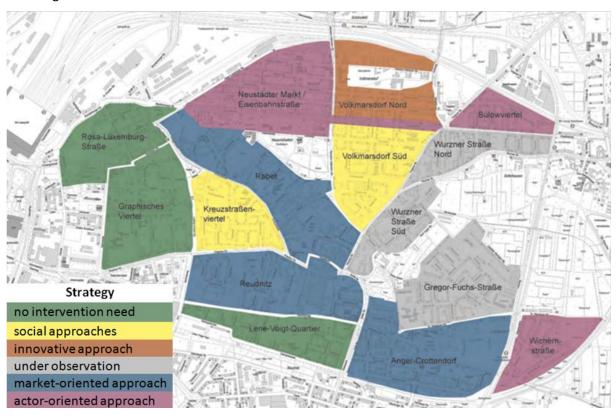


Fig. 8: Neighborhoods of the inner east and related strategic approaches of the city administration source: (Stadt Leipzig, 2013b, p. 63), author's translation

# 4.2.2 Housing Market and Rental Trends

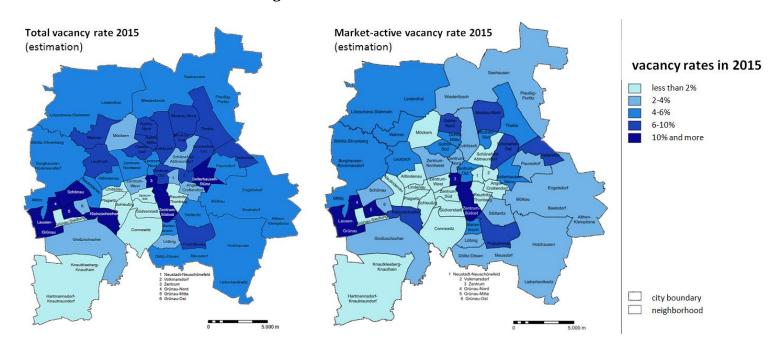


Fig. 9: Comparison of vacancy rates and market active vacancy rates in Leipzig - source: (Stadt Leipzig, 2017b, p. 28), author's translation

The housing market of Leipzig east is strongly linked to trends of the city's housing market. Leipzig's housing market is often referred to as tenant market, since statistics of the year 2000 proof that less than 10% of the inner urban apartment stock is used by owner-occupiers (Steinführer, 2004). As population increased and reurbanization proceeded, it is often argued that mainly the inner eastern

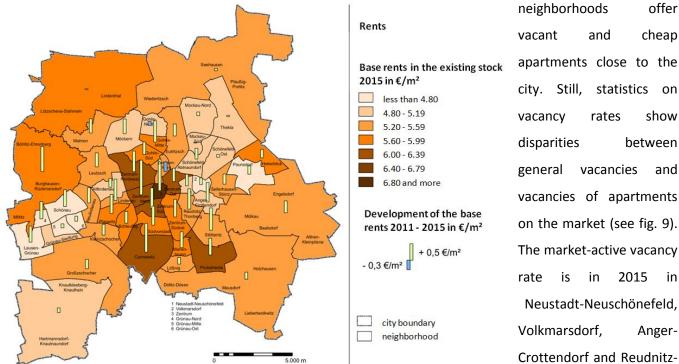


Fig. 10: Base rents in Leipzig 2015 - source: (Stadt Leipzig, 2017b, p. 34), author's translation

neighborhoods offer and cheap apartments close to the statistics on rates show between general vacancies and vacancies of apartments on the market (see fig. 9). The market-active vacancy 2015 in Neustadt-Neuschönefeld, Volkmarsdorf, AngerThonberg by less than 2% and only Sellerhausen-Stünz has a rate of more than 4%. Base rents for the existing stock (Bestandsmieten) are still low in the eastern neighborhoods, especially in Volkmarsdorf (below 4.80 €/m²) and Neustadt-Neuschönefeld and Anger-Crottendorf (between 4.80 and 5.19 €/m²) and high increases can be mainly registered in Reudnitz-Thonberg and Anger-Crottendorf (see fig. 10).

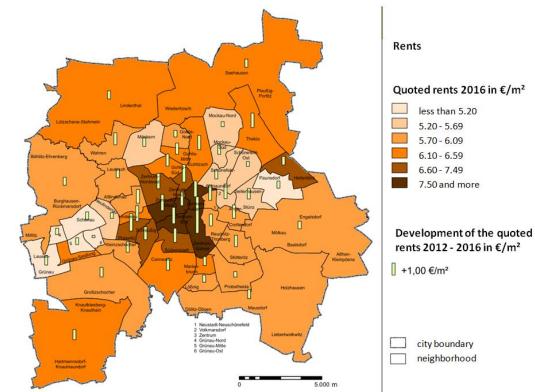
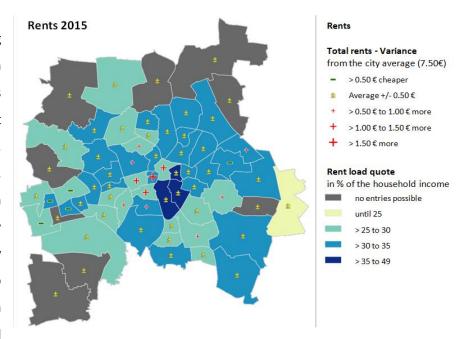


Fig. 11: Quoted rents in Leipzig 2016 - source: (Stadt Leipzig, 2017b, p. 37), author's translation

Therefore, extreme discrepancies between west and east, as well as south and east exist. The same corresponds to quoted rents (Angebotsmieten), although the inner east is slightly more expensive than the remoter north-east (see fig. 11). But although rents are comparably low in Leipzig east, they represent high burdens for the residents. Especially in Neustadt-Neuschönefeld and Reudnitz-Thoneberg, where high amount of low-income households live (e.g. unemployed or students), the total rent represents a share of more than 35% of the total household income (see fig. 12). The housing market in Leipzig east is very heterogeneous: big municipal housing companies like the LWB and housing cooperatives are represented as well as private landlords (Stadt Leipzig, 2017b). Moreover, also the spectrum of building types and ages is very big. Especially, Reudnitz-Thonberg, Volkmarsdorf and Neustadt-Neuschönefeld have very high amounts of Gründerzeit houses (more than half of the total apartment building stock). In Anger-Crottendorf and Sellerhausen-Stünz the amount of buildings from the time between the world wars is equally high. In Sellerhausen-Stünz only one fifth of the buildings are Wilhelminian (Stadt Leipzig and Amt für Statistik und Wahlen,

2016). Concerning construction activities in the last years, Leipzig's inner east could not compete with other areas. Between 2011 and 2015, construction activities in the housing sector mainly took place south of the city center, from Plagwitz to Probstheida as well as in the northern neighborhood Gohlis (Stadt Leipzig, 2017b). Thereby high



**Fig. 12: Rent load in Leipzig 2015 source:** (Stadt Leipzig and Amt für Statistik und Wahlen, 2016, p. 339), **author's translation** 

numbers of construction events have been related to the transformation of former factories to high-class apartments. Activities in the housing sector in the inner eastern neighborhoods were mainly related to refurbishment of houses. An exception is the neighborhood Reudnitz-Thonberg, where only in 2014 34 new apartment buildings had been constructed, mainly as infill development (id.). Moreover, the structure of newly built apartment types is changing, not always corresponding with the type of household existing in the neighborhood. Leipzig east has, as the other inner urban neighborhoods, high amounts of single households, whereby the number of single households increased between 2011 and 2016 by 20%-40% (Stadt Leipzig, 2017b). Although no individual numbers for the eastern districts are available, total Leipzig has high amounts of 3- and 4-room apartments and fewer amounts of single-room apartments. Still, the largest changes in the existing stock between 2011 and 2015 took place in the segment of single-room apartments (+6%) and 5+room apartments (+3.5%) (id.).

#### 4.2.3 Socio-spatial Developments

Social conditions and developments are important to mention in relation to urban strategies and housing trends. Still, general statements on numbers and trends for Leipzig east are difficult to name, since high differences on small-scale, depending of the definition of quarters, exist. The yearly published district catalogue (Ortsteilkatalog) of the city administration presents diverse social indicators on the structure of population related to education, employment, age, health as well as indicators concerning infrastructures as well as appreciated living conditions in the neighborhood.

Two tables in this chapter aim to give a brief overview on social trends in the six focus neighborhoods (tab. 3) and residential structures in the explicit quarters (tab. 4).

**Tab. 3: Relevant statistics for the inner eastern neighborhoods from 2012-2015 source:**(Stadt Leipzig and Amt für Statistik und Wahlen, 2016)

Neighborhood	2012	2013	2014	2015	Development 2012-2015	Comparison to total Leipzig	
	•	-1	Population	•	1	1	
Neustadt-Neuschönefeld	10.006	10.618	10.982	11.561	+15.5%		Development in Leipzig
Volkmarsdorf	8.451	8.979	9.937	10.991	+30.1%	+7.4%	
Anger-Crottendorf	9.795	10.052	10.551	11.024	+12.5%		
Sellerhausen-Stünz	7.706	7.865	8.198	8.700	+12.9%		
Reudnitz-Thonberg	18.717	19.291	19.922	20.546	+9.8%		
	•	•	Average age	'	-	-	
Neustadt-Neuschönefeld	36.6	36.2	36.1	35.6	- 1.0 years	43.2 years	
Volkmarsdorf	39.0	38.3	37.4	36.3	- 2.7 years		In Leipzig 2015
Anger-Crottendorf	39.1	38.9	38.4	37.9	- 1.2 years		
Sellerhausen-Stünz	50.0	49.2	48.4	47.0	- 3.0 years		
Reudnitz-Thonberg	38.0	37.6	37.3	37.1	- 0.9 years		
	•	SGB	II - public aid m	noney	-	-	
Neustadt-Neuschönefeld	35.3 % -	33.5 %	31.4 %	29.1 %	- 6.2 %-points	15.6 %	Ratio in Leipzig 2015
Volkmarsdorf	44.0 %	44.3 %	39.9 %	38.2 %	- 5.8 %-points		
Anger-Crottendorf	27.1 %	25.6 %	23.9 %	21.4 %	- 5.7 %-points		
Sellerhausen-Stünz	24.4 %	23.4 %	21.9 %	20.6 %	- 3.8 %-points		
Reudnitz-Thonberg	19.8 %	19.0 %	17.4 %	16.5 %	- 3.3 %-points		
	•	Residents v	vith migration	background	-	1	II.
Neustadt-Neuschönefeld	30.5 %	32.2 %	33.5 %	34.4 %	+ 3.9 %-points		
Volkmarsdorf	31.0 %	32.5 %	35.5 %	39.0 %	+ 8.0 %-points		l ej R
Anger-Crottendorf	11.7 %	12.0 %	13.3 %	14.6 %	+ 2.9 %-points	12.3 %	Ratio in Leipzig 2015
Sellerhausen-Stünz	6.9 %	8.1 %	8.8 %	12.1 %	+ 5.2 %-points		
Reudnitz-Thonberg	13.0 %	13.8 %	14.3 %	15.6 %	+ 2.6 %-points		

What all neighborhoods in Leipzig's inner east have in common is a strong population growth rate and at the same time the average age in those neighborhoods declined (see tab. 3). Especially, Volkmarsdorf registered a population increase of more than 30% between 2012 and 2015, whereby total Leipzig grew in average by 7.4 % in the same period. The major part of that influx in Volkmarsdorf is due to immigration from outside of Leipzig, while inner-city influx to and exodus from the neighborhood have an equal share in 2015 (Stadt Leipzig and Amt für Statistik und Wahlen, 2016). The neighborhoods Neutsadt-Neuschönefeld, Volkmarsdorf and Reudnitz-Thonberg had a strong influx of students, so that they counted in 2016 a much higher share than Leipzig's average (16.1%; 8.7%; 10% in the same order) (Stadt Leipzig and Amt für Statistik und Wahlen, 2016, 2012). In addition Leipzig east is often associated with high shares of foreigners, whereby the migration background is often correlated to the educational performance: indeed do Neutsadt-Neuschönefeld (34.4 % in 2015) and Volkmarsdorf (39.0 % in 2015) have a very high proportion of people with

migration background. Still, eastern neighborhoods like Anger-Crottendorf and Neustadt-Neuschönefeld just register shares slightly higher than Leipzig's average and Sellerhausen-Stünz even lies below (see tab. 3).

Tab. 4: Population structures of the inner eastern neighborhoods

Concerning education and employment rates, Leipzig east has a rather bad reputation, whereby especially Neustadt-Neuschönfeld Volkmarsdorf stand out: The number of people without completed vocational training lies by 8% in the total Leipzig. In Neustadt-Neuschönfeld and Volkmarsdorf, the numbers are much higher (22.2% and 18.5%) (Stadt Leipzig, 2013a). Further, the share of people receiving public transfer aid in 2015, is in all inner eastern neighborhoods above Leipzig's average (15.6%),but particularly in Neustadt-Neuschönfeld (29.1%) Volkmarsdorf (38.2%) (Stadt Leipzig and Amt für Statistik und Wahlen, 2016). The STEK -

Quarter	Population Structure
Graphisches Quarter	Mixed residential structure: majority of socially and economically well established households, partially segregation due to diverse rents in the quarter
Lene-Voigt Quarter	Mainly socially and economically well established households, students and young families mixed with a high amount of long-established residents.
Reudnitz	Mixed residential structure: students, young families, seniors, migrants - high amount of economically well established households.
Kreuzstraßen Quarter	Many seniors from the first-occupation generation, predominant low-income households, low demand for the quarter
Volkmarsdorf Süd	Mixed age structure, many residents from the first-occupation generation in the 80s, migrants, mainly low income households - some need social assistance.
Rabet	Mixed residential structure with students, young families, seniors, migrants - some economically well established households, but mainly low and average income.
Anger- Crottendorf	Very heterogeneous residential structure.
Gregor Fuchs Straße	Many seniors from the first-occupation generation - upcoming generation change, low demand by young families
Wurzner Straße Süd	Mixed residential structure with predominant socially deprived and low income households. High amount of public transfers recipients
Wurzner Straße Nord	Predominant socially deprived and low income households. High amount of public transfers recipients and high rate of migrants
Bülow Quarter	Over average young residential structure, students, increasing demand for the neighborhood, still high amount of low income households and of public aid recipients
Volkmarsdorf Nord	Over average young residential structure, high rate of people with migration background, high fluctuations and immigration from other districts, predominant socially deprived and low income households, high amount of public aid recipients
Neustädter Markt	Over average young residential structure, high rate of people with migration background (as tenants, traders and investors) predominant socially deprived and low income households, high amount of public aid recipients, characterized by influx of low income households and inner-urban exodus.
Rosa Luxemburg Straße	Low residents

LeO points out that children are statistically highly disadvantaged in the eastern neighborhoods: almost 70% of the children under 18 years old receive social benefits (Stadt Leipzig, 2013a). Moreover, the fact that since 2002 no Gymnasium exists in the inner eastern neighborhoods, complicates the educational situation further and might minimize the attraction of the area for academic or education conscious families. Still, the east has a strong network of civic associations and cultural or social clubs. Those are often able to care for the residents needs on very local level and therefore replace infrastructures missing. Leipzig east has since 2010 a government-led quartermanagement (QM), who tends to network and mediate between different resident groups and finally to monitor recent developments.

It becomes evident, that neighborhoods like Volkmarsdorf and Sellerhausen-Stünz are hardly comparable in terms of social indicators. This impression is reinforced by the table 4, which categorizes the different quarters by resident structures. Nevertheless, the concept of Leipzig east comprises a dynamically growing area, which moved into the focus of students as well as families.

### 4.2.4 Greening in Leipzig East

Although Leipzig's inner east is missing the connection to the natural Auwald and Leipzig's lakes and waterways, it has important green and open spaces, whereby many of those developed during the 2000s. Specific aims for Leipzig's inner east of the 2000s were: the permanent increase of public green, new green connections by the central Rietzschkeband, the finalization of the Eilenburger Bahnhof park (today's Lene-Voigt Park), greening and linking of the northern railway tracks and the small-scale greening and maintenance of newly vacated lots (Rößler, 2010). The guiding principle for the redevelopment area Leipzig East, was to have different zones of concentration and perforation, following the model of "Nucleus and Plasma" (Rößler, 2010, p. 330). High vacancies and local demand made the target clear to preserve Gründerzeit areas and equally build free green spaces for higher living qualities (Rößler, 2010).

In 2017, the inner east has several types of green structure, in different neighborhoods, offering a large variety of qualities. The Lene-Voigt Park in Reudnitz-Thonberg, which was finally opened in 2004, is a typical linear park, offering an east-west connection and several areas for children, sports and even gardening (Stadt Leipzig, 2005b). Further, the adjacent railway lane of Anger-Crottendorf extends the linear park, but is narrower than the Lene-Voigt Park and represents therefore only a cycle- or footpath (id.). In Neustadt-Neuschönefeld, the already existing community park Rabet was enlarged by almost 3 ha and serves today as a leisure and recreational area directly next to the busy Eisenbahnstraße. Together with the dismantling area at the Wurzner Straße, named "Dunkler Wald" (dark forest) in Volkmarsdorf and "Lichter Hain" (sparse grove) in Sellerhausen the Rabet is forming the green Rietzschkeband. Other traditional parks and open spaces, which often have the size of a pocket park are the Reudnitzer Park, Stephaniplatz, Bernhardiplatz and the Elsapark (Stadt Leipzig, 2005b)

# 4.3 Portrait of the Project: Parkbogen Ost

The Parkbogen Ost is an ambitious project of the city of Leipzig, that aims to become a long stretched linear park, surrounding the inner eastern city and represents the object of research in this thesis. It is called Parkbogen, since the park will have a curved form, building a circle green strip connecting the neighborhoods Reudnitz, Anger-Crottendorf, Sellerhausen-Stünz, Schönefeld, Volkmarsdorf and Neustadt-Neuschönefeld with Leipzig's Central Station (Parkbogen Ost = park arch east). The master plan of the Parkbogen Ost is embedded in the principle idea of the *Leipzig Charta* of 2007, which aims to reformulate the idea of urban planning and urban development in European cities (Bundesministerium für Umwelt, Naturschutz, 2007; Stadt Leipzig, 2016).

## 4.3.1 Background

The idea to the Parkbogen Ost, first time evolved when the closure of the viaduct in Sellerhausen-Stünz became foreseeable. That time engaged citizens of the district and nearby neighborhoods discussed the idea of converting the old train tracks into a path for bicycles and pedestrians. In 2010 the citizens' club of Sellerhausen addressed a letter to the city administration of Leipzig presenting the idea of an upper level park and cycle track. The decommissioning of the suburban train tracks was based on the construction of a city tunnel, making the over ground tracks obsolete. In 2012, the department for urban renewal and housing promotion (ASW) took up the two years earlier given idea, seeing the potential for the development of Leipzig east (Stadt Leipzig, 2016). The department saw a chance to tackle challenges of Leipzig's inner eastern neighborhoods, like poor connection to the city center, poor infrastructure of recreational areas and lower living environment quality. The city hoped the project could improve the image of Leipzig east and therefore increase the interest of the east as a living and working environment.

When the city tunnel of the Deutsche Bahn AG finally opened in 2013, the city organized "open Parkbogen Days", accompanied by diverse cultural activities, information stalls along the planned course and guided tours on the decommissioned train sites. Further in 2013 a working group was developed, consisting of relevant departments, local actors and was led by the ASW. The further process has been characterized by a steady exchange of departments involved: planning documents were evaluated, relevant sites were inspected and first explorative talks with numerous representatives were held. This planning phase was accompanied by the question whether ideas are practicable and land is available. Thereby, important talks were held with property owners, especially the Deutsche Bahn Real Estate Association, which still owns the major part of the future Parkbogen Ost. Further, negotiations with owners of the area of the former Postbahnhof and the former Thüringer Bahnhof took place. First results of these efforts were presented and discussed in form of a

citizen's workshop in April 2015. As part of the workshop, four working groups had been formed, discussing questions of the route network, open spaces, park types and additional projects on housing, business and infrastructure (Stadt Leipzig, 2016). Comments and ideas of engaged citizens were noted and included into the first conception of the master plan. The first design was again presented and discussed in a citizen's plenum in June 2015. Further testing of the legal and planning framework led step by step to the master plan in 2016, although still some uncertainties and the concrete course in the northern part were left open. In January of 2017, the master plan was finally adopted by the city council (Stadt Leipzig, 2016).

#### 4.3.2 the Master Plan

The Parkbogen Ost master plan presents several guiding principles and targets following the integrated urban development plan of Leipzig and the development plan of Leipzig East. The guiding principles emphasize the importance of the connectivity between green spaces, neighborhoods and paths, the driving force character and the civic engagement. Moreover, the project, as it aims to have a wide-ranging impact on several levels of urban life, has set twelve ambitious goals presented in table 5 (Stadt Leipzig, 2016).

Tab. 5: Defined targets for the Parkbogen Ost project-source: (Stadt Leipzig, 2016)

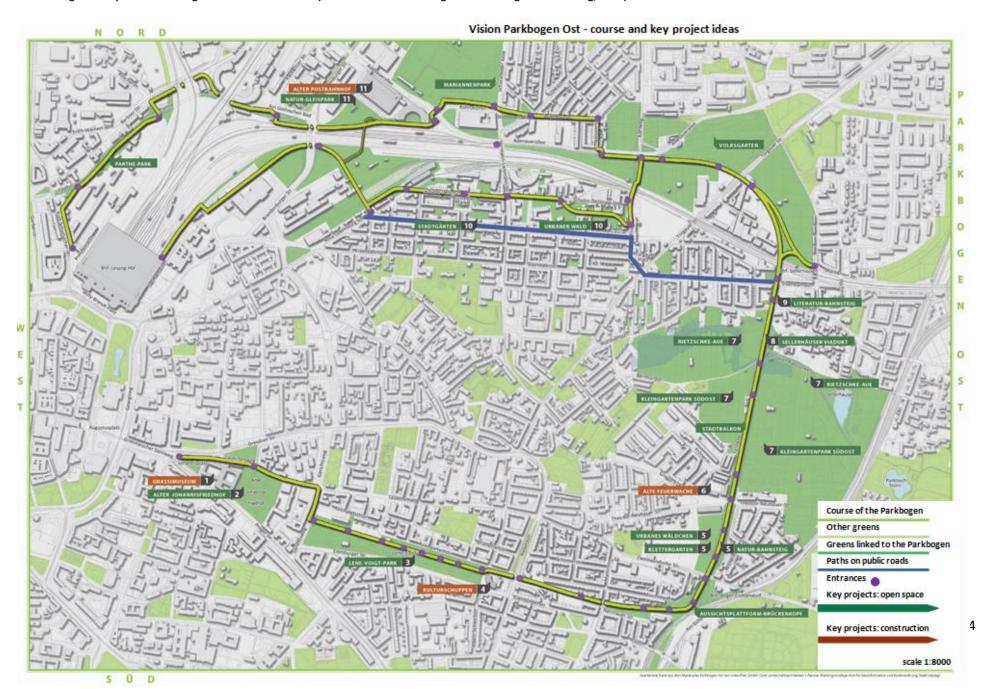
Indication	Function
1. green activity stripe	Using the chance to repair structural deficits and constructing a stripe for new forms of activities. The former barrier effect of tracks and fallow should be conquered. Pioneer and interim usage forms are welcome, if they help to prepare long-term use.
2. driving force for upgrading	The project Parkbogen Ost is seen as catalyst for upgrading concerning housing and business. Multifunctional projects aim to initiate a cautious further development of existing structures.
3. mobilization and participation	The Parkbogen Ost project intends to be seen as a city-wide approach. Therefore, it needs to be communicated as such. citizens, under the professional guidance of the city administration, should be activated and included into all phases of the project.
4. staging of monuments	The east of Leipzig holds several monuments, which tell the history of the district but haven't been easy accessible yet. The project aims to connect those monuments, making the city and industrial history an experience for everyone. Monuments are, for example the old viaduct in Sellerhausen, several bridges and former railway buildings and tracks.
5. creating identity of places	Although monuments are included into the parkbogen, the project aims to create a new image of Leipzig east without giving it a museum character.
6. supplementation of green spaces and	The implementation of new green areas aims to effect the local climate, by binding CO2 emissions and offering an opportunity for environmental friendly mobility. Moreover, consulting services will be opened to inform people on climate adaptation and

improvement of Leipzig's climate	mitigation strategies.
7. promotion of local and regional economic development	Leipzig east aims to become a competitive location for businesses and therefore promote job opportunities in the neighborhoods. Consulting services regarding constructional self-help and initiatives for the maintenance of green areas will be established in the old fire department ("alte Feuerwache"). Further, invested public funds aim to have a major impact on multipliers of the regional economy.
8. promotion of health	The opportunity of the increased offer of areas for leisure time and sports intend to improve health and quality of life in Leipzig east. Further, gardening projects should contribute to conscious handling of nature, animals and lead to healthier diets.
9. usage for everyone	Due to its diversity of areas and utilization possibilities, the Parkbogen Ost wants to include everyone, while promoting a good interaction of people regardless ethnic background or age.
10. extension of the traffic infrastructure	The master plan aims to provide the arc-structure of the Parkbogen with several interfaces. On the one hand connecting the neighborhoods to the park and on the other to make the switch between different means of transport as easy as possible. The new accessibility intends to address local and urban residents as well as tourists.
11. city marketing	It is desired that the Parkbogen Ost be established as a brand, advertising the high living quality and attractive leisure possibilities. The brand should be used especially in communication with touristic partners.
12. development of new strategies concerning land management costs	The implementation of the Parkbogen Ost represents an enormous financial expenditure for the city. Therefore new strategies like partnerships and sponsorships should be developed within the project for the maintenance of green areas.

The mega project Parkbogen Ost designed to be implemented within an 25 year timeframe. Presenting a large cost factor, the first parts of the project will be realized with the support of public funds. Besides own funds of the city of Leipzig, money was generated by the federal program of national projects of urban construction (NPS), the federal ministry of for the environment, nature conservation, building and nuclear safety (BMUB) and the European fund for regional development (ERDF) (Stadt Leipzig, 2016).

The Parkbogen will consist of three major parts, the southern section, the eastern section and the northern section, which are in different planning or implementation states. While most elements of the southern section are already existent and just need further adaptation, the eastern and northern section are still in planning. Construction of the eastern part including the Sellerhauser Viaduct is scheduled for 2018/19, whilst the concrete course of the northern section is still in discussion. As in the figure 13 presented, different parks, monuments and train stations will be connected by the Parkbogen Ost.

Fig. 13: Map of the Parkbogen Ost course - source: (Amt für Stadterneuerung und Wohnungsbauförderung, 2017)



# **V** Results

After the introduction of the theoretical background on greening projects, the methodology and details on the case study area, the following chapter will present the results of interviews and observations. They are explained and structured in relation to the given research question and related sub-questions. With the help of direct and indirect citations the results presented are illustrated and proven, whereby all translations were undertaken by the author and proved externally. The interviewees related to the given initials, coding rules as well as the code system applied can be looked up in Annex 3, 4 and 5. The chapter is divided into four subsections, which are structured following the sub-questions raised in chapter 1 and aims to give a deep insight on the Parkbogen project on three different levels. To ensure an easier reading, the most important results are summarized and highlighted in the beginning of each subsection. Finally, every subchapter is divided into the statements of stakeholders from politics or civil society and those of the real estate sector. This classification is useful for a more differentiated final discussion.

# 5.1 Stakeholder's Perceptions of Leipzig East

The interviewed stakeholders share different feelings and impressions towards the situation, the development and future possibilities and strategies in Leipzig east. Those perceptions build an important supplement to the statistics on the inner eastern neighborhoods recently presented in the chapter on the case study. The following three subchapters (5.1.1-5.1.3) aim to capture those feelings regarding the inner eastern neighborhoods and its development.

#### **5.1.1 Images**

## Political and Civic Stakeholders:

The perceived situation in the eastern neighborhoods and further the image depicted by different kinds of stakeholders is important for the further development of the area, for the strategies prepared and the funds approved as well as for the acceptance as residential area. Most images presented are related to the historically bad image, as workers neighborhoods, with a lack of green spaces and bad building conditions, but also to the dynamically changing Leipzig east, which contains locally highly differentiated neighborhoods.

The stakeholders observed the eastern neighborhoods for different time periods and from different professional or personal backgrounds. The political actors of the city administration experienced the eastern neighborhoods for more than 10 years, just like the head of the citizens' club Sellerhausen, who founded it 11 years ago. Many of the stakeholders interviewed, remember the "bad" image of

Leipzig east (AK, I. 61f.; PH, I. 30). Especially the political actors, Stefan Heinig and Petra Hochtritt, but also Tim Tröger, who works in a planning office operating in different neighborhoods in Leipzig, referred to the historically bad image (PT, I.33; SH, I. 41f.; TT, I. 37f.). The historically bad image includes several aspects like "missing qualities" and "simple building structures" (SH, I. 33ff.). Moreover, the interviewee of the ASW explains, the neighborhoods of the east have been associated in the past with "high vacation rates, ruins, socially disadvantaged" (PH, I. 35f.). Furthermore, Stefan Heinig points out that the eastern neighborhoods have always been a focus area for actions in terms of integrated urban development (I. 49f.) and an "area of arrival" (I. 63), with "lots of influx from outside, lots of exodus within the city" (I. 55f.):

"I think within many discussions of the city administration it has turned out, that the east is an area of arrival and that it will probably stay this kind of district (...)" (SH, I. 61ff)

Besides all bad images or memories related to Leipzig east, different stakeholders point out that it is difficult to talk about the east in general, since locally very different images exist.

"This term Leipzig east, it has historically not existed. It includes 5/6 different neighborhoods, which have never been so, so 100% alike, even today they are not" (TT, I. 48ff.)

Moreover, another stakeholder depicts the east as "divided" and therefore indicates that the image is locally very different. He observes the Lene-Voigt Park as "white-hedonistic" and the Rabet as rather visited by "people with migration background" (MB1, I. 33f.). The impression, that the bad image stays although the neighborhoods had changed, is shared by different stakeholders (TT,I. 38f.; PH, I. 37f.). But although it is referred to Leipzig east as "disadvantaged area" (PH, I. 28f.) or "grubby urchin" (AK, I. 62), different stakeholders made clear that a turning point has been reached. It has been noted that the east had become increasingly attractive for young people (PH, I. 42f.) and profited well from the population increase of Leipzig (TT, I. 180f.):

"And now the third phase started, where the eastern neighborhoods profit luckily of the population growth in Leipzig. So the neighborhoods are not ignored or people are not afraid of moving there" (TT, I. 180ff.)

#### Stakeholders of the Real Estate Sector:

Also the five stakeholders interviewed of the real estate sector present very diverse relations to the eastern neighborhoods, still large parts of their observations overlap. They also refer to the **bad historically image**, which was still omnipresent 5 years ago, but further point out the **different micro locations**. Further they observed the **change in image** for the positive, but some still see a **backlog** in its development.

All interviewees of the real estate business are operating in the total urban area of Leipzig. Mainly all stakeholders agree on the fact that the image has changed for the positive. One interviewee, who

grew up in the east and founded a real estate business, remembers that it was seen in the recent past as very dangerous place and related with crime and drugs (Go, I. 37f.):

"What was still unimaginable five years ago, that time we said, I cannot let my children grow up in the east" (Go, I. 185f.)

Another real estate agent interviewed, observe the positive development too, but still mentions a "large backlog", which he mainly relates to rents and selling prices in the eastern neighborhoods (Re, I. 37f.). Moreover, another real estate agent adds that the eastern neighborhoods "have difficulties with marketing" (Hi, I. 139), although this does not apply for every location in the east:

"There have always been micro locations, which worked well even 15 years ago. But in total it did not work well." (Hi, I. 239f.).

The same situation is noted by a small company owner, who owns objects in the east. He remarks the differences between the eastern neighborhoods, which become already visible from street to street (Wa, L. 11f.). Still, he rated especially the neighborhood surrounding the Eisenbahnstraße as very difficult, leading to the avoidance by many real estate agents (Wa, I. 16f.).

# **5.1.2 Changes and Challenges**

#### Political and Civic Stakeholders:

The interviewees noticed several changes in the eastern neighborhoods, which have been rated positive as well as negative. Most changes remarked have to do with the **influx of young people and creatives** and the strong degree of **refurbishments** and **upgrading**. Further, also **increased pressure on lots** and the **changing supply of lots** was noticed.

The head of the ASW notes that rents have increased in the eastern neighborhoods, while the vacancy rates have reduced (PH, I. 195f.). Moreover, new townhouses have also been constructed along the Rabet (PH, I. 331). At the same time, she explains how the new influx into the eastern neighborhoods had initiated many positive processes in the area:

"We have a huge influx. Housing projects are gathering, initiatives are gathering, where many people said a few years ago: 'no, not the east, we want to go west or south'. The caravan now went this way and it brings new life, new ideas, new impulses." (PH, I. 43ff.)

Also the stakeholders of the urban gardening project Querbeet notice, that many "alternative bars" and "housing projects" have settled in the eastern neighborhoods in recent years (MB2, I. 29). Furthermore, they see their own project as part of the changing process:

"Well, in 2012 or 2011 it was still a different thing compared to today, isn't it? Yes, maybe we could say that we are a part of the development that so many projects have settled here in recent years." (MB2, I. 26f.)

Moreover, they equally observe the high influx, especially of "young folks", which also led to a "shift" of "supply" and an increased pressure on lots (CE, I. 41f.). This pressure is noticeable on green infrastructure as parks, but also on their own lots, which they got for temporary use (CE, I. 278f./65f.). Finally, the interviewees remark strong changes in "the structure of users", especially in the Lene-Voigt Park:

"It is almost forbidden to enter (the Lene-Voigt park) without stroller" (MB2, I. 306)

Michael Berninger, who is strongly engaged in different community projects in Leipzig, also notices that rents have increased in the neighborhood, since the Lene-Voigt Park had been completed, although he remarks that rents are increasing city wide (MB1, I. 38f.). Furthermore, the interviewee mentions the high class refurbishments taking place and the transformation of former industrial buildings into loft apartments (MB1, I. 17). Another neighborhood where changes have been noticeable to him is the Bülow quarter. So he remembers that the municipal housing company LWB, struggled some years ago selling houses in the neighborhood, which works well today (MB1, I. 105f.). Also two other civic actors observed the high influx into the east: the changing "social structure" and "age structure" (TT, I. 185f.) and the moving in of "creative potential" (AK, I. 66). For the head of the citizens' club in Sellerhausen, this influx is caused by increased attractiveness of the neighborhoods:

"I am noticing certainly, that there is a boost in attractiveness, who surely also brings people here, which otherwise never had paid attention to the east." (AK, I. 147ff.)

Those developments observed, were accompanied by challenges, the stakeholders see for the eastern neighborhoods in different fields of urban development. Important aspects, which had been frequently mentioned by different stakeholders were missing green structures, in terms of quantity, but also concerning quality and connectivity (cf. CE; SH; TT), the uncertain further population development of Leipzig (cf. CE; PH; SH), the undifferentiated representation of the east by the media (cf. PH; TT) and the pressure on undeveloped lots combined with increasing gentrification discussions (cf. AK; CE; PH; SH). The interviewees of the city administration mention further social aspects in the east as important challenges, e.g. concerning education and integration needs (PH, I. 50ff.; SH, I. 75f.). It was further noticed that cultural infrastructures, as well as a unique symbol for the east are missing (MB1, I. 101f.; TT, I. 162ff.).

The pressure on (unconstructed) lots and greens is noticed of different stakeholders as a challenge: by the city administration in particular because of missing infrastructures like schools and kindergartens, for which it seems very difficult to find space (SH, I. 125ff.), by others because they fear for their own lots (CE, I. 65f.). Gentrification processes are mentioned by different stakeholders, whereby two civic interviewees perceive gentrification with mixed feelings, since investments and money are needed in the eastern neighborhoods (AK, I. 142ff.; MB1, I. 99f.) The two interviewees of

the city administration agreed on the fact that the discussions on gentrification have started in the east and that it is important to discuss rising fears (SH, I. 258f.; PH, I. 205f.). Therefore, a broad monitoring had been ordered by the ASW, which hopes to act in time:

"We are at some turning point and we have to take care, that no long established tenants will be displaced." (PH, I. 205f.)

The two political representatives interviewed emphasize the complexity of gentrification processes and the vicious circle, which is hard to stop once it started (SH, I. 262ff.; PH, I. 203f.):

"I think it is a very difficult discussion, and there is no solution: in fact, upgrading is wanted on one side, but it can rapidly turnover and then it is discussed negatively and seen as displacement (...)." (SH, I. 275ff.)

Further, Stefan Heinig as well as Petra Hochtritt mention the limited freedom and capacity of action, since budgets are limited, certain decisions have to follow the federal government and properties of the municipal housing company are too little to provide enough cheap housing (PH, I. 255f./ 269f.; SH, I. 299ff.). At the same time the increasing pressure on lots in the east provokes questions regarding the liability of political plans for urban development (CE, I. 33f.):

"(...) but whatever is decided, how reliable is that? How does the city act in fact, when strong investors appear and so on. (CE, I. 356ff.)"

## Stakeholders of the Real Estate Sector:

The actors of the real estate sector made observations similar to the other stakeholders: rents and building prices are increasing in the east and the neighborhoods register a strong influx. The main challenges for the eastern neighborhoods are seen in the unhealthy real estate market and the still existing backlog.

The sudden change and interest of investors as well as newcomers and therefore the high influx (Wa, I.20), is explained by different agents with the fact that Leipzig is "sold out", so that objects are mainly still available in the eastern neighborhoods (Go, I. 40f.; Hi, I. 78; Re, I. 30):

"And for this reason, the east has been neglected in past years, of investors as well as banks, they have invested little. But that changed now during the last 3/4/5 years, simply because nothing is available anymore in other neighborhoods." (Go, I. 39ff.)

The owner of *Goldstein Immobilien* sees positive and negative aspects in the ongoing development. On the one hand he welcomes the change in social structures in the eastern neighborhoods (Go, I. 42ff.), on the other hand he observes the strong increase of prices in the real estate sector with concern:

"Since 24/36 months there is a clear tendency, how it is getting tough: I give you an example: when I bought an object 3/4 years ago in Leipzig east, unrefurbished and dirty, I paid  $500Euro/m^2$ .(...) Now it is  $800-1000Euro/m^2$ , even in worse locations." (Go, I. 84ff.)

This development was also observed by the interviewee of *Victor Immobilien*, who notices it especially in the field of first lettings (Re, I. 22f.). Moreover, increased refurbishments and first lettings have been observed, especially in Neustadt-Neuschönefeld (Ka, I. 17f.). Finally, another real estate agent of the Wohnbar24 real estate company remarks that all neighborhoods of the east have profited of the strong influx into Leipzig, even those areas in the east, which are "far away of big green spaces" (Hi, I. 142f.). He rates the development of the east as positive, welcomes that more residents move there searching for the "multicultural" and observed a strong positive development especially in the housing market of the Lene-Voigt Park quarter (HI, I. 208/ 213f.). On the other hand he criticizes the changing character of Leipzig and that refurbishment efforts in the eastern neighborhoods are rising steadily, even in areas with weaker tenants (Hi, I. 172f.):

"The quality and efforts of refurbishment increased year-to-year and they became more high quality, decadent and noble. (...) In the area of the Eisenbahnstraße, they refurbish in the same style as in Gohlis or Schleußwig or the Waldstraßen quarter and the consequence is that the same rents will be requested over there." (Hi, I. 268ff.)

Those developments observed result also in the ranks of the real estate agents in some challenges for the east. On the one hand, the backlog of the neighborhoods concerning refurbishments, rents and high criminality are seen as challenge (Wa, I. 18/21). On the other hand the development of the housing market towards an "unhealthy market" and a little amount of owner occupiers is seen as problem (Go, I. 13ff.; Hi, I. 258). The interviewee of the small real estate company wohnbar24 explains, that the housing market in Leipzig is led by property developers, refurbishing in those areas where still unrefurbished houses exist (Hi, I. 83ff.). The problem he sees in this kind of market is the unrealistic pricing of objects independent of their location:

"The market of property developers has to be blamed, since the purchase prices, e.g. for protected properties, are totally independent of the location. So it does not matter, whether it is refurbished in the east or in a top location in Sleußwig - the m<sup>2</sup> costs roundabout 3000 Euros." (Hi, I. 93ff.)

Further, he criticizes the high anonymity of owners living in western Germany and the disadvantage of people from Leipzig, who do not have the means to compete with prices fixed by project developers (Hi, I. 259f):

"What annoys me is the fact (...) that only high-class refurbishments are taking place. Owner occupiers (...) have almost no chance to resist against project developers on the market." (Hi, I. 247ff.)

Equally as the political actors, he also notices the pressure on urban lots and the struggle of the city obtaining land for the creation of public infrastructure (Hi, I. 167f.). Finally, one real estate agent named the problem of "displacement" of "socially weak residents", which he is observing as a commencing process:

"(...) the whole development, from my perspective, is getting out of hand, concerning the tenant structures and social structures. We are repeating the same mistakes as in the old western Germany for decades, that socially week people will be pushed into ghettos again." (Go, I. 68ff.)

## 5.1.3 Strategies and Hopes

Many stakeholders interviewed, especially the actors of the city administration and the real estate agents attempted a future outlook, formulated strategies to cope with challenges mentioned or articulated wishes for the eastern neighborhoods.

## **Political and Civic Stakeholders:**

The strategies and hopes of political actors are strongly related to the **empowerment of residents**, the **support of socially weak** and the implementation of **new green spaces**. Those wishes shall be realized with the help of **more public funds** and **participation processes**.

As a central ongoing and future strategy for the further development of the eastern neighborhoods, the creation of new green structures, the expansion of existing green spaces as well as the increased connectivity are in the focus of the department for urban planning (SH, I. 91ff./177ff.). Moreover, the dual inner development of urban areas is targeted as a key strategy (PH, I. 365ff.). It is also considered, keeping the eastern neighborhoods as area of arrival, since those areas with a certain "integrative capacity" are needed (SH, I. 62ff.). It has been applied for a renewal of funding programs, like e.g. ERDF and Soziale Stadt, to work on important infrastructures in the east, like the needed secondary school and kindergartens and certain small projects like a community center and a cinema for the neighborhoods (PH, I 69ff.; SH, I. 72ff.). As response to the ongoing gentrification discussion, the political stakeholders count on monitoring to evaluate present needs, participation and an open and honest discussion (PH, I. 196ff./252ff.; SH, I. 277f.):

"If we design upgrading processes in a way that people are part of it, in the end they are capable to express themselves" (SH, I. 277f.)

The head of the urban planning department expects the east not to be gentrified so rapidly:

"This (gentrification) will not happen so soon in the east, as I said, it has to do with the historic reputation, but the discussion will come and rents will increase over there, they are also not economically feasible, and so the people will feel displaced and they will discuss it." (SH, I. 266ff.)

Finally, the head of the ASW hopes for the future, that the diversity remains in the eastern neighborhoods, while integration becomes a normal process and that the city administration continues to pay attention to the needs of the citizens (PH, I. 294f.):

"And this is what I would hope for, that we have open politics here, which take care and also that the city administration takes the challenge." (PH, I. 301f.)

#### Stakeholders of the Real Estate Sector:

Also the real estate agents mention wishes regarding the future development of Leipzig east, which mainly relate to economic aspects, like the **increase of purchase power**, the **increase of rents** in comparison with other districts and equally the **lasting affordability** of the neighborhoods. One interviewee, working on the refurbishments of listed houses even presents a **personal strategy** to cope with the problems of the housing market and personal challenges.

He stated to have changed his personal strategy, following a more social approach:

"I turned a bit social, it is not always necessary to get every last cent out of the business, but it is important to give a chance to people that are hard working, and still they do not have enough money to buy a luxury apartment somewhere." (Go, I. 63ff.)

Further, he also sold his buildings at the Eisenbahnstraße to a company based in Berlin, promoting alternative housing projects (Go, I. 109f.). In contrast to the present situation, the interviewee is convinced that the citizens of former eastern Germany will increase their buying power, so that more property in Leipzig will be bought by its residents (Go, I. 14ff.). On the other side he forecasts a negative development of the real estate sector and believes in a predestined real estate crisis (Go, I. 156ff.). Another real estate agent explains, that it is important in this business to adapt to present market prices (Wa, I. 15). Further, he expects the eastern neighborhoods to become a good residential location for families, while equally wishing that no family would be displaced because of increased rents (Wa, I. 22f./29f.). Finally, the different real estate agents interviewed, express different wishes concerning the development in the east, economical and social interests. While the interviewee of Goldstein Immobilien wishes that project developers would integrate more social and ecological aspects into their calculation (Go, I. 202f.), the interviewee of Gewerbe & Wohnen hopes that the real estate prices in the east would balance with the prices in the west and south (Ka, I. 28f.). Further, he hopes that the purchasing power increases (Ka, I. 30f.). The agent interviewed of Victor Immobilien articulates diverse wishes for Leipzig and the eastern neighborhoods. So he hopes that blots and gaps would disappear in the east and that the city stays dynamic and open (Re, I. 55/62). As other actors before he further mentions, that the rents should stay in relation with the income (Re, I. 58f.). Lastly, it was asked for more control of the public space, so drug trafficking would end (Wa, I. 18f.).

# 5.2 Observations concerning Leipzig east

Two different forms of observations had been undertaken to complement the perceptions of stakeholders interviewed on the eastern neighborhoods. Therefore one event was observed, whereby the urban development of Leipzig east was presented and discussed. Finally, the Lene-Voigt Park quarter, which was often named as the area, which had undergone strong changes after the implementation of the park, had been observed and results were mapped.

## 5.2.1 The Presentation of Leipzig East at the *Tag des Städtebaus*

During the *Tag des Städtebaus* (day of urban development promotion) Leipzig east was the focus area of the event in Leipzig. Therefore, observations during this day represented an important supplement to the interviewees' perceptions and gave an deeper insight into ongoing reflections on the eastern neighborhoods. Main focus points during the observation were the interactions and arguments during two events at same program day: the opening event and the expert discussion on gentrification in Leipzig east. (For the complete observation protocols see digital Annex c).

The opening speech at the *Tag des Städtebaus* was hold by the mayor responsible for the building authority, Dorothe Dubrau, and took place in an information center, presenting an exhibition on all major urban planning projects in the east. The event was well attended by ca. 30 participants, whereby the main interest was directed towards the posters presenting the projects targeted. Thereby, many visitors took pictures of the posters, showing projects targeted like the Parkbogen Ost, the transformation of an old fire department into a neighborhood centre, and the reopening of the "cinema of the youth". Especially the information on the big project Parkbogen Ost were extensive and positioned in the entrance. The speech of Dorothe Dubrau focused on the extreme change Leipzig east has passed through and named the visions for the east, with a certain emphasis on the Parkbogen Ost. Further, she introduced the events of the day and mentioned briefly the topic of gentrification, leading over to the expert discussion in the afternoon. Thereby, she mentions that gentrification is hardly visible at present-days in the inner east of Leipzig.

The second event observed focused on the challenge of gentrification in the inner east of Leipzig and was organized as expert discussion, whereby different actors with political, scientific and urban planning background held presentations. Moreover, results of an investigation on socio-demographic indicators, ordered by the ASW, were presented. The event was open to all visitors interested, but only two residents participated and only a handful of external visitors listened to the discussion. Possible reasons for the low participation are the stormy weather, the ongoing football match of Leipzig's team or competing events at the *Tag des Städtebaus*. Further, only one resident

participated actively in ongoing discussions and presented a sound knowledge on legal instruments and the theory of gentrification. Moreover, he criticized the limited possibilities residents have to fight back against gentrification and the lack of information provided. He acted disappointed by the fact that possible actions of the city administration are limited and that instruments could not protect single residents. Further he remarked, he would notice strong gentrification tendencies in the inner eastern neighborhoods. The issue of communication seemed an important point of discussion. While scientific participants requested more communication on gentrification from politics, the political actors stated to feel frequently ignored by scientists, conducting scientific studies on gentrification, without asking for their opinions. Many stakeholders agreed on the fact, that Leipzig east is threatened by gentrification, although indicators presented by a planning office were inconsistent and instruments could therefore not be applied at the moment. The actors of the city administration demanded another investigation, analyzing indicators on smaller scale, although it was noticed that the right timing for instruments could be crucial.

## 5.2.2 Structures Observed in the Lene-Voigt Park Quarter

During an one-day inspection, building structures in the Lene-Voigt Park quarter have been mapped, including their usage, the construction types, their present condition and the presence of balconies to understand the status of urban redevelopment in this neighborhood. Observations and mapping of the present situation in this quarter build a crucial supplement to the stakeholders' perceptions and analyze the circumstances in the area of implementation further. Thereby, this little extract of one residential area of Leipzig east presents different qualities and factors, which need to be recorded and discussed in relation with the general development in Leipzig east and the greening project targeted later on. The Lene-Voigt Park is located in Reudnitz and represents an already implemented part of the targeted project Parkbogen Ost, therefore it represents the chance to illustrate the relation between the project and one surrounding neighborhood. As presented in figure 14, the buildings surrounding the Lene-Voigt Park are mainly residential buildings. So do 174 buildings provide apartments of 259 buildings analyzed in total. Thereby, the rate of apartment buildings in the direct surrounding of the park is even higher, since some buildings provide a mixed usage of apartments and retail or gastronomy and not all buildings have been documented. Further, the gastronomy in close proximity to the park has been mapped. It was noticed that the residential areas at the northern and southern part mainly provide more expensive restaurants and cafes, whereas more fast food restaurants are located next to retail facilities at the eastern and western entrance. Only a little amount of industrial buildings has been observed, mainly in the south next to the HTWK college buildings. Other former industrial buildings at the eastern entrance of the park, which earlier contained huge printing facilities, have been transformed briefly into loft apartments (see also fig. 15).

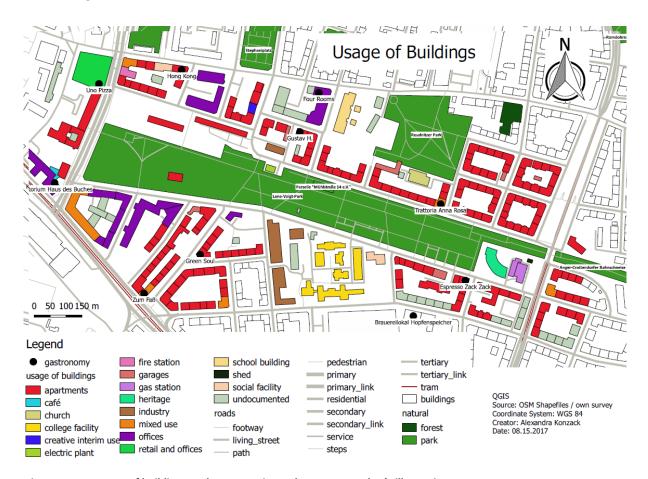


Fig. 14: Map - Usage of buildings at the Lene-Voigt park quarter - author's illustration

Also eleven office buildings have been counted, mainly located in the south west and the north west. While the ones in the south west are newly constructed or refurbished and used by different bigger companies, the ones in the north east seemed in bad condition and empty (see also fig. 16). Finally, one lot was observed providing space for design and art work in form of an interim use.

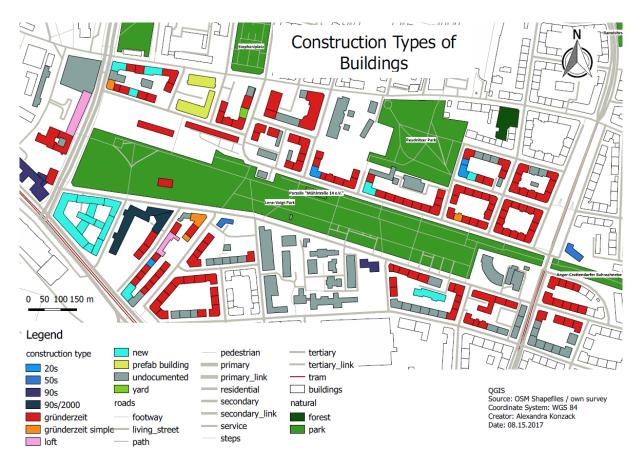


Fig. 15: Map - Construction types of buildings at the Lene-Voigt park quarter - author's illustration

Figure 15 presents the construction type of the buildings analyzed and it shows the high share of Gründerzeit buildings in proximity to the park. Around 83% of the buildings analyzed and documented are built in the Wilhelminian style. The construction type of industrial buildings and school and college buildings and some retail facilities has not been analyzed. Also some apartment buildings could not be documented, due to uncertainty or lack of time. Office building are newly built or originate of the 90s in the southern part, whereby the office buildings in the north are prefabricated. Besides those two office buildings, no prefabricated buildings have been observed in the close surrounding of the park. Further to the east, along the Anger-Crottendorfer Bahnschneise, building structures are changing and more buildings in the style of the 50s and 60s appear. Finally, it was remarked, that many newly constructed buildings could be observed, mainly following the Gründerzeit style and as in-fill development. Concerning the condition of buildings (see fig. 16), it was observed that around 85% of the buildings analyzed and documented were in top condition, which relates to new paint and windows and without indication of damage or dirt. Most of the Gründerzeit buildings had been extensively refurbished, highlighting external decorations. Further, two buildings have still been under construction and five buildings in refurbishment. Finally, ten buildings showed a bad condition, whereby half of them were apartment buildings and the other half office buildings and garages. Only one building in ruinous condition was observed, with broken windows and broken facades.

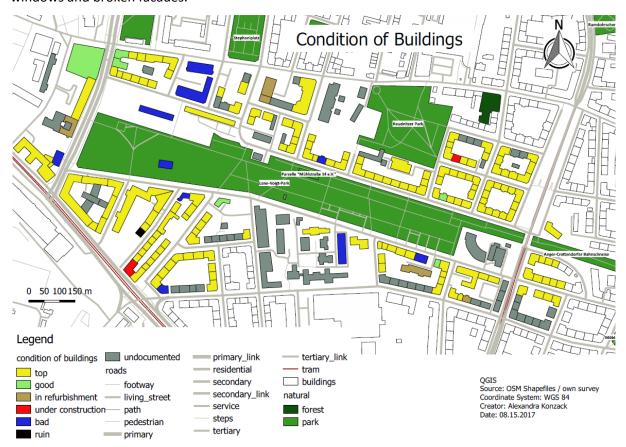


Fig. 16: Map - Condition of buildings at the Lene-Voigt park quarter - author's illustration



Fig. 17: Example of balconies attached at the Lene-Voigt park quarter own photograph

Concluding the availability of balconies as presented in the figure 17 was documented in a map (see fig. 18). The presence of balconies was mapped with "yes", whenever more than just the rooftop apartments or offices were equipped with balconies. The mapping of balconies was challenging, since balconies have been mainly attached facing into the yards. Therefore, many buildings could not be documented referring to the presence of balconies. Still it becomes evident, that many apartment

buildings provide balconies for the residents in the Lene-Voigt Park quarter. Out of 174 buildings determined as apartment buildings, 79 buildings have balconies attached, 38 buildings do not provide balconies and 57 could not be observed regarding balconies (see fig. 18). Since Gründerzeit buildings often did not provide balconies, the major part of balconies had been installed subsequently (see also fig. 17). More photographs of the mapping process can be found in the digital Annex c and the GIS data in digital Annex d.

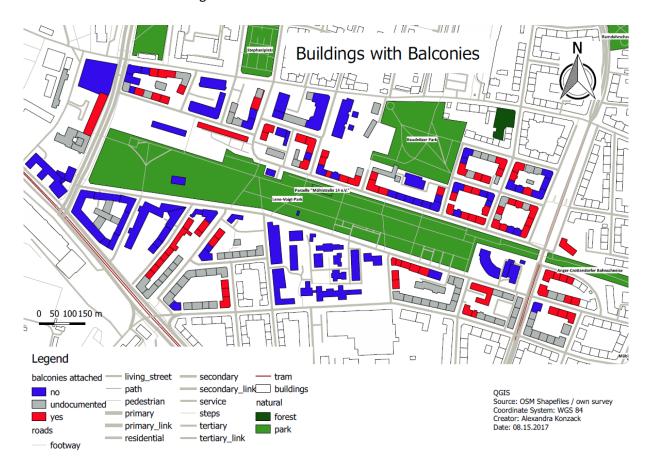


Fig. 18: Map - Availability of balconies at the Lene-Voigt park quarter - author's illustration

# 5.3 Stakeholder's Perception of the Project Parkbogen Ost

The stakeholders interviewed shared different hopes and fears towards the project and moreover, which will also be examined in relation to their different degrees of participation. The following part will present feelings surrounding the master plan of the Parkbogen Ost project.

## 5.3.1 Participation and Knowledge on the Project

## **Political and Civic Stakeholders:**

The interviewees accompanied the project in different phases, whereby all political and civic actors interviewed, participated in some way in the project. The participation took place in different time frames, from participating in the initial phase, to the collaboration with the development of the

master plan and finally the overall management and implementation arrangements. Thereby, stakeholders made positive, as well as negative experiences.

During the initial phase, Axel Kalteich, the head of the Sellerhausen citizens' club communicated the idea of maintaining Sellerhausen's viaduct as cycle path in 2009 to the city administration (AK, I. 48f.). Also Christel Eißner of Querbeet, participated in the first meetings in the Bülow quarter to elaborate the idea on the viaduct (CE, I. 93). When the closure of the S-Bahn operation become evident, a new network, consisting of 4-5 people developed, discussing a bigger vision for the viaduct and its integration into a bigger network (TT, I. 60ff.). That time the initiative Parkbogen Ost developed, including the members Tim Tröger and Michael Berninger interviewed. The city administration took over the mega project, whereby the ASW is in charge of the implementation, the use of funds and the participation processes and the department for urban planning is in charge for the legal background of implementation (SH, I. 147ff). The participation processes are perceived differently from stakeholders interviewed. The interviewees of the city administration explained, that the project was designed in a way to integrate participation into all working steps (SH, I. 214ff.):

"The elaboration was always based on the ideas of the civil society, then civic workshops followed, where we picked up ideas (...). Afterwards we worked with the different individual departments, in the chamber, because everyone has to be integrated and then presentations followed again for the citizens and politicians. (PH, I. 110ff.)

One interviewee of the gardening project Querbeet observed the participation process differently and finds many aspects to be criticized. Personally, she criticizes that to little information on further participation possibilities was spread and in particular that no one asked the urban gardening project Querbeet for cooperation (CE, I. 98ff./139). Concerning the master plan she is afraid that many citizens participating in the project, will be disappointed when ideas cannot be implemented in the end (CE, I. 193ff.). Also another stakeholder, who rates participation as crucial for the successful design of the path system, had wished for more transparency and civic discussion concerning the design of the master plan (MB1, I. 82):

"I think it was insufficient, that there was no discussion concerning the master plan. Instead it was given to a planning office in Berlin - as usually, so that the money does not stay within the city." (MB1, 78ff.)

Nevertheless, he welcomes the work of the ASW and the general planning and participation culture in Leipzig and is happy that it was talked about qualities needed (MB1, I. 83f./91f./94f.). Finally another interviewee of the Parkbogen Ost initiative is very satisfied with the participation process, so he was prepared on the fact, that the main participation would be needed in the initial phase (TT, I. 74f.):

"Our mission was fulfilled in the moment we heard that the city administration (...) was absorbing the idea and even instructing someone for the official planning and the design of the master plan. (...) We could not have wished for more in so little years." (TT, I. 80ff.)

## Stakeholders of the Real Estate Sector:

Out of five real estate agents interviewed, two interviewees **do not know the project at all**, two other agents have heard of it, but know **little details** and only one interviewee **followed the plan intensely**. The real estate agent of *Goldstein Immobilien* had informed himself four years ago, observing the plans in the town hall:

"So I followed the project intensely four years ago, since I had bought four houses in the Eisenbahnstraße, directly at the Parkbogen." (Go, I. 98ff.)

#### 5.3.2 Potentials of the Parkbogen Ost

### Political and Civic Stakeholders:

All stakeholders interviewed, who are or had been part of the project Parkbogen Ost, see great potentials in the implementation of the master plan. Often those potentials seen in the project are strongly related to the overcoming of challenges, seen for the eastern neighborhoods. So an obvious and frequently mentioned capability is the establishment of a totally **new route network** (cf. AK; MB1; PH; SH; TT), while **moving through greens** and connecting existing green infrastructures. This new green infrastructure is moreover seen as attractive possibility to **move without crossing roads** and to **activate bordering lots and neighborhoods** in the east, which are little attractive at the moment. Finally a new **symbol** for the inner east could be created (cf. CE; SH; TT).

The viaduct is often mentioned as "window to Leipzig" (AK, I. 44), as well as "new symbol for Leipzig east" (TT, I. 162). Michael Berninger of the Initiative Parkbogen Ost sees the project as an extensive urban planning idea, which makes use of existing structures, while creating new mental connections that should change the present routine of the eastern neighborhoods (MB1, I. 42f./3). Moreover, he mentioned the chance to adapt to new forms of utilization, also concerning increased combination of bicycles and public transport and the change for the surrounding neighborhoods to benefit (MB1, I. 54f.). This chance for the bordering lots and neighborhoods is also noticed by the head of the urban planning department, Stefan Heinig:

"I am also thinking about the different open spaces, especially along the Parkbogen, which are difficult to access (...). And if I now get a usage at the Parkbogen, they turn from a former edge to a connecting lot between neighborhood and Parkbogen." (SH, I.192ff.)

Further, he emphasizes that the project was a unique chance, where the strong civic initiative, the possibility to receive funds and the option to get land worked together:

"(...) to make use of these chances that came together, to set the course and to have the courage to do it, although we are not sure how to manage in the end." (SH, I.170ff.)

Both interviewees of the city administration see the importance of new qualities the project would bring for residents in the eastern neighborhoods (PH, I. 167ff.; SH, I. 245ff.). Besides, Petra Hochtritt of the ASW also aims to attract tourists, visiting the sights of Leipzig east (PH, I. 170ff.). Also the head of the citizens' club Sellerhausen is convinced that the Parkbogen will make the east better accessible as well as better perceptible (AK; I. 94f./57ff.):

"I think, it is a good thing for the district. Not only the cycle path, that people of the neighborhood can move better by bicycle, but also the neighborhoods will become more perceptible for the others." (AK, I. 57ff.)

He also sees those people benefiting that do not want to take the car, like environmental conscious residents (AK, I. 112ff.). Finally, he was especially impressed by the chance to use the viaduct as viewpoint and cycle path (AK, I. 44f.). Also Tim Tröger was convinced by the viaduct as new symbol for the east, which besides creates new qualities of stay for the residents:

"Finally I think, the most attractive of undertaking that measure was, to have found an imaginary incisive piece of infrastructure for the east, that maybe has been already searched for some time." (TT, I. 154ff.)

Further, he is arguing that the Parkbogen would create important new direct connections, which are able to serve as useful everyday connections for the residents, but also connected with the overall route system of Leipzig (TT, I. 198ff./192ff.). Besides, potentials like the preservation of the viaduct and the possibility to move by bicycle through green (CE, I. 180f./147f.), is seen by one member of Querbeet interviewed, equally as the advantage of already promised federal money:

"It was a special event when it became clear, that the federation will subsidize 3.3 Mio. Euros for the project. That was a huge blast." (CE, I. 109ff.)

Finally, Christel Eißner remarks that she also favored the project, since many uncertainties have been ignored and they had the chance to talk about visions of a green belt with different qualities for the east (CE, I. 115ff.).

Besides the clear potentials seen, the stakeholders expressed wishes directing towards the challenges seen. So mainly stakeholders interviewed hoped for good technical solutions (AK, I. 125f.), good financial means and the someone who will take over the responsibility and the maintenance on the long term (TT, I. 210ff.). Moreover, clear designs of the route are favored: while the interviewee of Querbeet hopes for the implementation of the urban forest in combination with different uses (CE, I. 277ff.), Michael Berninger sees the implementation of both northern courses as crucial (MB1, I. 76f.).

## Stakeholders of the Real Estate Sector:

Two of the real estate agents interviewed shared the impression, that the newly build green path system could increase the **attractiveness** of the eastern neighborhoods (Go, I. 183ff.; Re, I. 46ff.). The owner of *Goldstein Immobilien* also thinks that it can bring **new "impulses"** to the east and attract especially the "young people" (Go, I. 189/ 184). Furthermore, they understand the project as chance to **increase the demand for surrounding real estate objects**:

"Since we supervise many objects in the east, we see the project as chance to increase the attractiveness of the neighborhood as well as the properties located in the neighborhood." (Re, l. 46f.)

Goldstein even explained further, that he already had bought objects, since he knew about the planned project:

"I found it very interesting and for this reason, I bought the object at the Eisenbahnstraße that time, but I could not sell it then." (Go, I. 106ff.)

## 5.3.3 Challenges for the Parkbogen Ost

Besides all the positive expectations mentioned, many stakeholders also remark concerns towards the project, which sometimes arouse out of similar projects they could observe, others relate to problems regarding the implementation process or the expected impact.

## **Political and Civic Stakeholders:**

During the interviews with experts, major aspects rated as challenges are seen: the uncertainty of financial means and the low budget of the city, technical challenges combined with the problem of maintenance, limited availability of needed lots, difficult cooperation and a limited outreach as well as one time mentioned, the development of bordering lots led by investors and the triggered increase of rents.

Both interviewees of the city administration emphasized the low financial means of the city, especially in relation with the uncertain as well as costly reconstruction of bridges and other infrastructural elements:

"I mean, the whole financing is still unclear also with respect to the maintenance of bridges and so on." (SH, I. 169f.)

"The problem is the multidimensional nature and simply the provision of resources within the city." (PH, I. 141f.)

Moreover, the head of the urban planning office rates the impact of the route network as limited and is afraid that it will not reach everyone, who searches for new daily routes:

And the possibility of connection is limited, that needs to be understood. (...) it will not have the function as connection towards the suburbs. (...) Concerning daily routes, it will maybe not have a big impact. (SH, I. 162ff.)

On contrast, the head of the ASW is not concerned regarding the impact of the route network, but sees the complexity of coordination and financing as challenge (PH, I. 130ff./147ff.). Further, she is prepared that unexpected problems could always complicate the process, as she had to experience already in the initial phase:

"It is like this, that mainly all possible difficulties appear: from contaminated sites, to malfunctioning plants, protected bird species (...), to the condition of bridges and the viaduct (...)." (PH, I. 117ff.)

Still, the head of the urban planning department is convinced that experiences from similar linear parks, even of the Lene-Voigt Park, need to be integrated into the project implementation (SH, I. 248ff.). Also Michael Berninger observes challenges, although he is highly convinced of the project. He also sees a high degree of uncertainty, since 2.4 km of the northern course following the viaduct are still under negotiations (MB1, I. 74f.). Further he rates the Deutsche Bahn AG as a very difficult negotiation partner and is annoyed by the fact that a bridge was destroyed although it would have been needed for the project:

"The Bahn AG has no human face. No real contact person exists." (MB1, I. 62ff.)

Moreover, he sees high conflict potential in the implementation of the urban forest, since many residents would prefer the construction of apartments (MB1, I. 109ff.) and in the northern connection to the main railway station. Thereby, he is afraid that the development over there could be strongly led by investors:

"At the end of the northern part, where the course ends with the railway station, there exists a risk of urban planning without neighbors - 35ha without neighbors. It means that the neighborhood could develop only following the interests of investors." (MB1, I. 86ff.)

Finally, he observes the danger that former visions could be lost during the implementation process (MB1, I. 92f.). Gentrification triggered by the project is not seen as danger to him, although he points out that the CW-Group had bought the old Postbahnhof, probably calculating with the Parkbogen Ost (MB1, I. 103f.):

"I do not see the danger of gentrification, since there are still enough open spaces to be used first." (MB1, I. 68f.)

Equally, the head of the Sellerhausen citizens' club rates upgrading processes as challenge, still it is no "exclusion criteria" to him for the project (AK, I. 149). As most difficult he sees the technical solution and the maintenance and is aware of the aspect, that "it will certainly not reach everyone" (AK, I. 112). For one interviewee of Querbeet, the possible increase of rents in the surrounding

neighborhoods is seen as challenge (CE, I. 155ff.). Further, she is afraid that "the project could bind high financial means, which melt away somewhere else." (CE, I. 178f.). Also the problem of missing land rights of the city and uncertainties in the master plan are discussed critically:

I checked the master plan and there is one lot accounted (...), where I know it is not available. There is written something like, community garden and I was wondering and thought the lots belong to the LWB and I thought they already got building plans. (CE, I. 132ff.)

Also for another interviewee, the financial means, the buying of important lots and the maintenance are key challenges (TT, I. 215ff./121/114f.). Tim Tröger made negative experiences with a similar project in western Leipzig and is afraid that mistakes could be repeated:

"And I was once bitten, one example from Leipzig west, where in Lindenau and Plagwitz, some single track lines have been sold to neighboring private owners, with good intensions, so that they could expand their lot. And as soon as a small piece is missing, it is getting more difficult or even impossible to finalize the project." (TT, I. 116ff.)

Therefore, it is crucial to him, that the city makes use of its pre-emptive right (TT, I. 120ff.), further that some keeps an eye on the big picture, during the whole implementation phase:

"The biggest challenge is that someone has to keep in view the whole project, so that idea in the worst case is not breaking up into individual components." (TT, I. 112ff.)

Finally, he observes the need for cooperation with owners of bordering lots, since those are often needed for the better access of the Parkbogen Ost (TT, I. 127ff.).

#### Stakeholders of the Real Estate Sector:

In the group of real estate agents, the **timing** is seen as only change for the project, since needs and strategies had changes.

From the interviews with real estate agents only one interviewee had strong concerns regarding the project Parkbogen Ost. In his perception the interests and focused strategies in Leipzig have changed, so he rates the project concept and the master plan as too late:

"No doubt, every green space is a gain, but I am afraid that the plans for the green belt in Leipzig east are too late." (Hi, I. 226ff.)

He sees further the challenge, that the plans will not be finalized anymore, since the city administration could notice the strong need for housing:

"The plans for the Parkbogen Ost, as far as I know, date back to a time when the housing market was still very different. (...) So I could imagine that the spaces will not be transferred into greens anymore, since the pressure of the housing market is too big." (Hi, I. 158ff.)

Finally, he observed a similar project years ago in Plagwitz and is convinced that the timing is essential for those kinds of projects:

"I guess if Plagwitz was in the same situation as Leipzig east today, the project would have never been finalized in this form." (Hi, I. 224f.)

#### 5.4 The Role of Green in the Urban Planning of Leipzig

#### 5.4.1 Valuation of Urban Green

#### Political and Civic Stakeholders:

The stakeholder's interviewed pointed out that greening strategies served different needs, earlier as interim uses, later on as start-up measure, whereby important lots have been bought by the city. Further, the new valorization of greens was mentioned and the high usage of greens provided was emphasized.

In recent years, different strategies have been applied by the city administration to guarantee the supply with green for the eastern neighborhoods, to bring new forms of usage into the existing spaces and to become more sustainable. Stefan Heinig explains, that during the 90s and in times of Stadtumbau, the city converted closed down railway tracks into municipality parks, turned brownfields into interim green and focused on the creation of new green structures (SH, I. 86ff.). He further remarks, that green strategies are able to trigger positive developments in neighborhoods:

"Greening is always a start-up measure in urban development. Especially, in disadvantaged areas, in areas with high vacancy rates." (SH, I. 84ff.)

So the city had bought important lots in times of Stadtumbau, to ensure the long-lasting creation of green spaces (*PH*, *I*. *341ff*.). For the future, the interviewee of the urban planning department sees two major strategies, to ensure urban green in times of growth. On the one hand "public green spaces have to be planned" in areas where bigger residential neighborhoods develop on former railway territory (SH, I. 107). On the other hand "open space qualities" have to be "compensated", in areas of densification (SH, I. 109). Another important topic regarding urban green, is the provision of spaces serving for different forms of usage and fulfilling different functions. Therefore, the opening of allotments and school gardens is seen as an important strategy in terms of recreation and leisure time as well as the creation of new green structures for ecological functions (PH, I. 72 f.; SH, I. 112f.). Also Tim Tröger remembers the greening strategies in times of Stadtumbau, punctual measures like the Rabet or the Bernhardiplatz as well as the redesign of the Eisenbahnstraße (TT, I. 175f./176ff.):

"Lots of public space had been transferred and green spaces had been created, e.g. the redesign of the Eisenbahnstraße, for many years discussed. It was a hope to stop the decline of occupation and so on. But it did not work in such a short period." (TT, I. 176ff.)

Another interviewee remarks generally that the topic of green spaces is very much "in vogue", although it is equally an old topic and greening strategies have also been applied 100 years ago

(MB1, I. 6ff.). He further thinks that the ongoing debate on sustainability, biodiversity and ecosystem service generated a new valorization of greens, although green structures have been valued even before the existence of those concepts (MB1, I. 9ff.). Still he feels that the forms of usage have changed and states that especially urban gardening is in demand (MB1, I. 31/51f.). Still, the "towel gardens" in the Lene-Voigt Park, especially designed for urban gardening, are not used, yet (MB1, I. 25). Therefore, Michael Berninger is convinced that more users should be guided into the towel gardens (MB1, I. 26f.). Apart from the towel gardens, many stakeholder emphasize the high frequentation of the Lene-Voigt Park (AK, I. 87f.; MB1, I. 26f.). Another interviewee sees strong and increased usages in the Rabet and the Mariannen Park:

"It slops over the bridge into the Mariannen Park. I would not talk of overuse, but it is visible, that there is a strict development concerning multiple uses and more people." (CE, I. 289ff.)

#### Stakeholders of the Real Estate Sector:

Also the stakeholders of the real estate sector rate green neighborhoods and open spaces as important for personal and economic reasons. Many stakeholders mentioned that green spaces, small pocket parks as well as bigger natural areas, are **good selling arguments** and are **defining the character of a city** at the same time.

So are the neighborhoods in the south and west, close to the Auwald and to Leipzig's rivers, easiest to sell:

"If you look at Leipzig from above, you can see this beautiful green corridor. From north to south, banana shaped. Neighborhoods that adjoin to this area are self-propelling, and the demand is highest." (Hi, I. 135ff.)

Goldstein explains, that green spaces are especially an argument, selling to customers from other cities with less green (Go, I. 299f.). Therefore, it is always advertized if objects are located next to parks or forests (Ka, I. 24; Re, I. 43f.). But besides those economic arguments, some real estate agents interviewed also mention, that the character of Leipzig has always been strongly related to green and open spaces, so they hope to get more green into the neighborhoods (Hi, I. 173f.; Go, I. 262f.):

"An urban neighborhood also lives on it, that it has greens and water and open spaces." (Hi, I. 172f.)

Therefore, one interviewee explained his personal strategies for getting more nature back into his yards:

"If you come and visit me, you would see how I design my yards. I do not get anything for it and I could construct it cheaper and would save 20.000 Euros with every project but I plan it from the beginning that way. But that's an individual story." (Go, I. 263ff.)

#### 5.4.2 Challenges for Urban Green

#### Political and Civic Stakeholders:

The provision of greens in urban areas does not always follow easy strategies, but provides sometimes high conflict potential. Equally, greens are often threatened due to other interests and competing uses. So do different stakeholders mention the **risk of displacement of greens** due to other needed infrastructures and **conflicts due to different wishes of usage**.

Also the head of the urban planning department states, that the role of greens in present-days Leipzig is hard to grasp. He further explains, that many implemented greens, also in Leipzig east, were designed as interim uses, so the risk of later-on redensification had to be taken:

"(...) but where we also have known before, that we do not have the financial power, to ensure it completely also concerning the property rights and therefore we risked, that at some point it will be reconstructed again." (SH, I. 96ff.)

The main threat for green infrastructures is seen by him, as well as by Petra Hochtritt and the stakeholders of Querbeet, in the need for public infrastructural buildings, the city needs to construct on municipal lots (CE, I. 284f.; PH, I. 318ff.; SH, I. 128ff.). Therefore, Petra Hochtritt gives the example of a controversial decision of the mayor to transform the greens of the Otto-Runki Platz into a public swimming hall:

"On the one hand they say there is a deficit (of greens) in the east. And still there is a tendency of the city administration to construct on greens." (PH, I. 325f.)

As possible solution for those threats of displacement, Stefan Heinig emphasizes the need of multiple uses for greens, e.g. school gardens, although he admits that those strategies are not yet well thought out and high costs as well as a difficult legal situation represent barriers:

"The multiple usages of greens, so the topic if school gardens or allotments should be opened (...). It is also very difficult to handle, because who cares for the cleanliness of those places or the safety?" (SH, I. 116ff.)

One stakeholder of Querbeet also observes the pressure on greens, while noticing the danger of overuse of parks due to the high influx at the same time (CE, I. 287f.). Moreover, she evaluates the strategy of the city administration critically, concerning the inwards directed densification:

"But if you look at the plans, there is always written, no land usage, so to densify inwards and I think this is a discourse (...) Without usage of land, how you want to safe the greens?" (CE, I. 346ff.)

Further, the construction of new greens can be highly burdened by conflicts. While the interviewee of the department of urban planning remarks that cheap housing and the greening of buildings are hard to combine (SH, I. 113ff.), Michael Berninger sees problems in the implementation of the urban

forest, where surrounding residents, ecologic activists and the city administration have different ideas in mind (MB1, I. 111ff.).

#### Stakeholders of the Real Estate Sector:

The real estate agents interviewed see two major challenges for green spaces in Leipzig from their perspective: on the one hand the **increased pressure on greens** due to the demand on the housing market and on the other hand, the **importance of economic aspects** for many actors, which often surpass ecologic ones. The interviewee of *Goldstein Immobilien* gives the example of customers, who expect parking possibilities provided, although he would prefer to build gardens in the yard (Go, I. 227ff.). Therefore he hopes that ecologic aspects gain more importance in his sector:

"Besides all enthusiasm, how should I put it, it is always mirrored at the account statements, that's most important for the people. (...) I do understand that. Still, we have to make sure, that we find a certain balance. The economy has to be right, but also the ecology." (Go, I. 301ff.)

Still, the pressure on greens due to the high influx and the need for housing is observed by real estate agents in present-days Leipzig, so it is feared that existent allotments could disappear (Go, I. 293f.) or planned green spaces cannot be implemented in the future:

"I could also imagine, that because of the pressure on the market, (the plans) could be changed. Yes, that lots will not be transferred into greens anymore, but the lots will be needed to build apartments." (Hi, I. 61ff.)

#### VI Discussion

In the following chapter, the extensive results presented before will be summarized to relevant points for the final discussion. Furthermore, results will be discussed in relation to the research question and the theoretical background introduced in the beginning of this work. Thereby, expectations towards the greening project in relation to the expectations towards the development of Leipzig east from different stakeholder perspectives build the heart of the discussion.

#### 6.1 The Rapid Transformation of Leipzig East

The common rating of the situation in the eastern neighborhood is crucial for the understanding of all further points of discussion. Independent of the group of interviewees, all stakeholders stated that Leipzig east is changing drastically and rapidly. This process was perceived as a sudden change, since the situation was noticed as very different only five years ago. Changes were expressed as transformation of residential structures, including an increase of young people, students, creatives and alternative projects. Further, an increase in rents was described. Although these indicators of transformation have already been presented within the case study, the interviews show that this development is omnipresent for different stakeholders. In fact, it was frequently mentioned that those changes appear locally very different and some neighborhoods stand out in its development. Although the whole city of Leipzig is benefiting from the high influx and vacancy rates decrease citywide, some locations undergo a special transformation of residential structures and building structures. While the area of Neustadt-Neuschönefeld is currently seen as a focus spot of constructional activity and refurbishments, especially the Lene-Voigt park quarter but also the Bülow quarter are seen as areas with strong residential transformation. Thereby, refurbishment activities in the Lene-Voigt Park quarter are already concluded in major parts, which was also proven by observations. As presented with the help of mapping, the surrounding of the Lene-Voigt Park represents a residential area with high living comfort, constituted in top refurbished Gründerzeit buildings, with balconies installed and gastronomic offers, attracting young couples or families. The positive development of the area is often stated as concurrent with the opening of the park in 2004, at a time when Leipzig started to flourish, but the eastern neighborhoods did not yet. The given example of the Lene-Voigt park shows that the eastern neighborhoods developed and still develop locally very differentiated. This also leads to the circumstance that those neighborhoods, although spatially close, are differently challenged and expectations vary locally. Even though lots of indicators have changed in the eastern neighborhoods and locations have profiled differently, the image of Leipzig east seems to change slower than its external appearance. All but one real estate agent interviewed, who is personally strongly attached to the area, still see the eastern neighborhoods as an area which is spatially cut-off, with simple building structures and missing green qualities. But many aspects related to the bad historical image are now in the focus of urban development strategies: green infrastructures should be built, for example with the Parkbogen Ost, leading also to better accessibility of the area and furthermore the project will represent an unique symbol for the surrounding neighborhoods. Still, the analysis showed that the present transformation of Leipzig east is rated ambivalently: at the moment upgrading processes, population shifts and greening projects are welcomed, but the future development seems afflicted with many uncertainties. Stakeholders are fluctuating between optimism and worries, since the persistence of the high influx and strong attractiveness of Leipzig are still questioned by many interviewees. The opinions of political actors and real estate agents concerning the future development of the east mainly overlap. So they expect the area not be hyped extraordinarily in the near future and rents to stay moderate. Moreover, the present uncertainty especially of civic actors can further explain the perception of upgrading processes and strongly influence the discussions on the housing market and gentrification.

#### 6.2 The Unhealthy Real Estate Market and Gentrification

An important turning point regarding the housing market in Leipzig seems to be reached, as mentioned by different stakeholders of all stakeholder groups. The housing market is perceived as unhealthy by various interviewees and even some of the real estate agents observe ongoing activities critically. So this estimation is shared independently of the stakeholder group. In spite of different programs of the city administration to bring more owner-occupiers into the city, the rates stay low. Most apartments or buildings are bought up by huge property developers, benefiting from tax benefits for listed buildings. They are further able to pay exorbitant prices, with which most owneroccupiers in Leipzig cannot compete. Moreover, investors or apartment owners are often situated in western Germany and have no emotional relation to their object, nor to the neighborhood. As Leipzig represents an attractive city for investments - green areas, big stock of Gründerzeit buildings and rapidly growing - and it is referred to as "sold out" by different actors, the present investments and the high influx into the eastern neighborhoods seem to be a logical consequence. More astonishing is the fact that property developers nowadays pay the same prices per square meter for a listed object, regardless of the location as stated by one real estate agent. Besides, the demand at the housing market and the way buildings are constructed or refurbished is not matching anymore. Even the interviewed real estate agents criticize the high amount of luxury refurbishments taking place in Leipzig, as well as in the eastern neighborhoods. The ongoing development of the housing market, combined with the strong attractiveness of the city and the changing image of certain neighborhoods could influence a further increase in real estate prices. Rents could increase rapidly in inner urban neighborhoods like Leipzig east, with their proximity to the city center and their big Gründerzeit housing stock on the one side and rents still below average and low income residents on the other, which is reminiscent of the initial phase according to the classical gentrification theory (cf. Riemann, 2016). Although Leipzig has got a municipal housing company (the LWB), which owns circa 35 000 apartments in the city, enough affordable apartments in central locations can hardly be provided, since many objects of the LWB are located in the prefab building segment in more remote quarters like Paunsdorf (LWB, 2015). So the hype about Leipzig and the increase in rents led to discussions on gentrification, also beginning in the eastern neighborhoods. Actors of the city administration realized the beginning fear for gentrification and dedicated one expert discussion at the Tag des Städtebaus to the topic, although interviewees of the city are personally not believing that the eastern neighborhoods could be gentrified soon. Still, the city administration aims to observe the ongoing processes further, since legal instruments only serve before displacement occurs. Also other stakeholders interviewed do not see a major threat in gentrification so far and rather remembered times when investments in the eastern neighborhoods were long-desired. Further, the influx of young people and creative projects to the area is strongly welcomed, rather than feared as influx of pioneers in the sense of the classical gentrification theory.

Nevertheless, gentrification discussions have started, the city administration has targeted further upgrading strategies, which serve the missing qualities of the eastern neighborhoods, at the same time Leipzig seems sold out and available lots for needed infrastructures are scarce. Therefore, it is about time to ask for the role of the Parkbogen Ost project and greening projects in general, in the rapidly transforming Leipzig east, applying the critical view of the green gentrification approach (Gould and Lewis, 2017).

#### 6.3 The Parkbogen Ost as Engine

The Parkbogen Ost project was initiated eight years ago by a citizen's initiative and represents a long desired hope for many civic stakeholders and residents. It is strongly welcomed by a high number of residents, since it brings long missing green structures to the eastern neighborhoods, who are unfortunately cut-off from Leipzig's natural attractive forests, water and green corridors. Thereby, different greening elements are targeted, like the combination of linear parks, pocket parks, forests and urban gardening, providing different possibilities of usage. Residents of the eastern neighborhoods will be able to use those new elements for recreational aspects in the future, since access will be provided within the Parkbogen Ost project to greens, which have been earlier used and fenced by the BAHN AG. Also political stakeholders realized the opportunity of the Parkbogen creation, whereby the master plan developed contains a broad argumentation taking up social,

economic and ecologic aspects. In contrast to observations of Dooling (2009) that greening projects are often wrapped into an argumentation of sustainability, the line of argumentation concerning the Parkbogen Ost rather uses points of environmental justice and economy. Also for stakeholders interviewed, sustainability aspects play a subordinate role. The project is rather seen as chance for the rise of the surrounding neighborhoods, in terms of attractiveness, acceptance and also economic aspects. Many hopes thereby are placed into the new accessibility of the neighborhoods by bicycle or foot and by passing forgotten sights and gardens, without crossing busy roads. Furthermore, the viaduct should become a brand for the east, facilitating the marketing of the area and attracting external visitors and tourists. It is hoped and believed by all civic and political stakeholders that the impact of the project will have an enormous appeal: the implementation of the project will activate surrounding lots, which have been hardly perceived or used before. Many lots around the future Parkbogen Ost are used at the moment for garages, industrial buildings or allotments. It is to be assumed, that activation is understood in this context as upgrading to higher forms of usage. As indicated during the chapter of results and former discussions, housing in recent times represents one of the most valuable forms of usage in Leipzig, due to decreasing vacancy rates and persistent influx. So the Parkbogen should help to direct the investors' interest towards the more remote eastern areas, whereby also the statements of real estate agents reinforced this impression. The argument of proximate green spaces was always missing for real estate agents in the eastern neighborhoods and in recent times neither needed due to the attractive inner-city location and the influx. On the contrary, for a bit more remote neighborhoods such as Sellerhausen, the new green infrastructure offers a new selling argument. Still, this aspect is well known by the city administration and even desired. Following Gould and Lewis (2017), the green infrastructure is clearly instrumentalized, but - on the other hand - desired impacts are made transparent. So the city administration of Leipzig can hardly be blamed for the concealment of upgrading strategies. They laid their interest of upgrading, next to diverse social and ecologic reasons, open, while organizing diverse participation possibilities. The civic stakeholders do not feel threatened by this future outlook, since new and more attractive forms of usage are demanded for the lots surrounding the eastern course of the Parkbogen and the viaduct. Looking at the northern course a different image is depicted: lots that are planned to be transferred into an urban forest are disputed, since residents see the need for housing. So the Parkbogen Ost is far away from being perceived as LULU as observed by Anguelovski (2016) concerning different greening projects in New York. The Parkbogen is rather seen as an engine for the area. Further it seems that the eastern neighborhoods are still in a position where those impulses are highly welcomed. Civic stakeholders interviewed do not want to miss the numerous positive effects of greens in their neighborhoods, just because of some worries

regarding the housing market. They might feel that gentrification processes follow complex mechanisms, whereby the implementation of an green infrastructure is not perceived as a proper trigger. Still, it needs to be questioned, whether the city administration provides preventive strategies for the worst case scenario, in which the strong influx remains and equally the high class refurbishments and constructions mushroom around the Parkbogen Ost.

# 6.4 The Parkbogen Ost: Stuck Between Past and Present Urban Planning Strategies

Stakeholders noticed a list of challenges encompassing the project. Besides technical barriers, a central question was whether the Parkbogen Ost is still compatible with the guiding principle for the eastern neighborhoods and the city of Leipzig in general. The eastern neighborhoods had and have still the function as "area of arrival" for the city, but it is controversial whether this role can remain when upgrading processes proceed and the image changes. Basically, the idea of the Parkbogen Ost developed in a time when the east was still troubled with high vacancy rates and plenty of empty lots. Therefore, the question seems justified. The Parkbogen project represents a complex and costly undertaking, whereby the explicit financing and purchase possibilities are still unclear. So it is another uncertainty, whether the city will be able to buy all necessary lots to implement the Parkbogen to its full extent. Furthermore, neighboring landlords have to be integrated, to guarantee sufficient access possibilities. As the experiences made with the BAHN AG showed, such a cooperation is difficult and time intensive. Different civic and real estate stakeholders are less afraid of upgrading than the project not being fully implemented. Although the initiative appears to follow important aspects and needs, some stakeholders, of the real estate sector as well as civic actors, question the reliability of targeted plans. They realized the pressure on vacant lots in the whole urban area of Leipzig and wonder whether strategies decided on years ago can still be followed under present circumstances. Besides, the political representatives admit that decisions made on the federal level have to be followed and the city's liberty of action is often limited. Due to the changing needs of Leipzig, which also become visible in the eastern neighborhoods, a new question has to be posed:

## Has the idea of the Parkbogen Ost become obsolete, regarding the new increasing need of housing and lots?

The ASW certainly is aware of the diverse expectations linked to the successful realization of the project, but at the same time other challenges bother the present-days Leipzig. The city needs to find a way to implement urgent and costly infrastructural projects, like schools and kindergartens. Thereby, social infrastructure competes with the rising needs at the housing market for the left over

empty lots in the eastern neighborhoods. First conflicts become visible at the northern course of the Parkbogen, where residents themselves demand the construction of apartments, instead of the implementation of an urban forest.

#### 6.5 Urban Greening: A Hailed and Threatened Strategy

The implementation of green infrastructure is a common strategy in present-day cities and mayors can profit from the experiences other city governments made. Although the planning and design of green spaces has always been a part of urban planning, the expectations concerning the value and benefit of green spaces has certainly increased in present-day cities. This development is strongly related to relatively new concepts, like sustainability, environmental justice or ecosystem services emphasizing the value of greens in urban spaces (Wolch et al., 2014). Following the idea of green infrastructures, it is often expected that green spaces can influence ecological, social and economic aspects at the same time (Walmsley, 2005). In the time after the German reunion, greening was frequently used as an intermediary strategy in Leipzig. So it was making use of spaces, which had been presently unclaimed, also supporting Leipzig's image as green city that contains wide-ranging open spaces. Today, in the case of Leipzig east, some political and civic stakeholders interviewed see greening as a targeted start up measure, triggering positive development, especially in areas with low indicators. Moreover, they emphasize their conviction that new green structures in the east are needed to compensate the unequal distribution of natural amenities in Leipzig. Moreover, different interviewees of all stakeholder groups see in particular the social benefits of new green structures, like the improved aesthetics, access for elderly people and children and a safer and better way to work. On the other side, the majority of real estate agents emphasized the marketing benefit of all kinds of greens, which is especially high when investors originate from less green cities. The analysis shows that also in this case study arguments from among the environmental justice point of view as well as from the green gentrification point of view are overlapping. In the case of Leipzig east and the Parkbogen the wish for new green infrastructures overtakes the fear for increased property values and residents' displacement. In contrast, different stakeholders of all groups interviewed rather feared green spaces to be displaced by the influx of people and the need for construction. In fact, although greening represents one guiding principal for urban development in the eastern neighborhoods, not all existing green spaces are envisaged to remain, due to the increasing pressure on lots and politics have difficulties in explaining the transformation. Whereby the Parkbogen Ost project represents a green infrastructure project, which is clearly hyped and focused, the city government decided that another green space has to make way for the construction of a public swimming hall. Also expressed by the opinion of stakeholders interviewed, it seems that displacement of residents is not yet the fear in most of the eastern neighborhoods, since lots with lower usage, like garages, could be used for the construction of apartments. Fears for the displacement of green spaces or missed opportunities of implementation, are omnipresent in contrast. The analysis shows that green spaces are instrumentalized in the eastern neighborhoods to set impulses for upgrading, but they are threatened by construction at the same time. The government of Leipzig has increasing difficulties to preserve simple greens, while following the guiding principle of the dual inner development. With the Parkbogen Ost project, they hoped to have found a structure offering ecological, economic and social value, due to secured air lanes, the new connectivity and diverse usage possibilities. But in contrast to the question, what kind of development is feared by stakeholders due to greening projects, it appears necessary to ask for the changing role of green structures in relation to the changing real estate market:

How does the present development on the housing market affect the role of greens in the inner eastern neighborhoods?

#### 6.6 Brief Outlook

The implementation of the whole Parkbogen Ost project will prospectively take more than 20 years and Leipzig will change drastically during that time, independently of the project. Thereby, the process of implementation will be accompanied by many difficulties. It is uncertain whether the project can be fully realized, so whether the circle from the central railway station to the viaduct can be closed and as well what the greening project may imply for the residents of the eastern neighborhoods in the future. It is certain that the successful implementation of the project is highly dependent on diverse factors: the budget, the city administration can bring in, the success of cooperation with former and current landlords of needed and neighboring lots, the importance given to greening within the city administration and the citizens and the need seen in the establishment of apartments or other forms of usage. Just as the possibility of finalization, the impact of the Parkbogen project is hard to predict. The participating stakeholders expect an increased connectivity and visibility of the east, as well as a positive influence on the surrounding lots and neighborhoods. It is understandable that many stakeholders living or working in the eastern neighborhoods longed strongly for a greening initiative, which they supported with best efforts, as attractive connected green spaces and a unique symbol for the east have been missing for decades. As the project represents indeed an enormous undertaking, it could be that the Parkbogen Ost creates awareness for the former ignored eastern neighborhoods and that it can even highlight the diverse historical and cultural sights they incorporate. It is further unclear which neighborhoods profit most from the newly constructed linear park. Still, if one thinks the areas surrounding the Parkbogen will certainly

develop like the Lene-Voigt Park quarter, the person might be wrong. The quarters are locally so different, that it would be necessary to examine the exact location and analyze several indicators further. Although the eastern neighborhoods will probably not be demanded in the near future in the same way as the neighborhoods close to the natural *Auwald* and rivers, upgrading and influx could be enough for long established residents to fear the rents and therefore their homes. If the city administration preserves the well established participation culture and follows their ideal of open dialogs, the energy that is often put into mutual accusations could instead be used for the finding of constructive solution strategies. Finally, those dialogs only promise a positive outcome, if they also give room to talk about possible negative aspects of targeted urban planning projects and to share the experiences from other initiatives.

#### VII Conclusion and Final Reflections

As explained in the beginning, the aim of this thesis was to capture positive and negative expectations concerning the Parkbogen Ost project and to understand on a second level how those are linked to general expectations and strategies for the eastern neighborhoods. The concept of green gentrification thereby represents an important supplement to the sustainability and EJ approach, which already influence the current urban planning discussions increasingly. It was beyond the scope of this thesis to clarify whether green gentrification is triggered by the Parkbogen Ost. Rather, the purpose was to examine critically which feelings could be provoked by stakeholders, because of such a greening project.

By observing the project with the help of diverse stakeholders, it could be noticed that green gentrification as well as gentrification in general do not represent the main threat to most of the interviewees. Furthermore, targeted upgrading processes are commonly known. This does not lead to protest of stakeholders participating, but is rather highly welcomed. Only one civic stakeholder sees the possibility of a future relationship between the Parkbogen and increasing rents in the surrounding neighborhoods. All stakeholders agreed in the strong wish for increased green infrastructures in the inner east of Leipzig, still some interviewees worried for the actual realization of the master plan. Thereby, some worried about technical and financial challenges, others observed the decreasing availability of lots anxiously. The new competition for lots due to the present strong influx and the need for increased public infrastructure makes many stakeholders wonder for the current role of green infrastructure. Amongst the real estate actors the increasing need for housing is seen as the main challenge for the construction of new greens in the inner eastern neighborhoods, since apartments are rated as more urgent in the near future. Thereby, different real estate actors

generally criticize the unhealthy real estate market in Leipzig, which they also see as a challenge for the eastern neighborhoods. Within the analysis also many positive expectations have been revealed concerning the Parkbogen Ost, especially of civic actors that participated in the project. So it is expected that new green infrastructure in the east sets positive impulses for a further economic and social improvement and provides diverse usage possibilities for residents as well as tourists. Thereby, expectations of different stakeholder groups do not differ significantly concerning the development of Leipzig east. Since most of the real estate agents have not been familiar with the master plan of the Parkbogen Ost, their expectations were mainly related to improved selling arguments.

The Parkbogen Ost project is still only drafted and the concept of green gentrification represents a new approach, which helps to develop a critical look on a phenomenon, rather than measuring indicators. Therefore, the open approach chosen was appropriate to cover the complex topic, which integrated several stakeholder groups and neighborhoods and thus perspectives. Finally, it would be necessary to analyze the project again after more parts are implemented or even after finalization. That time, it would be crucial to integrate external actors into the analysis, to grasp the final outreach of the Parkbogen and to see which feelings its impact evokes.

The discussion of the given results showed that the current mood of stakeholders is wondering for the new role of greens in Leipzig and the eastern neighborhoods and fears for the failure of the Parkbogen Ost. Moreover, new questions arose following the present fears of stakeholders and asking for the reverse influence of the housing market on greens. It has to be questioned how the current housing market and the implementation of greens interact in the long run. Are green infrastructures that serve diverse needs and offer wide-ranging benefits for different stakeholders at all feasible under the conditions of the current housing market in Leipzig or will they disappear again when the pressure on lots increases further? The Parkbogen Ost certainly proves that greening strategies can be accompanied by high expectations, which need to be expressed loudly and openly. The implementation of greens is just like the displacement of greens on the agenda in Leipzig east. Equally, wishes for upgrading are just as much part of the present reality as discussions about gentrification. The inner eastern neighborhoods are at a turning point and the Parkbogen Ost is just one side effect of their new, slowly changing, standing.

#### VIII References

- Amt für Stadterneuerung und Wohnungsbauförderung, 2017. Parkbogen Ost [WWW Document]. URL http://www.leipziger-osten.de/content/stadt-umbauen/parkbogen-ost/ (accessed 9.5.17).
- Anguelovski, I., 2016. From Toxic Sites to Parks as (Green) LULUs? New Challenges of Inequity, Privilege, Gentrification, and Exclusion for Urban Environmental Justice. J. Plan. Lit. 31, 23–36. doi:10.1177/0885412215610491
- Anguelovski, I., Martínez Alier, J., 2014. The "Environmentalism of the Poor" revisited: Territory and place in disconnected glocal struggles. Ecol. Econ. 102, 167–176. doi:10.1016/j.ecolecon.2014.04.005
- Atkinson, R., 2004. The evidence on the impact of gentrification: new lessons for the urban renaissance? Int. J. Hous. Policy 4, 107–131. doi:10.1080/1461671042000215479
- Baxter, P., Jack, S., 2008. The Qualitative Report Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. Qual. Rep. 13, 544–559.
- Benedict, M.A., Edward, T., Mcmahon, J.D., 2001. Green Infrastructure: Smart Conservation for the 21st Century. Washington D.C.
- Benfield, K., 2011. The Original High Line: La Promenade Plantée in Paris The Atlantic. Atl. doi:https://www.theatlantic.com/international/archive/2011/07/the-original-high-line-la-promenade-plant-eacute-e-in-paris/241964/
- Bogner, A., Menz, W., 2009. Das theoriegenerierende Experteninterview Erkenntnisinteresse, Wissensformen, Interaktion, in: Bogner, A., Littig, B., Menz, W. (Eds.), Experteninterviews Theorien, Methoden, Anwendungsfelder. VS Verlag für Sozialwissenschaften, Wiesbaden, p. 306.
- Böhme, C., Bunzel, A., 2014. Umweltgerechtigkeit im städtischen Raum, Expertise "Instrumente zur Erhaltung und Schaffung von Umweltgerechtigkeit". Berlin.
- Bortz, J., Döring, N., 2006. Forschungsmethoden und Evaluation, 4. ed. Springer Medizin Verlag Heidelberg, Heidelberg.
- Breuste, J., 1996. Grundzüge des Wandels von Stadtstruktur und Umweltsituation der Stadt Leipzig Ein Überblick, in: Breuste, J. (Ed.), Stadtökologie Und Stadtentwicklung: Das Beispiel Leipzig. Analytica, Berlin, pp. 11–32.
- Brüsemeister, T., 2008. Qualitative Forschung: Ein Überblick, in: Qualitative Forschung. VS Verlag für Sozialwissenschaften, Wiesbaden, pp. 53–228. doi:10.1007/978-3-531-91182-3\_2
- Bryman, A., 2016. Social Research Methods, 5th ed. Oxford University Press, Oxford.
- Bunce, S., 2009. Developing sustainability: sustainability policy and gentrification on Toronto's waterfront. Local Environ. 14, 651–667. doi:10.1080/13549830903097740
- Bundesamt für Naturschutz, 2017. Bundeskonzept Grüne Infrastruktur; Grundlagen des Naturschutzes zu Planungen des Bundes.
- Bundesministerium für Umwelt, Naturschutz, B. und R., 2007. LEIPZIG CHARTA zur nachhaltigen europäischen Stadt. Berlin.
- Checker, M., 2011. Wiped out by the "Greenwave": Environmental gentrification and the paradoxical politics of urban sustainability. City Soc. 23, 210–229. doi:10.1111/j.1548-744X.2011.01063.x
- Choa, M., 2007. Selbstgenutztes Wohneigentum im Bestand als Strategie für die Aufwertung innerstädtischer Altbaquartiere in den neuen Bundesländern Dargestellt am Beispiel Selbstnutzerprogramm in Leipzig (No. 69), Materialien zur Raumordnung.
- Crewe, K., 2001. Linear Parks and Urban Neighbourhoods: A Study of the Crime Impact of the Boston South-west Corridor. J. Urban Des. 6, 245–264. doi:10.1080/13574800120105779
- Cucca, R., 2009. The Unexpected Consequences of Sustainability Green Cities Between Innovation and Ecogentrification 1–21. doi:10.2383/38269
- Curran, W., Hamilton, T., 2012. Just green enough: contesting environmental gentrification in Greenpoint, Brooklyn. Local Environ. 17, 1027–1042. doi:10.1080/13549839.2012.729569
- Dahmann, N., Wolch, J., Joassart-Marcelli, P., Reynolds, K., Jerrett, M., 2010. The active city? Disparities in provision of urban public recreation resources. Health Place 16, 431–445.

- doi:10.1016/j.healthplace.2009.11.005
- Dale, A., Newman, L.L., 2009. Sustainable development for some: green urban development and affordability. Local Environ. 14, 669–681. doi:10.1080/13549830903089283
- Doehler, M., Rink, D., 1996. Stadtentwicklung in Leipzig: zwischen Verfall und Deindustrialisierung, Sanierung und tertiären Großprojekten, in: Häußermann, H., Neef, R. (Eds.), Stadtentwicklung in Ostdeutschland. VS Verlag für Sozialwissenschaften, Wiesbaden, pp. 263–286. doi:10.1007/978-3-322-89071-9\_12
- Dooling, S., 2009. Ecological gentrification: A Research agenda exploring justice in the city. Int. J. Urban Reg. Res. 33, 621–639. doi:10.1111/j.1468-2427.2009.00860.x
- Dresing, T., Pehl, T., 2010. Transkription, in: Handbuch Qualitative Forschung in Der Psychologie. VS Verlag für Sozialwissenschaften, Wiesbaden, pp. 723–733. doi:10.1007/978-3-531-92052-8\_50
- Drilling, M., Schnur, O., 2012. Nachhaltigkeit in der Quartiersentwicklung einführende Anmerkungen, in: Drilling, M., Schnur, O. (Eds.), Nachhaltige Quartiersentwicklung. VS Verlag für Sozialwissenschaften, Wiesbaden, pp. 11–41. doi:10.1007/978-3-531-94150-9\_1
- Dunn, C., Roberts, B., 1997. Maps and Illustrations, in: Flowerdew, R., Martin, D. (Eds.), Methods in Human Geography. Addison Wesley Longman Limited, London, pp. 254–274.
- European Comission, 2013. COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS.
- Falk, W., 1994. Städtische Quartiere und Aufwertung: Wo ist Gentrification möglich? Stadtforsch. aktuell 49.
- Fehlberg, T., 2013. (Re)Produktion von rechtsextrem dominierten "Angsträumen", in: Raumbezogene Qualitative Sozialforschung. Springer Fachmedien Wiesbaden, Wiesbaden, pp. 103–122. doi:10.1007/978-3-531-93240-8 5
- Flick, U., 2011. Triangulation, in: Empirische Forschung Und Soziale Arbeit. VS Verlag für Sozialwissenschaften, Wiesbaden, pp. 323–328. doi:10.1007/978-3-531-92708-4\_23
- Flitner, M., 2017. Grüne Infrastruktur und die Erneuerung städtischer Naturen, in: Flitner, M., Lossau, J., Müller, A.-L. (Eds.), Infrastrukturen Der Stadt. Springer Fachmedien Wiesbaden, Wiesbaden, pp. 45–64. doi:10.1007/978-3-658-10424-5\_3
- Freunde des Mauerparks e.V., 2016. Infos rund um den Berliner Mauerpark [WWW Document]. URL https://www.mauerpark.info/mauerpark/?lang=en (accessed 5.3.17).
- Friends of the High Line, 2017. About the High Line [WWW Document]. URL http://www.thehighline.org/about (accessed 5.3.17).
- Garcia-Zamor, J.-C., 2008. The Leipzig Model Myth or Reality. University Press of America, Lanham;
- Gläser, J., Laudel, G., 2004. Experteninterviews und qualitative Inhaltsanalyse als Instrumente rekonstruierender Untersuchungen, 1. ed. UTB, Stuttgart.
- Glock, B., 2006. Stadtpolitik in schrumpfenden St?dten, 1st ed. VS Verlag f?r Sozialwissenschaften, Wiesbaden. doi:10.1007/978-3-531-90452-8
- Gormsen, N., Kühne, A., 2000. Leipzig. Den Wandel zeigen. Edition Leipzig, Leipzig.
- Gould, K.A.., Lewis, T.L.., 2017. Green Gentrfication Urban Sustainability and the Struggle for Environmental Justice, 1st ed. Routledge, New York.
- Gränitz, F., 2013. Daten und Fakten zur Leipziger Stadtgeschichte, 5th ed. Leipziger Universitätsverlag, Leipzig.
- Grimble, R., Wellard, K., 1997. Stakeholder methodologies in natural resource management: A review of principles, contexts, experiences and opportunities. Agric. Syst. 55, 173–193. doi:10.1016/S0308-521X(97)00006-1
- Haase, A., Rink, D., 2015. Inner-City Transformation Between Reurbanization and Gentrification: Leipzig, Eastern Germany. Geografie 120, 226–250.
- Haase, D., Kabisch, S., Haase, A., Andersson, E., Banzhaf, E., Baró, F., Brenck, M., Fischer, L.K., Frantzeskaki, N., Kabisch, N., Krellenberg, K., Kremer, P., Kronenberg, J., Larondelle, N., Mathey, J., Pauleit, S., Ring, I., Rink, D., Schwarz, N., Wolff, M., 2017. Greening cities To be socially

- inclusive? About the alleged paradox of society and ecology in cities. Habitat Int. 64, 41–48. doi:10.1016/j.habitatint.2017.04.005
- Haase, D., Larondelle, N., Andersson, E., Artmann, M., Borgström, S., Breuste, J., Gomez-Baggethun, E., Gren, Å., Hamstead, Z., Hansen, R., Kabisch, N., Kremer, P., Langemeyer, J., Rall, E.L., McPhearson, T., Pauleit, S., Qureshi, S., Schwarz, N., Voigt, A., Wurster, D., Elmqvist, T., 2014. A Quantitative Review of Urban Ecosystem Service Assessments: Concepts, Models, and Implementation. Ambio 43, 413–433. doi:10.1007/s13280-014-0504-0
- Haferkorn, J., 1996. Naturschutzprobleme der Leipziger Auenlandschaft, in: Breuste, J. (Ed.), Stadtökologie Und Stadtentwicklung: Das Beispiel Leipzig. Analytica, Berlin, pp. 250–260.
- HausHalten e.V., 2017. HausHalten e.V. Der Hintergrund [WWW Document]. URL http://www.haushalten.org/de/haushalten\_hintergrund.asp (accessed 7.11.17).
- Henckel, D., von Kuczkowski, K., Lau, P., Pahl-Weber, E., Stellmacher, F. (Eds.), 2010. Planen?

  Bauen ?Umwelt. VS Verlag f?r Sozialwissenschaften, Wiesbaden. doi:10.1007/978-3-531-92288-1
- Hildebrandt, A., Jäckle, S., Wolf, F., Heindl, A., 2015a. Methodologie, Methoden, Forschungsdesign. Springer Fachmedien Wiesbaden, Wiesbaden. doi:10.1007/978-3-531-18993-2
- Hildebrandt, A., Jäckle, S., Wolf, F., Heindl, A., 2015b. Inhaltsanalyse, in: Methodologie, Methoden, Forschungsdesign: Ein Lehrbuch F{ü}r Fortgeschrittene Studierende Der Politikwissenschaft. Springer Fachmedien Wiesbaden, Wiesbaden, pp. 299–333. doi:10.1007/978-3-531-18993-2\_12
- Holm, A., 2012. Gentrification, in: Eckardt, F. (Ed.), Handbuch Stadtsoziologie. VS Verlag für Sozialwissenschaften, Wiesbaden, pp. 661–687. doi:10.1007/978-3-531-94112-7\_29
- Hornberg, C., Bunge, C., Pauli, A., 2011. Strategien für mehr Umweltgerechtigkeit Handlungsfelder für Forschung, Politik und Praxis.
- Huber, F.J., 2013. Gentrification in Vienna, Chicago and Mexico City Qualitative Gentrification-Research and International Comparability Gentrifizierung in Wien, Chicago und Mexiko Stadt Qualitative Stadtforschung und internationale Vergleichbarkeit. Österreich Z Soziol 38, 237–257. doi:10.1007/s11614-013-0091-5
- Huber, F.J., 2011. Gentrification als soziales Phänomen und die Rolle der Akteur/innen Ansätze einer Soziologie der Gentrifizierung. Universität Wien.
- Jepsen, A.L., Eskerod, P., 2009. Stakeholder analysis in projects: Challenges in using current guidelines in the real world. Int. J. Proj. Manag. 27, 335–343. doi:10.1016/j.ijproman.2008.04.002
- Kabisch, N., Haase, D., 2014. Green justice or just green? Provision of urban green spaces in Berlin, Germany. Landsc. Urban Plan. 122, 129–139. doi:10.1016/j.landurbplan.2013.11.016
- Kabisch, S., 1996. Entwicklungsperspektiven gründerzeitlicher Wohngebiete, in: Breuste, J. (Ed.), Stadtökologie Und Stadtentwicklung: Das Beispiel Leipzig. Analytica, Berlin, pp. 99–110.
- Kullmann, K., 2011. Thin parks / thick edges: towards a linear park typology for (post)infrastructural sites. J. Landsc. Archit. 6, 70–81. doi:10.1080/18626033.2011.9723456
- Kulturbund der DDR, 1990. Beiträge zur Leipziger Stadtgeschichte (No. 14). Leipzig.
- Lamneck, S., 2005. Qualitative Sozialforschung, Lehrbuch, 4. ed. Beltz Verlag, Weinheim, Basel.
- Lees, L., 2008. Gentrification and Social Mixing: Towards an Inclusive Urban Renaissance? Urban Stud. 45, 2449–2470. doi:10.1177/0042098008097099
- Letzel, U., 2016. Leipzig in Zahlen Statistik Einwohner Entwicklung Stadt Leipzig [WWW Document]. URL http://www.leipzig-sachsen.de/leipzig-stadtchronik/statistik-einwohner.html (accessed 9.3.17).
- LWB, 2015. Leipziger Wohnungs- und Baugesellschaft mbH Jahresbericht 2015. Leipzig.
- Magee, L., Scerri, A., James, P., Thom, J.A., Padgham, L., Hickmott, S., Deng, H., Cahill, F., 2013. Reframing social sustainability reporting: towards an engaged approach, in: Environment, Development and Sustainability. pp. 1–40. doi:10.1007/s10668-012-9384-2
- Maschewsky, W., 2001. Umweltgerechtigkeit, Public Health und soziale Stadt. Verlag für Akademische Schriften (VAS), Frankfurt am Main.

- Mayring, P., 2010. Design, in: Mey, G., Mruck, K. (Eds.), Handbuch Qualitative Forschung in Der Psychologie. VS Verlag für Sozialwissenschaften, Wiesbaden, pp. 225–237. doi:10.1007/978-3-531-92052-8\_15
- Mell, I.C., 2008. Green Infrstructure: concepts and planning. FORUM Ejournal 8, 69–80. doi:1354-5019-2008-04
- Mey, G., Mruck, K., 2010. Interviews, in: Handbuch Qualitative Forschung in Der Psychologie. VS Verlag für Sozialwissenschaften, Wiesbaden, pp. 423–435. doi:10.1007/978-3-531-92052-8\_30
- Millennium Ecosystem Assessment, 2005. Ecosystems and Human Well-being: Synthesis . Washington DC.
- Mousa, L., 2013. (Re)Produktion und (Re)Präsentation der Lebenswelt "Flüchtlingslager" Die Rolle von Film, Bild und interaktiven Forschungsansätzen, in: Raumbezogene Qualitative Sozialforschung. Springer Fachmedien Wiesbaden, Wiesbaden, pp. 123–145. doi:10.1007/978-3-531-93240-8 6
- National Recreation and Park Association, n.d. Creating Mini-Parks for Increased Physical Activity. Ashburn.
- Nuissl, H., Rink, D., 2003. Urban sprawl and post-socialist transformation: The case of Leipzig (Germany) (No. 4), UFZ-Bericht. Leipzig.
- O'Leary, Z., 2004. Guide to doing research, 1st ed. SAGE Publications Ltd, London.
- Pearsall, H., 2012. Moving out or moving in? Resilience to environmental gentrification in New York City. Local Environ. 17, 1013–1026. doi:10.1080/13549839.2012.714762
- Pham, T.-T.-H., Apparicio, P., Séguin, A.-M., Landry, S., Gagnon, M., 2012. Spatial distribution of vegetation in Montreal: An uneven distribution or environmental inequity? Landsc. Urban Plan. 107, 214–224. doi:10.1016/j.landurbplan.2012.06.002
- Quastel, N., 2009. Political Ecologies of Gentrification. Urban Geogr. 30, 694–725. doi:10.2747/0272-3638.30.7.694
- Riemann, C.S., 2016. Baurechtliche Instrumente gegen Gentrifizierung. Kommunal- und Schulverlag, Wiesbaden.
- Rink, D., 2015. Zwischen Leerstand und Bauboom: Gentrifizierung in Leipzig, in: Eckhardt, F., Seyfarth, R., Werner, F. (Eds.), Leipzig Die Neue Urbane Ordnung Der Unsichtbaren Stadt.
- Rink, D., 1995. Leipzig Gewinnerin unter den Verlierern?, in: Vester, M., Hofman, M., Zierke, I. (Eds.), Soziale Milieus in Ostdeutschland. Bund-Verlag, Köln, pp. 51–90.
- Rink, D., Behne, S., 2017. Grüne Zwischennutzungen in der wachsenden Stadt: Die Gestattungsvereinbarung in Leipzig, in: Statistischer Quartalsbericht Leipzig I/2017. Leipzig, pp. 39–44.
- Rößler, S., 2015. Klimawandelgerechte Stadtentwicklung durch grüne Infrastruktur. Raumforsch Raumordn 73, 123–132. doi:10.1007/s13147-014-0310-y
- Rößler, S., 2010. Freiräume in schrumpfenden Städten (No. 50), IÖR Schriften. Berlin.
- Scholz, D., 1996. Wirtschafts- und Großstadtentwicklung Leipzigs, in: Breuste, J. (Ed.), Stadtökologie Und Stadtentwicklung: Das Beispiel Leipzig. Analytica, Berlin, pp. 35–49.
- Smith, N., 2002. New Globalism, New Urbanism: Gentrification as Global Urban Strategy. Antipode 34, 427–450.
- Stadt Leipzig, 2017a. Bevölkerungsbestand [WWW Document]. URL http://statistik.leipzig.de/statcity/table.aspx?cat=2&rub=1&obj=0 (accessed 9.3.17).
- Stadt Leipzig, 2017b. Monitoringbericht Wohnen 45.
- Stadt Leipzig, 2017c. Der Landschaftsplan [WWW Document]. URL http://www.leipzig.de/bauen-undwohnen/stadtentwicklung/landschaftsplan/ (accessed 6.23.17).
- Stadt Leipzig, 2017d. Das Integrierte Entwicklungskonzept (IEKO) Stadt Leipzig [WWW Document]. URL http://www.leipzig.de/bauen-und-wohnen/stadtentwicklung/landschaftsplan/integriertesentwicklungskonzept-ieko/ (accessed 6.23.17).
- Stadt Leipzig, 2017e. Freiraumstrategie der Stadt Leipzig Lebendig grüne Stadt am Wasser Stadt Leipzig [WWW Document]. URL https://www.leipzig.de/news/news/freiraumstrategie-der-

stadt-leipzig-vorgestellt/ (accessed 7.3.17).

Stadt Leipzig, 2017f. Programmgebiet Soziale Stadt - Leipziger Osten [WWW Document]. URL http://www.leipzig.de/bauen-und-wohnen/foerdergebiete/leipziger-osten/soziale-stadt-leipziger-osten/ (accessed 7.10.17).

Stadt Leipzig, 2016. Masterplan - Parkbogen Ost. Leipzig. doi:https://ratsinfo.leipzig.de/bi/\_\_tmp/tmp/45081036431946940/431946940/01195895/95-Anlagen/06/AnlageDMasterplanText.pdf

Stadt Leipzig, 2015a. 10 Jahre Bund-Länder-Programm Stadtumbau Ost in Leipzig - Bilanz und künftige Herausforderungen.

Stadt Leipzig, 2015b. Wohnungspolitisches Konzept.

Stadt Leipzig, 2014. Monitoring Bericht Wohnen 2013/2014. Leipzig.

Stadt Leipzig, 2013a. Integriertes Stadtteilentwicklungskonzept Leipziger Osten (STEK LeO) - Anlage 162.

Stadt Leipzig, 2013b. Integriertes Stadtteilentwicklungskonzept Leipziger Osten (STEK LeO) 132.

Stadt Leipzig, 2013c. Umweltbericht. Leipzig.

Stadt Leipzig, 2012. Stadtentwicklung koopstadt; Klimagerechte und nachhaltige Stadtentwicklung - Leipzig. Leipzig.

Stadt Leipzig, 2011. Stadthäuser in Leipzig.

Stadt Leipzig, 2009. Monitoringbericht 2008. Leipzig.

Stadt Leipzig, 2005a. Stadterneuerung und Stadtumbau in Leipzig, gestern - heute - morgen (No. 43), Beiträge zur Stadtentwicklung. Leipzig.

Stadt Leipzig, 2005b. Stadterneuerung - Neue Freiräume im Leipziger Osten. Leipzig.

Stadt Leipzig, Amt für Statistik und Wahlen, 2016. Ortsteilkatalog 2016 349.

Stadt Leipzig, Amt für Statistik und Wahlen, 2014. Statistischer Quartalsbericht Leipzig I/2014 71.

Stadt Leipzig, Amt für Statistik und Wahlen, 2012. Ortsteilkatalog 2012 344.

Stadtplanungsamt, 2009. Gesamträumliches Leitbild - Radial-Ring-System.

Steinführer, A., 2004. Wohnstandortentscheidungen und städtische Transformation, 1st ed. VS Verlag für Sozialwissenschaften, Wiesbaden.

Stier, W., 1999. Datenerhebung, in: Stier, W. (Ed.), Empirische Forschungsmethoden. Springer Berlin Heidelberg, pp. 161–205. doi:10.1007/978-3-642-58460-2\_6

Tretter, E.M., 2013. Contesting Sustainability: "SMART Growth" and the Redevelopment of Austin's Eastside. Int. J. Urban Reg. Res. 37, 297–310. doi:10.1111/j.1468-2427.2012.01166.x

Turismo Valencia, 2017. JARDINES DEL TURIA [WWW Document]. URL

http://www.visitvalencia.com/es/que-visitar-valencia/parques-y-jardines/todos-los-parques-y-jardines/parque-jardin/7411 (accessed 5.3.17).

Üblacker, J., 2015. PROJEKTBERICHT ENTWICKLUNG DER GENTRIFICATION-FORSCHUNG IN DEUTSCHLAND 1980 BIS 2014. Berlin; Bonn; Köln.

Umweltbundesamt, 2015. Umweltgerechtigkeit im städtischen Raum – Entwicklung von praxis tauglichen Strategien und Maßnahmen zur Minderung sozial ungleich verteilter Umweltbelastungen.

UN-Habitat, 2016. WORLD CITIES REPORT 2016.

United Nations, 1987. A/RES/42/187 Report of the World Commission on Environment and Development, in: 96th Plenary Meeting.

Vogelpohl, A., 2013. Qualitativ vergleichen – Zur komparativen Methodologie in Bezug auf räumliche Prozesse, in: Raumbezogene Qualitative Sozialforschung. Springer Fachmedien Wiesbaden, Wiesbaden, pp. 61–82. doi:10.1007/978-3-531-93240-8\_3

Walmsley, A., 2005. Greenways: multiplying and diversifying in the 21st century. Landsc. Urban Plan. 76, 252–290.

Walmsley, A., 1995. Greenways and the making of urban form. Landsc. Urban Plan. 33, 81–127. doi:10.1016/0169-2046(95)02015-L

Wiest, K., Hill, A., 2004. Sanfte Gentrifizierung, Studentifizierung und Inseln ethnischer Konzentration

- in ostdeutschen Innenstadtrandgebieten? Das Beispiel Leipzig. Raumforsch. Raumordn. 62, 361–374.
- Witzel, A., 2000. The Problem-centered Interview. Forum Qual. Sozialforsch. / Forum Qual. Soc. Res. 1.
- Wolch, J.R., Byrne, J., Newell, J.P., 2014. Urban green space, public health, and environmental justice: The challenge of making cities "just green enough." Landsc. Urban Plan. 125, 234–244. doi:10.1016/j.landurbplan.2014.01.017

## IX Annex

Annex 1:	Exemplary Interview Guideline - Experts	p. 95
Annex 2:	Exemplary Interview Guideline - Real Estate Actors	p. 96
Annex 3:	Background information on Interviewees and Interviews	p. 97
Annex 4:	Coding rules	p. 98
Annex 5:	Code System	p. 103

### **Digital Annex:**

PDF Version of the thesis: "masterthesis\_konzack.pdf"

Annex\_a: All interview guidelines used

Annex\_b: All transcripts

Annex\_c: Observation protocols and photographs

Annex\_d: GIS data used

Annex\_e: MAXQDA project: "masterarbeit\_konzack"

Annex\_f: Table with all codes and generalizations

#### Annex 1: Exemplary Interview Guideline - Experts

Kurze Vorstellung meiner Person, des Masterstudienganges, Erläuterungen zum Forschungsinteresse und der Art der Erhebung. Abfrage nach Erlaubnis zur Aufnahme des Interviews und der weiteren Verwendung.

Bitte stellen Sie kurz Ihren Werdegang und Ihre Tätigkeiten vor.

#### Zu Leipzig und dem Leipziger Ostens:

- 1. Wie würden Sie die Stadt Leipzig heute beschreiben?
- 2. Wie würden Sie den Leipziger Osten vor 10 Jahren und heute beschreiben?
- 3. Wie begründen Sie diese Veränderung?
- 4. Welche Maßnahmen gab es für die Entwicklung des Leipziger Ostens, die sie als zentral bezeichnen würden? (warum?)

#### **Der Parkbogen Ost:**

- 5. In welcher Form sind/waren Sie an dem Projekt Parkbogen Ost beteiligt?
- 6. Welche Potentiale sehen Sie in der Umsetzung des Parks?
- 7. Welche Herausforderungen sehen Sie?
- 8. Wie werden Sie mit diesen Herausforderungen umgehen?
- 9. Welche Möglichkeiten gibt es für BürgerInnen sich weiterhin in den Parkbogen Ost einzubringen?
- 10. Wurden ähnliche Projekten aus anderen Städten bei der Konzipierung des Konzepts berücksichtigt?

#### Weiterführend:

- 11. Was sehen Sie als zentralste Herausforderung für Leipzig's Stadtentwicklung?
- 12. Was würden Sie sich für die Umsetzung des Parkbogen Ost wünschen?

Vielen Dank für Ihre Zeit!

#### Annex 2: Exemplary Interview Guideline - Real Estate Actors

Kurze Vorstellung meiner Person, des Masterstudienganges, Erläuterungen zum Forschungsinteresse und der Art der Erhebung. Abfrage nach Erlaubnis zur Aufnahme des Interviews und der weiteren Verwendung.

Bitte stellen Sie kurz Ihr Unternehmen und Ihre Tätigkeiten im Bezug auf den Leipziger Wohnungsmarkt vor.

#### Das Unternehmen:

- 13. Seit wann ist Ihr Unternehmen in Leipzig tätig?
- 14. In welchem Bereich der Immobilienwirtschaft sind Sie tätig?
- 15. In welchen Stadtteilen von Leipzig arbeiten Sie?
- 16. Gibt es möglicherweise Stadtteile, die Sie neu erschlossen haben?
- 17. An welchen Kundenkreis richten sich die Angebote?

#### **Die Entwicklung Leipzigs:**

- 18. Wie würden Sie die Entwicklungen auf dem Leipziger Wohnungsmarkt beschreiben?
- 19. Hat sich der Immobilien Markt im Leipziger Osten verändert seit 2000? Wenn ja, wie?
- 20. Was unterscheidet den Leipziger Osten von anderen Stadtteilen in denen Sie arbeiten?

#### Parks & Parkbogen Ost:

- 21. Welchen Stellenwert hat das Vorkommen von Parks oder Erholungsflächen für Ihre Objekte?
- 22. Kennen Sie die Planungen zum "Parkbogen Ost", einem grünen Bogen aus Parkflächen und Radwegen, der den inneren Osten umspannen soll?
- 23. Wie bewerten Sie das Projekt im Bezug auf Ihr Unternehmen?
- 24. Für welche Objekte/Kunden ist der Parkbogen Ost interessant?

#### Weiterführend:

- 25. Wie bewerten Sie den Einfluss des Parkbogen Ost auf die Immobilien Entwicklung im Leipziger Osten?
- 26. Welche Entwicklung wünschen Sie sich für Leipzig in den kommenden 20 Jahren?

Annex 3: Background information on Interviewees and Interviews

Interviewpartner	Position	Zeit	Ort	Zuordnung
Petra Hochtritt ( <b>PH</b> )	Abteilungsleiteri n des ASW	24.02.2017 10 Uhr	Technisches Rathaus Prager Straße 118 -136 04317 Leipzig	Stadtverwaltung / Expertin
Stefan Heinig (SH)	Abteilungsleiter Amt für Stadtplanung	24.05.2017 10 Uhr	Neues Rathaus Martin-Luther-Ring 4 - 6 04109 Leipzig	Stadtverwaltung / Experte
Axel Kalteich (AK)	Vorsitzender des Bürgervereins Sellerhausen- Stünz e.V	07.04.2017 15 Uhr	Telefon	Bürgerverein/ Experte
Marius Brauer (MB2)+ Christel Eißler (CE)	Gründer/Mitglie d von Querbeet	18.04.2017 16:30 Uhr	Neustädter Str. 20, 04315 Leipzig	Gartenprojekt/ Experten
Michael Berninger (MB1)	Culturträger/ Mitbegründer Initiative Parkbogen Ost	24.05.2017 15 Uhr	Culturträger GmbH Gabelsberger Str. 1 a 04317 Leipzig	Zivile Initiative/ Experte
Tim Tröger ( <b>TT</b> )	Stadtlabor/ Mitbegründer Initiative Parkbogen Ost	22.05.17 11 Uhr	Telefon	Zivile Initiative/ Experte
Dan Rehnert ( <b>Re</b> )	Victor Immobilien	/	Leitfaden schriftlich beantwortet	Immobilienbüro
Herr Goldstein ( <b>Go</b> )	Gründer von Goldstein Immobilien	10.07.2017 13 Uhr	Telefon	Immobilienbüro
André Hill ( <b>Hi</b> )	Gründer von Wohnbar 24	22.05.2017 11 Uhr	Telefon	Immobilienbüro
Herr Walther ( <b>Wa</b> )	Gründer von Immobilien Walther	19.05.2017 16 Uhr	Telefon	Immobilienbüro
Herr Kaufmann ( <b>Ka</b> )	Gewerbe und Wohnen	19.05.2017 17 Uhr	Telefon	Immobilienbüro

## Annex 4: Coding rules

Category	Code	Sub-Code	Definition	Example	Coding Rule
stakeholder's perception of Leipzig east			Any parts that relate to perceptions, experiences, emotions towards the neighborhoods in Leipzig's east		
	Relation to Leipzig East		the stakeholder's relation to the focus area, which is important to interpret their experiences and perception	"Ich habe bei der Stadt 92 angefangen als Sachbearbeiterin damals für ein Sanierungsgebiet und das hat sich dann mit der Veränderung der Programme, auch dadurch, das die integrierten Programme gekommen sind, immer erweitert. 2000 war ich dann zum Beispiel zuständig im Leipziger Osten für die Sanierungsgebiete, für soziale Stadt, für EFRE und irgendwann 2007 bin ich dann Abteilungsleiterin geworden"	Only parts that explain their relation to the neighborhoods, like profession, childhood, residence. The relation can include feelings towards the area, but excludes descriptions of changes notices and perception of present situations
	Image		Any parts that relate to how the neighborhoods are seen as a general image	"Ich glaub es ist inzwischen angekommen in vielen Diskussionen der Stadt, das eben der Osten ein Ankunftsstadteil ist und das wohl auch bleiben wird und dass das auch sinnvoll ist so einen Stadtteil zu haben"	Only parts that explain the image of the eastern neighborhoods. Those state descriptions can be told from the personal viewpoint or the general viewpoint by media, politics, etc. The image can be positive or negative, but does not include changes noticed or listed challenges to tackle.
	neighborho od changes noticed		Any changes noticed in the eastern neighborhoods over the last 10 years	"Was aber jetzt wiederum sehr positiv ist, weil sich das ganze Stadtgebiet Leipziger Osten natürlich sehr positiv dadurch entwickelt. Weil Gelder rein fließen, weil natürlich auch die Sozialstruktur dann wieder etwas ausgeschwemmt werden."	neighborhood changes include all changes notices in relation to constructional changes, resident changes. It could also include changes affecting all neighborhoods in Leipzig. The category excludes changes in greening and emotions towards changes noticed.
	personal challenges		challenges that concern personal decisions or lifestyles	klar bin ich mit im Boot - mitgefangen, mit gehangen, man kann sich aber den ökonomischen Zwängen nicht entziehen. Es sei denn ich mache meinen Laden zu und sage, ne ich bin nicht bereit von meinem Kunden 4000 oder 5000 Euro einen m² zu verlangen. Das wäre die einzige Alternative, sonst funktioniert es ja nicht. Es sei denn ich wäre Multimillionär und sage, ich tue jeden m² mit 1000 Euro sponsern und bin einfach ein Gutmensch, funktioniert nicht."	challenges that concern personal decisions or lifestyles, but are not including challenges concerning the neighborhoods

Category	Code	Sub-Code	Definition	Example	Coding Rule
	challenges concerning Leipzig east		Any parts that relate to problems or challenges seen in Leipzig's east	Ich glaube im Osten fehlt auch immer noch sehr viel kulturelle Infrastruktur: Es gibt keine Kinos, Theater usw., weswegen es eher eine Gegend für junge Familien ist, als für junge Leute	The category includes all challenges mentioned by stakeholders related to Leipzig east. Those challenges can also be seen for total Leipzig and affect Leipzig East as well. It excludes challenges seen in relation with the project and gentrification, since gentrification has an own code
		Gentrification	Any parts that refer to Gentrification	Naja, das ist halt die Krux. Je attraktiver ein Standort ist, desto mehr Leute ziehen da halt hin und verdrängen die Leute die dort jahrelang versucht haben das Fähnlein oben zu halten, mit wenig Mitteln relativ viel gemacht haben.	It includes all comments related to gentrification: negative as well as positive ratings, but only if it was in the clear context of displacement or gentrification was explicitly mentioned. Comments are also included, when they still add on to the discussion on gentrification.
	strategies for Leipzig east today		strategies or measures for Leipzig's east for urban change/ development or to react on challenges	Wir haben jetzt gerade beauftragt so ein Grobscreening heißt das, was den Leipziger Osten untersucht, hinsichtlich Mietentwicklung, hinsichtlich Verdrängungstendenzen, hinsichtlich Segregation, um dann entscheiden zu können, müssen wir zum Beispiel mit einer Millieuschutzaktion reagieren, müssen wir Sanierungsgebiet drüber legen.	The category includes all measures and strategies named for urban change/ development or to react on challenges in Leipzig's east and includes public, programs as well as personal strategies. Further opinions in direct relation to the strategies are included. Greening strategies as certain strategy for Leipzig's east will be included in both categories.
	expected future develop- ments		Any parts that relate to ideas for the future development of Leipzig's east	Die Ostdeutschen sind immer noch nicht so richtig bereit, für die Altersvorsorge oder für die Wohnqualität sich eine eigene Immobilie zuzulegen, höchstens in den Städten, wo man sagt eine Eigentumswohnung. Das wird sich aber in den nächsten Jahren auch drehen und wandeln und mit Sicherheit auch anders gestaltet werden.	It includes all mentioned images or ideas for the future development of Leipzig east, but excludes outlooks expressed as wishes or challenges seen

Category	Code	Sub-Code	Definition	Example	Coding Rule
	wishes		Any parts that relate particularly to personal wishes related to Leipzig's east	Und das würde ich mir wünschen, dass wir hier eine offenen Politik haben, die drauf schaut und auch das die Stadtverwaltung sich den Problemen stellt.	It includes all personal or in the name of some institution expressed hopes and wishes in relation to Leipzig's east. If wishes rely on the connection of the project and the neighborhoods of Leipzig east, they will appear in both categories.
role of green in urban development			Any part of the text relating to the significance, usage of green in Leipzig's east or the city and further strategies as well as challenges for green		
	valuation of greens		Any text relating to the value of green or emotional expressions related to green	Mit Nachhaltigkeitsdebatte, Biodiversität und ÖSL eine ganz neue Inwertsetzung - dazu neue Begrifflichkeiten wie die doppelte Innenentwicklung, dabei wurde der Wert von offenen Flächen und Grün auch früher schon geschätzt	It includes all expressed positive and negative feelings towards existing greens or the significance of green in general, that are not seen as challenge. It excludes parts about the usage of green and greening strategies, as well as the valuation of the Parkbogen Ost
	usage of greens		Any parts related to the usage of greens or green structures	Das schwappt natürlich über die Brücke, bis in den Mariannenpark, der jetzt ganz anders - also ich würde nicht von einer Übernutzung sprechen, aber man sieht schon, dass es da eine stringente Entwicklung gibt im Hinblick vielfältigere Nutzung und mehr Leute und so.	It includes all parts on the actual or future usage of greens, excluding greenways. It excludes the usage of the Parkbogen Ost and any emotions or ratings towards the usage.
	challenges for greening		any challenges related to greening strategies or existing greens	Wohlwissend, dass es da Zielkonflikte gibt, also preiswertes Bauen und Gründach und Grünblaues Dach, also wenn es auch noch Regenrückhaltung bringen soll, das passt nicht miteinander zusammen, das ist sicherlich schwierig.	The category includes all challenges and problems seen in relation to existing greens, planned greening strategies on neighborhood or city scale. It excludes all challenges particularly related to the Parkbogen Ost Project, except they are expressed as general challenges for greens.

Category	Code	Sub-Code	Definition	Example	Coding Rule
	greening measures and strategies		Any strategies or measures related to green for the city or the eastern neighborhoods	Das heißt wer hindert uns da dran, dort auch mal für ältere Leutchen dann, das die nicht schon mit 70 ins Pflegeheim müssen, sondern das die sich auch in ihrer Wohnung, in ihrem kleinen Mikrostandort im Umfeld wohl fühlen, das wir z.B. in unseren Innenhöfen Hochbeete anlegen. Das wir in unseren Innenhöfen auch mal kleine Bienenstationen anlegen können, das wieder Schmetterlinge wachsen, das wieder ein paar Radieschen wachsen. Das einfach ein paar Kräuter wachsen, das man einfach sich wieder ein bisschen daran hält (Herr Goldstein)	It includes all greening measures, planned or already implemented, except the Parkbogen Ost and excludes ratings or emotions towards the measures.
stakeholder's perception Parkbogen Ost project			Any parts that relate to perceptions, experiences, emotions towards the Parkbogen Ost project		
	relation to the project		the stakeholder's relation to the Parkbogen Ost project, which is important to interpret their experiences, perceptions and emotions towards the project	Dann waren wir sofort Feuer und Flamme und haben natürlich dann diesen Brief aufgesetzt, also auch mit Rücksprache mit dem eigentlichen Ideengeber, mit dem Olaf Petersen, der damals noch in Nähe gewohnt hat, jetzt wohnt er direkt im Stadtteil. Ja dann haben wir das Schreiben abgestimmt und mal als Ballung los geschickt und es kam dann halt zurück, wie Sie das jetzt vorliegen haben.	Only parts that explain their relation to the project, like profession, voluntary engagement or residence. The relation can be civic participation, but does not include any emotions towards participation. It further excludes potentials seen triggering the participation.
	civic participa- tion		Any parts that relate to civic participation possibilities, experiences and wishes concerning the project	Die Erarbeitung folgte immer auf der Grundlage der Bürgerideen, dann hatten wir Bürgerwerkstätten, wo wir die Ideen abgeholt hatten, die im Stadteilzentrum unsere Ideen vorgestellt haben. Dann kam natürlich auch ein ganzes Arbeiten mit den Fachämtern, im Kämmerlein, weil man muss ja alle mitnehmen und, ja, und dann erfolgte wieder diese Vorstellung sowohl im Forum Leipziger Osten als auch bei der Politik.	Including all parts explaining if or how interviewees participated/participate into the Parkbogen Ost project at any level of planning or implementation.
		negative experiences	negative experiences made, related to the project	Und dann ist das Planwerk aber irgendwie weiter gewandert. Also ich bin dann auch nicht mehr informiert worden und es ist dann anders ausgehandelt worden auch die Möglichkeiten der Partizipation, ne?	The code includes all parts that relate to negative experience in relation to participation processes.

Category	Code	Sub-Code	Definition	Example	Coding Rule
		positive experiences	positive experiences made, related to the project	Also in dem Augenblick, als wir mitbekommen haben, Aha, das ganze findet Gehör, vor allem im Sanierungsamt, unterstützt im Planungsamt und es wird sogar offiziell jemand mit der Planung beauftragt, der so einen Masterplan erstellt, in dem Augenblick war eigentlich unsere Mission fast schon erfüllt.	The code includes all parts that relate to positive experience in relation to participation processes.
	potentials seen		Any kind of potential seen in relation with the planning or implementation process of the project and its outcome	Er soll etwas verbinden, was bisher gedanklich noch nicht verbunden ist. Stadtteile in Leipzig, die sonst nicht mit dem Thema Grün in Verbindung gebracht werden.	The category includes all positive potentials seen by stakeholders themselves, which are not expressed as wishes
		wishes	All parts of the text that relate to future wishes concerning the urban development	Ja, also ich wünsche mir, das es mal irgendwann wirklich Spaß macht vom parkbogen oben auf den Leipziger Osten zu gucken und sich zu freuen, das es diese Verbindung jetzt wirklich gibt, und das sowas eben belebt ist als öffentlicher Raum und nicht nur ein Durchgangsweg.	It includes all personal or in the name of some institution expressed hopes and wishes in relation to the Parkbogen Ost project. If wishes rely on the connection of the project and the neighborhoods of Leipzig east, they will appear in both categories.
	challenges seen		Any kind of fear or challenge seen in relation with the planning or implementation process of the project and its outcome	Ich sag mal was ketzerisches. Kann ja auch sein, das es ziemlich hohe Mittel so da (spricht stockend) bindet, find ich, die irgendwo anders dann wieder wegschmelzen. Seh ich so ein bisschen als Problem.	The category includes all negative expectations, challenges and problems seen, in relation to the Parkbogen Ost project.
		annoyances	Any kind of annoyance notices related to the project or the urban development	Also so direkt auf uns zu gekommen ist eigentlich niemand. Also eigentlich in der Projektphase, eigentlich weiß die, eigentlich wissen einige Fachämter bei der Stadt bescheid, das wir immer so auf der Suche sind.	It includes all parts on annoyances in relation to the project implementation. It excludes annoyances in relation with the participation process.
	experiences from other projects		Any experiences mentioned, made in other projects or observed from the outside	Und da bin ich so ein bisschen gebranntes Kind aus dem Beispiel Leipziger Westen, wo z.B. an Gleisfingern, Gleisanlagen in Lindenau und Plagwitz manchmal einzelne kurze Stücke eben im Interesse von privaten Anrainern lagen, dann in guter Absicht einfach veräußert wurden um dort jemanden den Wohnhof zu vergrößern und sobald da auch nur das kleinste Stück fehlt, wird es zumindest schwerer, wenn nicht unmöglich das dann fertig zu stellen.	It includes all experiences made in other urban development projects, in Leipzig or different cities, but excludes particular challenges seen for the Parkbogen Ost project.

## Annex 5: Code System

Code System	#
Total	429
stakeholder's perception of Leipzig east	
relation to Leipzig East	26
image	24
neighborhood changes noticed	32
challenges concerning Leipzig east	47
gentrification	14
personal challenges	4
strategies for Leipzig east today	24
expected future developments	7
wishes	13
role of green in urban development	
valuation of greens	21
usage of greens	13
challenges for greening	23
greening measures and strategies	19
stakeholder's perception of the Parkbogen Ost project	
relation to the project	17
civic participation	15
negative experience	6
positive experience	5
potentials seen	54
wishes	8
challenges seen	42
annoyances	5
experiences from other projects	10