IDENTIFYING LOST SPACES

The relationship between planning, economics and society in Berlin, Germany

Graduation thesis

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Colophon

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Personal motivation

Since I can remember I have been traveling through cities. During my travels I have encountered many different cultures and different types of city development that have been my inspiration trough out my studies. One of the aspects that always fascinated me, were empty areas and the stories which accompany these spaces. When I was handed the option to choose my own topic in the beginning of my graduation I started with my fascination of voids and from there the topic of lost spaces started to grow. This fascination was massively triggered right before the start of the graduation project when I was visiting Berlin for the first time. While visiting Berlin I was amazed that still major differences in East and West Berlin were visible, although the Berlin wall fell 25 years ago. Even though these areas were different in many ways both areas had these unwanted areas. To connect this personal fascination with my academic endeavours, lost spaces will be the main topic of my graduation in order to explore this urban phenomenon from an academic perspective.

This thesis is the end result of an academic year of research into the different phenomena that are connected to lost spaces. I want to thank both my mentors Verena Balz and Egbert Stolk for their input during the project and their guidance during this year long exploration on this topic. Without both of them the results in this thesis would not have been the same. Lastly I want to thank my parents and my girlfriend for their support and the many corrections they made to the massive amounts of text I have written.

Part A:
Introducing lost space

Historical overview/context

Since the fall of the Soviet Union and the iron curtain in 1989, political changes in Eastern European countries have had a major impact on the planning systems in this region. These countries, first being ruled by communistic ideas, transitioned to being ruled by the idea of the welfare state. Principles of the welfare state were established to spread social well-being across society. When in the mid-1990s neo-liberalism emerged as a new important political idea in these regions, a public debate about the role of the 'market' in planning and development began to evolve. This debate, which is still on-going, is mostly focused on what the relations among the government, the public and the market should be in planning and development.

The political transformation, started in 1989, of the communistic government via the welfare state into the neo-liberal government has caused three important urban planning changes. The first change is the transition from government-led planning to governance-led development. This translates into the general request that stakeholders have to be involved in city development, also known as more 'bottom-up' development. This means involvement of social actors and lower tiers of government side by side with the higher tiers of government. The second change is a shift in the focus from plan-led towards development-led planning. This means there is less dependence on regulatory planning and an increased use of project-approach based planning. This project-approach is based on direct investment and involvement of stakeholders. The third change is a shift in ideology changing the assumption of social justice as an important pillar of society to a sense of economic competitiveness.

A result of these changes is an increased competition for planning resources, including direct public investment. This competition has led to a redistribution of the available public investment. One of the consequences of this redistribution is that the least economic viable spaces, while they are in great need of these investments, are receiving less of these investments.

Simultaneously the governmental planning has become an incidental engagement of the government in the redevelopment of areas. Because of this change governments are cooperating with the 'market' by direct public investment and by changes in legal regulations. This is done in order to create conditions for the 'market' to invest into less economic viable spaces.

As a result of this practice a lack of spatial quality became quickly apparent. Besides quality also the appreciation of spaces changed. The big concrete buildings and squares that showed the might of communism changed into more glass buildings and green parks to present the new policies. This physical change indicated a second problem with the former spaces and buildings, the lack of appreciation that society had for them. This lack of appreciation was on a social, economic and on a political level.

The lack of spatial quality and the lack of appreciation together form the urban phenomenon of lost space.

The impact of changes of political ideas on spatial development remains unclear, but these changes in planning appreciation have affected different areas in the urban setting. When there are no plans or visions developed for urban areas over a long period of time, these start to deteriorate and in the end voids appear in the urban fabric. This is because of disappearing uses and connections which accelerate a lack of felt responsibility. From a governmental point of view this approach has created a defused planning landscape, in which involvement of non-governmental actors remain undefined.

Figure 1 | Timeline of political and economical change in Berlin (by author)

Design levels connected to lost space

Urban planning, urban design and architectural design: this seems like a given order for the development of most of the build environment. The first layer is focused on creating policies and rules for the development of the urban environment. The next layer is about the design of this environment, the public space and setting rules for the layer that comes afterwards. This will then be followed by the design of the (individual) buildings. Because of this layering architecture can be named as a first order design, closest to the client and users of the design; Urban design a second order design and urban planning a third order design. (George, 1997, p. 150) (Ralph & Wand, 2009, p. 105)

With each step towards a higher layer of design the client and the final user become more distant and the problem less defined, therefore the solutions will be more generic and in most cases a framework design instead of a spatial design or a strategy. In order to create these frameworks the problem definition needs to become very well defined to not only produce a good but also applicable framework to work with in the second and first design orders.

For this project the third order of design will be used to create a framework to tackle the problem of lost space in order to create more knowledge to tackle the problem in the second design order.

Third order of design   Second order of design   First order of design
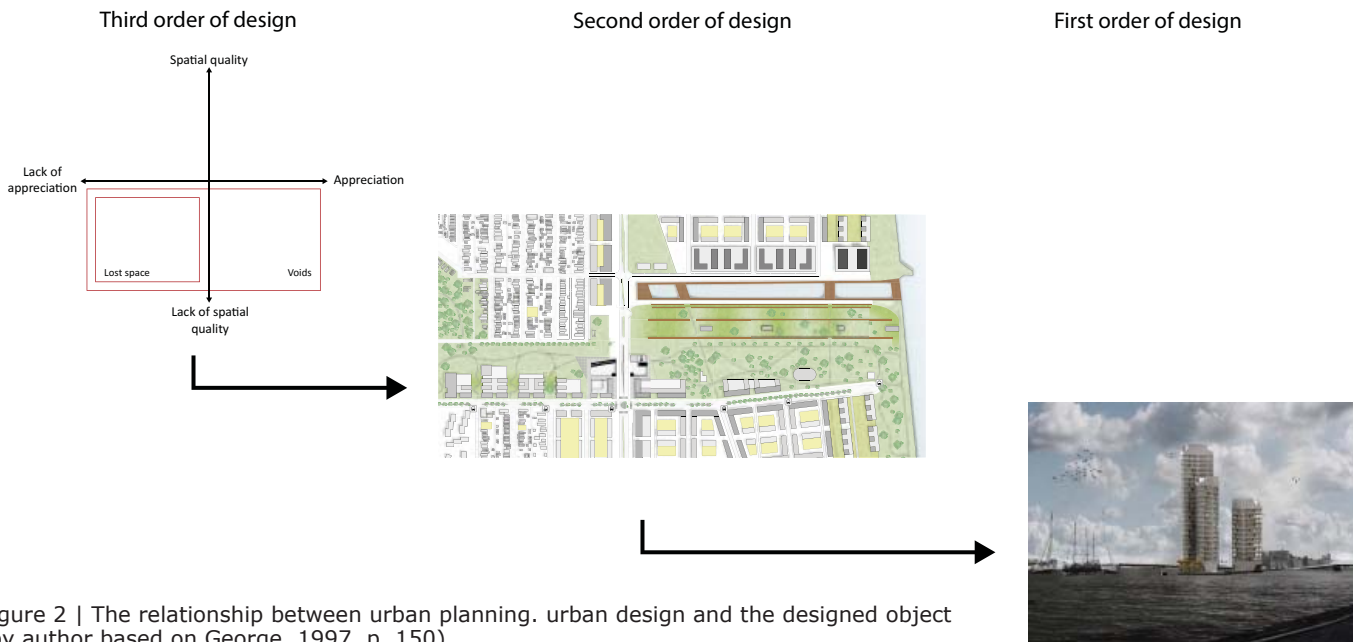
Figure 2 | The relationship between urban planning. urban design and the designed object (by author based on George, 1997, p. 150)

Rebuilding of the country   **Division of the country**   **Transition towards one country**

1945   1961   1989   2015

Struggles of resbuilding (lack of materials & money)   Two systems devided (Communism and Capitalism)   Struggles of attention (Lack of appreciation and money)
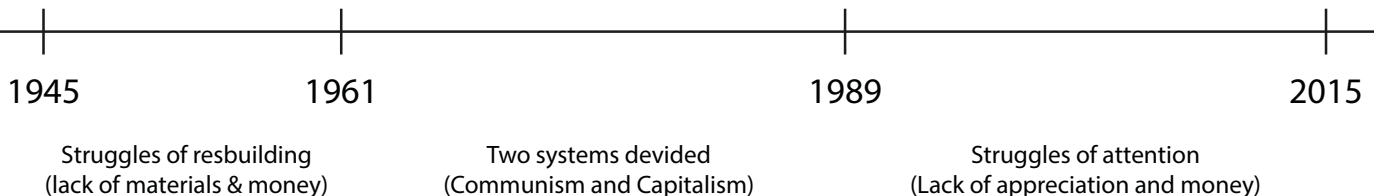
Problem setup

The topic of voids has been on the academic agenda for a long time. It was first mentioned in the 1980s from an architectural design perspective. Since then there has been many academic publications on this topic, but the aspect of planning is still underexposed in this discourse. This graduation project is going to balance these two sides in order to create a solid foundation for the design part.
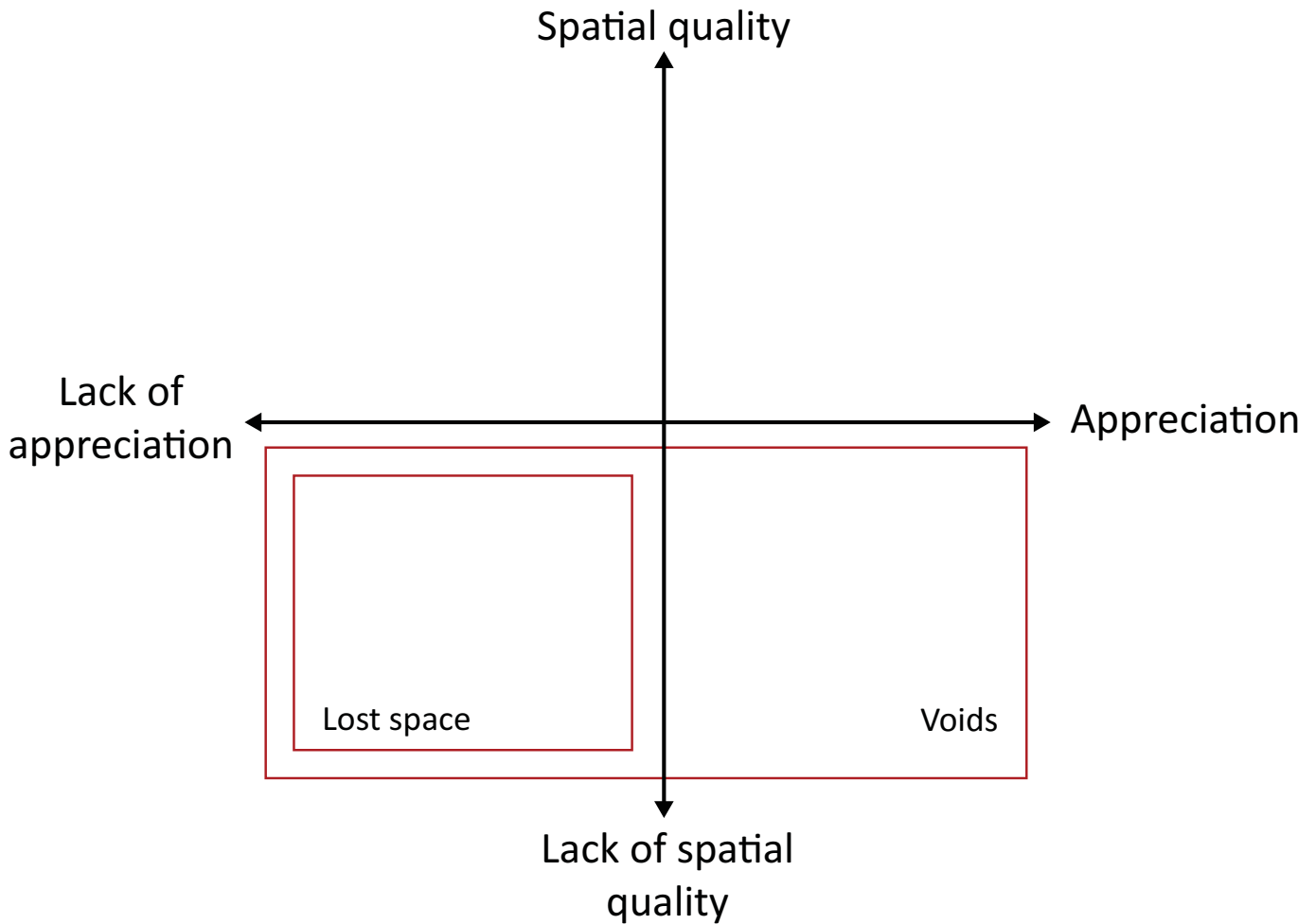
Figure 3 | the two parts of the lost space problem (by Author)

Relevance

As a planner or designer decisions are made that will not benefit every stakeholder in the process of a project. It is important to take these negative effects into account in order to not only create a solution for the proposed problem, but also to think about the consequences of the implementation. In the case of this research project this relates with the degree of necessity to act on the problem of lost space in an urban context.

The topic of lost space emphasizes an understanding of the emergence and disappearance of voids in the urban fabric. The graduation project thereby connects the academic theory of lost space with the changes in planning regimes that took place in Eastern Europe after the fall of the Berlin wall. It searches for the effect that this political change has had on the status of these voids and specifically the changes which took place because of the transition from the communistic planning regime via the welfare state into the neo-liberal planning regime.

The switch, which took place from welfare state economic policies towards neo-liberal economic policies, restarted the public debate about the role of the government concerning planning. This transformation marks the transition from government to governance. Following this change and the changes in planning that followed formed the core of the research group Regional Governance, Planning and Design to which this graduation project 'identifying lost space' is linked.

Definition of lost space

Until now the term lost space has not been clearly defined. For this thesis the definition of Roger Trancik will be used to accomplish this. He describes lost spaces as "underused and deteriorating spaces." (Trancik, 1986, p. 2) He also adds that these spaces can still "provide exceptional opportunities to reshape an urban center." (Ibid) An additional theoretical elaboration of this will follow in part B when exploring the theory of lost space.

"A problem well stated is a problem half solved." (Kettering, 1876-1958) This quote shows the core of this graduation project. Lost spaces are a highly complex urban phenomenon, high complexity problems are defined by being "dynamic and poorly defined" (Enserink, 2010, p. 26) theory about spaces. This combination of underused spaces and opportunities is exactly what makes lost spaces so complex.

Summarizing it can be stated that the problem of lost space consists mostly of two problems. The first part is the lack of spatial quality. The second part is the lack of appreciation, both social, economic and planning.

Research goal

Voids and lost spaces are becoming a phenomenon that is increasingly found in the urban context. Even though these phenomena have been researched on different scales, there is yet to be found a well-defined description and therefore it's necessary to increase the likeliness of a solution concerning the third order of design.

With the political and economic changes in the last decades comes an increasingly fierce struggle for resources, appreciation and attention. This is important for preventing lost spaces and identifying parts of cities that are underdeveloped and underappreciated in order to tackle each location's specific problem. Furthermore actors need to be identified in order to get them involved. Because of these changes there is now an even growing complexity and less understanding of the lost space phenomena.

The negative spiral which creates lost spaces is a problem that many cities struggle with, but there is not a clear solution for this problem. The societal goal of this graduation project is therefore not to provide the definitive solution for lost spaces in the city, but to discover a pattern in the conditions on which lost spaces thrive, a definition of lost space. The design in the third order will be a framework for identifying lost spaces in the urban context. With this identification recommendations will be made in order for the second order of design to tackle the problem of lost space.

Introduction of the location

In the previous chapters and paragraphs the problem and context was introduced. To be able to test the proposed theoretical approach to lost spaces a location is needed. The problem statement described political and economic change that lead to the emergence of these spaces.

These changes happened in many places but Berlin is the only in case in which these changes took place in the same city as the already finished implementation of the welfare state. The 40 years division of Berlin created a city with two sides and planning regimes that in an instant moment connected and had to be combined. This transition is an important reason why the city of Berlin is chosen for these case studies.

The availability and accessibility of Berlin and German planning and policy documents is a second reason. Many of the Eastern European countries are culturally different from Western Europe and therefore difficult to fathom for a person born and raised in Western Europe.

As the capital of Germany, Berlin receives much political attention from not only a domestic but also an international point. The European Union (EU) is becoming a single block that defines its foreign policies as one unity to have more impact on the geo-political field. With the recent crises in Syria and Ukraine it has shown that the EU doesn't want to use military force but economic and political pressure. With Germany as the biggest economy (The World Bank, 2013) and the most inhabited state in the EU (Eurostat, 2014) Germany is in a highly powerful position inside the European Union. The announcement of Jean-Claude Juncker as the president of the European Commission showed the German influence and the relationships inside the EU. England tried to gain more power in the EU, but with the support of Germany Juncker put the English "back in line". (Oltermann, 2014) With the increased involvement of the European Union in the world politics, and as the capital of an influential member in the union, Berlin is expected to be an important location in the geo-political field for the years to come.

▲ **Figure 4| Národní 138 Prague, Czech Republic** (from google streetview)

▲ **Figure 5 | Empty cassino pool, Las Vegas, USA** (by imgur.com user Jonpaula)

◄ **Figure 6 | Former swiming pool, Berlin, Germany** (by author)

▼ **Figure 7 | Former trainyard, Berlin, Germany** (by author)

Research questions

In order to investigate lost spaces and answer the research goal stated in chapter 1.3.2 it is important to translate the context and the research goal into research questions. This will be done in the following chapter. These questions will form a guideline for the research project.

In the previous sections the main topic of the graduation project was introduced: political changes led to changes in planning regimes which had far-reaching consequences for the urban space. This planning change created donitions that proved to be fruitfull for lost spaces to exists and to grow. These spaces are in an increasingly fierce struggle for resources, appreciation and attention. In this research lost spaces are approached as design objects of the third order as introduced in chapter 1.2.

The main research question that follows from this is: What types of lost spaces can be identified in an urban context and what actions are important in order to tackle the problems of lost space? To be able to explore this complex question the following sub-research questions were defined:

1. What different perspectives on lost space are there and which ideologies are behind these perspectives?

2. What characteristics are part of the problem of lost space and how are these characteristics connected to the different perspectives?

3. How can, with the use of the perspectives and characteristics, lost spaces be identified in the urban context?

Methodology

The methodology of this graduation project is setup in order to streamline the project and to set clear and achievable goals. The beforehand mentioned questions and methods are crucial to set not only reachable goals but also to review the process afterwards objectively.

The thesis is the final product that needs to be delivered in order to graduate in the academic Master of Urbanism. For this a literature review or a theoretical investigation is necessary to provide the information that is needed to connect to the designed framework which will follow later in this report.

This literature review will be focused on academic literature connected to the topics of changing political systems and urban voids. The sub-themes that will be investigated are covering the welfare state, neo-liberalism, and their connection to governance. Also the topics of voids and their connection to public goods will be reviewed. All these reviews will be combined and thereby form the theoretical framework for this graduation project. At the end of the literature review a set of criteria should be collected on the relationship between voids and public goods.

In order to test the framework and to get a grasp of the literature, there needs to be a method to verify the found information. This will be done by the use of case studies. First an explorative case study has been done. This is "a type of case study that is used to explore those situations in which the intervention being evaluated, has no clear single set of outcomes." (Yin, 2003, p. 5) For this project the relationship between lost space theory and spatial areas will be tested.

After this initial explorative case study there will be a second round of case studies. This second round of case studies will be a multiple-case study. This type is focused on the "comparison that can be drawn from different cases in order to predict or find similar characteristics and results." (Yin, 2003, p. 47) These results can then be used in order to form conclusions on the in the literature review found characteristics and how to identify and measure these characteristics.

The case studies will consists of two parts: a spatial analysis, to investigate the lack of spatial quality, and an appreciation analysis, by investigating the public debate, as well as the analysis of publicly available policy documents.

To understand a city, there has to be a notion of how the city works. By using a spatial analysis, an understanding of the locations can be created in a quantitative way. The use of different types of maps and documents and, especially, the combination of these, will lead to the discovery of new facts about the location that were previously hidden.

Because the topic is closely linked to governmental influence of planning, policy documents need to be researched. These documents will show the full picture of the current and past state of the planning system.

In order to fully understand a location that has been used as a case study field work is needed. Fieldwork for this thesis will consist of site visits that will create a visual understanding of locations that is not provided by maps, pictures or data. Not only can field visits create a more clear understanding of the location, but it will also provide the possibility for tools like interviews and behavior analysis. Thereby it helps to get a better understanding of the local social connections.

The goal of a research project of the third design order is about creating policies or conditions in order for the first and second design orders to use these. In the end the final product will not be a conventional design, like an urban vision or a strategy. Instead a framework will be created to define the problem of lost space and identifying areas in the urban fabric that are or can become a lost space. After identifying areas, this framework can act as a guideline when tackling the area.
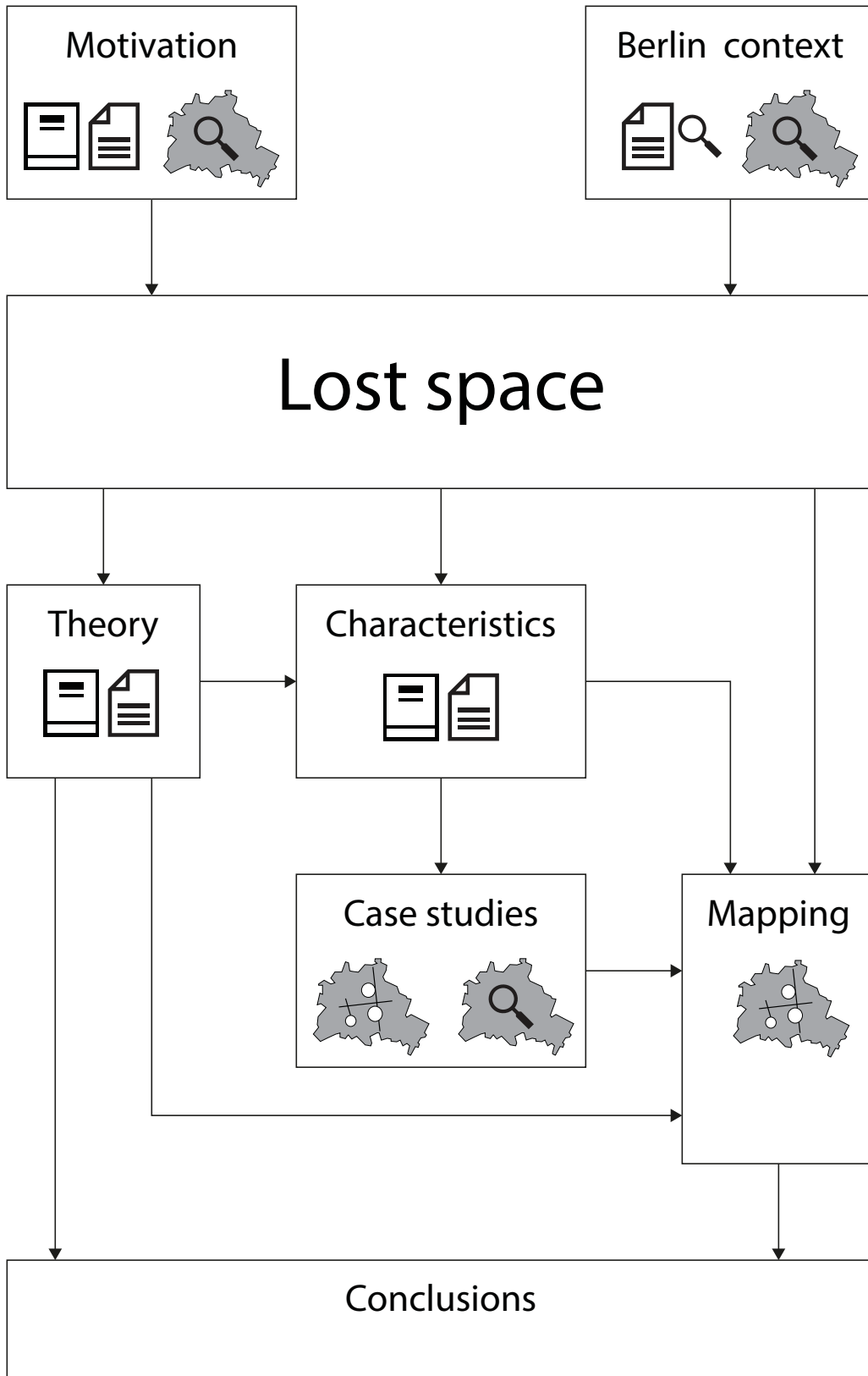
Figure 8 | Visualising the methodology of the graduation project (by Author)

Part B:
Creating the lost space method

The theory of lost space

Until now the term lost space has been used as a description of an empty and deteriorated space. In order to answer the research questions a more precise definition is needed, this will happen in the following part. Roger Trancik's theory will be used to explain the definition, this will be expanded with the used of Allen Berger and Paola Vigaò.

Perspectives

Lost space cross

Spatial quality

Lack of appreciation

Appreciation

Lost space

Voids

Lack of spatial quality
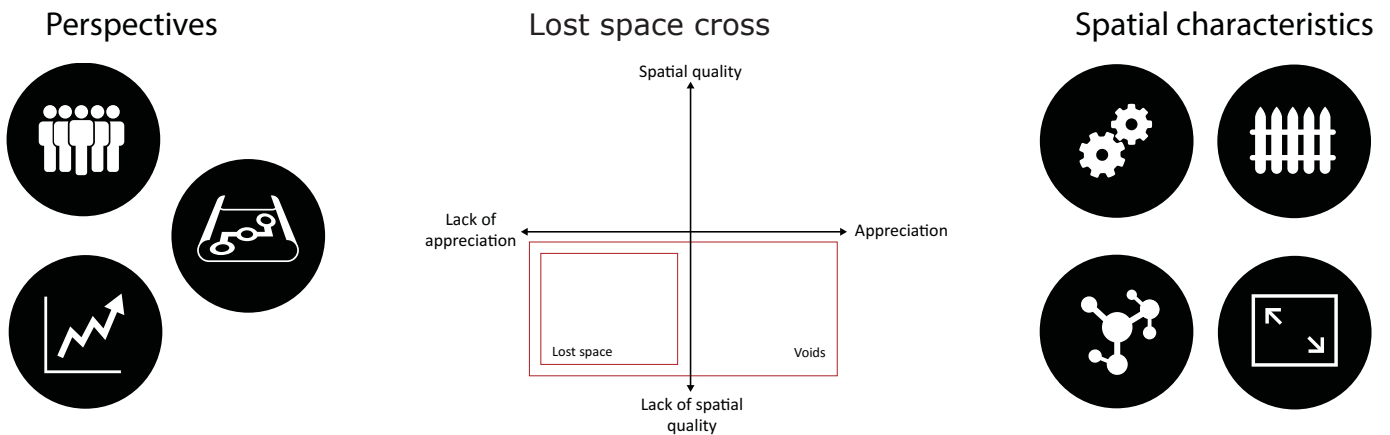
Spatial characteristics

Figure 9 | Research project overview (by author)

Trancik as one of the founders of the lost space theory

The lost space theory describes the debate which started in the 1980s. It acknowledges the existence of voids, "underused and deteriorating spaces" (Trancik, 1986, p. 2) as lost space but emphasises that these spaces can still "provide exceptional opportunities to reshape an urban centre" (Ibid), so that areas are being revitalized and "counteract urban sprawl and suburbanization." (Ibid)

Trancik defines lost space as the "undesirable urban areas that are in need of redesign" (Trancik, 1986, pp. 3–4) which have no "positive contribution to the surroundings or users." (Ibid) At the same time "they are ill-defined, without measurable boundaries, and fail to connect elements in a coherent way." (Ibid) On the other hand these spaces should not only be seen negatively because they also have some potential in offering "the opportunity for rediscovering the many hidden resources in our cities." (Ibid)

Trancik defines furthermore five main categories of lost space: (1) an increased dependence on the automobile; (2) the attitude of architects of the modern movement towards open space; (3) zoning and land-use policies of the urban-renewal period that divided the city; (4) an unwillingness on the part of contemporary institutions- public and private- to take responsibility for the public urban environment; and (5) and abandonment of industrial, military, or transportation sites in the inner core of the city. (Trancik, 1986, p. 4)

It can be concluded that lost space consists of spatial and appreciation aspects. While Trancik tries do describes in great detail the spatial component, about the appreciation factors he is less clear.

Berger's and Viganó's additions to Trancik's theory

Where Trancik goes into great spatial detail about lost spaces, Allen Berger contributes to the discussion by investigating the topic by focusing on the appreciation factor. He connects the spatial categories which Trancik describes and the social systems that are present in the city. "Cities are not static objects," (Berger, 2006, p. 203) but are an ever changing collection which are marked by "continuous transformation of buildings and landscapes." (Ibid) These "transitions manifestations" (Ibid) are what makes a city feel alive.

Berger insists furthermore that the future of every space and in particular lost space lays in the "interaction of human agency" (Berger, 2006, p. 211) and will be derived from "transferring and sharing knowledge." (Ibid) Therefore he sees that designers should "resist closure and univalent expertise" (Ibid) and should always draw from local information sources during the design process. He recommends this because local sources of information can show a cultural focus that can help discovering important local topics.

There is hardly a need "to emphasize the increasingly amount of lost space" (Berger, 2006, p. 214) which we can find in the real urban world. Lost space is "the inescapable entropic counterpart to evolution and urbanization." (Ibid) These spaces are "far away from being a failure and they will show previous success." (Ibid) A design should challenge this for continuation of urban evolution in order to be successful.

To quantify the discussion of lost space Paola Viganò introduced the word porosity into the discussion. With this term she means the percentage of voids in the urban and social networks among others. These voids have not only big implications on density but also on the "sustainability; ecological, social and economic development and decisions" (Viganò & Pellegrini, 2006, p. 336) that are taking place in cities. Porosity opens at the "conclusion of an economic or social cycle, following on from a breakage in the modes of use" (Viganò & Pellegrini, 2006, p. 343) of space and enables the rethinking and redevelopment of cities.

Seen these three authors contributing to the lost space it can be concluded that there are different perspectives on the problem of lost space. These perspectives are connected to the appreciation side of lost space. Together the spatial and appreciation parts form the problem with lost spaces.

The lost space diagram

With lost space more defined the diagram that was shown, figure 3 in part A, p.12, can now be used to explain different movements and perspectives. The diagram below shows a version in which different approaches towards the lost space problem can be seen. Before explaining what types of approach are possible to tackle lost spaces it is important to define these two concepts.

Spatial quality is the measurability and therefore standard of space. Qualities are measurable, for example travel time. These measurables will be discussed later in this part. The lack of spatial quality is the first half of the lost space problem and the essential characteristic of lost space.

There are however different perspectives on lost space. These perspectives can be grouped together under the name of appreciation. Appreciation is about recognising and enjoying these good qualities. The appreciation and the spatial quality factors are influencing each other but there is no ratio between the two.

In order to define the appreciation it is important to investigate the overlaying structure that lost space is part off. This structure for lost space is public goods. What society defines as a public good is an important factor for the lost space research. This was shown by the political change in Eastern Europe. The debate between the ideologies of the welfare state and neo-liberalism that will be described later is an important change in the definition of public goods and the role of the government in planning.
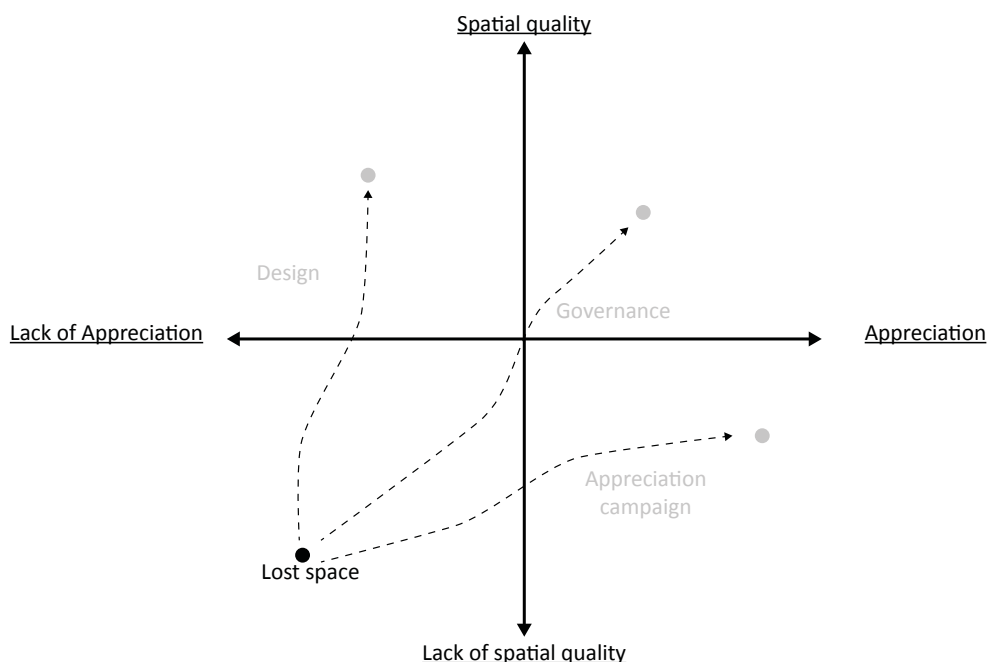
Figure 10 | Types of interventions to improve lost spaces (by Author)

Lost space as part of the discussion about public goods

Public goods are goods which "can be enjoyed simultaneously by more than one person." (Klosterman, 1985, pp. 7–8) Additionally these "are difficult to assign a well-defined property rights to." (Ibid) This means that it is difficult to define the value for a single consumer and or restrict the access to this good. Examples for this can be "television broadcasts and a healthy and pleasant environment." (Ibid) Because of political changes there are less public resources available. Not only does this mean that there is less public money available but also political interest. The lack of political interest will therefore also result in less public investment in public goods. The topic of lost space becomes thus a bigger part of the discussion about planning.

Public goods factors

Public goods are very important in urban planning because of several factors. The first factor in economics is called the ´spill over effect.´ This means that when an area "changes, its surroundings will be influenced" (Klosterman, 1985, p. 8) by it. An urbanism example could be the negative effects on a neighbourhood when a certain street gets a bad reputation. This effect is often used as an argument why the government should invest in its own city, while the market doesn't see any potential in a location. With investments in an area the negative spiral will come to a stop. Then it will turn in the opposite direction and start being a positive influence on its surroundings again. This will benefit its surroundings and thereby attract more investments from private parties. (Ibid)

A second factor is the "prisoner's dilemma" or "free riders problem". These terms are used to describe a problem that contains two parts. The first part is when private parties "use the pursuit of their own interests" which leads to a negative effect on society. The second part is when parties use the "public goods for their own good and don't contribute to its creation." (Klosterman, 1985, p. 10) An urbanism example could be a private party which will neglect an area for personal gain when it knows that the government will invest in the area in order to save the area. That way it will benefit the private party later on.

The third factor in the public goods definition is the perception of a space. In An economic theory of club goods J. Buchanan describes the phenomena of the perception of space, the figure below shows a short summary of the theory.

If a space is public or private depends on a number of factors but the biggest one is the ability to close off an area. In the figure below it is shown that three out of the four combinations are used as public space. The non-closed off spaces are always felt as public and the closed off public areas are in a grey area that people need to discover in order for it to be perceived public. (Buchanan, 1965)

Anomaly continues on this theory and states that "public goods can been seen as sources of market failure" (Anomaly, 2013, p. 23) and claims that these exist because of the market and that they should be handled by the state. He also claims that "there is no direct link between demand of public goods and welfare." (Anomaly, 2013, pp. 23 – 24) By this he means that an increase of public goods does not directly improve the quality of urban life.

	Public goods	Private goods
Closed off	Perceived private	Private
Non-Closed off	Public	Perceived public

Figure 11 | Perception of goods (by Author based on James Buchanan's Club theory)

Public goods debate

In general the public goods' debate consists of two sides, for and against large scale governmental planning. These sides are often linked towards either the pro-welfare state policies or they are linked with neo-liberal policies. Both sides have two main arguments that have been used to characterize the debate.

The side supporting the welfare state uses the argument that public goods make an important impact on the focus from the government that plans and develops. Since public goods are involved, "something which concerns us all" (Klosterman, 1985, p. 67) the government should be in charge of providing and maintaining these types of development. The second argument about phenomena like the prisoner's dilemma is that this dilemma creates an "impossible position for investors and to which the government needs to help out" (Klosterman, 1985, p. 68) in order to create a positive economic climate.

The other side, linked to the neo-liberal policies, uses two arguments which are more focused on the free 'market' principles. The first argument that "the market should be able to regulate itself" (Ibid) is used. The second argument which is stated is the idea that the government "should be the regulator" (Klosterman, 1985, p. 62) and makes sure no party can dominate the market. In order to do so the government should not be a party on the market itself.

Public goods are an important part of lost space. Perspectives from different groups and organisations have ideas on what is good and what is lacking. Therefor this important context perspective will be explored in the next chapter.

Figure 12 | Lost space and connected toppics

Planning doctrines and their perspective on lost space

A part of the problem statement described political and economic changes due to a change in the dominant ideology. These changes led to changes in planning. Planning driven by ideology is known as a planning doctrine. Transitioning form one planning doctrine to another will mean a new distribution of resources, which will create a struggle for resources. With this struggle for resources conditions are created for lost spaces to exists and flourish.

Planning doctrines are defined by Andreas Faludi and Arnoud van der Valk as "a set of interrelated and enduring notions about spatial organisation and development strategies and the guidelines on how to handle them. […] The majority of the members of the planning community accept the main constituents of the planning doctrine as self-evident and beyond discussion." (Faludi & Valk, 1994, p. 18)

With this quote Faludi and Van der Valk state that planning ideologies exist and that the research into these ideologies themselves are very important while the questions about the existence of these ideologies are not important because most members of the planning community agree on the existence.

There are many ideologies existing in the planning realm but only a couple are important for this thesis. This thesis is looking at the political, economic and planning changes during the last three decades in Eastern Europe. The next chapter will explain the main planning doctrines in Germany, and in particular Berlin, and their impact on lost spaces.

Welfare state

The welfare state is a political concept to organize the government of a country as a key-actor in order to protect the social well-being of its citizens. Equal distribution of wealth is one of the main foci of the welfare concept. The evolution of the welfare state started in the 18th and 19th century with the industrial and political revolutions. In the 'Golden Age' of capitalism, in the 1950s' and 1960s' post-war economic boom, there was a so called third revolution, the social rights revolution. (Esping-Andersen & United Nations Research Institute for Social Development., 1996, p. 1) Thereby the welfare state became part of the "post war 'Golden Age', an era in which prosperity, equality, and full employment seemed in perfect harmony." (Ibid)

The concept of the welfare state has been very successful in multiple regions of the world. But since the early 1970s, "however, social programs have faced mounting political challenges." (Pierson, 2001, p. 143) With this quote Pierson introduces the main cause for the end of the welfare state, with the reduced investment in the social programs the quality of these programs decreases.

This results in questions being raised why the extensive investment of public money was done in the first place. Esping-Andersen states additionally that this effect also works in the reversed way. Sentiments and political outcries "have generally been weakest where welfare spending has been heaviest." (Esping-Andersen, 1990, p. 33) With this statement he clarifies that it is not that society is against big social investments but when economic ideas influence the spending on these programs the social reaction is inversely. This means that where social spending is lowest, the realisation of the necessity of these is also lowest.

For lost space this planning doctrine is connected to the planning appreciation. The welfare state focuses on how the government can create an equal distribution of wealth. For urban development this means that the government is the main actor in the planning field. This makes the planning appreciation the most important factor in the welfare state perspective on lost space.

Design   Construction   User

Figure 13 | Welfare state approach to planning and designing the city (by author)

Design   Construction   User

Figure 14 | Neo-liberal approach to planning and designing the city (by author)

Neo-liberalism

Neo-liberalism is often seen to be the opposite of the welfare state. Neo-liberalism is the economic and political ideology by which the economy can advance through the "maximization of entrepreneurial freedoms within an institutional framework."(Harvey, 2007, p. 147) Important parts of these freedoms are free trade and free markets, easily obtainable property rights, and individual liberty. The role of the government is to "create and preserve an institutional framework appropriate to such practices." (ibid) If such a market does not exist it is important that the government creates such a market by taking actions which should be limited only to create an open market. There was much resentment towards the neoliberal policies, as this "entailed much destruction of institutional frameworks" (ibid) and even the society's way of life. The economic downfall of the 1960s and 1970s lead towards a restart in the "capitalistic economies." (Ibid, p. 148) The restart created room for a new ideology to take over as the leading political force.

Two important political leaders of neo-liberalism were Prime Minister Margaret Thatcher, in the UK, and president Ronald Reagan, in the USA. They were the leaders of their respective countries in the 1980s, in which they advertised and implemented neo-liberal policies. These policies are based on the four pillars of neo-liberalism, which will be covered later in this chapter. During the 1990s neo-liberalization has "in effect swept across the world like a vast tidal wave of institutional reform and discursive adjustment." (ibid, p. 148) With the adaptation of these policies by the World Trade Organization and the International Monetary Fund no place can claim "total immunity" (ibid) from the neo-liberal reforms.

According to Dumenil and Levy neo-liberalism even goes as far as being a project to try to achieve the total "restauration of class power to the richest strata in the population." (Harvey after Dumenil and Levy 2004, p. 149) They underpin their statement with data to show the share of the top 1% of income earners, which income soared suddenly from 8% to 15% in roughly two decades (Ibid) in the US by the end of the 20th century.

Harvey adds to this statement that neoliberalism has not proven to be "good at revitalizing global capital accumulation" (Harvey, 2007, p. 149) but is has "succeeded remarkably well in restoring class power."(Ibid) Finally Harvey adds that the neoliberal ideas are "quickly abandoned whenever they conflict with this class it is trying to restore." (ibid)

Neo-liberalism has four main pillars which are essential in order to restore the class system. The first pillar is privatization which is "to open up new fields for capital accumulation" (Harvey, 2007, p. 153) in sectors which were previously part of the governmental or non-profit sectors. A good example of this is the privatization of British coal mines by Margaret Thatcher. Financialization is the second pillar of neo-liberalism. The financial sector is an important factor in this process. "Deregulation" (Harvey, 2007, p. 154) and "opening up of the stock market" (Ibid) for more companies happened in order to provide an increase in financial transactions. This is the main goal of this pillar. "Crisis creation, management and manipulation" (Ibid) is the third pillar. By manipulating crisis financial gain for the rich and powerful can be achieved. The final pillar is the use of policies for redistribution of wealth.

For urban planning and design neo-liberalism has the effect that there is less governmental structure to work with and more responsibilities are given to municipalities. This urban entrepreneurialism sets cities furthermore in competition against each other which leads to investments in the city but also to a "more efficient and mostly privatized organization of public goods." (Peck & Tickell, 2002, p. 398)

For lost space this planning doctrine is connected to the economical appreciation. Neo-liberalism focuses mostly on entrepreneurial freedoms. For urban development this means that the economic potentials and values are the main actor in the planning field for this ideology.

Design	Construction	User

Figure 15 | Governance approach to planning and designing the city (by author)

Governance

While the welfare state focuses on a big planning government, neo-liberalism opens planning up to the 'market' to be made profitable and more efficient. With the rise of neo-liberal policies the term governance started to become more popular in the planning debate. Governance used to be a synonym for government but in the last couple of decades this changed. Now it is used with many different meanings but mostly to describe the "change in the meaning of government, referring to a new process of governing, or a changed condition of ordered rule, or the new method by which society is governed." (Rhodes, 1996, pp. 652–653) In other words it is used to describe the process that leads away from the state and makes way for a more collective way to rule society. This is the definition of the phenomena governance which is used for this graduation project.

Governance is furthermore "ultimately concerned with creating the conditions for ordered rule and collective action." (Stoker, 1998, p. 17) This aim has the effect that the final goal of governance is not a big difference to government, "it is rather a difference in processes." (Stoker, 1998, p. 17)

The stated theory of governance regards the state neither as a "unitary political subject nor as a passive, instrumentalizable object but as a complex social relation." (Jessop, 2004, p. 49) In essence it treats the government as an "ensemble of social embedded, socially regularized, and strategically selective institutions, organizations, social forces and activities" (Ibid) which is involved in the process of making decisions for the community. Jessop also emphasizes the "interdependence of the state apparatus and state practices with other institutions and social organisations" (Ibid) in order to make it more socially embedded. The state must be independent from other actors which are involved in the planning process, otherwise it could lead to a situation in which not all parties are equally important. This will make the process of planning less interesting for other partners involved and mitigate the original idea behind opening up planning to the market.

For lost space governance is important, because this new way of governing planning not only involves the government and economic actors to be involved but also societal partners. This social dimension is a very important part of lost space because society is the end user of the urban tissue and without getting them involved with lost spaces these areas will be surely lost.

1989	2000	now	
Devision	Unification	Transition	Time period
Dictatorial	Neo-liberalism		Type of planning
Welfare state			
Government	Governance		Governing

Figure 16 | Types of interventions to improve lost spaces (by Author)

Lost space characteristics

With the theory of lost space more defined, the connection between lost space and public goods described and the explanation of the different perspectives and their connected planning ideologies the first research question can be answered, this will follow in the conclusion of this part, see p. 6.

This following chapter will focus on the identification of the lost space characteristics, which will answer the second research question. It starts with an explanation how the characteristics have been found. Then the characteristics that are connected with the different planning ideologies and their identification method are covered. The chapter ends with the spatial characteristics that have to be present in order for a space to be able to be labelled a lost space.

Identifying the lost space characteristics

The theory reviews that have been covered in the previous chapters can be translated into characteristics, but all of these characteristics are still too undefined to be investigated. Because lost space is about a research on physical spaces and social dimensions connected to these spaces, there is a need for quantifiable data to measure the changes instead of vague statements such as "it improved" or "it got worse."

A research framework has been created to help with the translation from the theory into quantifiable data. This framework is not only focused on finding the characteristics but also about the necessary research that needs to be done to work with this framework. See the figure below for the framework.

The theory of lost space is a part of public goods and is connected to perspectives from different ideologies, as stated before. In order to be able to do research on a specific location there needs to be quantifiable data to measure the changes instead of vague statements such as "it improved" or "it got worse". Just like any other space factors such as size; ownership; accessibility; usage or public awareness changes over time are important for lost space as part of public goods. To investigate the public goods and in particular lost space, the land value, the development around the location, the public appreciation and spatial aspects of a location will be investigated.

Lost spaces are identifiable through a series of characteristics that together created conditions which caused the space to be lost. In the figure below these characteristics are visualised in a relationship diagram. The characteristics are divided into two parts, the lack of appreciation and the lack of spatial quality side, which will be explained in this chapter.

The 'Good city form' (Lynch, 1981) Lynch describes his theory. In it Lynch defines conditions needed to be fulfilled in order to speak of a good city. The theory has seven main principles: Vitality; sense; fit; access and control Lynch already described in his book 'The Image of the City' (Lynch, 1960) and adds efficiency and justice to this list.

To link this theory to lost space two adjustments need to be made to the principles. First of all lost space is part of the public goods discussion, meaning that the principles described by Lynch should only be (partly) used when they are connected to the public goods theory. The second adjustment that needs to be done is the inversion of the principles. Where Lynch uses for example access, for lost space it would be blocked or limited access.

With these two adjustments together the theory of good city form and public goods provide lost space with eight characteristics that become measurable in order to identify lost space in the urban fabric. Each characteristic will be described in the next chapter.

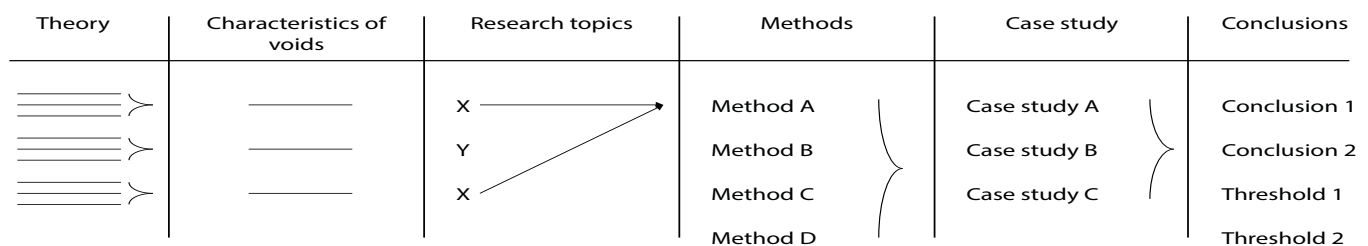| Theory	Characteristics of voids	Research topics	Methods	Case study	Conclusions
		X	Method A	Case study A	Conclusion 1
		Y	Method B	Case study B	Conclusion 2
		X	Method C	Case study C	Threshold 1
			Method D		Threshold 2

Figure 17 | General set up of the framework (by author)

With the theory of lost space more defined, the connection between lost space and public goods described and the explanation of the different perspectives and their connected planning ideologies the first research question can be answered, this will follow in the conclusion of this part, see p. 6.

This following chapter will focus on the identification of the lost space characteristics, which will answer the second research question. It starts with an explanation how the characteristics have been found. Then the characteristics that are connected with the different planning ideologies and their identification method are covered. The chapter ends with the spatial characteristics that have to be present in order for a space to be able to be labelled a lost space.

Lack of spatial quality

As stated before the different perspectives on lost space have each their own characteristic but there are also general characteristics for lost space. These general characteristics are connected to spatial attributes of a location. In the next sub-chapter these spatial lost space characteristics will be further defined.

Spatial quality is often used in urban thermology but is also often ill defined. It consists of two concepts, space and quality. Space is a general concept about an area that is not only about physical attributes of the area but also about the "spatial organization of society, relationships between territories and flows of people and goods through networks" (Schön, 2005, p. 391) between
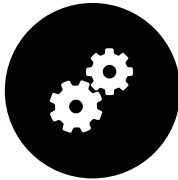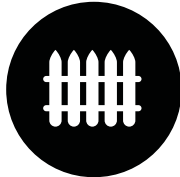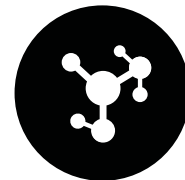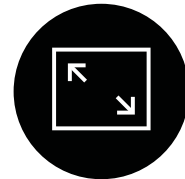

Figure 18 | Relationship diagram of the Lost Space characteristics (by the author)

The problem with lost space is its complexity. With seven characteristics it seems difficult to measure all of these. Each factor explains a part of (the lack of) potential of the space, if it is or will become a lost space. For a space to be a lost space there need to be multiple characteristics present. On their own they don't say much about this problem.

For the final product it will be possible to create three stages of lost space. Current lost spaces, future lost spaces (take care that they don't become lost spaces) and past lost spaces (that need to be taken care off). The characteristics together do encompasses many spaces. With a set threshold for each of these characteristics, they can be investigated via mapping. The results from this investigation can be used as a recommendation for future city planning.

different spaces. Quality is about the degree of excellence of something.

Spatial quality can be changed by "urban development, political decisions, must involve choice, negotiation, friction and divergence and occasionally agreement that enables action." (Rocco de Campos Pereira, 2013, p. 1)

In the following part the four lost space characteristics linked with spatial quality will be described.

Function

The first spatial characteristic of lost spaces is the function of the space. Kevin Lynch wrote in ´Good city form´ that form is an important part of the function of the space and "adaptation of the place to the activity, vice versa or by a mutual adaptation," (Lynch, 1981, p. 167) can achieve this.

The exact opposite happens with lost spaces. Lost spaces are predominant without a function or a closed off function. Spaces without a function are lacking the usefulness for most users making them not being used. On the other hand are the mono-functional spaces. Their design mostly prohibits flexible use of the space. This in combination with the closed off function will create the condition of this second characteristic.

Measureable factors for the function characteristic are the functionless or mono-function spaces. A list can be made of these mono-functions in order to locate them. Functions like cemeteries, military areas, public transit depots (train yards etc.) could be a start in searching for lost spaces. Most of these functions are part of the F or SF zones in Berlin's zone-planning and can be located that way.

Accessibility

To be able to use a space it is important to have access to it. Lynch defines three factors that consist in the characteristic of accessibility, namely diversity; control and legibility.

"A diversity of people, of food, of jobs, of entertainment, of physical settings, of schools, of books, are all desirable. Variety among the available behaviour settings means that it is easier for any individual to find one that is congenial to him, or to become competent in new ways." (Lynch, 1981, p. 191) With this Lynch expresses a human preference of choice. Both a space itself and compared to other spaces. For lost spaces diversity is often lacking putting it in the shadow of other spaces with similar aspects.

Part of the choices that are preferred is the ability to be in control. With the "ability to exert control over access-to shut off flow when desired-is therefore a value in itself." (Lynch, 1981, p. 193)

"Legibility refers to how easily an environment can be read or 'made sense of.'" (Dee, 2001, p. 17) It will enable people to not only predict but also become part of the space themselves. Thereby an area will become more accessible.

Accessibility can be measured in two parts. First is the accessibility in the sense that a location can be (limitedly) accessible or closed off. For example a festival area is limitedly accessible, because when a ticket is bought access will be granted to the site while this wasn't allowed previously. The second part of accessibility is the control and legibility of the access, namely how the entrance(s) are set-up.

Connectivity

For the society to go to a location and start using it its connectivity is an important part of the decision making process. Connectivity can be an indication for lost space not only about the current state but also the possibilities of the space. When the location lacks connectivity it is hard to expect the space to become actively used by people if there is no connection towards this area.

Connectivity can be measured in two ways, passenger throughput and travel distance or time. (Lynch, p. 201) For lost spaces the travel distance is the one that will be used because connectivity towards other areas is more important than the amount of travels that can simultaneously reach the location.

Measuring the connectivity will be done by analysing the distance and travel time between an area and centres of importance in its city. It is hereby important to look at the urban form the space is located in. The travel distance towards only the closest city centre in a poly-centrically city is not sufficient.

Ersließungsstandards des NVP 2000/2001 - 2004		
	Grenzwerte für die Furheregentfemung zur Haltestelle [m]	
Betriebszweig	hohe Siedlungsdichte	niedrige Siedlungsdichte
Regionalverkehr	600	1000
S-Bahn	600	1000
U-Bahn	400	600
Straßenbahn	350	550
Bus	300	500

Figure 19 | Berlin Erschließungsstandard (by Berlin senate department of urban planning, 2004)

Besides the two numerical values for connectivity there are also two types of connectivity transits: public and private. Public transit are publicly available transportation systems, for example a metro or bus, while private transportation systems on the other hand are for example cars and taxis.

Berlin has a poly-centrically city model, so in order to analyse the connectivity of Berlin one needs to look at two centres, the closest by and a central point in the heart of the city. The first value will determine if the location has a good local connectivity and the second value will determine if the connectivity towards the rest of the city is sufficient.

For the local connectivity there are standards for the reach of a system. In case of the Berlin's public transit system, the Berlin state department has set standard values for each public system. These values can be found in the Erschließungsstandard, or the maximum reach a transportation system has. There are two categories one for high and one for low density areas, depending on the location either one of these will be used.

Size

Lost spaces exists in all sizes and shapes, big or small, but different approaches are needed for spaces of different sizes. Compared to small lost spaces big lost spaces are having more problems when it comes to appreciation. The bigger the size of a space the more impact it will have on its surrounding. When looking at the background, political and social changes, the bigger size lost spaces where deemed more influential and therefor these lost spaces are in the forefront of this research project. This characteristic is used as a filter over the other characteristics.

Lack of appreciation

In chapter B3.3 the three perspectives on lost space have been introduced, social; economic and planning appreciation. These three perspectives were created by translating planning ideologies' view on lost space into a type of appreciation. Appreciation can be "significant and lasting social change by changing the people who make up society. And there are only two ways of changing people: changing individuals, and changing institutions." (Alexander, 2005, p. 210) This next sub-chapter will cover these three types of appreciation.

Social appreciation

The "unwillingness on the part of contemporary institutions, public and private, to assume responsibility for the public urban environment," (Trancik, 1986, p. 4) is an important factor in the creation of a lost space. The responsibility that Trancik describes comes from the principle fit that Lynch uses. When a space fits it creates "comfort and satisfaction" (Lynch, 1981, p. 152) for its users, these users then start to appreciate the space each in their own way. This creates a feeling of responsibility or appreciation of a location, which -although difficult to measure- still shows in the public debate. This public debate becomes an important indicator to measure public appreciation.

By analysing local newspapers, (international) books and movies this debate can be measured. Also societal groups should be taken into account when looking into social appreciation because these groups show what part of lost spaces are important in the eyes of (local) society and thus part of the public debate.

Using the archives of local newspapers will create an indication about the amount of publicity an area gets over time. The amount of articles about a specific location can show a spike in interests in a certain area, showing that change is taking place. When these changes are connected to the historical overview and the land value analysis, a more coherent overview can be created.

Economic appreciation

Analysing the ground value development over time can give great insides into several factors of a location. First of all it can show the interest of the 'market.' The neo-liberalistic principle of supply and demand translates in a changing ground value if the demand changes. Connected to this is the spill-over effect, when it's "status changes its surroundings will be influenced." (Klosterman, 1985, p. 8) Both of these factors are connected to the ground value of a location and its surroundings.

When looking at economic numbers it is very important to create a base line. This base line creates the context to compare the results with. With the ground value change over time, the change of the average of the city is the base line.

The Berlin state has the Bodenrichtwert, a map of Berlin illustrating roughly what a square meter of ground costs in a certain area, see figure 20.

The Bodenrichtwert maps are available from 1995 until 2014 for the whole of Berlin. The numbers can be translated into graphs in order to make the changes more visual. Interesting information in these graphs are the high and low points and their location in time. Connecting these peaks with historical events can give an inside in why the ground value changed.
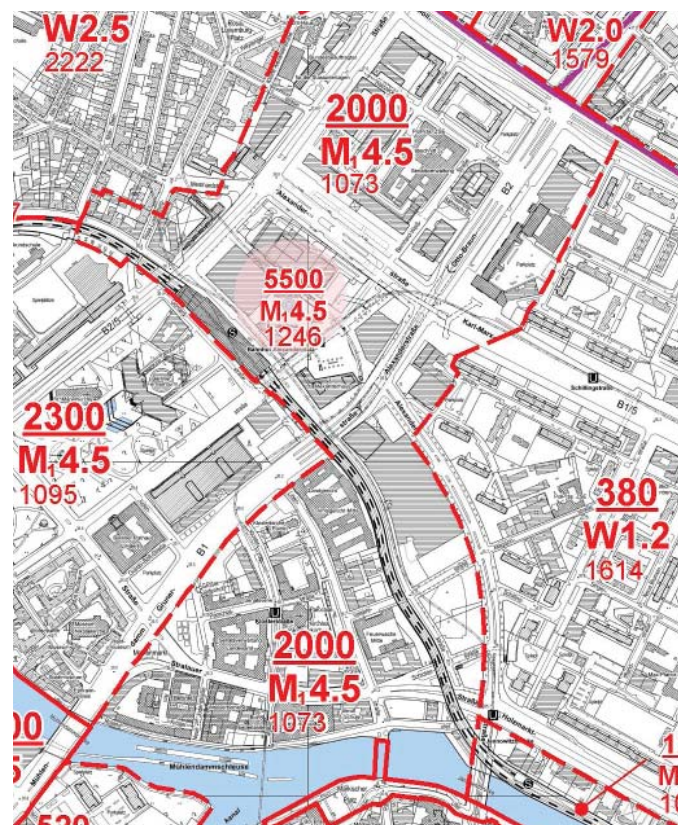

Figure 20 | Bodenrichtwert of Alexanderplatz (from FIS-Broker)

Planning appreciation

Planning plays a big role for lost spaces because it shows the planning appreciation of a location. The loss of function or radical changes in zoning and land-use policy are part of the planning appreciation of a location, as described by Trancik, Berger and Vigano.

Urban space are marked by "continuous transformation of buildings and landscapes," (Berger, 2006, p. 203) meaning that when there are no efforts made or these efforts bear no fruits it becomes clear that this space is in trouble. In order to investigate this planning appreciation development plans and their proposed changes are an important indicator.

When looking at the development plans for an area the German planning law is a good factor to help selecting important plans. German planning law knows two main plans on city level. First is the Flächennutzungsplan (FNP) a preparatory land-use plan that is mostly made on the scale 1:25.000. They are created by the local municipal council. These plans hold no direct connection to for example "granting of building permissions." (Pahl-Weber & Henckel, 2008, p. 79) It is however binding on public planning bodies and bureaus, meaning that they are "required to adapt their plans to the FNP." (Ibid)
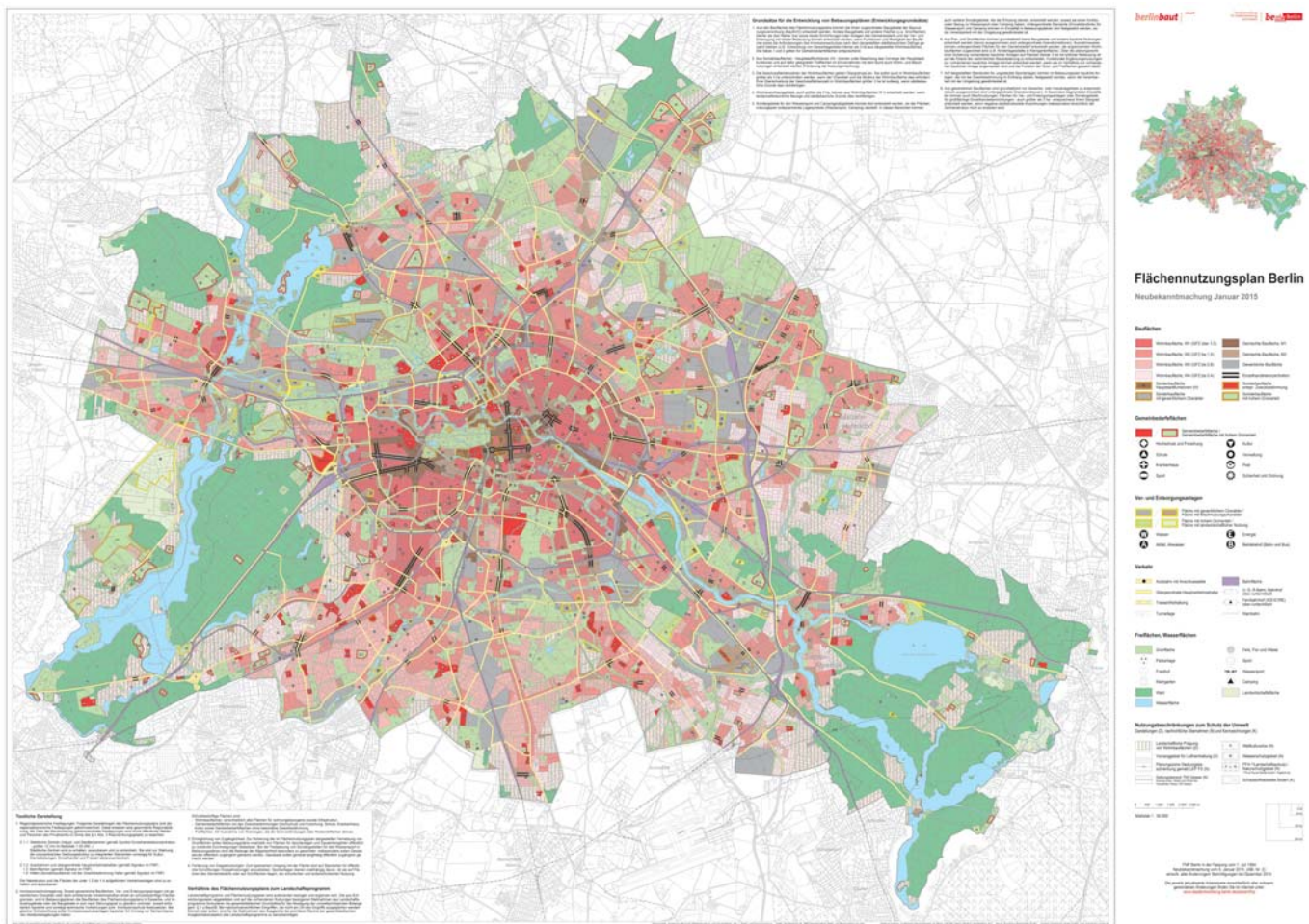

Figure 21 | 2015 Flächennutzungsplan Berlin (from FIS-Broker)

Summary and conclusions

To finalize this second part the following chapter will first give a brief overview of the literature review, followed by the conclusion of this part with answering the first two sub-research questions.

Summary

This part started with defining lost space not only as underused and underdeveloped but also as an underappreciated space. With the works of Trancik, Berger and Viganò this was underpinned. Next to this theoretical positioning also the lost space diagram, the cross, was further explained and the difference between the two sides, spatial and appreciation, were introduced. With the connection between lost space and public goods the importance of ideologies to the topic was introduced.

The three main ideologies for the last three decades in East Europe, namely the welfare state; neo-liberalism and governance, were investigated. This investigation led to the introduction of lost space types based on the perspectives of these ideologies. These perspectives were translated into the first three important characteristics of lost space. These characteristics are all connected towards a type of appreciation.

After this the spatial lost space characteristics were investigated with the help of another round of literature research. These characteristics are the general set of characteristics that combined with the first three create the characteristics that make the lost space problem as complex as it is. While there was a list of characteristics, these characteristics needed to be translated into quantifiable and location bound measurable in order to be able to state if a space is a lost space or not.

A framework was introduced in which the theory was translated into characteristics that each on their own got their own measuring method. This was the beginning of the lost space framework, a framework created to be used when investigating and working with lost spaces. The framework will need to be tested, by case studies, in the next part.

Conclusions

With the compact summary above the first two sub-research questions can be answered. By answering these questions the general concept of lost space can be explained.

The first research question formulated as "What different perspectives on lost space are there and which ideologies are behind these perspectives?" There are four perspectives. First is the spatial perspective, a general perspective about spatial characteristics. The second perspective is the political perspective driven by the welfare state ideology. The economic perspective is the third one that is driven by the neo-liberal ideology. And as the last perspective is the social perspective based on the ideology of governance.

With the second research question "Which characteristics are part of the problem of lost space and how are these characteristics connected to the different perspectives?" There are seven main characteristics. The spatial perspective providing the first four characteristics: the functional; the accessibility; the connectivity and the size characteristics. The political perspective provide the lost space characteristic of planning appreciation while the economic perspective the economic appreciation provides and the social perspective the social appreciation characteristic.

As a final note to this part there is much written about the spatial quality part of lost space, while the appreciation side is often underexposed. The aim of the next parts is to research and to improve on the writing about lost space and to test the created method to analyse both the spatial and the appreciation side of the problem. Identifying these spaces and analysing them should also provide a better answer for the main research question. The next part will go into this analysis with the help of case studies. These case studies are going into the criteria that were found in the literature review.

For the article that was written at the P2 that formed the base for this gratudation thesis see apendix 1.
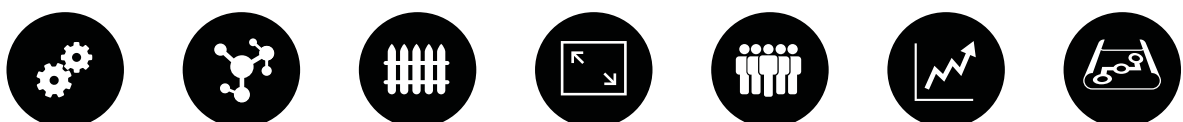
Figure 22 | The seven lost space characteristics (by author)

▲ **Figure 23| Tempelhofer feld (by author)**

▲ **Figure 24 | The gate and fence surrounding Teufelsberg (by author)**

◄ **Figure 25| Isolation of the Berliner Großmarkt (by author)**

▼ **Figure 26 | Functionless area at Former Johannisthal airport (by author)**

Part C:
Testing the method with case studies

Identifying planning in Berlin

In the last part the lost space framework was introduced. With the framework based on literature it is necessary to test the framework by applying the framework onto multiple cases. The following part will describe the testing of the framework. Before introducing the cases the location of Berlin needs to be further explained from a historical and planning perspective in order to provide an adequate context.

The city of Berlin was founded in the 13th century and functioned as the capital of the Kingdom of Brandenburg which later transformed into the Kingdom of Prussia. Prussia was one of the leading forces behind the German reunification that took place at the end of the 19th century and created the first German state which closely resembles the German state as we acknowledge it today. (MacGregor, n.d., pt. 00.45–02.05) This German state was able to expand its industry during the industrial revolution with extraordinary speed, giving the possibility to overtake nearly all the European western countries in military industrial innovation. (MacGregor, n.d., pt. 04.03–04.35) Furthermore these innovations triggered a rapid urbanisation and especially Berlin due to workers-migration that was the result of the Hobrecht plan. In this plan the polycentric connection of Berlin with its surrounding villages is used to create a connected unified urban fabric that could expand even further. These innovations also lead to a massive increase of wealth that led Berlin to become one of the leading cultural cities in the beginning of the 20th century.

Due to the loss of the First World War and the concessions and reparations that followed, this cultural blossoming ended. In the interbellum the newly formed republic faced a difficult time facing hyperinflation and political extremism that transformed the German state when in 1933 Adolf Hitler rose to power. Hitler aimed at transforming Berlin into Germania, the capital of a big unified German empire as the centre of a worldwide empire with major redevelopment of the city. Changes in the urban fabric were planned and partly undertaken to demonstrate power.

After the defeat in the Second World War and the massive destruction of the city due to air raids, great rebuilding plans were needed to rebuild the city. Instead of one centralized plan the allied powers wanted to control the German nation and therefore split up the country and the capital into four sectors. (Williams, 2008, p. 13) These four sectors eventually transformed into East (German: Deutsche Demokratische Republik, DDR) and West Germany (German: Bundesrepublik Deutschland, BRD), with their own rebuilding plans.
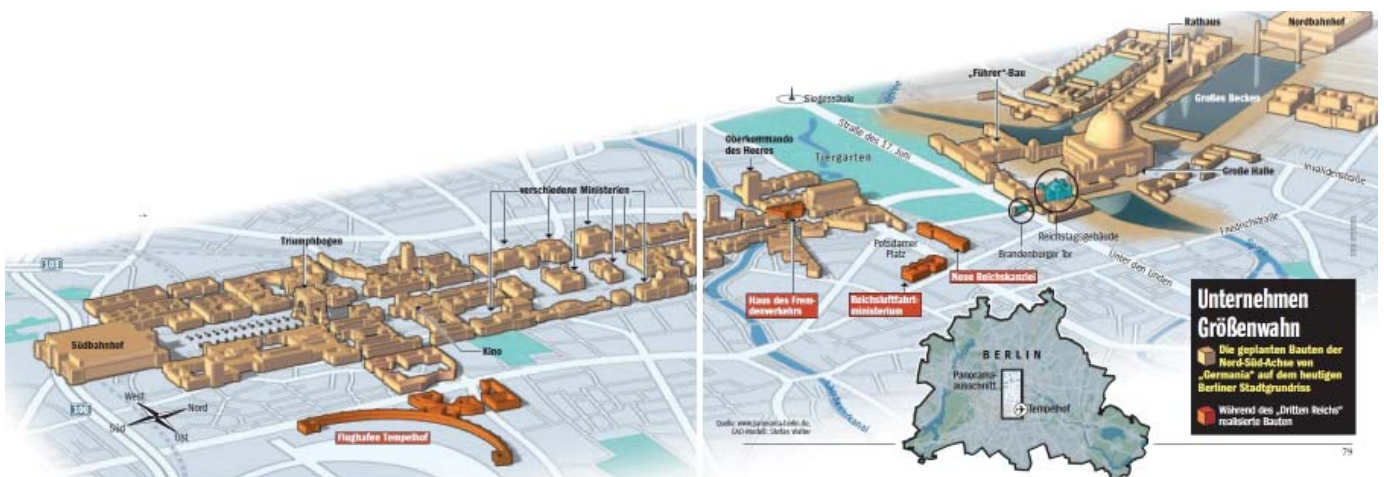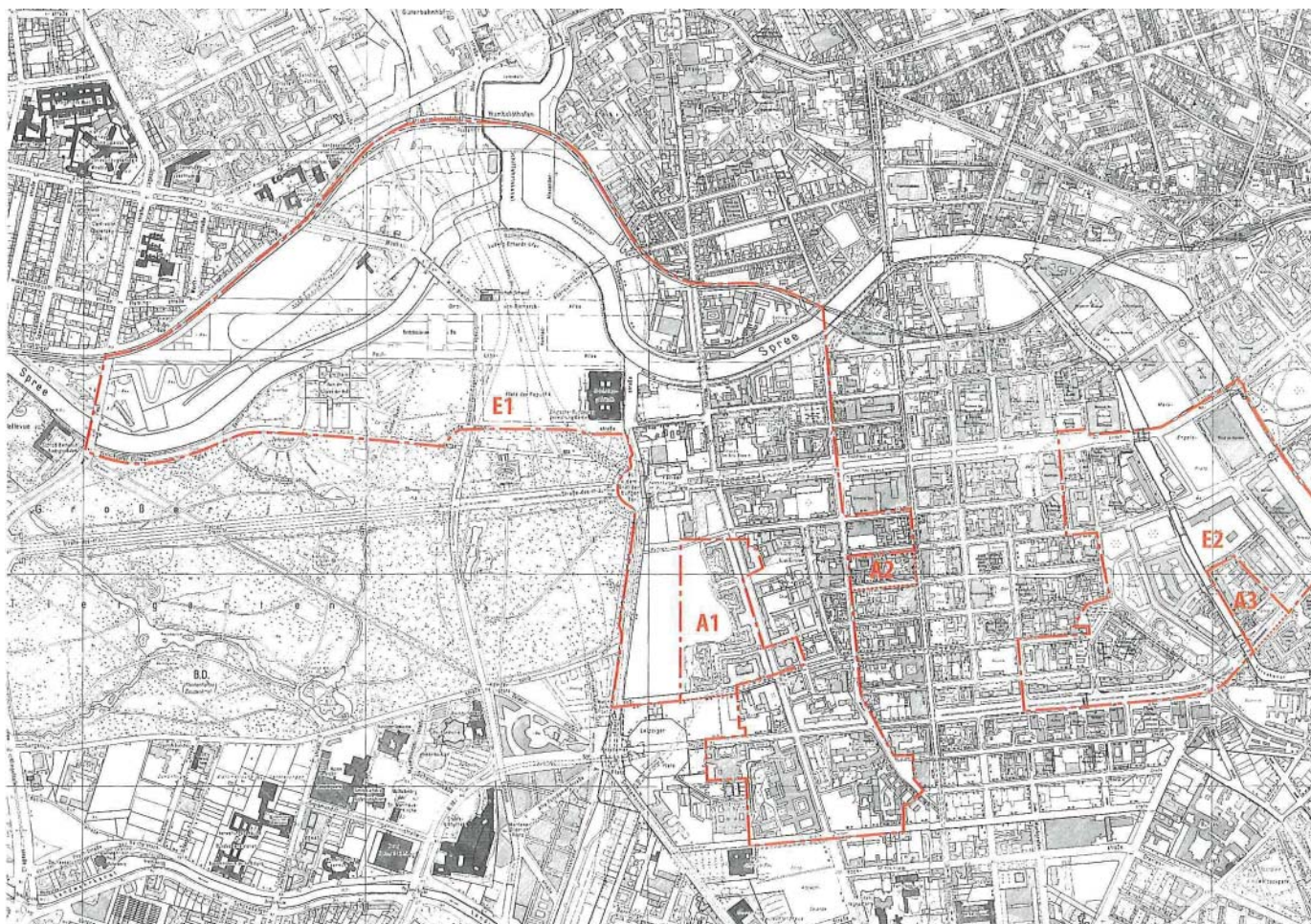
Figure 25 | Germania North South axis plan (by Spiegel)

Entwicklungsmaßnahme „Hauptstadt Berlin –
Parlaments- und Regierungsviertel"

*Development Measure for the Capital City
of Berlin – Parliamentary and Government
Quarter*

Begrenzung der Entwicklungsbereiche E1 und E2
Development Area E1 and E2 boundaries

Anpassungsgebiete A1, A2 und A3
Adjustment Areas A1, A2 and A3

Entwicklungsverordnung vom 17. Juni 1993,
Karte Stand 20.06.1995
*The development regulations of 17 June 1993,
map from 20 June 1995*

Figure 26 | Berlin Mitte development plan after the 1993 regulations (Senatsverwaltung für Stadtentwicklung)

While West Germany, and with it West Berlin, followed the capitalistic economic model after the American Marshall plan was put into action, East Germany and East Berlin followed a Communistic model that was essentially controlled by the Soviet Union. In the following decades the East and West side of Berlin would be separated by a wall. This wall was not only a physical barrier it also split the two sides apart in ideologies and planning principles. While the Western part of Germany grew into a world leading economic powerhouse after the rebuilding period, the Eastern part was left behind and was troubled with economic stagnation and massive communistic redevelopment. (Williams, 2008, pp. 15–17)

After the fall of the wall in 1989 and the reunification in 1990 the city faced the massive assignment of reconnecting a city that was divided for more than forty years and in which the two parts of Berlin were based on different principles. Berlin is a combination of village that grew together, giving the city a historical polycentric planning model. After the reunification this shifted towards a more monocentric model planning for the inner-city (Schröder, 2007, p. 8), as a bridge between East and West.

The "Vertrag über die Zusammenarbeit der Bundesregierung und des Senats von Berlin" from August 25th 1992 changed planning in Berlin drastically. The treaty consisted of the decisions to establish Berlin as the political and not just the symbolic capital of Germany. Therefore it created a major change in planning that was necessary in Berlin. Now there was a need for new federal buildings and copious amounts of residential buildings for the employees, who would serve the government. Due to the new function as the capital of Germany, improvement of the infrastructure in Berlin became necessary.

Figure 27 | Political devision Berlin since 2001 (Senatsverwaltung für Stadtentwicklung)

Berlin-Mitte was chosen as the location for the new federal government. The new federal government buildings were supposed to have a symbolic location bridging the former border between the two sides. The plan, see Figure 26, was created with four main goals: (1) Tolerance and looking towards the future; (2) Foreign institution should move to Berlin; (3) Also German institutions which are important for the country should move to Berlin; (4) There should be a mixture of the new public and residential functions in the city district. (Schröder, 2007, p. 20)

In the 1990s the focus lay on the establishment of the welfare state in the former East Germany and the improvement of the welfare state in the West. This focus changed with the increased importance of neo-liberalism in politics.

After the initial reunification plans which mostly focused on the political and major public functions in Berlin-Mitte, plans started to be designed for other parts of Berlin. Most of the redevelopment plans for Berlin were drastically changed, when the growth of the former East Berlin area did not go accordingly to the predictions.

Explorative case study

With the literature framework that was presented in part B, a first round of case study analyses has been done. The aim of this first round was to test the framework and to gain experience using this framework. The case studies where done in the form of an explorative case study. Chosen for this set are the following locations: Alexanderplatz; Berliner Stadtschloss / Palast der Republik; Potsdamer Platz ; Wilhelm Gedächtniskirche /Breitscheidplatz; Bahnhof Zoo / Hardenbergplatz; Warschauer Straße station area; Märkisches Viertel; Tempelhofer Feld; Spreepark and the Former Iraqi embassy. In the following chapter this first round is presented.

Alexanderplatz

Alexanderplatz is a well-known Berlin square in the former East Berlin area. The square is one of the big touristic sights in Berlin with world time clock and the skyscrapers and the view of the 'Fernsehturm' are all part of the area's identity. The square is officially only located between the buildings, the smaller area in the figure 28. For many people the Alexanderplatz is more an area than a square that stretches all the way from Alexanderstraße to Grontardstraße and from the Grunerstraße all the way Karl-Liebknecht-Straße, see the bigger area in figure 28.

Historical overview

To get a better understanding of an area a historical overview can show the ways an area has developed over time. Therefore there will be a short overview over the historical redevelopment of Alexanderplatz in the following chapter.

Figure 28 | Alexanderplatz in its surroundings (map by Bing maps)

The neighbourhood surrounding the Alexanderplatz was founded after the redevelopment that followed the thirty years´ war in the 17th century. The square, totally unrecognizable with today's square, itself was used as a "market square were mostly cattle was sold". (Behrens, Fiedler-Bender, Häfchen, & Pfalzgalerie Kaiserslautern., 1993) Afterwards it went through multiple faces of redevelopment until it became a parade square in the 18th century. In 1805 the square was renamed after the Russian czar Alexander the first, in his honour. During the early 20th century the area starts to form more like it is today with the construction of the station and the street layout. (Jochheim, 2006, p. 107)

In the Second World War during the battle of Berlin, the area surrounding Alexanderplatz was heavily fought for. With one of the biggest air-raid shelters in the city and the metro tunnels where used as barricades for the German 'Wehrmacht' to make a last stand. (Jochheim, 2006, p. 109) After the war the area started slowly to be redeveloped but the real improvement started in 1958 after the DDR government decided to create an Eastern axis along the Stalin Allee, now the Karl-Marx-Allee. The area surrounding the square was redeveloped in the 1960s following the '16 Grundsätze des Städtebaus' created by Kurt W. Leucht. The DDR
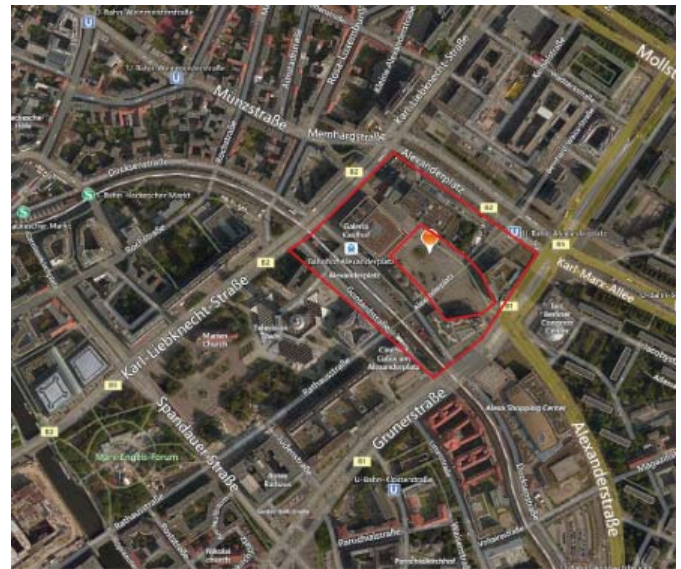
government issued these 16 principles that should lead to an urban planning and architecture that would be conform to socialism and communism principles. Many of the points define how to create a good economy and a healthy city and therefore show the strength of the communistic state. For example point 3 "Cities are built for industry by industry. Growth of cities is defined by the 'forming factors': industry; government institutions and cultural sites." (Bolz, 1951, p. 36) or point 11 "A healthy city is in need of the right amount of light and air. Not only density and direction but also transportation is important factors in this." (Ibid, p 45) This design formed the basis of the Alexanderplatz as it is known today.

After the redevelopment was completed in 1969 the square was used for many international events to prove the might of the communistic party. Until on the 4th of November 1989, the day that the square was used by protestors that wanted more freedom and less power for the SED, the Germany communistic party. Five days later the wall fell and the square became a relic of the past. The square reminded people of the DDR days and their policies, therefore an international competition was created in 1993 to start the redevelopment. This development lead to a

"construction boom" (Jochheim, 2006, p. 181) that has transformed most of the buildings surrounding the square. Plans were made for 13 150+ meters high towers but only "8 buildings have gotten a permit" (van Lessen, 2008) and "three of them are completely cancelled." (Fülling, 2007) Since 2007 redevelopment of buildings has been wrapping up, with as the opening of the Alexa Mall. Since then a new cinema opened next to the station and further developments, like a shopping area and huge retail shops have been started.

Testing the method

Like stated before the term of public goods is a vague term and difficult to quantify on objects or areas, therefore research needs to be done about the ground value; development around the location and the public appreciation will be investigated. This will be explained in the following chapter.

Social appreciation

Since Alexanderplatz is such a well-known place there has been much coverage in the media of it. This next chapter will focus on selected examples of this coverage.

 Two of the earliest pieces of media which show the Alexanderplatz are paintings and prints that cover events that occurred in the area. A good example is the painting of a fighting, see Figure 29, which happened during the March revolution in 1848 at Alexanderplatz. It is a painting, in the German romantic style, which illustrates the events which happened back then. There are many paintings which can be found in some of Berlin's museums.

During the 'wild' 1920s and early 1930s many literature was written in Berlin and about Alexanderplatz. One of the iconic books of this period is Berlin Alexanderplatz by A. Döblin. This book is considered one of the most important books of that time and describes very well the area during the early 20th century. One of its television adaptions was directed by the famous (West) German director Rainer W. Fassbinder.

Figure 29 | Barrikadenkampf Alexanderplatz 1848 (by Klaus Günzel)

The complexity of Alexanderplatz and its actual physical boundaries is furthermore discussed in numerous urban and architectonic books. One of the most reviewed ones is the '5 Plätze - 1 Name. Der Berliner Alexanderplatz' by Alexander Schug.

As stated before Alexanderplatz was the site on which on the 4th of November 1989 the final protests against the DDR government were held. By this it gained not only a position as an important location in many documentaries about the last period of the DDR but foremost earned an important political (historical) dimension.

Alexanderplatz is furthermore featured in several German and Hollywood movie productions which are set in Berlin. Examples for this can be seen in the 2003 German movie 'Goodbye Lenin' broaching the issue of the fall of the DDR or the 2004 Hollywood action movie 'The Bourne Supremacy' in which the Alexanderplatz is used as the location of the CIA's European headquarters.

Next to the cultural aspects of media also the daily press cover the developments on an around Alexanderplatz regularly. In October 2012 a young adult with a Thai background died in front of a night club after an altercation between young adults with Thai and Turkish backgrounds. The altercation and its consequence lead to an intense media coverage of violence between minorities. The incident additionally influenced the way the public perceives the area "as this was one of many violent incidents going to the clubs surrounding Alexanderplatz." (Bundtrock, Reichelt, & Dassler, 2012)

And lastly another reason why Alexanderplatz is so well-known is due to the fact that it is often used as a location of research. An incident of this can be seen in the project 'Verlust der Nacht' which used the area around Alexanderplatz to show how much light pollution is at the location by making a picture the whole night and created a video that showed the light that was being researched.

Economic appreciation

The city of Berlin has a system called GAA or BORIS Online, in which data is made publicly available. This system is very handy when researching the land value. The available data dates back until the fall of the wall. Since Alexanderplatz was East Germany before there are no public data about land value from the DDR times available.

Figure 30 shows the land value through time, starting with a sign of confidence from the 'market' after the announcement of the development competition in 1993 with an upward trend. Then after a year of stagnation the value started to drop, the first drop between 1994 and 1996 is because of the lack of improvements. The second drop is dated between 2002-2004 in which there was a big delay in the planning when the world cup was hosted in Germany and "much of the construction work was delayed because of demanding requests of construction labour." (APU, 2005) Finally the land value starts to increase when the first buildings are finished, this upward trend is believed to continue since many new developments are happening right now surrounding the area.
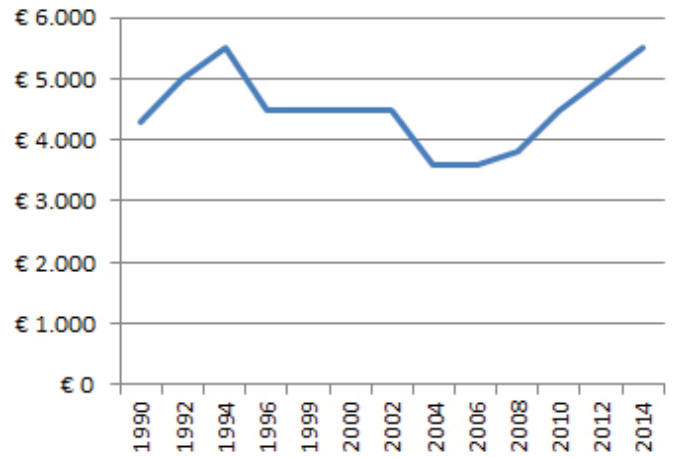
Figure 30 | Land value Alexanderplatz area (by Author)

Planning appreciation

As illustrated before many plans have been made for the development of the area around Alexanderplatz. Figure 31 below, shows an overview of the most important and influential plans over time.

To show the development around Alexanderplatz the picture above shows a collection of images that represent the most influential plans that have been made. First image is the map of the area at the end of the 18th century when the area was in constant change. The second picture illustrates the station after the development which took place at the beginning of the 20th century shaping the station area. The third plan is the DDR development plan of the 1960s that changed the area into the communistic propaganda square but also this plan shaped the square as we know it today.

41

1900 - Trainstation

1993 - Redevelopment

18th Century - Development plan
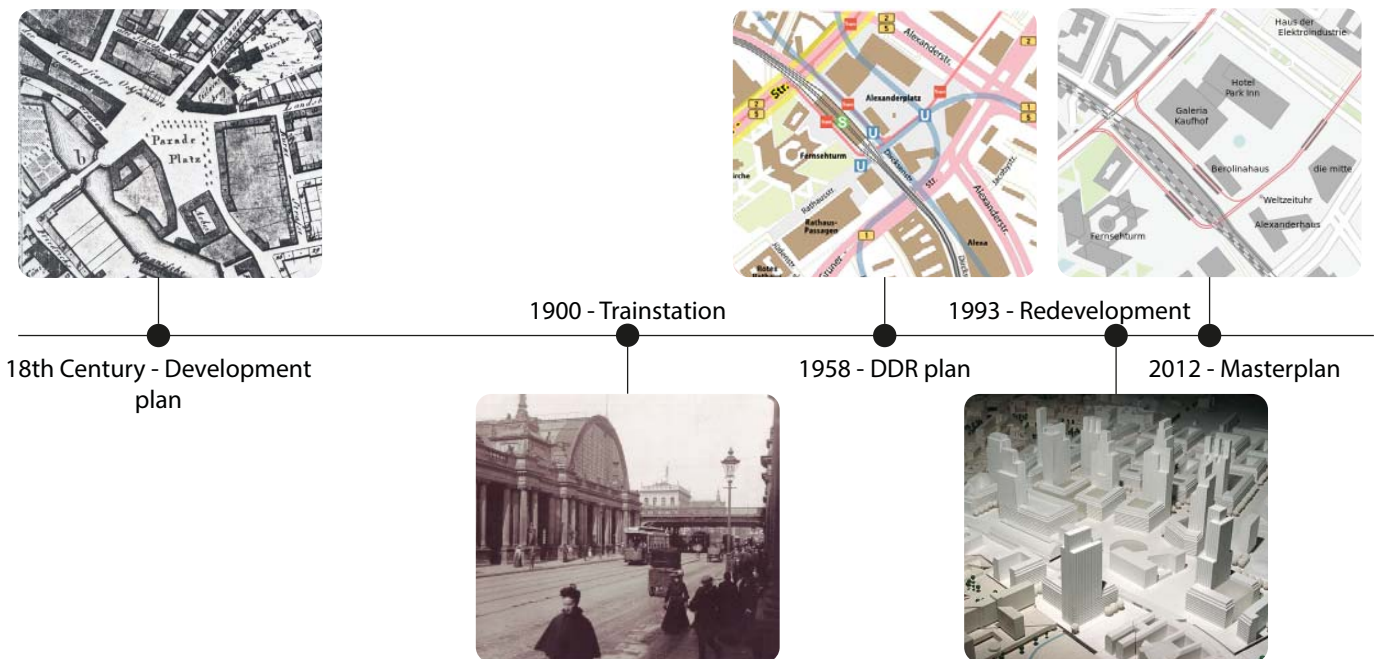
1958 - DDR plan

2012 - Masterplan

Figure 31 | Timeline of the most important plans for Alexanderplatz (by Author)

The next one is a picture of a model of the 1993 development plan with high-rise development that started the economic development of the area that brought many of the now well-known buildings around the square. The last plan is the current master plan, which aims at improving the economic situation of the area in order for it to continue to keep evolving.

Location analysis conclusions

Due to the results of the research the case study of Alexanderplatz can be considered a good example on how public investment can improve a lost space area. After the Second World War the area was a lost space because of all the destruction that took place. With new plans the square was developed into a communistic propaganda area. The square became a public good because of its function and was defined as such under that regime.

After the fall of the wall and the end of the DDR government, the area was negatively associated with the former regime. Without a function it became a lost space, a relic of the past to which nobody wanted to be associated with. When new plans, highlighting the economical potentials, started to transform the area's public appreciation started to improve, ending its status as a lost space.

The other nine case studies

Since the goal of this first round of case studies was to improve and get experience working with the framework the other case studies in this round are shorter and less extensive. While these case studies are important for the development of the framework, for the continuity of this thesis they are not of great value. Therefore the other nine case studies are not shown in this part of the thesis but in appendix 2.

Multiple case study

While the first round of case studies where used to get familiarity working with the lost space framework and improving this framework there was a need for testing the finalized lost space framework. This next chapter describes this next phase in using the finalised framework while searching for thresholds for the found characteristics. These threshold will then be used in part D in order to investigate the urban fabric of Berlin to discover lost spaces in the whole city.

General goal of the study

The three cases which are chosen for the case study analysis are Spreepark, Tempelhofer Feld and Rangierbahnhof Pankow. The main reason they are chosen is because they are in three stages of being a lost space. While Spreepark is a lost space currently, Tempelhofer Feld was a lost space in the past and Rangierbahnhof Pankow is in the transitioning phase towards leaving being a lost space.

In order to use the described methodology it is important to test and use it on an example beforehand by which the methods become familiar. Testing can furthermore change the method because supposedly logical steps which were thought of during the development of the methodology might work differently when applied. The case of Alexanderplatz, in Berlin will be used in the following chapter to show the complete results of the case study analysis.

	Spreepark	Tempelhofer Feld	Rangierbahnhof Pankow
Size	29.5 hectares	386 hectares	33 hectares
Former function	Entertainment park	Airport	Railwayyard
Accessibility	Not, closed off by fence	Not, closed off by fence	Not, closed off by fence
current function	-	City Park	-
Accessibility	Not, closed off by fence	Gates, are only open during day time	Not, closed off by fence
Location	Former East Berlin	Former West Berlin	Former East Berlin
Historical relevance	DDR's only entertainment park	Berlin's oldest airport	Railway yard
What happend during the new regime	Went bankrupt after 12 years	Closed because of economic and political reasons after 18 years	Closed in 1997

Figure 32 | Comparison between the three chosen case studies (by author)

They are also chosen because they have many factors in common. For example they are (1) large unbuilt areas; (2) without a function while being a lost space; (3) closed off from its surroundings; (4) important areas in their respective former function, part of a changing political system; and (5) they survived the switch of political system but closed down due to economic reasons. For the comparison see Figure 32.

Furthermore these case studies are interesting because two cases are in former East and one in former West Berlin. While Spreepark is still a lost space with no big changes in the foreseeable future, Rangierbahnhof Pankow is starting to show the first signs of development. Tempelhofer Feld has been one between 2008 and 2010 and could show a possible solution to the lost space problem.

In order to save time and space the other nine case studies will be shortened to only an introduction, historical overview and the analysis conclusions in this booklet. This part about the preliminary results will close with conclusions formed out of the presented case studies and recommendations for further investigation and a reflection on the method.

Spreepark

Located in the district of Treptow-Köpenick on the south bank of the river Spree is the former amusement park Spreepark. It is part of the city park of Plänterwald and is designated as a nature reserve. This former East German park was abandoned after 2001 when the park went bankrupt.

Figure 33 | Spreepark (by Abandoned Berlin)

Historical overview

Opening in 1969 the Spreepark was the only amusement park in East Germany. Covering nearly 30 hectares the park was home to several themed villages and a Ferris wheel. After the German reunion the park transformed from a communistic relic into a modern 'western' theme park. (Mazuhn, 2006)

In 2001 the Spreepark GmbH & Co filed bankruptcy though and the park became an abandoned area with nobody claiming responsibility for the park. Between 2002 and 2009 the park was not accessible for anyone. Since then the location was reopened as a park, first for only 2 hours in the weekend. Due to popular demand this was changed into the whole weekend between 2011 and early 2014.

Since then the park has been closed. Spreepark was also used for outdoor events during the spring and summer periods. Afterwards it was run by volunteers and proceeds of the visits were used to improve the area. (Berliner Spreepark, 2014a) In 2011 the park became part of the setting of the Hollywood movie 'Hanna', this increased the number of visits to the location and reviving the social and political approbation.

In early 2014 the municipality and district of Treptow-Köpenick acquired the ownership (Berliner Morgenpost, 2014) of the park and were looking for ways to revitalise and exploit the park. In the summer of 2014 a fire took place at the Spreepark which damaged several parts of it. (Berliner Spreepark, 2014b) This was a major setback for the new owners that wanted to use the old remains of the amusement park to start a new park.
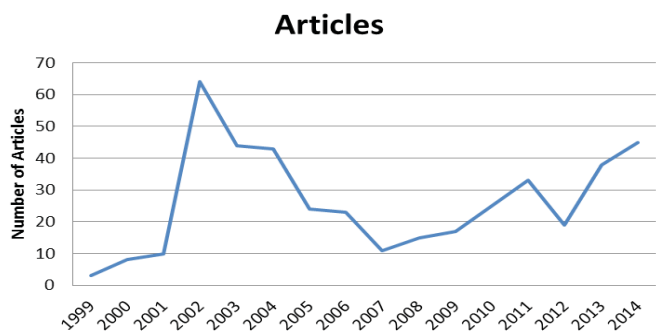
Articles

Figure 34 | Media analysis Spreepark (by author)

Public appreciation analysis

For the media analysis of the Spreepark the search query "Spreepark" was used in both Der Tagesspiegel and the Berliner Morgenpost online archive. The results of both the newspaper archives are combined in Figure 34. The Morgenpost archive only dates back to 2001 which means that the search results from 1999 and 2000 are deflated numbers.

The first period, 1999 until 2007, is the period between the closing of the park and the struggle finding a new owner. In this period the entertainment park is closed due to financial reasons. In early 2002 there is a peak though when the entertainment park is forced to be sold because the owner is arrested for multiple criminal offences. The new owner is quickly presented. However this new owner is not able to convince the municipality of its plans and therefore not allowed to open the park. During the years that follow the location slowly starts to lose its news relevance because of the debate between the owner and the municipality. In this period from 2001 until 2007 the park is not accessible.

The second identified period is between 2007 and 2012 in which the location is used for multiple events and as a set for the Hollywood production 'Hanna' in 2011, this movie creates a peak of articles. In this period the park is closed but temporarily opened for events.

The last period is the period from 2013 until the present day. In this period the park is used for multiple events and it opened for visitors for a part of the year. This leads in 2014 to the purchase of the Spreepark by the municipality, this purchase results in the temporarily closing of the site. (Berliner Morgenpost, 2014)

In general it can be concluded that the public perception of the Spreepark consists of three periods in which the public appreciation changed. The first period is the period around the closure of the park in which without owner and function the location is being forgotten. In the second period the location is forgotten although it is in the news a couple of times due to events. The final period is the period where the location is rediscovered and this resulted in the purchase of the park. Therefore can this development be seen as an example of neo-liberal economic policy in which demands, the request to be able to access the location, can and will translate in supply, the purchase and redevelopment of the location. For the number of articles and their origin on which the graph is based, see the appendix.

Economic appreciation analysis

The ground value analysis of the case study is done with the Bodenrichtwerte, a publicly available mapping series on FIS-Broker, the Berlin GIS based system, see figure 35. The Spreepark location itself is an area labelled SF, a zone with the function of park, cemetery, sporting grounds or airport. Because of this special function the ground has no value per meter, therefore its surrounding areas are analysed in order to get an indication of what the ground value could be.
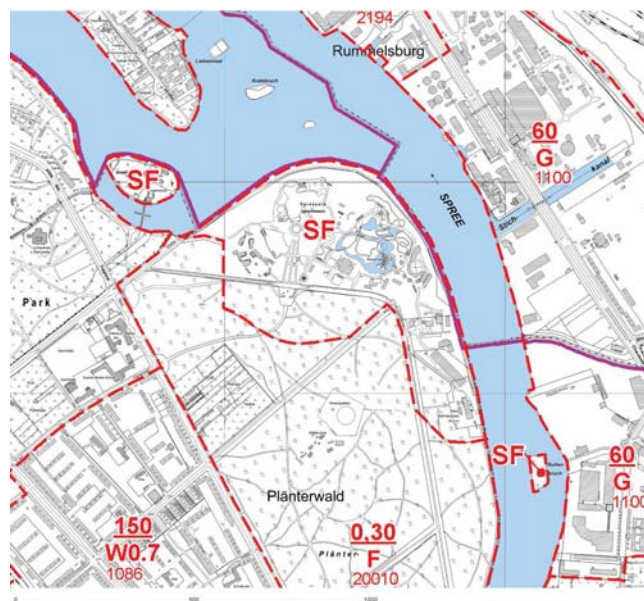

Figure 35 | Spreepark ground value 01.01.2014 (from FIS-broker)
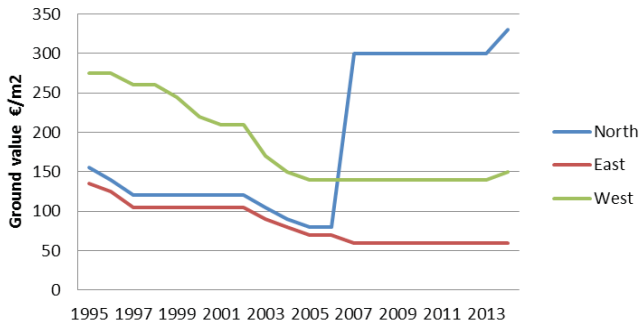
Ground value Spreepark

Figure 36 | Spreepark ground value through time, 1995-2014 (by author)

In figure 36 the value through time of the surrounding areas of Spreepark are shown. The general trend seen in the graph is the decline of the region. From 1995 until 2015 the ground value of the whole region loses roughly half of its value. When the Spreepark closes in late 2001 there is an immediate reaction seen in the ground value. Development of the northern part, the Rummelsburg peninsula, creates a local increase but this doesn't influence its surroundings.

In general the region surrounding the Spreepark has been declining in the last 20 years. The spill-over effect the Spreepark has, in this case the negative influence on its surroundings, was visible when the entertainment park closed down and in the years that follow. For the ground value data on which the graph is based, see the appendix.

Planning appreciation analysis

The following analysis focuses on the Flächennutzungsplan, (FNP) a zoning plan that describes the function that is located on a certain area. The plan is created by the urban development department of the Berlin state. The plans are on scale 1 in 50.000 and are used as a general development outline.

Generalbebauungsplan (East German FNP) 1989 and FNP 1994

The Plänterwald is seen as a city park with a special function, the entertainment Spreepark. After the reunification the 1994 FNP changes the status of the area to a forest area with a special function in it.

FNP 1996

The goal of the 1996 FNP proposal is to improve the Plänterwald as a whole, not mentioning Spreepark in specific. The forest will be renovated by improving the existing restaurant and the edge of the forest will need to be improved. This proposal is implemented in the 1998 FNP.

FNP Version 2002

In 2002 the first changes are being proposed to the 1998 FNP. The goal is to keep the Spreepark location as an amusement park, but the "quality and attractiveness needs to be developed." (FNP, 2002) Spreepark should become a 'Sonderbaufläche mit hohem Grünanteil' a special zone in the green Plänterwald, giving the owner more freedom with the area. The size of the Spreepark designated area is furthermore increased.

FNP Version 2004

As an addition to the 2002 proposal, the 2004 FNP proposal is created. The area is designated as a cultural and amusement park. The size of the area is even more increased, now the whole area north of the Wasserweg is part of the Spreepark region.
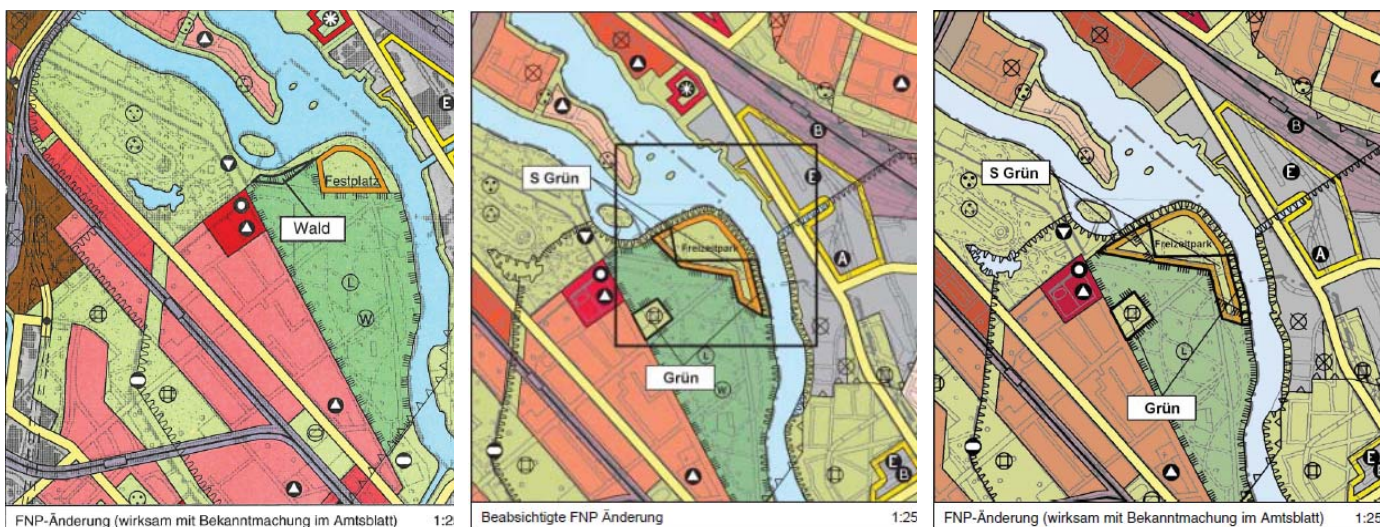

Figure 37,38,39 | FNP development 1998, 2002 and 2006 (Berlin municipal department for urban planning)

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FNP Version 2006

As the final addition the 2006 proposal is created. The Plänterwald has been designated as a (nature) conservation area and the Spreepark is a special zone inside this area. The Spreepark is defined, as in the 2004 proposal, north of the Wasserweg. The 2006 proposal is in 2009 implemented in the new FNP.

The Bebauungsplan (B-Plan) is next to the FNP an important policy document that shows a detailed development of an area. The B-Plan is created by the Bezirksamt, the government of a Berlin district. The plans are on a scale 1 in 1000 or 1 in 2000.

B-Plan 2002

The Treptow-Köpenick Bezirksamt made a B-Plan, number 9-7, for the Spreepark in 2002. According to German law, §3(2) BauGB, each planning document has to be on public display before it can be implemented. The B-Plan for Spreepark was published for citizen participation but was never officially on public display. This means that the plan has not been officially implemented in the law and has therefore no real significance.

This is the last B-Plan for the Spreepark, meaning that there has been no development plan since the park became vacant.

2004 Master Plan

In 2004 a master plan was developed for the Plänterwald, to improve the connectivity of both the Spreepark and the forest. The plan exists mostly of the addition of parking places and the widening of the main access road. This plan is connected to the B-plan that was being developed at that time. The master plan was never realised because of social pressure from action groups like Pro-Plänterwald which argued that the plan would affect the nature reserve too drastically. (Reddig, 2007)
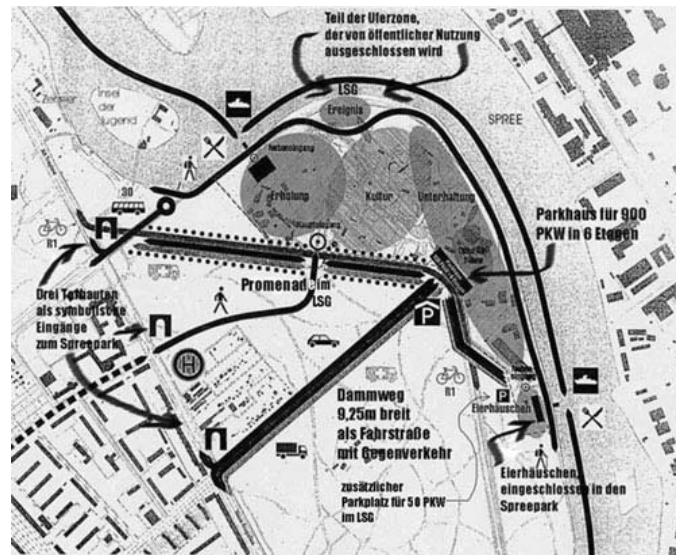

Figure 40 | The 2004 Plänterwald master plan (from pro-plaenterwald.de)

Spatial analysis

For the Spreepark spatial analysis the Erschließungsstandard from the Berlin municipality is used to measure the connectivity for the location. In figure 41 this analysis is shown. For the S-Bahn, the blue lines, the range of 1000 meter is indicated as a distance in which it provides its function. The bus system, green, has a reach of 500 meters. With many bus stops in the area the connection by bus is quite good. But the travel time to the central point of Brandenburger Tor, which is 9,5 kilometres from the location, takes roughly 40 minutes by public transportation. So while the public transport connection looks good on a map the time travelled is actually quite high for such a small distance.

The accessibility of the location itself is the next step of the spatial analysis. The park is closed off by a fence and has two entrances. The main entrance at the Wasserweg was the entrance to the old entertainment park. This location is completely neglected and will need to be renewed for future use. The second entrance is located next to the 'Eierhäuschen,' a historical monument that is now without function.

Because the Spreepark is closed off it is not accessible making it an isolated area inside the Plänterwald and its surroundings.
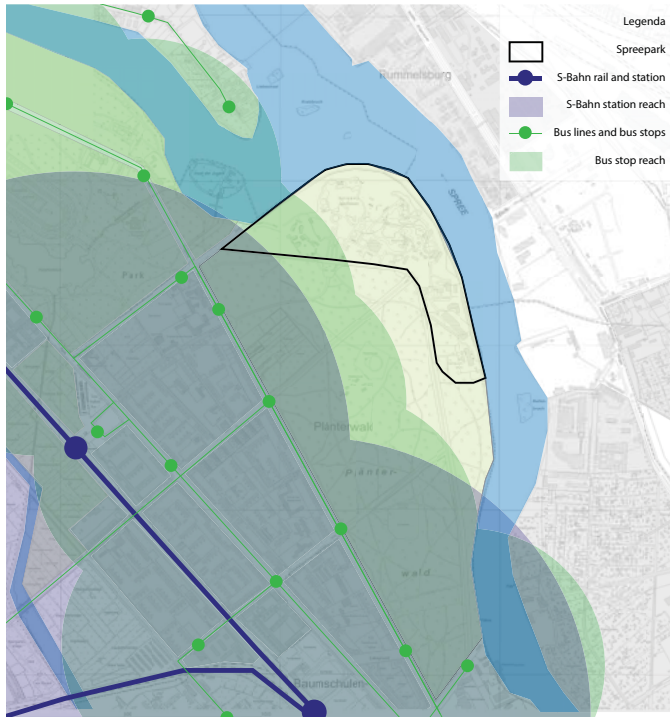
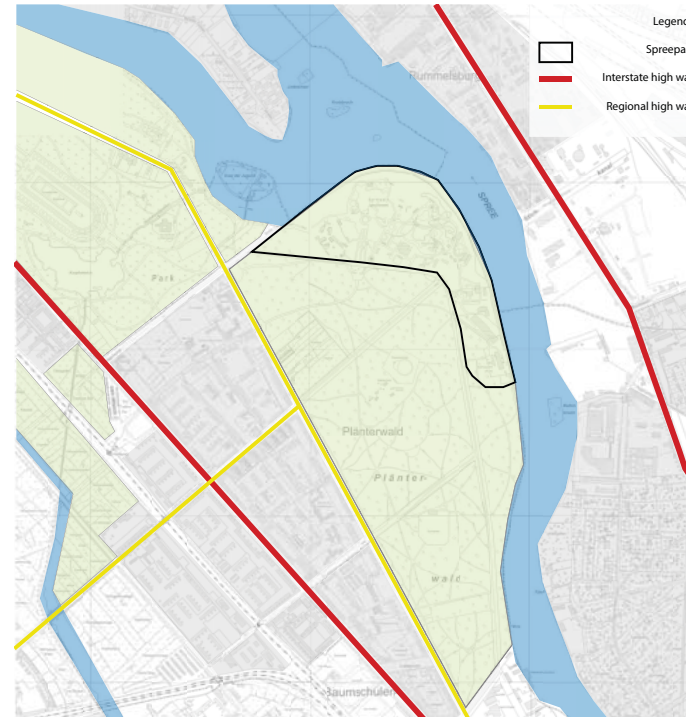Figure 41 | Erschließungsstandard Spreepark (by author)

Figure 42 | road connectivity of the Spreepark (by author)

Next to the connection via public transport is the connection via the road network. Right in front of the park is the Neue Krugallee, this is the yellow line north south in Figure 42. The red line is the 96a, a regional highway connecting Oranienburg north of Berlin to Schönefeld south of Berlin. Together these two roads connect Spreepark to the city centre or the outer laying Berlin districts. When traveling by car the travel time to the Brandenburger Tor is 25 minutes, meaning that the location is better connected by private transportation.

Conclusions

As a conclusion of the Spreepark case study analysis it can be stated that the Spreepark is a lost space because of the lack of responsibility and the lack of function for the location. The old entertainment park on the bank of river Spree has fallen into disarray. It has attracted attention because of the movie that used the park as a location and the fire that destroyed parts of the entertainment park.

When looking at the economic value of the surroundings it is not showing that the public appreciation is increasing. Because of the change in ownership the location created a lot of publicity that could be used as a potential for the location. Because of the lack of economic future there have been no plans made for development.

In general the park has potential, a green park along the river with a rich history and it is located close to the city centre. Since it is now owned by the municipality, which aims at investing in the transformation of the lost space into a new park next to the river, it can be assumed that the prospects for a future development in this area are positive. However without a proper function and development plans the Spreepark is likely to stay a lost space in the future.

Figure 43 | entrances of Spreepark (by author)

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Tempelhofer feld

Located on the south side of the city centre is a 220 hectare big former airport, see 18. The airport is part of Germany's rich aviation history but after the closure of the airport in 2008 it was reopened as a city park in 2010. These days it is an example for public participation on a city wide scale.

Figure 44 | Tempelhofer Feld terminal (by DDP)

Figure 45 | Tempelhofer Feld from the air (by picture-alliance/ ZB/dpa-Zentralbild)

Historical overview

The Tempelhofer Feld is a former airport on the south side of Berlin's inner city. The airport is most famous for the 'Luftbrücke' that was established during the blockade of West Berlin in 1948 in order to connect West Berlin with West Germany and provide the city with necessary goods. (Tempelhofer Freiheit, 2012, p. 3) Due to innovations in aviation the size of airplanes increased until the airport became too small for the intercontinental flights in the 1970s. From then onwards the airport was therefore mainly used for cargo and private flights until it was closed down in 2008. (Ibid) Closing the airport was a political decision that contained three main arguments: (1) the economic situation of Tempelhof was dire with only 16% of Berlin flights leaving from Tempelhof; (2) the states of Berlin and Brandenburg were aiming at constructing one joint bigger and modern airport; (3) the environmental effects of an airport in the middle of a city. The abandoned site and buildings have been part of a large public discussion that even led to a referendum about the question if the airport should stay open or not in 2008. In 2010 the former airport is opened as a temporary city park. In the years that followed the area became a big success and this eventually led to the creation of several citizen groups that are against the redevelopment plans.

In 2014 these groups initiated a second referendum (Litschko, 2014) about the future of the area. Policy makers had to succumb under the societal pressure and in the end the complete area was designated as a permanent park instead of becoming partly a residential area. Because of this second referendum the Tempelhofer Feld is the school example of citizen participation and citizen power.

It is rumoured that former major Klaus Wowereit used his power to block development plans for the buildings by leasing the hanger out for two months a year, (Berliner Morgenpost, 2009) while plans were made for a Cold War museum, a technical museum or even a film and television studio in the hanger. (Schicketanz, 2009) All these plans were made, but none were implemented. While the building is limitedly accessible and deteriorating, the Feld itself is open during the day. Especially in the summer it is widely used as a park for sports and recreation as well as for urban gardening.

Public appreciation analysis

The media analysis of Tempelhofer Feld started with only one search query "Tempelhofer Feld." When it turned out that this term was not used widely while the former airport was still being used by planes the search query "Flughafen Tempelhof" was also used.

When the two search results are combined the three main points in the decision making of the location become clearly visible in the graph. In 2004 the political discussion continued about closing the airport. Then in 2008 the actual closing of the airport and in 2014, with the referendum, the public debate about the future use of the area. For the media data on which the graph is based, see appendix 2.
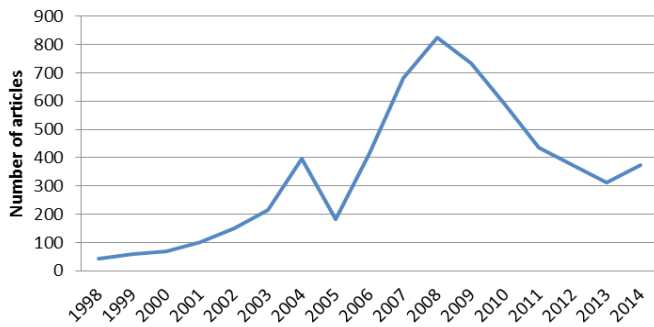
Articles about Flughaven Tempelhof

Figure 46 | Media results for Flughaven Tempelhof (by author)

Articles about Tempelhofer Feld

Figure 47 | Media results for Tempelhofer Feld (by author)

When examining Figure 46 it two important moments become apparent in time when the term Flughafen Tempelhof peaked. When in 2004 the political debate about the future of the airport continued, a temporary spike in attention followed. In the period after this until the closure in 2008 there was an increase of attention for the airport and its uncertain future, creating the second spike. The use of the term Flughafen Tempelhof has since then declined. And since the opening of the park in 2010 the term Tempelhofer Feld has become a more common term to describe the former airport, see Figure 47. With the increased popularity of the park and the citizen pressure that led to the referendum about the future the location, the Tempelhofer Feld has become a big part of local news.
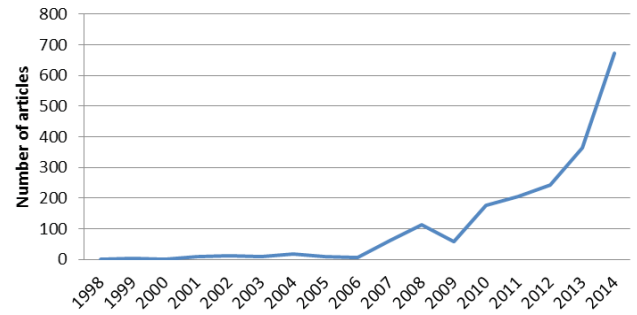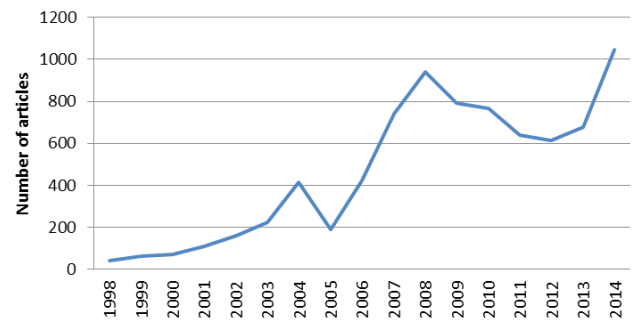
Articles total

Figure 48 | Combination of both results for Tempelhofer Feld (by author)

Economic appreciation analysis

With the help of the Bodenrichtwerte the ground value analysis is erected. Just like the Spreepark case the Tempelhofer Feld is labelled SF, a zone with the function of a park, cemetery, sporting grounds or airport. Because of this special function the ground has no value per meter, but its surrounding areas can be analysed in order to get an indication of what the ground value changes could be.

In Figure 50 the value through time of the surrounding areas of Tempelhofer Feld is illustrated. The trend seen in the graph is split up into two parts. First from 1995 until 2010 the area surrounding the Tempelhofer Feld shows a great decline, in which nearly half of the value is lost. When the airport closes in 2008 the ground prices don't change but when in 2010 the area is opened up to the public three out of four areas start to improve greatly. The Southern area is not increasing because it is stuck in between a closed off edge of the area and a major traffic artery leaving little room for development. For the ground value data on which the graph is based, see the appendix.

Planning appreciation analysis

For Flughafen Tempelhof the 1994 FNP was the first step in a political planning process to close down the airport. The airport was designated as mixed development area with public, commercial and residential zones. With 386 acres and a location "right at the city centre, this area can be considered to have enormous opportunities for a viable, sustainable and vibrant city area." (FNP, 2008)

The development of the location has two main pillars. The first one is the integrated connections between the Kreuzberg district in the north, the Neukölln district in the east and the Tempelhof-Schöneberg district in the west. The second pillar is the historic value of the airport. Together this can be seen as the catalyst for improvement in the region. Even though the political decision to close the airport could be taken in a matter of months it will take decades to redevelop an area the size of Flughafen Tempelhof. (FNP, 2009)
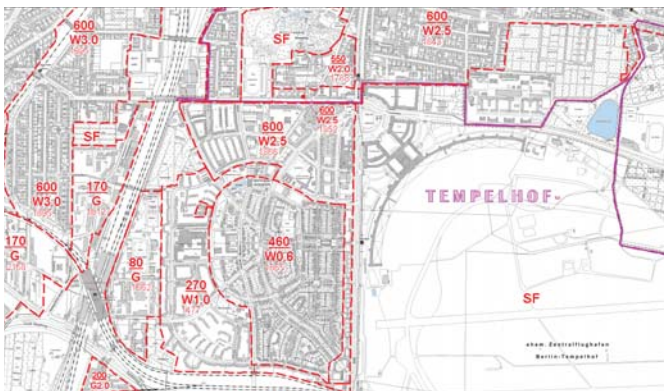
Figure 49 | Tempelhofer feld ground value 01.01.2014 (from FIS-broker)

Figure 51 | 1994 FNP (by Berlin Senate urban planning department)

Ground value Tempelhofer feld

Legend: North, East, South, West

Y-axis: Ground value €/m2 (0–700)
X-axis: 1995 1997 1999 2001 2003 2005 2007 2009 2011 2013

Figure 50 | Tempelhofer feld ground value through time, 1995-2014 (by author)

Figure 52 | 2009 FNP proposed redevelopment of the former airport (by Berlin Senate urban planning department)

FNP 2008

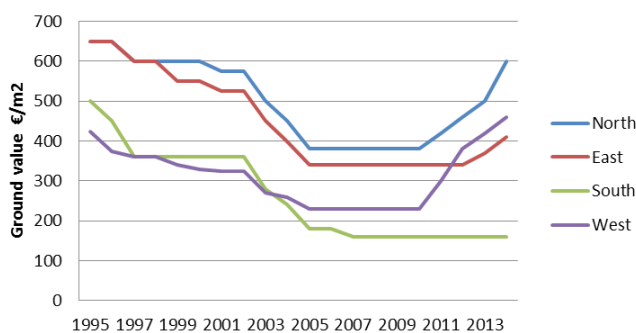When the final political decision was taken to close down the airport in December 2007 the first change in the FNP was presented shortly after. Instead of the redevelopment of the whole area the inner circle, used for taking off and landing planes, was designated as a city park. The surrounding areas would be slowly developed towards residential zones to the north and east side. The south and west side would be developed for commercial and public use. (FNP, 2008)

FNP 2009

When the final adjustments to the FNP were published in the development plan, it resembled closely the original ideas from the 2008 proposal. The main changes were the density of the residential area and a continuation of the development outside the northern part of the airport area. These proposed changes were not ready for the November 2009 FNP implementation. (FNP, 2009) With the referendum about the future of the area held in May 2014, the plans were rejected by the local community and later abandoned by the municipality.

B-Plan

Besides the FNP plan there was also the B-Plan, a more detailed zoning plan that is created when development is planned to take place. Since the 1994 FNP was created to show intentions to change the function of the airport but later there were no actual changes aimed a development there has never been a B-Plan created. Master plan and other types of plans

Besides the official planning documents there have been many plans made for the whole or parts of the Tempelhofer Feld. Because none of these have been implemented these might not seem relevant at first but they are interesting to investigate in order to understand the mind-set about the location.

The 2008 development plan of the Columbiadamm was created in line with the proposed FNP changes in 2008. It uses the historical shapes and sporting facilities to create a new residential district. This plan was never realised because of the societal pressure.
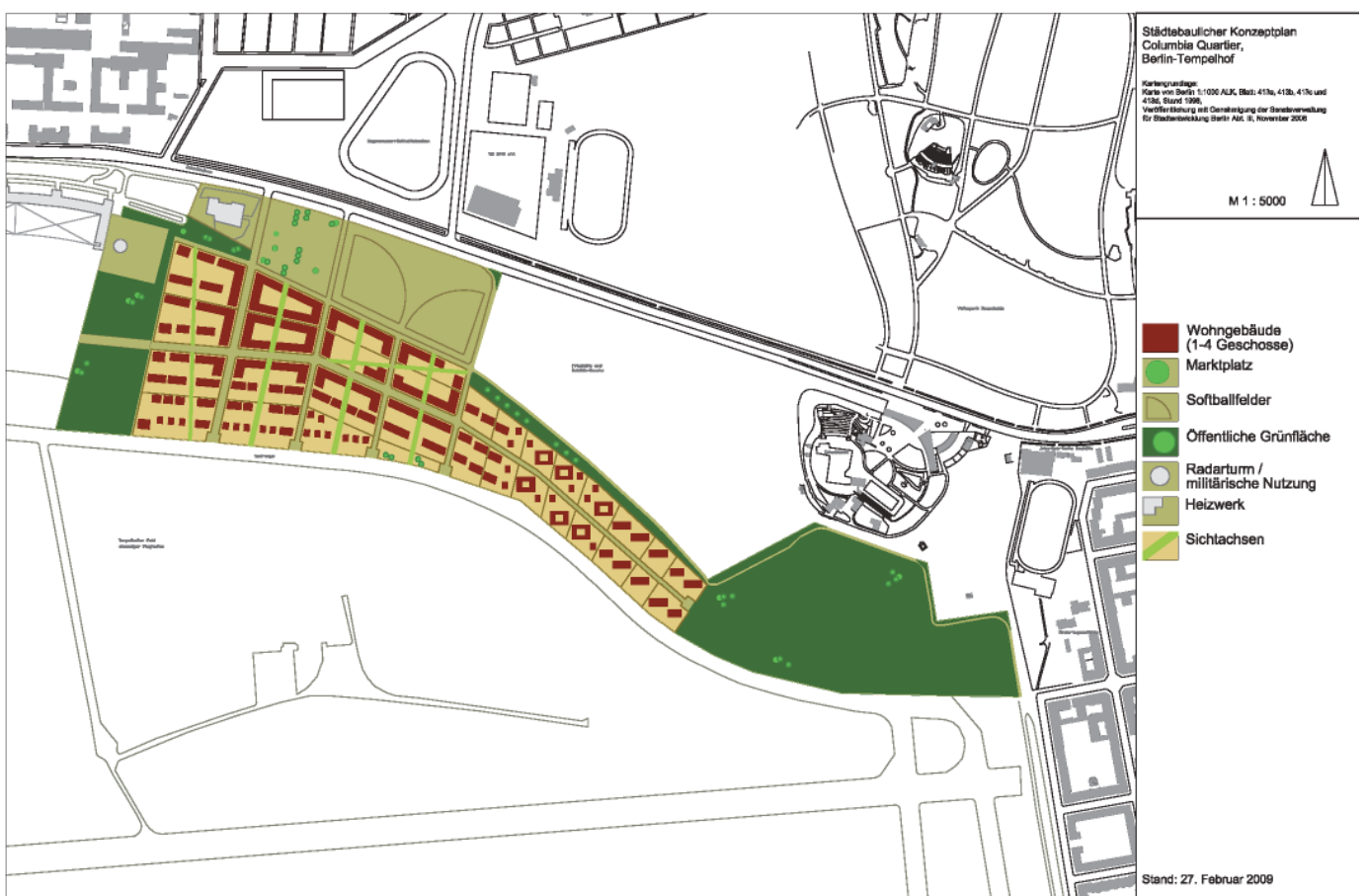
Figure 53 | 2008 Columbiadamm development proposal (by Berlin Senate urban planning department)

Spatial analysis

For the Tempelhofer Feld spatial analysis the Erschließungsstandard is also used to measure the connectivity for the location. In figure 54 this analysis is shown. For S-Bahn, the purple circles, has a reach of 1 kilometre. The U-bahn, the blue lines, the range of 600 meter is indicated. And the bus system, green, has a reach of 500 meters. As visible in Figure 54 the area of Tempelhofer Feld is connected by many S-bahn, U-bahn and bus stops. Since the Feld has many exits the distance between the location and the central point of Brandenburger Tor, is between 5,5 and 8,5 kilometres. Traveling this distance by public transport takes between 25 and 35 minutes.
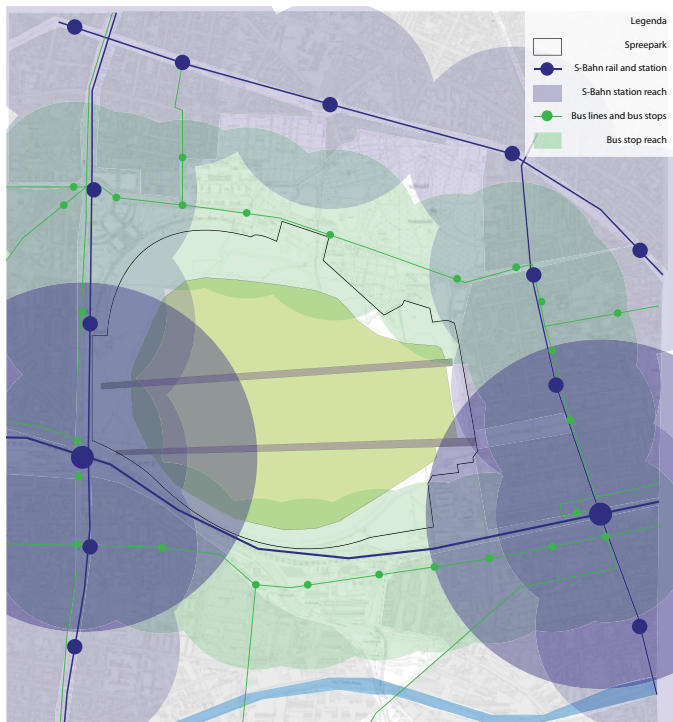
The accessibility of the location itself is the next step of the spatial analysis. The park is closed off by a fence and has ten entrances. The three main entrances are shown in Figure 55. In the west is the Tempelhofer Damm, in the north is the Columbiadamm and in the east is the Oderstraße entrance. Since the opening of Tempelhofer Feld as a park it has been connected with the urban fabric of Kreuzberg in the north, Neukölln in the east and with Tempelhof-Schöneberg in the west.

The park is open every day between sunrise and sunset and it is free to access. Parts of the park are nature reserves because of the unique bird sanctuary that is located there.

Figure 54 | Erschließungsstandard Tempelhofer Feld (by author)
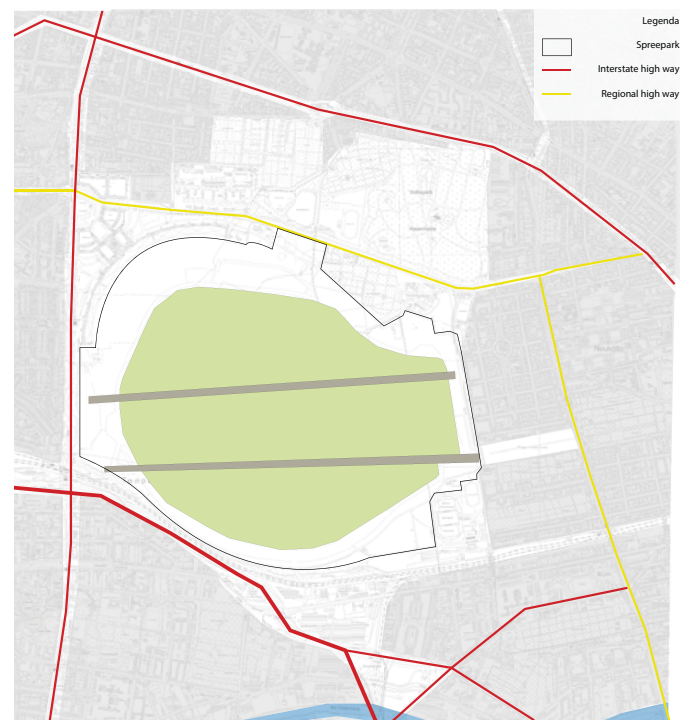
Figure 55 | Road connectivity of the Tempelhofer Feld (by author)

Next to the connection via public transport is the connection via the road network. On the south side of the location is the city highway ring located. The location is enclosed by the regional road Tempelhoferdamm, in the west, the Columbiadamm in the north and the Hermannstraße in the east. These big roads connect together to the road network which leads to and from the city centre towards the outer laying neighbourhoods. When traveling by car the travel time to the Brandenburger Tor is 25 minutes.

Analysis conclusions

The Tempelhof airport has a rich history. After losing its function as an airport the area was closed off for the public. For the next couple of years it was functionless and not accessible making it a lost space. During this time the area had a negative economic effect on its surroundings. When the area was transformed into a city park in 2010 it became a very valuable public good to the citizens of Berlin. Since then the area has had a positive effect on its surroundings and the public appreciation has reached great heights. So much even that in 2014 the citizens used social pressure and a referendum to change the zoning plans. It shows that with social pressure changes can be made to planning documents. This is a school example of citizen participation. This case shows that changes in planning have a direct effect on the public awareness and that the involvement of society is an important asset in tackling the problems of lost space.
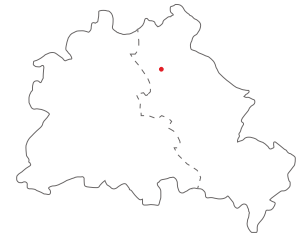

Figure 56 | Entrances of the Tempelhofer Feld (by author)

Rangierbahnhof Pankow

The third and final case study is located in the borough of Pankow, a peripheral location of the centre of the city. "The urban planning development of this area in the Berlin urban fabric is of citywide importance." (Stadtentwicklung, 2015)

Figure 57 | map of the railway yard in its surroundings (by author)

Figure 58 | Aerial view over the site (by Pankower-tor.de)

Historical overview

As part of the strategic development of Pankow this large strip of land, 33 hectares, is planned to be developed. Pankow is located in former East Germany and was home to many of the higher-ups in the communistic regime. Since then the district has been a residential district. The location has been closed down since 1997 and appears abandoned because of the lack of use. Parts of it were demolished between 2007 and 2009 but there are some buildings left to explore. The development on this former railway yard is connected to the overall strategy, to increase the poly-central model that Berlin uses, by creating a new centre in the northern district of Pankow.

The area is split into two parts by the S109 Autobahn bridge. The first part is the northern side, the old Rangierbahnhof Pankow. This is where the locomotives where stored. The other part is the southern side. This is where the freight yard was, storing goods and train wagons. While the southern part is now completely empty there are still old buildings standing, although in dire conditions, on the northern part.

Figure 59 | Picture of the main building of the railway yard (by author)

Public appreciation analysis

The railway yard in Pankow has been known by three main names over the years: Güterbahnhof Pankow; Rangierbahnhof Pankow and Pankower Tor. These names were used as the search quarry in both Der Tagesspiegel and the Berliner Morgenpost online archive. The results are illustrated in the figures below.

In general it can be noted that when the first demolition of the old train yard started happening in 2007 the area became, although slightly, in the news. Later when the proposed future plan of the location was revealed, most of the news coverage happend. Since then with no actions taking place at the site, the public appreciation decreased again. The total of articles is shown in Figure 60 showing these two peaks in public appreciation.
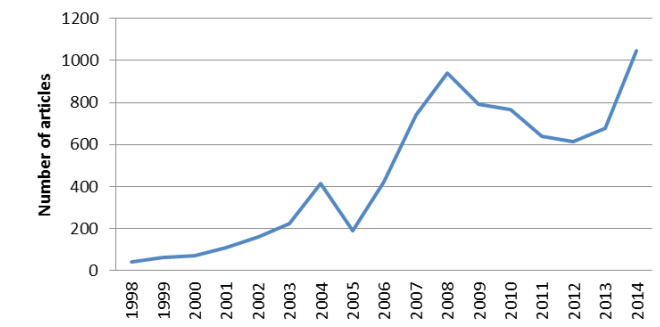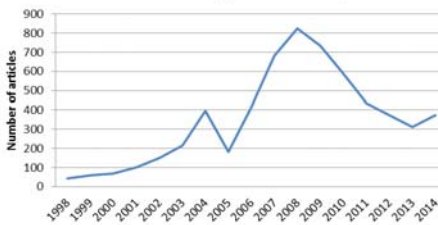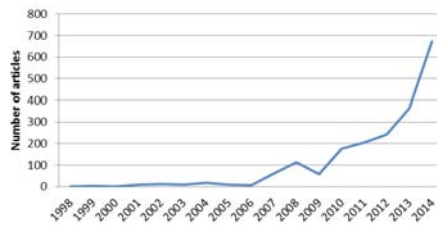

Figure 60 | Total articles about the site (by author)
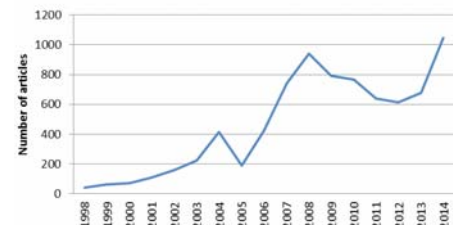
Figure 61 | amount of articles for each search quarry (by author)

Economic appreciation analysis

The ground value analysis of the case study is done with the Bodenrichtwert, a publicly available mapping series on FIS-Broker, the Berlin GIS based information system, see figure 62. The Rangierbahnhof location itself is an area labelled SF, a zone with the function of park, cemetery, sporting grounds or transportation area. Because of this special function the ground has no value per meter, but its surrounding areas can be analysed in order to get an indication of what the ground value changes could be.

In figure 63 the values through time of the surrounding areas in Pankow are shown. The general trend seen in the graph is the decline of the region. From 1995 until 2005 the ground value of the whole region loses its value. Compared to the city average these losses are in the same trend. With a big redevelopment project on the western side of the railway these locations improved in economical appreciation.

In general the region surrounding the Pankow has been in decline during the first decade of this analysis. Following a trend, with the overall Berlin numbers, in the last decade the numbers start to increase again

Figure 62 | Pankow ground value 01.01.2015 (from FIS-broker)
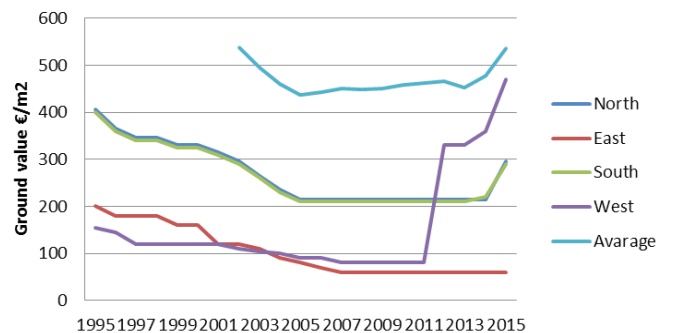
Figure 63 | Pankow ground value through time, 1995-2015 (by author)

Planning appreciation analysis

With the location being a blank sheet and surrounded by residential areas it is by investors considered to be ideal for development of a new centre. The plan is to add a shopping mall, two schools around 850 houses and possibly a cultural complex. This all together should not only increase the social appreciation of Pankow but also increase the quality and add jobs of the district and therefore the economic appreciation. The planning has started in 2010 and the design was finished in early 2014, but the construction keeps getting postponed.

FNP / B-plan

In the latest addition of the FNP the area was still labelled as part of the transportation system. While there has been a vision developed for the area, there has not been a formal request for adjusting the FNP. Because of the lack of this adjustment there is also no B-Plan for this location.

Figure 64 | Plan for the development of the location (by Pankower-tor.de)

Figure 65 | Renderings from the Pankower Tor project (from Pankower-Tor.de)

Spatial analysis

The four parts of the spatial analysis are function, size, connectivity and accessibility.

The function of Rangierbahnhof Pankow is like the name states a railway yard. Railway yards are big open space with train tracks where trains and wagons are stored and / or unloaded. These are mostly located outside the inner city along major train connections. The area is approximately 33 hectares in size.

Connectivity is an important part of the lost space problem. Berlin state regulations state that the Erschließungsstandard is a guideline for public transportation systems. Meaning that in Pankow, a highly dense residential district, the reach of public transit points is limited, for example the S-Bahn serves only a 600m area around station. In Figure 51 the public transportation stops and their reach are shown. With the site located right in between two S-Bahn stations the local connectivity is good and there are plenty of different lines and routs to go about. Traveling towards the central point of Brandenburger Tor takes up to 28 minutes for 10 kilometres.

For transportation by car the situation is similar. With two main excess roads towards the inner city ring or towards the edge of the city locations are easy to travel towards. By car traveling the 10 kilometres take about 22 minutes.

The accessibility of the location itself is the next step of the spatial analysis. The yard is closed off by fences and gates but big holes in the fences and wide open gates make the areas easily accessible.

Analysis conclusions

As a conclusion of the Rangierbahnhof Pankow case study analysis it can be stated that the location is a lost space because of the lack of responsibility by the lack of function for the location. The old railway yard has been designated as a new city centre. With good connectivity and both political and economic appreciation set behind the project could be this locations necessary improvement in order to tackle the lost space. So far this plan hasn't led to any result changing the location. Combining this with the lack of social appreciation, it will become difficult to change this area from a lost space into a new city centre as its creators want it to be.

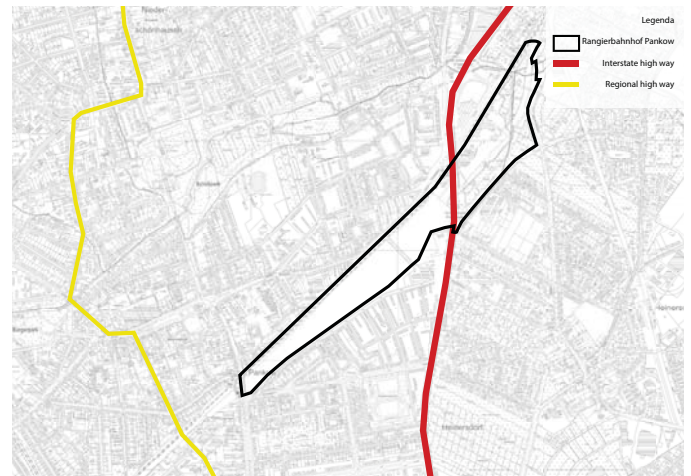Figure 66 | Pankow public transporation network (by author)

Figure 67 | Pankow road network connection (by author)

Summary

Trancik might describe five types of lost space but in general all of them except the infrastructural lost spaces overlap. For example the case of Spreepark and the former Iraqi embassy can be linked to the same reason as to why it became a lost space, see appendix #. Also the case of Märkisches Viertel and Tempelhofer Feld are closely connected. Therefore it is difficult to distinguish these types of lost space. The four closely connected lost space types are: Change in planning regime; change in zoning and land-use policies; lack of responsibility for a lost space and abandonment or loss of function. The term political lost space is introduced because of this overlap. Even though one type of lost space might be the catalyst for the down fall all of them are in the end present in one form or the other in a case of lost space.

The two sets of case studies can be linked towards the switch of planning regimes. The five lost spaces connected to important areas in Berlin wall are all lost spaces because they are connected to the Berlin wall. With the switch of the governmental regimes they became more important again. These cases are currently improving rapidly because of a mixture of public and private investment. The second set was selected because they are or were a specific type of lost space. These cases are all lost spaces because of economic or political effects that are not directly connected to neo-liberalism. But neo-liberalism is creating conditions that make it more difficult for areas to get out of this situation, because the competition for public investment creates a smaller amount of available resources.

In general the case study analyses concludes that switches in political and planning regimes are a big part of the reason of lost space and that the neo-liberalism ideology creates conditions that are not good for these spaces. With limited resources and little political attention for example the case of Märkisches Viertel has been waiting for nearly 40 years for improvements on the social economical side. Not all the cases were lost spaces but that is logical if these cases are picked because they are important areas in the city.

In addition the preliminary case study conclusions the following conclusions were found during the three case studies investigating Spreepark, Tempelhofer Feld and Güterbahnhof Pankow.

Comparing the cases leads to conclusions in two parts. First are four general lessons about lost space:

1.   Public awareness can lead to economic improvement (neo-liberal principle)

2.   Public awareness can change or even completely block development (societal pressure)

3.   Social participation is important when planning for development (social participation)

4.   Lost spaces can also exists when there is too much publicity (public awareness)

	Characteristic	Case 1: Spreepark	Case 2: Tempelhofer feld (old)	Case 2: Tempelhofer feld (ne	Case 3: Pankow railwayyard
Spatial quality	1. Function	Empty (old entertainment park)	Empty (old airport)	City park (old airport)	empty (old trainyard)
	2. Accessibility	closed off	closed off	open during daylight	closed off
	3. Connectivity (central point)	38 min (9 km)	21 min (7 km)	21 min (7 km)	28 min (11 km)
	(local point)				
	4. Surroundings	Forrest	regional roads and neighbourhoods	regional roads and neighbourhoods	S-Bahn, Neighbourhoods
	5. Size	29,5 ha	220 ha	220 ha	33 ha
Appreciation	1 Public appreciation	29 articles	410 articles	465 articles	11 articles
	2 Economic appreciation	180 €/m2	277 €/m2	407 €/m2	277 €/m2
	3 Political appreciation	1 FNP adjustment proposal	1 FNP adjustment proposals	Designs and FNP adjustment proposals	1 design proposal

Figure 68 | Case study comparison (by author)

Characteristics	Threshold
Function	Functions likely to be lost space
Connectivity:	
The distance to Brandenburger Tor	No threshold
Public transportation:	30 km/h
Car:	24 km/h
Accessibility	(partly) closed off
Size	20 hectares
Social appreciation	48 articles per year
Economical appreciation	Below 280 €/m²
Political appreciation	At least 1 plan

Figure 68 | Lost space characteristics and threshold (by author)

The second conclusion is about the continuing of the lost space research. The next step will be to generalize the analysing method and search for all lost spaces in an area. In order to do this there needs to be a threshold for each characteristic on when it is considered a factor for lost space. After much literature research and because these method of approaching lost space in this methodological way no numbers have been found for these characteristics.

In the figure 54, the thresholds for the lost space characteristics are shown. These are set after the three case studies. These thresholds are set in order to generalize the analysing method and locate lost spaces in a region.

Besides being able to identify lost space these thresholds can also be used to show changes trough time. These thresholds can be used to give numeric values to each of the lost space criteria and then the changes to a lost space can be shown on the lost space diagram. To be able to compare the case the characteristic are given a value, -2; -1; 0; 1; 2; based on the threshold. 0 is the threshold itself while -1 and 1 are half or double the threshold. Everything further apart from the threshold is a -2 or 2.

The three case studies presented before can then be shown in the lost space diagram, see figure 55.

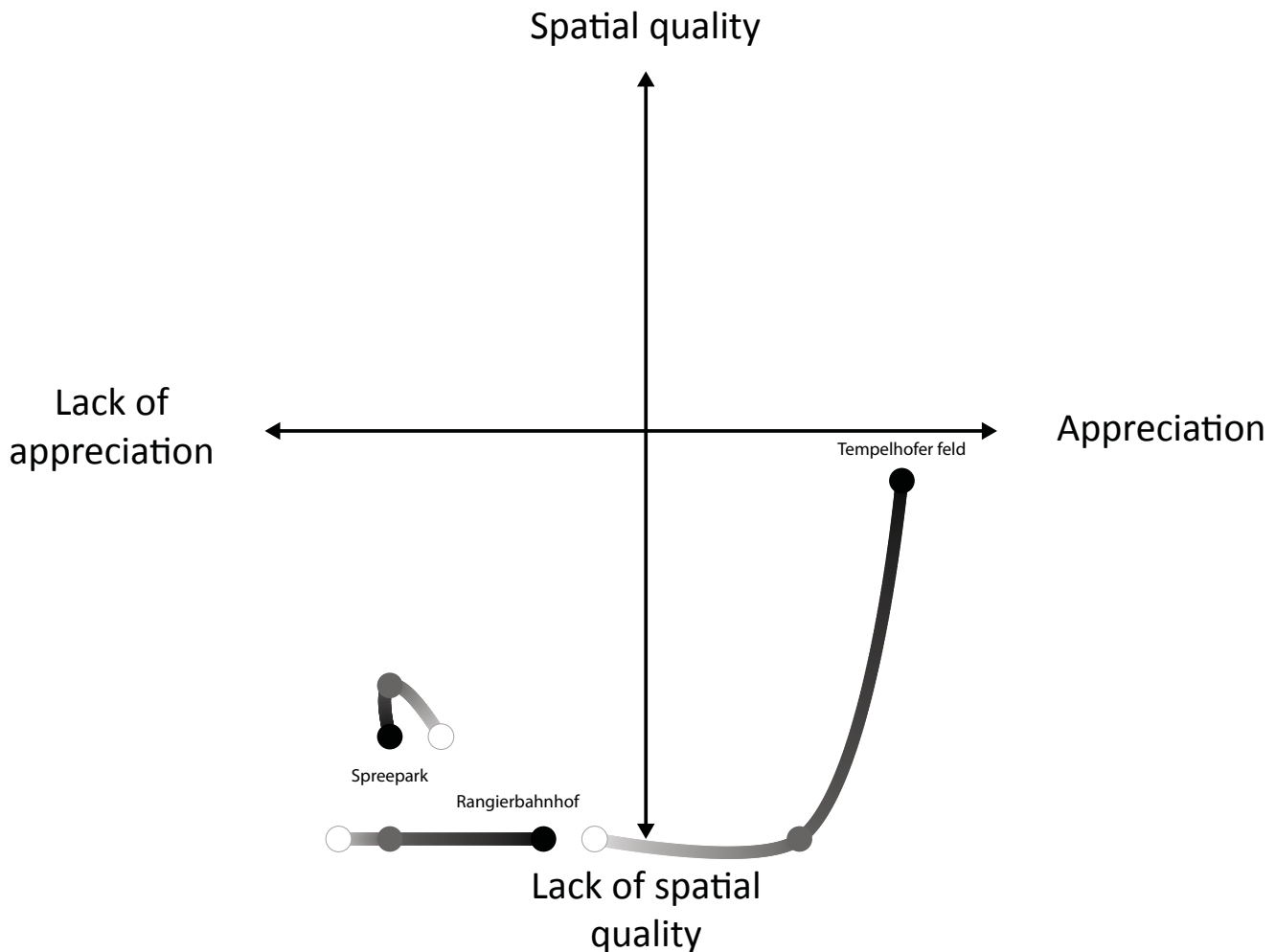Figure 69 | Lost space diagram Spreepark, Thempelhofer feld and Rangierbahnhof Pankow (by author)

▲ **Figure 70| Tempelhofer feld (by ...)**

▲ **Figure 71 | View on the Güterhanhof from Pankow-Heinersdorf U-Bahn station (by author)**

◀ **Figure 72 | Spreepark (by...)**

▼ **Figure 73 | Warschauer Straße station view towards Berlin Mitte (by author)**

Part D:
Mapping lost space in Berlin

Mapping method

In part C the lost space framework which was created in the previous part was tested with the help of case studies. With these testing and improvements that followed, the framework was finalised and used to test three cases. While these cases gave good results, the initially proposed third sub-research question "How can, with the use of the perspectives and characteristics, lost spaces be identified in the urban context?" is still difficult to answer.

With the lost space framework, consisting of a set definition, characteristics and methods to measure these characteristics, the third research question can now be answered with the help of spatial, social, economic and political data sets. In the following part the search for lost spaces in the Berlin fabric will be outlined. This research into lost space in Berlin is the final product of this graduation project. With this product finished the main research question can be answered and recommendation on how to approach lost spaces can be given.

Because this research is part of a graduation project there is a limited amount of resources available, which has an impact on the achievable results in a limited time frame. Therefore the investigation is divided into two phases. These two phases will be described in this first chapter.

Phase one: mapping lost spaces in Berlin

In order to achieve the goal and final product of this graduation project, identifying the lost space problem in the case of the city of Berlin, there has to be a translation from the characteristics into maps. Because of a limited amount of time and resources this will be done in two phases.

The first phase focuses on identifying the potential lost spaces and presenting them on a map. An overview of the intermediate products from the first phase is shown in figure 74. The main lost space characteristics in this phase will be:

- Functions, that are probable to be lost space;

- Connectivity, by both public and private transport;

- Planning appreciation, as seen in the lack of planning;

- Economic appreciation, as seen in a low ground value.

Phase two: Identity analysis

The second phase will be the testing of these spaces found in phase one towards the other lost space characteristics. It starts with the search for a local identity, like name and spatial size, and will then be using the lost space characteristics of social appreciation and accessibility to determine if these spaces are lost. At the end of phase two there will be a series of maps identifying all lost space aspects that represent the methodology presented in part 4 and 5 of this graduation project.

Functions

Big transport
zones

Industrial
zones

Potential
zones

Special
zones

Public
transit map

Travel time
PT

Potential
Lost space
map

Connectivity

Road map

Travel time
Car

Planning

Planning
zones

None
planning
zones

Ground value
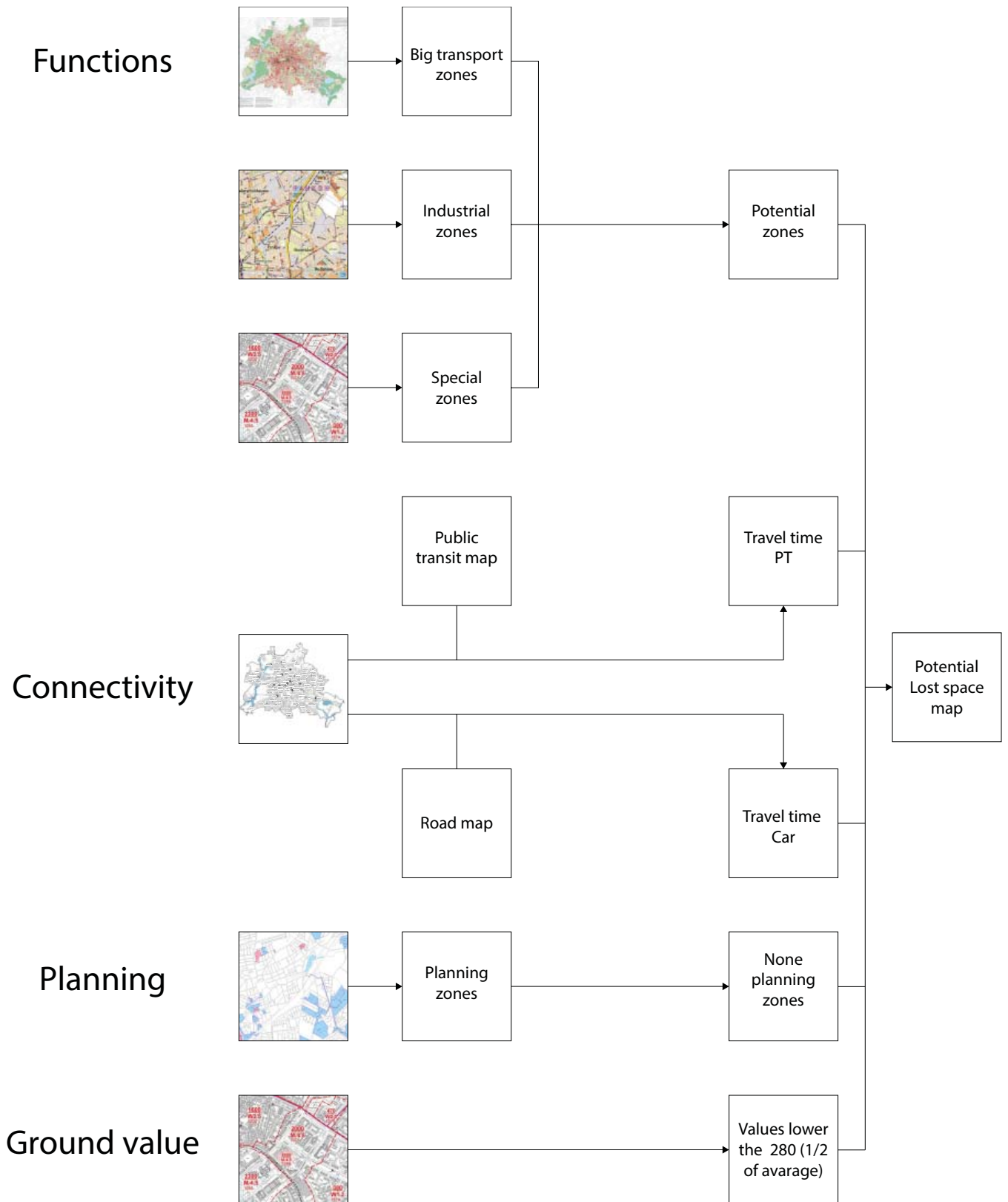
Values lower
the 280 (1/2
of avarage)

Figure 74 | Lost space mapping approach (by author)

Phase one: mapping lost space

According to the outlined methodology spaces that are likely to be lost spaces can be discovered by mapping the characteristics identified in Part B. These spaces can then be tested for the other characteristics in order to finalise this city wide lost space investigation. This mapping will result in recommendations that are important in order to tackle the problem of lost space and therefore answering the final sub-research question and providing an answer to the main research question.

The mapping of lost spaces in Berlin's urban fabric needs a lot of data. Spatial characteristics as location specific functions, connectivity and appreciation factors like economic driven development are necessary to begin this mapping. In the current day and age multiple sources provide data that could be proven useful but especially internet sources should always be verified.

The data collection will therefore happen from different sources. The state of Berlin, which publishes many documents online for everyone to access, can be considered be a good and reliable source of information. In terms of connectivity the Berliner Verkehrsbetriebe (BVG), the local transit authority, is a reliable source.

With the use of a Geographic Information System (GIS) all the data that is collected can be combined and analysed. GIS system uses geographical location embedded information. With this information a data set does not have to be changed to overlay another data set but can be combined.

With the help of a GIS system the various datasets can be combined to identify lost spaces in the urban fabric of Berlin. These datasets can be combined, therefore providing insights rather than analysing the data individually.

Possible lost space functions

The first data set that will be used is the function data set. As described earlier there are multiple functions that are more prone to be or to become a lost space than others. The FNP data set includes every zone in Berlin with its specific function. While there are many different types of zones in this set there are only six zones that are relevant for the lost space research: industrial zones; non build zones; transportation zones; mono functional facilities; holiday homes and communal areas, see figures 75 until 80 for the maps of each zone.

Figure 81 shows the combination of all the zones that have a specific function that are probable to be or to become a lost space. The map has several features that are outstanding and interesting to investigate if they also return in the next phase. First of all a ring structure of the city can be identified. In this ring structure is a centre with a high amount of possible lost space functions. This centre is surrounded by housing developments with small possible areas of lost space scattered around it. Further out is a second ring with areas that have functions that might to become lost spaces. Along the edge of the city the spaces aren't located in a third ring but they are ordered depending on the districts they are located in. Districts in the North East, South East and South West have huge areas that have functions that are possible lost spaces while for example the southern districts have functions that are less likely to become lost spaces. With this map finalised the first data set necessary for identifying lost spaces in the Berlin urban fabric is ready to be used.
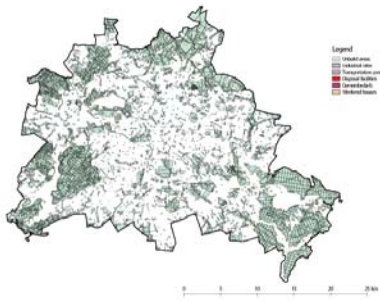
Figure 75 | FNP unbuilt areas

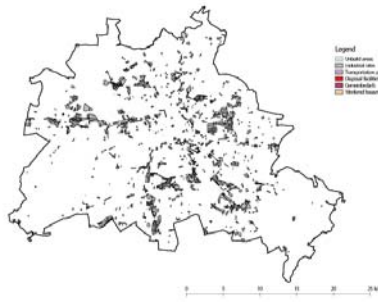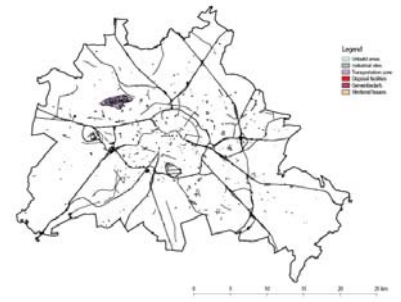Figure 76 | FNP Industrial areas

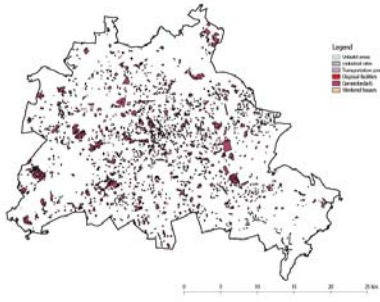Figure 77 | FNP Transportation

Figure 78 | FNP Common facilities
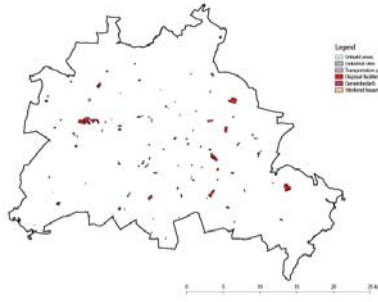
Figure 79 | FNP Disposal facilities

Figure 80 | FNP Weekend houses

Legend

- Unbuild areas
- Industrial sites
- Transportation zone
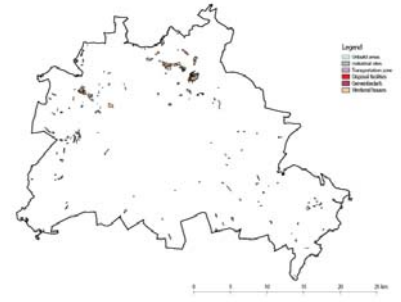- Disposal facilities
- Gemeinbedarfs
- Weekend houses

67

0   5   10   15   20   25 km
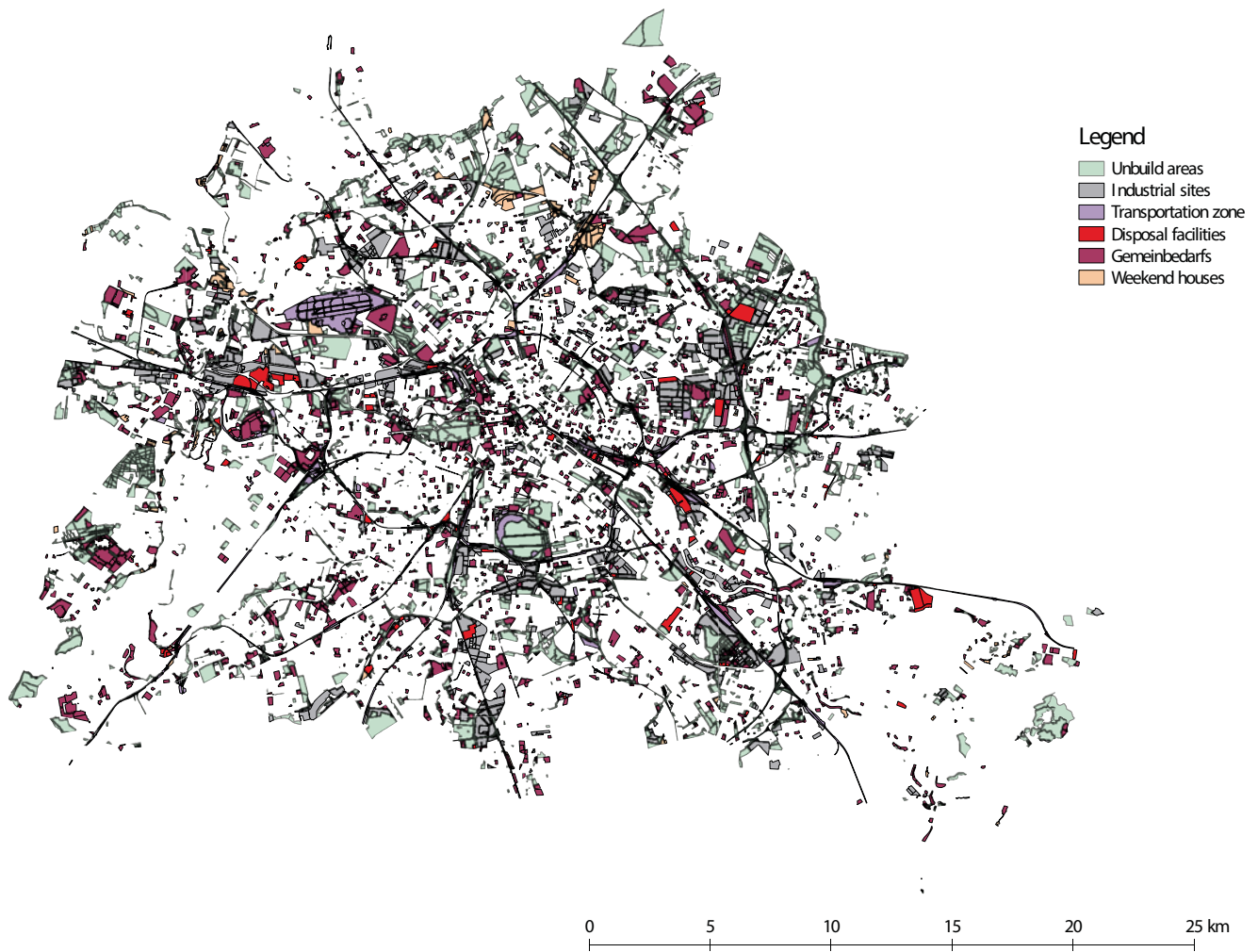
Figure 81 | The possible Lost space functions combined (by author)

Connectivity

Connectivity is an important characteristic of lost space, when spaces are not well reachable they are more likely to be forgotten. Connectivity is analysed by researching the travel reach of both the public transportation system and traveling by car.

The travel reach is the measureable distance over a certain time period. This means travel time and distance from a central point, previously set at Brandenburger Tor can be plotted on a map. In the case study of Tempelhofer Feld it shows that in Berlin has two different reaches, one for public transportation and one for car travel, see chapter C3.4.

According to the state of Berlin which published data showing the average speed when traveling by car through the city the average speed is 24,9 kilometres an hour. When traveling by public transport the average speed would be 17,0 km/h. (Senatsverwaltung für Stadtentwicklung und Umwelt Berlin, 2014, p. 14) This public transportation data is however not very useful for this particular analysis. When traveling short distances these numbers will provide a useful result but when traveling longer distances the average speed goes up substantially. The average is based on the contribution of all the transportation modes. This means that the average speed is based on 329 bus lines together with the speed of the ten U-Bahn lines, while also incorporating the other modes of transportation. The average speed thus consists of the relatively slow bus lines, which also have frequent stops, and a small amount of S- and U-Bahnrides, which not only stop less frequent but also can transport more passengers. Thereby the average speed of the U-Bahn of 30 km/h has to be considered, for in reality inhabitants do not to travel at the average speed of all the transport systems.

So instead of using the 17.0 km/h, 30 kilometres an hour is used. This number results from publication by the BVG showing that the average speed of the rapid systems, S-Bahn and U-Bahn, is roughly 30 kilometres an hour, or 5 kilometres in ten minutes. (BVG, 2014) The results are expected to give a better representation of the actual average travel time. It has to be stated though that there has to be more research into this topic to identify a more reliable data set for this. Either by adjusting the measurement tool in distinguishing the means of transportation or identifying not the average speed of all the different means of transportation but setting this into relation of the actual use of transportation. For this thesis this topic is however too specific to research this data set and just a small indicator in one of the analyses.

Connectivity analysis with public transportation

The public transportation is analysed with the help of the tool presented on the website http://mapnificent.net/. This website "shows you the area you can reach with public transport from any point in a given time." (Wehrmeyer, 2010) In other words it will output the travel reach for the Berlin public transportation system when putting in the desired travel time. With this tool seven transportation hubs are selected and their reach is combined into a single map, see figure 82. The transportation hubs selected are: Berlin Haubtbahnhof; Gesundbrunnen station; Ostkreutz station; Sudkreutz station; Westkreutz station, Alexanderplatz station and Brandenburger tor as central point of the city.

The figure shows a clear central area in the city that is well connected and around the edges of the city big areas that are lacking connectivity. Also visible in the figure are the arteries that provided connection towards the edges of the city.

Connectivity analysis with the car

Next to public transportation car connectivity is also very important. For this connectivity analysis a different approach is used as for the public transportation analysis. With the help of space syntax the integration of every street in Berlin is measured. "Space syntax measures how every public space or street segment in a built environment relates to all other public spaces. On the one hand it measures the to-movement, or accessibility potential of each street segment with respect to all others. On the other hand it measures the through-movement potential of each street segment with respect to all others." (Van Nes, 2011, p. 7)

By using this analysis both the local integration and the city wide integration of each street can be measured. The final result of this analysis is shown in figure 83. The figure shows clearly a similar pattern as the public transportation map, as in that the city centre is very well connected with well-connected arteries and the area lacking connectivity located at the cities edge.

Lack of connectivity map

When comparing the two maps with each other to create the combined lack of connectivity map, the car connectivity completely disappears. This shows that the city is better connected by car then by public transport and that the infrastructure in the city of Berlin is focused on traveling by car.

Figure 82 | Accessibility via public transportation
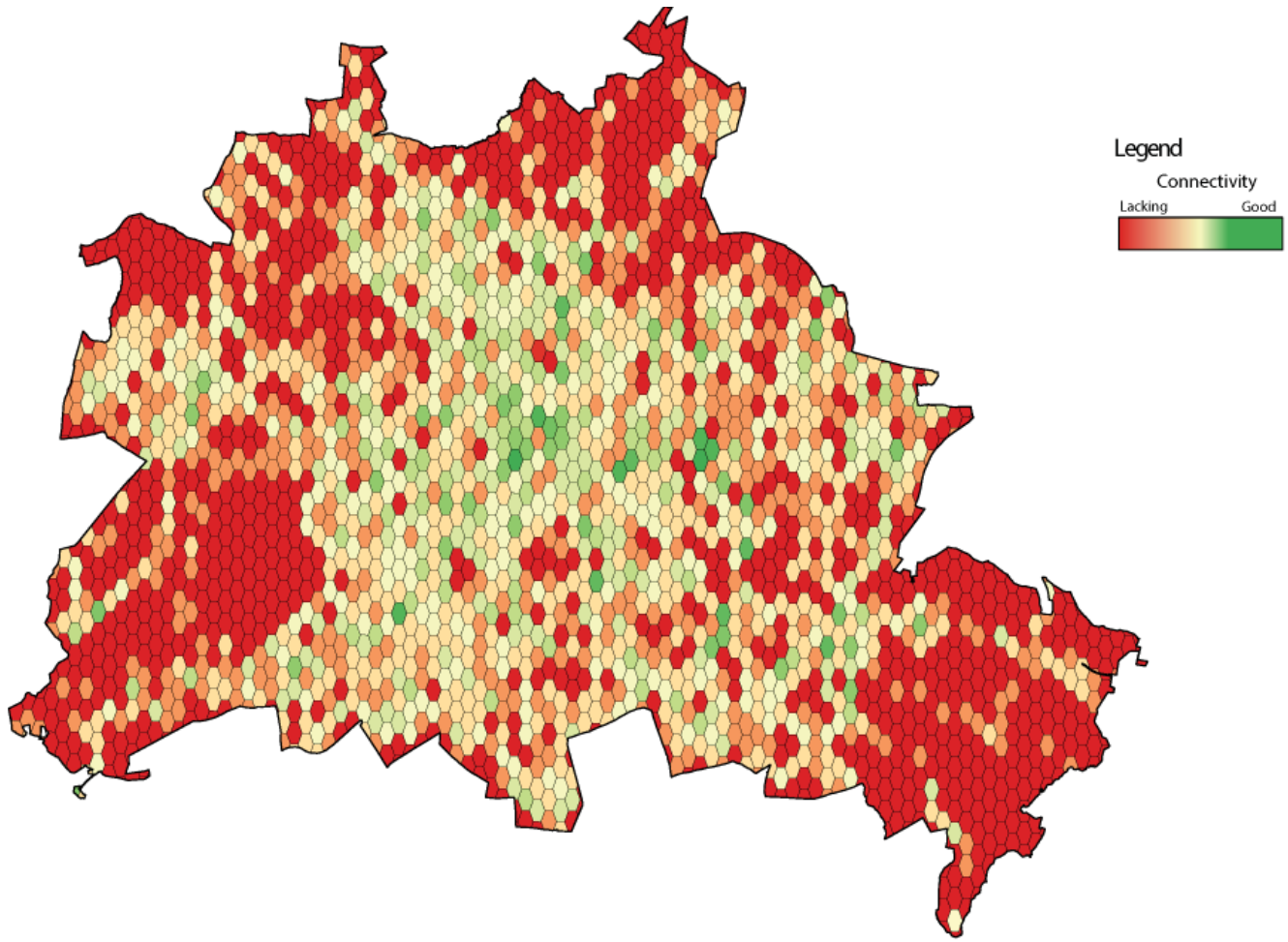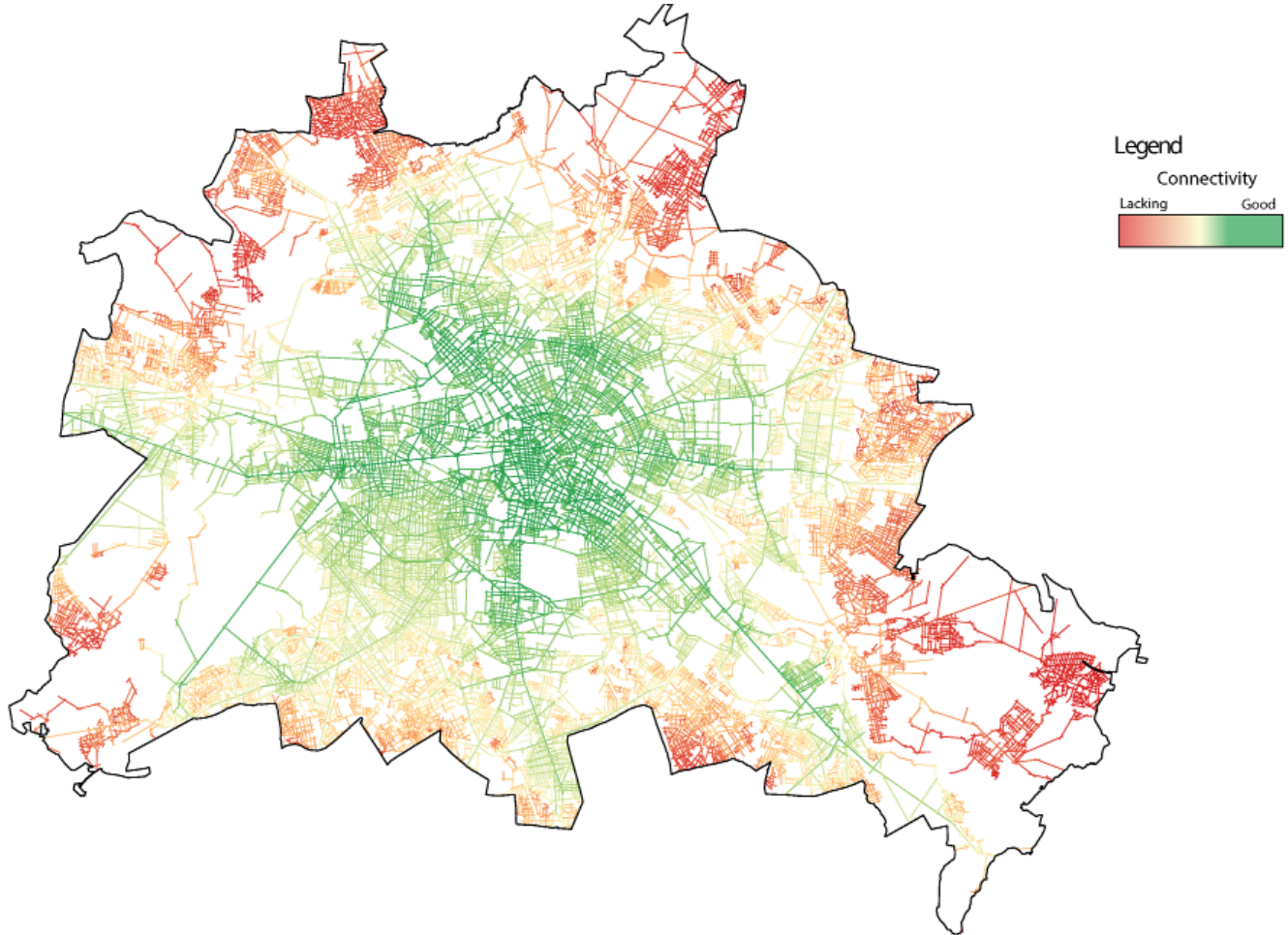(by author)

| 0 | 5 | 10 | 15 | 20 | 25 km |

Legend
Connectivity
Lacking   Good

Figure 83 | Accessibility with the car (by author)

| 0 | 5 | 10 | 15 | 20 | 25 km |

Legend
Connectivity
Lacking   Good

Lack of economic appreciation

The lack of economic appreciation is the next data set that is necessary in order to research lost spaces. For this data set the Bodenrichtwert, a data set of Berlin illustrating roughly what a square meter of ground costs in a certain area, will be used.

When looking at these economic numbers it is very important to create a base line. This base line creates the context to compare the results. The average of the city would be a good place to start for this analysis. The aim of this analysis is to find locations that lack economic appreciation, therefore the economically lowest 25%, of the cities ground value, are from an economical perspective a lost space. In figure 84 are these areas shown.

What is very characteristic about this map is the fact that the city centre is completely empty, meaning that in the city centre space is more valuable. Spaces along the edge of the city are the areas which are mostly below the threshold. There seems to be an optimal distance towards the city centre in the outer regions of the city, where the value is above the threshold again. When looking with a different perspective to the map the division between the former East and West Berlin are also visible. While large parts of East Berlin are below the threshold, West Berlin is more balanced.

Lack of planning appreciation

The lack of planning appreciation for urban tissues is focused on a lack of planning documents and designs. While the FNP shows changes in zoning the B-Plan shows actual changes in the build and urban structures of the city.

This is the first map that doesn't show a circular structure. All the previous maps had rings or half circles that could be distinguished but not with this data set. In this data set there is a clear North South strip of development. This North South strip is in an angle that is similar in the general direction of how the Berlin wall was positioned, see figure 85. Also there are two major clusters, one in West and one in East Berlin along the edge of the city that are definable.

With the data set of all the B-Plans in Berlin a new map can be created in which all the areas that have no B-plan can be found. This seems to be an excessive amount of space but with the spatial characteristic data as a base and the lack of planning appreciation data as a filter a more precise result is created.

Figure 84 | Lack of economic appreciation (by author)
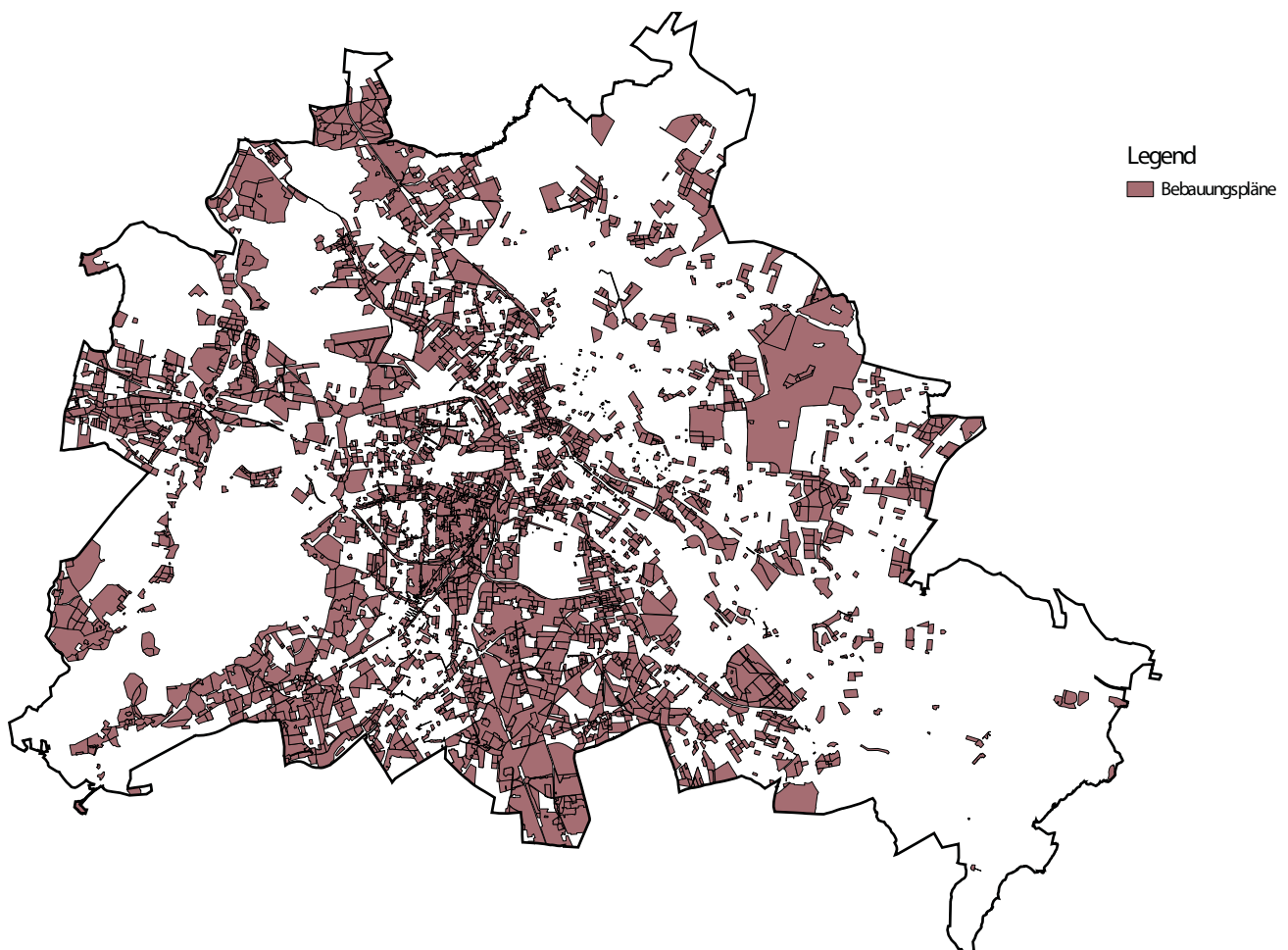
Figure 85 | Planning appreciation (by author)

Possible lost spaces

After the preparation of the different data sets the creation of the potential lost space map is possible. With each step the data sets are adjusted until with the combination of these data the potential map can be created.

In figure 86 this process is shown. The first step is combining all the maps that have different function aspects in them. This forms the potential function map. When laying the function data set underneath the connectivity data set the overlapping areas are taken out to form the first version of the potential lost space map. The next step is to adjust this map to take out the areas that have plans lined up. This means the overlapping areas with the B-Plan data set, will be taken out of the map. The ground value data set is used to create the final version of the potential lost space map. This last step is done by overlaying the map with the ground value data set and using all the intersecting areas.

This map can then be translated towards a potential lost space data set for the whole city of Berlin, for the map, see figure 86. The potential lost space map has some very noticeable characteristics that are worth mentioning. First are the circular shapes on the map, these come from the connectivity map. The second are the size of the shapes, while very small in the middle they get bigger towards the edge of the city.

Two lost space characteristics are still not incorporated in this map, namely the lack of social appreciation and the accessibility analysis. As stated earlier with the lack of resources it is too complex to research these on the scale of the whole of Berlin. These two characteristics will be investigated in the next chapter, by researching areas that are located on the map in figure 86.

Legend
■ Potential lost space
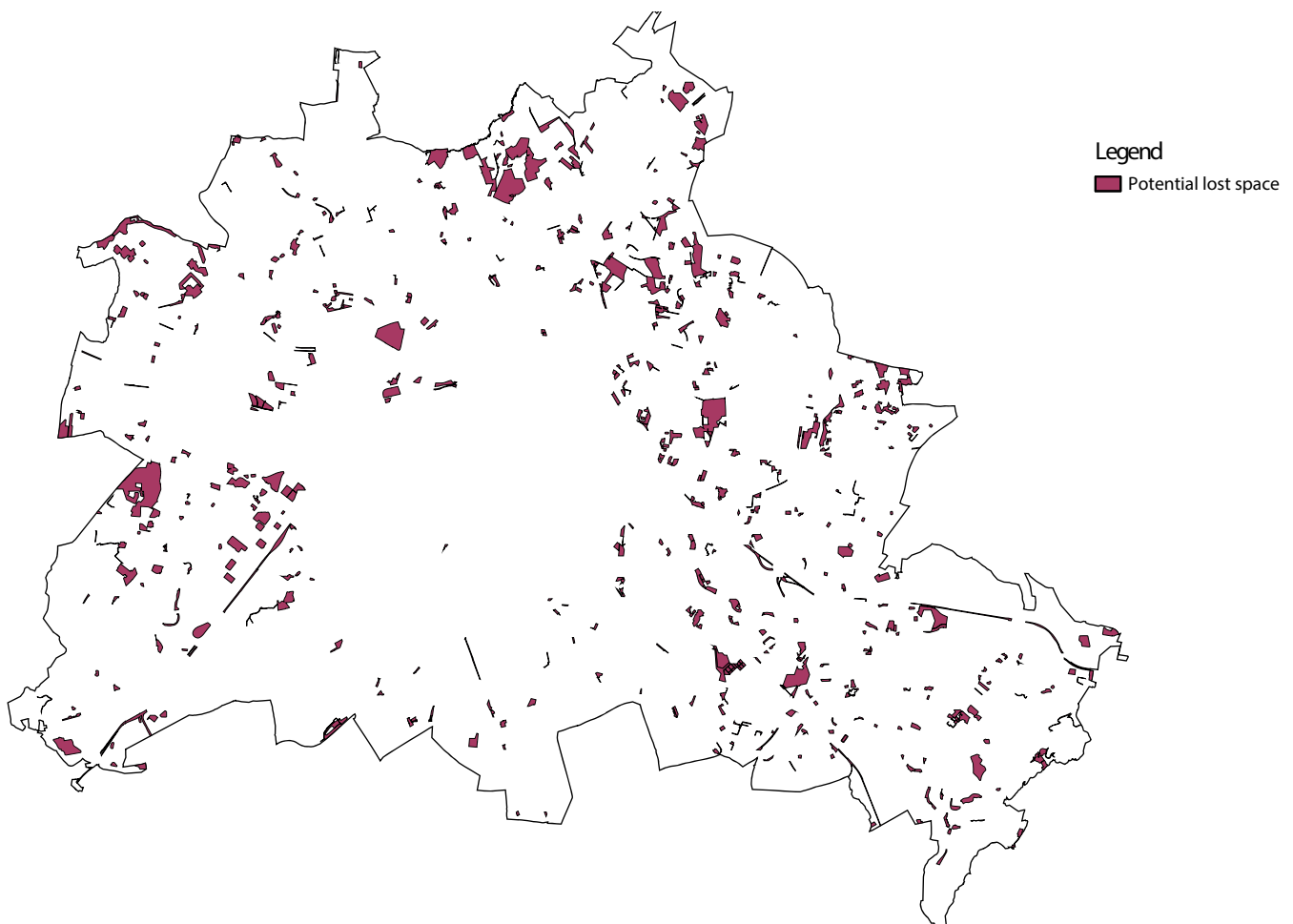
Figure 86 | Possible lost space map (by author)

Functions

Connectivity

Planning

Ground value
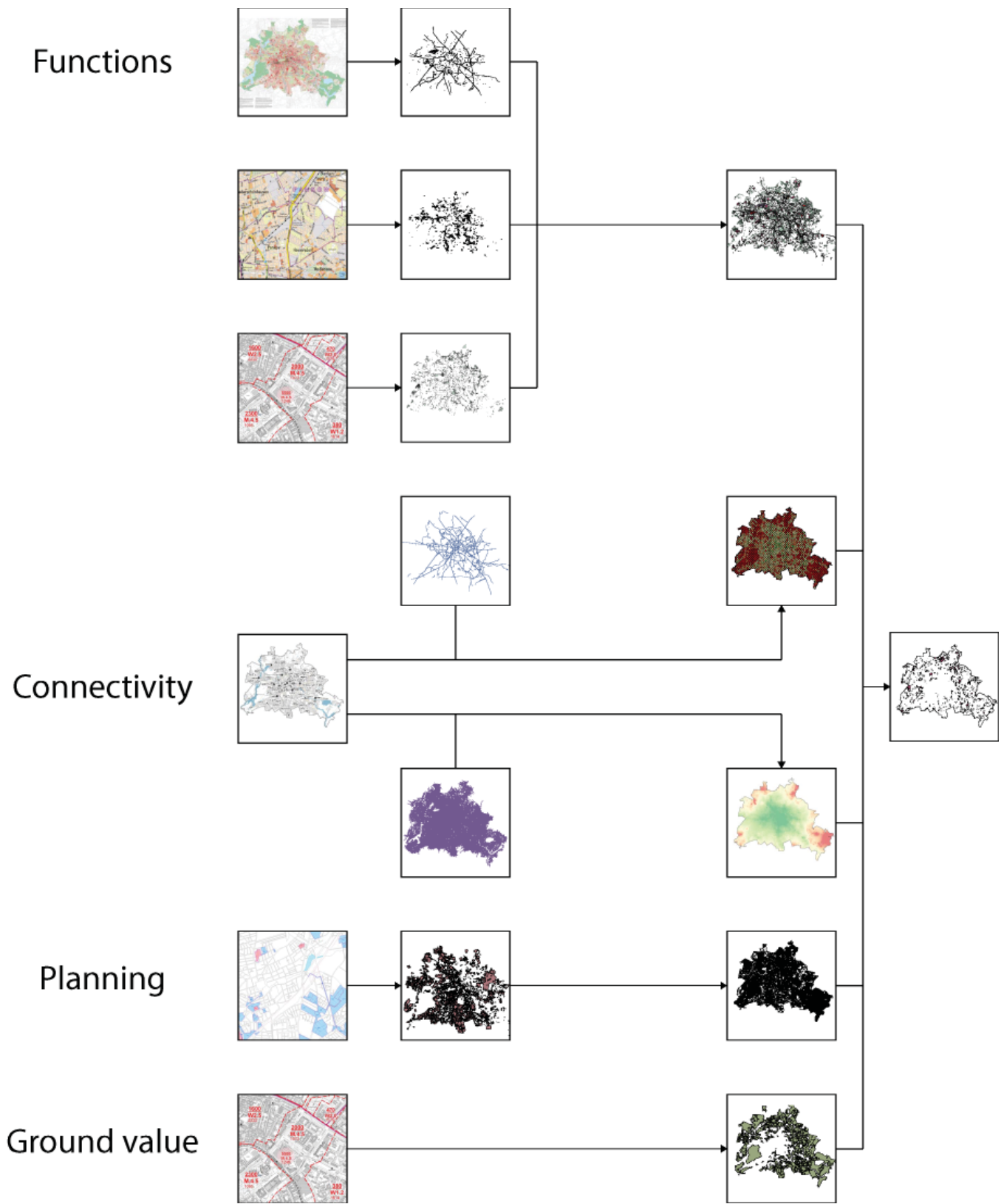
Figure 87 | The order how the Lost space map was created (by author)

Phase two: Identifying lost space areas

In order to identify areas a couple of criteria where selected. First there had to be a difference in function in order to test the different lost space criteria. Secondly the location in the city and the size were important in order to create diversity in the test cases. For the P4 thesis two cases will be shown extensively. These cases are the Berlin Großmarkt in Mitte and the former Johannisthal airport in Treptow-Köpenick. These two cases are examples of the types of spaces that have been found. For the p5 thesis it is planned to add an additional two to four cases to get a more complete overview of the found results.

Berliner Großmarkt

Located on the Beusselstraße in the North West of the Bezirk Mitte, this industrial area has been marked as a potential lost space. The area is used as the fresh fruit and vegetable department of the Berliner Großmarkt, a joint venture between wholesale companies.

Social appreciation

The figure 91 displays the articles per year that were connected to the Großmarket between 2001 and 2015 that have been published in Berlin's two biggest newspapers. The diagram shows a clear peak in 2006, the year the industrial area was closed in order for the renovations, necessary to modernise the market, to take place.

In general there have been 8,8 articles a year which has been below the threshold set at 48. This means that from a social perspective it has been a lost space for a long time.

Figure 89 | location of Berliner Großmarkt in its surroundings (by author)

Figure 90 | Picture at the centre of the location (by author)
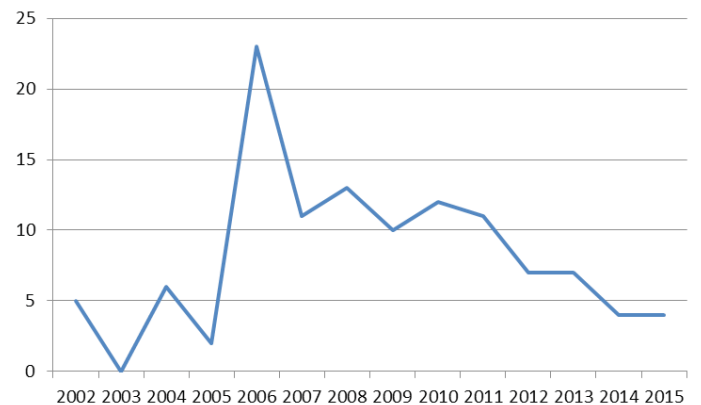
Figure 91 | Articles about the Berliner Großmarkt (by author)

Figure 92 | The accessibility points to the site (by author)

Accessibility

The Großmarkt is located between Water in the North and the West, a regional road in the East and the S-Bahn and train ring in the South. There are only three entrances to the area. Two of these are road connection to the region road located on the east side, while the other is a small tunnel underneath the ring in the South West.

Conclusion

In general the location has all the lost space characteristics except for the function. This area can be marked a lost space in waiting. As soon as it loses its current function as an industrial site extra attention should be paid to this area in order for it to not become a lost space.

Characteristics	Threshold	Actual value
Function	Functions likely to be lost space	Industrial site
Connectivity:		
The distance to Brandenburger Tor	No threshold	6,1 km
Public transportation: 35 min	30 km/h	10,5 km/h
Car: 15 min	24 km/h	24,4 km/h
Accessibility	(partly) closed off	Limited accessible
Size	20 hectares	13 hectares
Social appreciation	48 articles per year	8,8 articles
Economical appreciation	Below 280 €/m²	100 €/m²
Political appreciation	At least 1 plan	0 development plans

Figure 93 | Lost space characteristics of Berliner Großmarkt (by author)
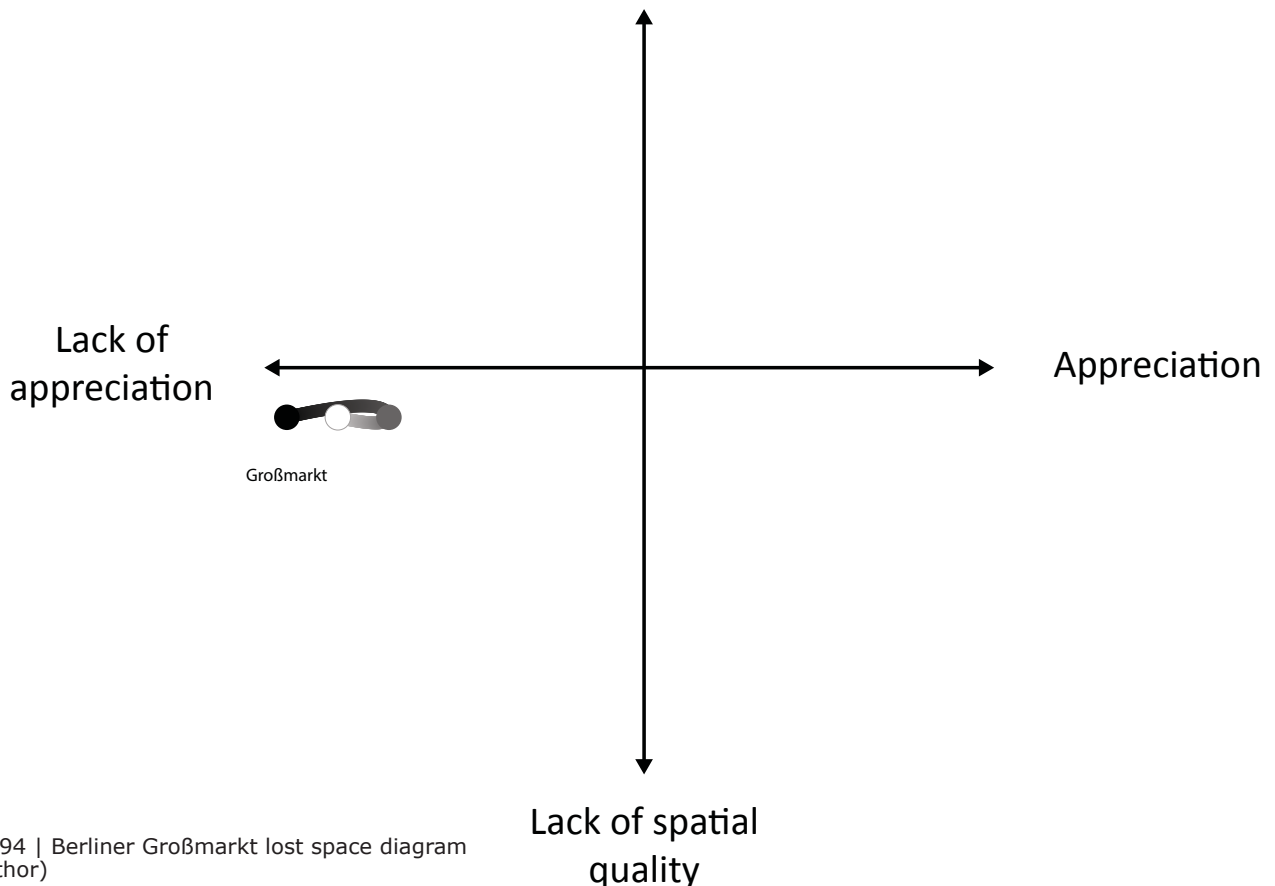
Figure 94 | Berliner Großmarkt lost space diagram (by author)

Former Johannisthal airport

The area marked orange in figure 95 is a former airport located in the Bezirk of Treptow-Köpenick. The airport has been falling into disarray from the 1950s onwards. After the division of Berlin the area was used by the East German border guards as a training ground. Officially the airport was closed in 1995. (RonaldV, 2012)

Since then the main area has been transformed into a city park with a nature reserve at its core. While the biggest area of the airport has been designated in the FNP as a park, the South East part has been designated as empty area. These areas are specified into brownfields without buildings and without a particular function. (Bezirksamt Treptow-Köpenick, 2002)

Social appreciation

The graph representing the social appreciation has a couple of identifyable features. First is the lack of overall articles, a avarage of 3 articles a year. This is below the threshold of 48 per year. Secondly there are three peaks in the diagram.

The first peak is in 2003, representing the moment it became public that the area was placed under ecological protaction in order to preserve the unique flora and founa that was located on the site. 2009 shows the second peak in the graph, the moment were 100 years earlier the airport was founded, as the first airport in Germany. The last peak happened in 2013, when the offical opening of a new part of the city park happened. Therefore it becomes clear, that a little social attention is only given in very specific moments which are, like in the case of 2009 not even necessarily linked to the current state of the site itself.

Taking the generally limited attention of this site as well as the circumstances of this attention into account it can be concluded that the former airport has a lack of social appreciation.

Figure 95 | the location of Johannisthal airport (by autor, Bing maps)
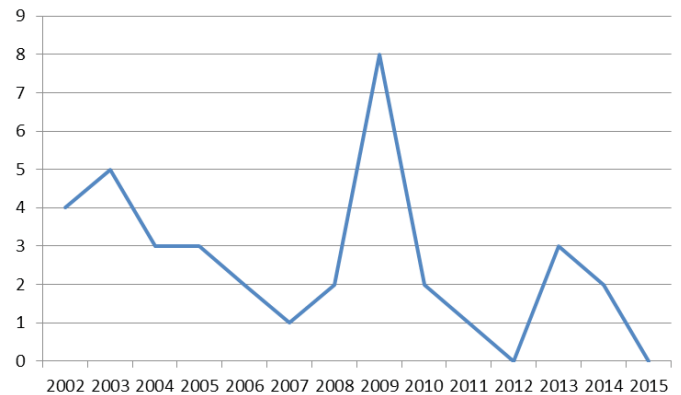
Figure 96 | Articles about the former airport (by author)

Figure 97 | View on the brownfields (from Google maps)
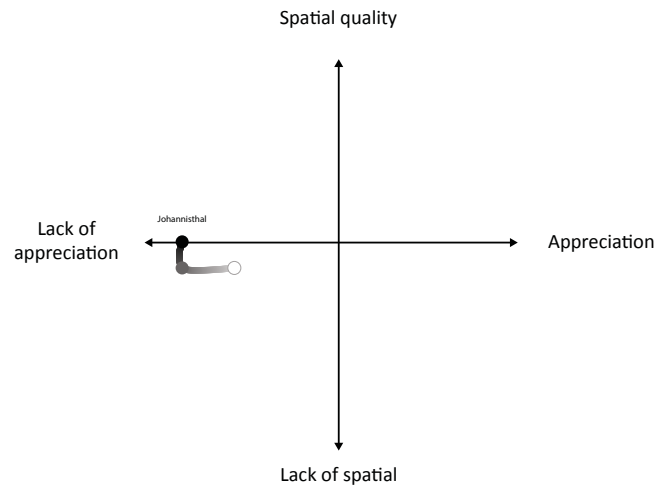
Figure 98 | Johannisthal lost space diagram

Accessibility

The accessibility of the area is very good. Roads are developed and all the areas are easy to access. For example the park has no walls or fences surrounding it. Also the brownfields are well accessible, see figure 97. In general the area doesn't have an accessibility problem.

Conclusion

After the selection of this area its social and accessibility characteristics were investigated. The potential lost space map showed that the whole area might be a lost space but after a short investigation into the actual function of the area, the area could be defined as having two aspects. The first one, the former field of the airport, has become an open park. The second aspect is that of the brownfields that were part of the spaces surrounding the field.

The planning appreciation shows no B-plan, meaning that the area is at the end of development and further development is unlikely. The field developed into a park that can't be considered a lost space. On the other hand the brownfields are by definition a lost space, which is showing because the area South East is still undeveloped.

With all the characteristics of lost space being present and with the further investigation into the area it can be concluded that the former Johannisthal Airport field is not a lost space anymore but that the other parts of the former airport have become a lost space.

Characteristics	Threshold	Actual value
Function	Functions likely to be lost space	Park and empty areas
Connectivity:		
The distance to Brandenburger Tor	No threshold	22,1 km
Public transportation: 56 min	30 km/h	23,7 km/h
Car: 32 min	24 km/h	57,7 km/h
Accessibility	(partly) closed off	Open to access accessible
Size	20 hectares	26 hectares
Social appreciation	48 articles per year	3,1 articles
Economical appreciation	Below 280 €/m²	Average of 120 €/m²
Political appreciation	At least 1 plan	0 development plans

Figure 99 | Lost space characteristics of Johannisthal airport (by author)

Former spystation Teufelsberg

Located in on the West side of Berlin in on the edge of the Grunewald is located the Teufelsberg. This is the third location that was found on the potential lost space map. The artificial mountain is the highest elevated point of Berlin. The mountain was "created with the rubble from World War Two" (Behling et al., 2012, p. 10) on the foundation of the former Nazi academic in Berlin.

After the completion of the mountain, it was claimed by the American army intelligence in order to improve the spying capabilities on the East German and Russian Soviets. The construction of the original buildings "started in 1969 and lasted until 1972" (Behling et al., 2012, p. 12) From 1972 on the site the multiple buildings were added until in 1989 the final addition was finished. (Behling et al., 2012, p. 22) Until the final moment when the site was used both the American and British spy agencies used the location.

After the plans fell through in 2006 the area had been sitting empty and was used by artists and urban exploders that led to the deterioration of the site. Since 2011 the site has been part of the European heritage days. This means that the area is a protected location and a live canvas for artists.

Figure 101 | Gruhl & Partner's development plan (Beckmann et al., 2013, p. 121)

Figure 100 | View on Teufelsberg in 1986 (Beckmann et al., 2013, p. 55)
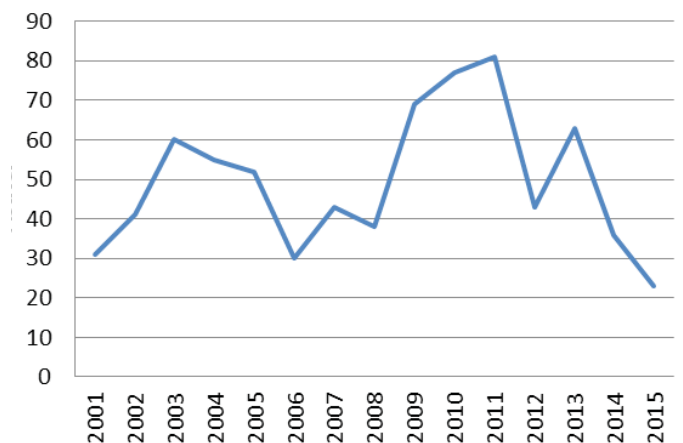
Figure 102 | Articles about the former airport (by author)

Since 1992 (Beckmann et al., 2013, p. 31) the field station is been decommissioned and the between 1994 and 2008 multiple development plans were created in order for redevelopment of the area but all fell through, some because of the lack of investment others because of the local building laws and building permits. (Beckmann et al., 2013, pp. 114–125)

The only plan that had actual impact was the design from Gruhl & Partner. A transformation from the site into a mixed use area with a Hotel, houses and cultural and dining facilities. This plan was focused on the partly reuse of the existing buildings. Even though the plan wasn't realised because of environmental reasons, in the end the demolition of parts of the building ensemble did take place.

Social appreciation

The social appreciation analysis shows a couple of interesting features. First of all is the sear amount of articles, which is roughly ten times the size of the other found spaces. Second is the shape of the line, which has three clear peaks, as to where most lost space only have a single peak in appreciation. This shows that appreciation in this location is changing rapidly.

2011 marks the year in which the most articles are written about the place. This was the year that the current owner, the artist collective, started to use the location as their canvas. In general the social appreciation is good with much being written about the location.

Figure 103 | Part of the fence (by author)
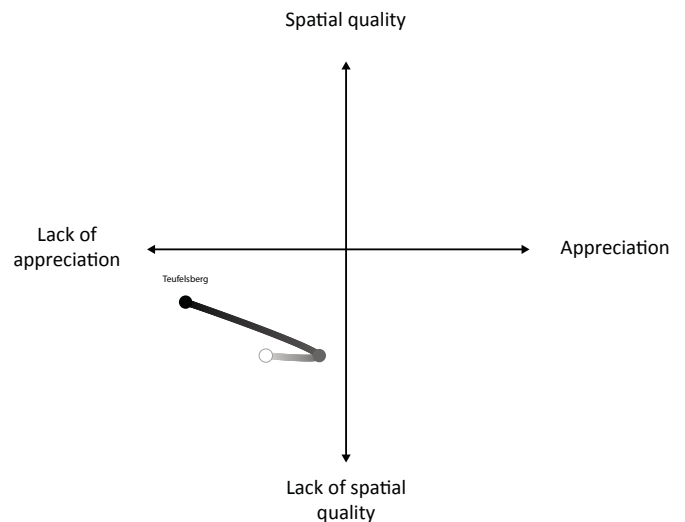
Figure 104 | Teufelsberg lost space diagram (by author)

Accessibility

When visiting the location in order to analysis the location and all of its characteristics, the accessibility was a problem. Research into the location stated that the area was surrounded by a big fence which should prohibit people for gaining access to the location but a big amount of holes in the fence would still gain entrance to the site.

When arriving on the site the big fence surrounding it was full of repaired holes, showing that someone or an organisation was taking care of the location. The second part of the accessibility analysis was the fact that there are guided tours through the facility, for a fee, but they were not shown on a sign. This makes the location not well accessible, because of the fence and the when the location is open to visit it is a paid entrance.

Conclusion

This former spy station, that no longer in use, is located on the western edge of Berlin inside the Grunewald. Cancelation of the project further development seems unlikely. It is possible to visit the location and currently it has an owner that takes care of the location. The current function seems like a temporary one because the area isn't being preserved or developed.

All these characteristics together indicate that this location is a lost space. While it has currently a function and an owner that takes care of the location, this looks like a temporary function. The lost space graph shows that the site is improving but still has a long way to go, but with the last development plans not succeeding future investment seems unlikely. Seen from the amount of articles there is plenty of interest in the location but this interest can't be taken for granted in the future.

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Characteristics	Threshold	Actual value
Function	Functions likely to be lost space	Special function: safety and order
Connectivity:		
The distance to Brandenburger Tor	No threshold	10,4 km
Public transportation: 56 min	30 km/h	9,71 km/h
Car: 25 min	24 km/h	24,96 km/h
Accessibility	(partly) closed off	Limited accessible paying fee when open
Size	20 hectares	3,91 hectares
Social appreciation	48 articles per year	54,7 articles
Economical appreciation	Below 280 €/m²	0 €/m²
Political appreciation	At least 1 plan	0 development plans

Figure 105 | Lost space characteristics of Teufelsberg (by author)

◄▲ **Figure 106| Roof of the Teufelsberg building comples (by author)**

▶▲ **Figure 107 | Teufelsberg development sign (by author)**

▲   **Figure 108 | Berliner Großmarkt (by author)**

◄   **Figure 109 | Former airport Johannisthal (by Senatsverwaltung für Stadtentwicklung und Umwelt Berlin)**

▼   **Figure 110 | View on Berlin from the Teufelsberg (by author)**

Summary

Because of the limited resources available during this project the mapping of lost spaces had to be divided into two phases. The first phase used the characteristics that where identifiable on maps to generate a potential lost space map. This map could be used as a lost space warning map.

The second phase went into identifying a couple of the areas marked on the map. During this phase two locations were investigated for the characteristics that were unable to map. The result was less successful than the first phase, because as it turns out there are mostly potential lost spaces and very few actual lost spaces.

It also shows that the potential lost space map as it is right now is can be more balanced. All the factors are used but they have no weight, meaning that for example the function is just as important as the economic value. In reality there are differences in how much the characteristics influence the lost spaces. Further research into this matter can improve this balance and therefore the result of the mapping. In general this mapping phase has just started and would form a great starting point for further research.

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Part E:
Conclusions and recommendations

Lost space conclusions

In this last part of the thesis conclusions should be drawn which provide answers to the beforehand stated research questions. After these conclusions a short reflection on the graduation project as a whole will be given, to describe not only the results but also the lessons learned during this graduation project. The part ends with recommendations for further research that would be necessary to continue the exploration and identification of lost spaces.

The graduation project started a year ago with an idea about researching voids that developed into the lost space research that was presented in this master thesis. Research questions were formulated in order to specify the research and sub-research questions to divide the research into different parts. These different parts had each their own exploration method.

The main research question was formulated as: What types of lost spaces can be identified in an urban context and what actions are important in order to tackle the problems of lost space? To be able to explore this complex question the following sub-research questions were defined:

1. What different perspectives on lost space are there and which ideologies are behind these perspectives?

2. What characteristics are part of the problem of lost space and how are these characteristics connected to the different perspectives?

3. How can, with the use of the perspectives and characteristics, lost spaces be identified in the urban context?

In part A up to D the answer on these sub-questions were presented in full detail. In the following paragraphs the answers will be summarized next to each other and more compact. This is done in order to be able to answer the main research question at the end of this chapter.

The different perspectives on lost space

In part A four perspectives on lost space were presented and compared to each other. The spatial perspective was the first perspective investigated. It was a combination of spatial factors that are connected with Kevin Lynch's Ideal city form. These factors formed the general idea on which lost spaces are based.

The second perspective is the political perspective based on the ideology of the welfare state. This perspective had to do with the planning appreciation of a place.

The economic perspective is the third perspective. This perspective is based on the economical appreciation that is connected to the ideology of neo-liberalism.

The final perspective is the social perspective, connected to the ideology of governance. This perspective deals with the appreciation that society has on the areas.

Lost space characteristics

With the translation of these four perspectives seven characteristics were found. The spatial perspective provided the first four characteristics. These spatial characteristics are (1) the functional; (2) the accessibility; (3) the connectivity; and (4) the size characteristics of a space.

The three perspectives connected to appreciation provided the other three lost space characteristics. (5) The political perspective provides the lost space characteristic of planning appreciation while (6) the economic perspective provides the economic appreciation and (7) the social perspective provides the social appreciation characteristic.

Characteristics	Threshold
Function	Functions likely to be lost space
Connectivity:	
The distance to Brandenburger Tor	No threshold
Public transportation: 35 min	30 km/h
Car: 15 min	24 km/h
Accessibility	(partly) closed off
Size	20 hectares
Social appreciation	48 articles per year
Economical appreciation	Below 280 €/m²
Political appreciation	At least 1 plan

Figure 111 | Lost space characteristics and threshold (by author)

Identifying lost spaces in the urban fabric of Berlin

With these characteristics identified, the lost space framework was starting to form. In order to test the framework and the theory used to underpin the framework a set of case studies was done. The goal of these case studies was not only to identify lost spaces but also to research numeric threshold for the characteristics.

After these case studies and the thresholds had been identified the urban fabric of Berlin has been dissected in order to find lost spaces. Because of the limited resources available during this project the mapping of lost spaces had to be divided into two phases. The first phase used the characteristics that were identifiable on maps to generate a potential lost space map.

The second phase dealt with testing areas from this potential lost space map in order to create a general conclusion on this map. The cases showed that most of the identified areas are not lost spaces but have the criteria to become one. This can be explained by the fact that all characteristics had to be present in order to be a lost space on the potential map, but lost spaces do not have to have all seven of these characteristics, five or six of these characteristics together will also indicate a lost space.

Answering the main research question

With all the sub-research questions answered, the main research question can be answered. The main research question is 'What types of lost spaces can be identified in an urban context and what actions are important in order to tackle the problems of lost space?'

Lost space is partly a spatial and partly an appreciation problem. For a space to be a lost space the lack of spatial quality has to be present, while not all the appreciation factors have to be present. Therefore it can be concluded that there are three types of lost space, namely social lost space; economic lost space and planning lost space. Furthermore these three types of lost space can coexist on one location meaning that an area can be for example both a social and economic lost space.

While these types each have their own problems and there for their own solutions, combinations are not only possible but desired as they improve the overall integration of a space into its surrounding urban and social fabric.

When developing for a social lost space the development plan has to have both a spatial design as well as a social system to integrate the space into the social networks present, this can be done for example with social input during the design process. Developing for an economic lost space has to focus on value of not only the developed space but also its surroundings. With this improvement of the area should become more feasible for investors in order battle lost space. Lastly when tackling a planning lost space there development plans for the area, this will results in further deteriorating conditions. Therefore it is important to always develop plans for areas that lack spatial quality, which development can be with the help of the two other approaches justified.

The results presented in this thesis are one attempt to contribute to this complexity while further research has to show whether there will ever be one final and global definition. For example while in Berlin there was a very clear political change, in other locations there might be more, smaller and less obvious political changes. Even though these would also lead to planning lost spaces these would be inherently different from the planning lost space in Berlin.

In general it can be concluded that the research into the topic of lost space created more clarity for the case of Berlin but not for other locations. Therefore the creation of the framework is very important. This framework can be adjusted for the specific locations context and then used in order to identify areas that are lost spaces and areas that have the potential to become lost space.

With this graduation project a design in the third order has been made, meaning that the next step would be to design a project in the second order. This should result in using a location found by the mapping and creating a project that focuses on improving the spatial qualities and at the same time a strategy to improve the lack of appreciation.

Reflecting on the graduation project

In order to reflect on the graduation project of lost space there are a few topics that need to be addressed. The social relevance will underpin the importance of this graduation project from a social perspective. The connection with the research group, that this graduation project is related to, focuses on the academic relevance and how the research group influenced this graduation project. The final part of the necessary topic that needs to be discussed before a reflection can be created is the connection between the research and design part of this project.

Social relevance of lost space

Voids and lost spaces are becoming a phenomenon that is found at an increasing rate in the urban context. Even though these phenomena have been researched on different scales, there is yet a well-defined description to be found and therefore it's necessary to increase the likeliness of a solution concerning the third order of design.

With the political and economic changes in the last decades an increasingly fierce struggle for resources, appreciation and attention goes along. This is important for preventing lost spaces and identifying parts of cities that are underdeveloped and underappreciated in order to tackle each location's specific problem. Furthermore actors need to be identified in order to get them involved. Because of these changes there is now an even growing complexity and less understanding of the lost space phenomena.

The negative spiral which creates lost spaces is a problem that many cities struggle with, but there is not a clear solution for this problem. The societal goal of this graduation project is therefore not to provide a definitive solution for lost spaces in the city, but to discover a pattern in the conditions on which lost spaces thrive. This will be translated into recommendations that can utilize the great potential of lost spaces.

Connection to the research group

The topic of lost space emphasizes an understanding of the emergence and disappearance of voids in the urban fabric. The graduation project thereby connects the academic theory of lost space with the changes in planning regimes that took place in Eastern Europe after the fall of the Berlin wall. It searches for the effect that this political change has had on the status of these voids and specifically the changes which took place because of the transition from the communistic planning regime via the welfare state into the neo-liberal planning regime.

The switch, which took place from the welfare state economic policies towards neo-liberal economic policies, restarted the public debate about the role of the government concerning planning. This transformation marks the transition from government to governance. Following this change and the changes in planning that followed formed the core of the research group Regional Governance, Planning and Design, from the department of Urbanism, to which this graduation project lost space is linked.

Connection between the research and design parts of the project

The lost space graduation project is based on a combination of research and design. Although the project could be divided into two parts, a research semester and a semester of the creation of the lost space framework, both of these aspects were present during the whole project and influenced each other constantly.

The research part of the project was about exploring the academic writing connected to the topic of lost space. The goal of this research was to get a clear definition of lost space and research the connecting topic of public goods. Then this definition was connected with perspectives from ideologies important for the transition that happened after the fall of the wall in Berlin.

With this research into lost space, the design of this project was about creating a framework to handle lost space. The framework was created to give guidance when searching for these spaces and providing the necessary tools to tackle the lost space problem when discovering such spaces.

Reflecting on the product

While the framework has been developed in multiple phases with many reflection moments now that the framework is finalised, reflecting on it is an important part of the process.

The framework started with R. Trancik's 'Finding lost space.' While the publication was used to elaborate the vaguely defined idea about the relationship between voids and political change, it also had its flaws. First of all it was written in a different context, being about the American society from the 1980s. This change of context has such a big impact on lost space, that there was a need to create a more complete definition of lost space in the context of the graduation project. With all the connected literature and the assumptions that were made for this project, when interoperating these sources it is important to note that this created a framework that is built on assumptions. The final product has a my definition of lost space.

Secondly the context of Berlin has a major impact on the framework. When looking at a different context it has to be stated that the perspectives, social; economic and political, have to be revised because the ideologies that are present in this new location are probable not exactly the same as in Berlin.

Finally it has to be acknowledged that due to a limited amount of available resources the mapping part isn't coherent. The first phase has a replicable approach for every city or region if data is available. With a greater availability of resources, extra time and tools to explorer the undervalued characteristics, the second phase can also be more automated. This would mean that therefore the division in two phases might not be necessary anymore.

Personal reflection on the process

The graduation project started with a strong but vaguely defined idea about researching voids in the urban fabric. The initial goal was the creation of a vision on tackling these voids in a city unknown to me in order to go into the research without prejudice.

After defining my personal idea, that political transition was the cause of these voids, the research into the theory surrounding this topic started. For the first time since studying Urbanism I felt like a researcher instead of only a designer. Working both as a researcher and a designer in the urban development field is something that I grew quite font off. In this period I learned a lot of new aspects about Urbanism. Reading was not the only tool to further the project, also writing text helped me with the development of the project. During the first semester reading and writing was the majority of activities for the project.

When working towards the first important moment, the P2, it became clear that a vision would not be a suitable result of the research that was starting to take shape. This meant changing the main goal of the graduation project, creating a vision towards creating a framework to identify and tackle lost space. As time passed and the research started to transition from literature reviewing towards spatial analysing the problem of lost space, I rediscovered the boundaries of urbanism. I even dare to say that I am no longer only an urban designer and planner but also an urban researcher.

The location of Berlin was chosen for this graduation project was a clear result of the researched political transformation. The choice for berlin was based on the existence of both the welfare state system and the communistic system that became one and then later transformed into a neo-liberal system. While the existence of two systems at the same time gave good results and formed for an interesting case other locations in Eastern Europe could have gave a more clear picture for the transition overall, since the switch of complete city was less dramatic. Overall the location was a good decision but a other location would not have been out of the question.

Along the way I learned many skills that I will be using for the rest of my professional career, basic skills like academic writing, academic reading and connecting urbanism with other research fields, but also the usefulness of GIS in spatial planning.

Recommendations

Not only is the research on lost space location specific, there is also the need for further research. The following chapter is going to list the recommendations that are a result of the research which took place during this graduation project.

The first recommendation is about the selected functions/zones that describe functions that are likely to become lost spaces. This criteria is now based on the zoning specification from the Berlin FNP, which has many different functions grouped together. The problem is visible in the non-build areas, in which are functions like parks that might be lost spaces but also tree plantations and agriculture fields. If it was possible to have more specific distinctions between the functions it would be possible to have a more coherent result.

The criteria of connectivity provides great results in terms of indicating locations on the map but there are some recommendations that could improve this characteristic. The connectivity analysis is based on the travel reach from a one single central point in the city. When combining this type of analysis from different important points in town, there will be better distinctions concerning the quality of the connectivity. Therefore the cut-off, of the areas that are outside of the travel reach, will be less hard.

Another further research point in the connectivity analysis is the travel speed. This is measured by average travel time. This proved to be not a great indicator for the actual travel reach. Therefore there is a need for more research into the travel speed. This is applicable for both the public transportation system and the car.

The social appreciation is researched by measuring the amount of articles in beforehand defined newspapers and timeframes. In order to improve this research aspect the content, specifically the opinion about the space (negative/positive), is recommended to be included into the research. Besides the opinion also more sources should be used to get a better overview of different views that the social debate contains.

The planning appreciation is based on the amount of plans which are made for one area. But these plans are measured in the form of B-plan a formal planning document. There is also the need for informal plans, especially in the case study of Berlin, but in general in times of governance an increasing tool used in urban development, to be covered in this approach.

Finally there is a need for weighing the importance of each lost space characteristic. As the framework is formulated currently all factors are used equally but they have no ratio. For example the function is as important as the economic value. In reality there are differences in how much the characteristics influence lost space.

From the answers of the research questions and the recommendations concerning the framework, which can be seen as the design of this project, the complexity of the topic lost space becomes clear once again. In this complexity lays not only a challenge for urban researchers but also the reason for the problems many cities have with lost spaces. The lack of economical appreciation makes development difficult, especially in times of neo-liberalistic policies in cities or difficulties in the current accessibility of it. Also the lack of social appreciation and therefore a lack of awareness create difficulties. An example for this can be seen in one of the case studies presented in this thesis, the case study of Tempelhofer Feld. While it had many indicators pointing it out as a future lost space it is nowadays an urban phenomenon with a high popularity among its users. This can be explained due the constant public interest which it was provided with not only due to political decisions but also neighbourhood organizations. This shows that in times of governance plans can be influenced by citizens which can influence an endangered spot of a city in such a way that it does not become a lost space.

In this case study is therefore not only the complexity of the topic of lost space in general represented but also the influence of the political and social background of an area. Lost spaces need therefore be investigated furthermore in the future to create cities in which people can enjoy and appreciate the urban tissue in its built and non-built form.

References

Alexander, E. R. (2005). Institutional transformation and planning: from institutionalization theory to institutional design. Planning Theory, 4(3), 209–223.

Anomaly, J. (2013). Public goods and government action. Politics, Philosophy & Economics, 1470594X13505414.

APU. (2005, 09). Kein kompletter Baustopp zur Fußball-WM 2006 in Berlin. DIE WELT. Berlin. Retrieved from http://www.welt.de/print-welt/article165100/Kein-kompletter-Baustopp-zur-Fussball-WM-2006-in-Berlin.html

Beckmann, K., Derksen, D., Haesecke-Diesing, R., Leitner, F., 2013. Field Station Berlin : geheime Abh   rstation auf dem Teufelsberg.

Behling, K., Jüttemann, A., Hodgson, S., 2012. Berlin Teufelsberg outpost in the middle of enemy territory. Berlin Story Verlag.

Behrens, P., Fiedler-Bender, G., Häfchen, H., & Pfalzgalerie Kaiserslautern. (1993). Peter Behrens, Berlin Alexanderplatz : Pläne, Zeichnungen und Photographien zum Wettewerb und der Bebauung, 1929-1932. Kaiserslautern: Die Pfalzgalerie.

Berger, A. (2006). Drosscape: Wasting land in urban America. New York: Princeton Architectural Press.

Berliner Morgenpost. (2009, February 20). Klaus Wowereit alone has a sequel. Berlin. Retrieved from http://www.morgenpost.de/berlin/article1026808/Klaus-Wowereits-Alleingang-hat-ein-Nachspiel.html

Berliner Morgenpost. (2014, March 26). Land Berlin kauft Spreepark im Plänterwald. Berlin. Retrieved from http://www.morgenpost.de/berlin-aktuell/article126189924/Land-Berlin-kauft-Spreepark-im-Plaenterwald.html

Berliner Spreepark. (2014a, April 10). 40 jahre rummel im plaenterwald fuehrungen. Retrieved from http://www.berliner-spreepark.de/40_jahre_rummel_im_plaenterwald_fuehrungen.html

Berliner Spreepark. (2014b, November 8). Großbrand im Spreepark! Retrieved from http://www.berliner-spreepark.de/aktuelles/142-grossbrand-im-spreepark

Berlin Today. (2013). Press and information office of the federal state of berlin.

Bezirksamt Treptow-Köpenick. (2002, September 4). Adlershof Projekt. Senatsverwaltung für Stadtentwicklung und Umwelt. Retrieved from http://www.stadtentwicklung.berlin.de/natur_gruen/naturschutz/schutzgebiete/de/nsg/nsg35.shtml#tafeln

Bolz, L. (1951). Von deutschem Bauen; Reden und Aufsätze. (Author, Trans.). [Berlin: Verlag der Nation.

Buchanan, J. M. (1965). An economic theory of clubs. Economica, 1–14.

Bundtrock, T., Reichelt, T., & Dassler, S. (2012, 10). 20-Jähriger stirbt nach brutalem Angriff am Alexanderplatz. Der Tagesspiegel. Berlin. Retrieved from http://www.tagesspiegel.de/berlin/mordkommission-ermittelt-20-jaehriger-stirbt-nach-brutalem-angriff-am-alexanderplatz/7253442.html

BVG. (2014, March 30). The Berlin underground. Retrieved from http://www.bvg.de/index.php/en/17103/name/Underground.html

Enserink, B. (2010). Policy analysis of multi-actor systems. The Hague: Lemma.

Esping-Andersen, G. (1990). The three worlds of welfare capitalism. Princeton, N.J.: Princeton University Press.

Esping-Andersen, G., & United Nations Research Institute for Social Development. (1996). Welfare states in transition national adaptations in global economies. Retrieved from http://site.ebrary.com/id/10369716

Eurostat. (2014, January 1). Population in europe. Eurostat. Retrieved from http://ec.europa.eu/eurostat/tgm/graph.do?tab=graph&plugin=1&pcode=tps00001&language=en&toolbox=data

Faludi, A., & Valk, A. van der. (1994). Rule and order : Dutch planning doctrine in the twentieth century. Dordrecht; Boston: Kluwer Academic Publishers.

Fülling, T. (2007, 05). Alexanderplatz wird zur Einkaufswelt. DIE WELT. Berlin. Retrieved from http://www.welt.de/regionales/berlin/article894791/Alexanderplatz-wird-zur-Einkaufswelt.html

George, R. V. (1997). A procedural explanation for contemporary urban design. Journal of Urban Design, 2(2), 143–161.

Harvey, D. (2007). Neoliberalism as creative destruction. Peace Research Abstracts Journal., 44(3), 21.

Jessop, B. (2004). Multi-level governance and multi-level metagovernance. Multi-Level Governance, 49–74.

Jochheim, G. (2006). Der Berliner Alexanderplatz. Berlin: Links.

Klosterman, R. E. (1985). Arguments for and against planning. Town Planning Review, 56(1), 5.

Litschko, K. (2014, October 19). Volksbegehren gegen Tempelhof-Bebauung. Taz. Retrieved from http://taz.de/taz-Serie-Schillerkiez-Buergerprotest/!80255/

Lynch, K. (1960). The image of the city. Cambridge, Mass.: MIT Press.

Lynch, K. (1981). A theory of good city form. Cambridge, Mass.: MIT Press.

MacGregor, N. (n.d.). Bismark the Blacksmith [Online stream]. Retrieved from http://www.bbc.co.uk/podcasts/series/germany

Mazuhn, H. (2006, July 24). Geschichten aus dem Plänterwald. Der Tagesspiegel. Berlin. Retrieved from http://www.tagesspiegel.de/berlin/geschichten-aus-dem-plaenterwald/733556.html

Oltermann, P. (2014, June 6). Cameron's stance on EU sparks unusual candour from German politicians. The Guardian. Retrieved from http://www.theguardian.com/world/2014/jun/06/david-cameron-european-union-german-juncker

Pahl-Weber, E., & Henckel, D. (2008). The planning system and planning terms in Germany : a glossary. Hannover: Akademie für Raumforschung und Landesplanung.

Parliament, the state government, and the boroughs. (2014). Press and information office of the federal state of berlin. Retrieved from http://www.berlin.de/berlin-im-ueberblick/politik/verwaltung.en.html

Peck, J., & Tickell, A. (2002). Neoliberalizing Space. In N. Brenner & N. Theodore (Eds.), (Vol. 34,3, pp. 380–404). Presented at the Spaces of neoliberalism : urban restructuring in North America and Western Europe, Blackwell.

Pellegrini, P., Viganó, Paola.,. (2006). Comment vivre ensemble : prototypes of idiorrhythmical conglomerates and shared spaces. Roma: Officina.

Pierson, P. (2001). The new politics of the welfare state.

Ralph, P., & Wand, Y. (2009). A Proposal for a Formal Definition of the Design Concept.

Reddig, E. (2007). Masterplan (Januar 2004). Retrieved from http://www.pro-plaenterwald.de/info/planverfahren.htm

Rhodes, R. A. W. (1996). The new governance: governing without government1. Political Studies, 44(4), 652–667.

Rocco de Campos Pereira, R. (2013). Why governance will make urban design and planning better: Dealing with the communicative turn in urban planning and design. Presented at the NUL-New Urban Languages Conference Proceedings: Re-imaging the City after the Knowledge Based Turn, Milan, Italy, 19-21 June 2013; Planum: the Journal of Urbanism, 2 (27), 2013, Planum Association.

RonaldV. (2012, October 28). Berlin-Johannistal. Retrieved from http://www.ronaldv.nl/abandoned/airfields/ge/Berlin/index.html#Johannisthal

Schicketanz, S. (2009, January 13). Babelsberg will in Tempelhof landen. Retrieved from https://web.archive.org/web/20090113010341/http://www.pnn.de/Pubs/nachrichten/pageviewer.asp?TextID=16161

Schön, P. (2005). Territorial Cohesion in Europe? Planning Theory & Practice, 6(3), 389–400.

Schröder, T. (2007). Hauptstadt Berlin, 15 Jahre Entwicklungsmaßnahme: The capital city of Berlin-15 years of development measure. Berlin Senatsverwaltung Stadtentwicklung.

Senatsverwaltung für Stadtentwicklung und Umwelt Berlin. (2014, January 23). Mobilität der Stadt:

Kenndaten zur Mobilität. Retrieved from http://www.stadtentwicklung.berlin.de/verkehr/politik_planung/zahlen_fakten/download/Mobilitaet_dt_Kap-1-2.pdf

Stoker, G. (1998). Governance as theory: five propositions. International Social Science Journal, 50(155), 17–28.

Tempelhofer Freiheit. (2012, May 14). History of tempelhofer freiheit. Retrieved from http://www.thf-berlin.de/nc/en/about-tempelhofer-freiheit/history/chronik/?page=3

The World Bank. (2013). World Development Indicators. The World Bank. Retrieved from http://data.worldbank.org/indicator/NY.GDP.MKTP.CD?order=wbapi_data_value_2013+wbapi_data_value+wbapi_data_value-last&sort=desc

Trancik, R., ,. (1986). Finding lost space : theories of urban design. New York: Van Nostrand Reinhold.

Van Lessen, C. (2008, 08). Die Riesen kommen kleckerweise. Der Tagesspiegel. Berlin. Retrieved from http://www.tagesspiegel.de/berlin/alexanderplatz-die-riesen-kommen-kleckerweise/1308972.html

Van Nes, A. (2011). Space syntax in urban studies – an introduction. TU Delft.

Viganò, P., & Pellegrini, P. (2006). Comment vivre ensemble: prototypes of idiorrhythmical conglomerates and shared spaces (Vol. 3). Officina.

Wehrmeyer, S. (2010, October 31). a mapnificent world. Retrieved from http://blog.stefanwehrmeyer.com/post/1448498820/a-mapnificent-world

Williams, J. A. (2008). Berlin since the wall's end : shaping society and memory in the German metropolis since 1989. Newcastle: Cambridge Scholars Pub.

Yin, R. K. (2003). Case study research : design and methods. Thousand Oaks, Calif.: Sage Publications.

Apendix 1:
P2 graduation article

Identifying Lost Space

The relationship between Planning and Political regimes

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Abstract – Because of changes in the city not every space is influenced the same, some improve some decline and some are not affected. If a space declines too much it will become a void, a lost space. Lost spaces are a problem because they can divide neighbourhoods and disturb the social network that is in place. Therefore lost spaces are part of the debate on public goods, about what the government should and shouldn't plan and develop for.

Since the debate on public goods is about the core of the urban planning and design debates this article starts with the theory behind the public goods and lost space, in order to build upon these when creating a framework on how to address these spaces.

A part of the framework is identifying these spaces, which is a difficult task when translating abstract scientific terms into identifiable spatial characteristics. A method was created to help this translation. Explaining the method will be the core of this article.

To finalize the creation of a new method, it should be tested. To test this method a case study is to show how the method works and what goes into using this method.

Key words – Lost space, Public goods, Strategic urban projects, Political regimes

1 Introduction

De-industrialisation, political and economic changes have a major impact on European cities in the last decades. The changes have and will influence the way cities look and develop. Because of these changes in the cities, lost spaces started to exist in bigger and more frequent quantity. Due to this lost space barriers and voids start to exist and fragment the urban fabric. This problem starts with the disappearing use and responsibility of space and quickly develops in a social and political problem. Neighbourhoods can fall apart and this can disturb the flow of social connections. This can create a negative atmosphere and the neighbourhood might go into a negative spiral of social and economic problems. Lost spaces are part of the debate on public goods, what should the government plan and develop for and what should it leave for the 'market'?

This article is going to be part of the literature research for the graduation project Political Lost Space. Results will be used as a description of the created method used in order to measure the public good status of an area. There is a spectrum, an 'amount' of how much a space is a public good, of which lost space is one. The method is based on literature research that will be presented first before going into more details about the method.

2 Literature Review

In order to explain the method that has been created to measure public goods, the theoretical background is explained first. The theoretical background is based on two parts. Firstly it is based on the academic literature on public goods, about the role of the government in planning and development. Secondly it is based on lost spaces or voids that are part of the downfall of private development.

2.1 Public goods

Public goods is the name for goods that "can be enjoyed simultaneously by more than one person." (Klosterman, 1985, pp. 7–8) Additionally public goods "are difficult to assign a well-defined property rights to" (Ibid) this means that it is difficult to define the value for a single consumer and or restrict the access to this good. Examples for this can be "television broadcasts and a healthy and pleasant environment." (Ibid) The theory is closely linked with the debate about what the government should and shouldn't plan for, this debate was restarted with the transition from the welfare state into neo-liberalism.

Public goods are very important in urban planning for of a couple of factors. The first factor is in economics called the `spill over effect´ This means that when something's status changes its surroundings will be influenced (Klosterman, 1985, p. 8) by it. An urbanism example could be the negative effects on a neighbourhood when a certain street gets a bad reputation. This effect is often used as an argument why the government should invest in a neighbourhood , while the market doesn't see any potential in the location. By investing in a project the negative spiral could be stopped and turned into a positive influence on its surroundings, benefitting its surroundings and thereby attract more investments from private parties. (Ibid)]

A second factor is the prisoner's dilemma or free riders problem". These terms are used to describe the problem that contains two parts. The first part is when private parties "use the pursuit of their own interests" (Klosterman, 1985, p. 10) that leads to a negative effect on the society. The second part is when parties use the "public goods for their own good and don't contribute to its creation." (Ibid) An urbanism example could be a private party that will run an area into the ground for personal gain when knowing that the government will clean up the area that will benefit the private party later on.

The third factor in the public goods definition is the perception of a space. In An economic theory of club goods J. Buchanan describes the phenomena of the perception of space, the figure below shows a short summary of the theory.

	Public	Private
Closed off	Perceived private	Private
Non-Closed off	Public	Perceived public

Figure 1 | Perception of space (by Author based on James Buchanan's Club theory)

Defining a space as public or private depends on a number of factors, the main factor is the ability to close off an area. The figure above shows that two out of the four combinations are used as public space and that one even though it is public is perceived as private space. The non-closed off spaces are always felt as public and the closed off public areas are in a grey area that people need to discover in order for it to be perceived public. (Buchanan, 1965)

In general the literature on public goods consists of two sides, for and against large scale governmental planning. These sides are generally linked towards either the pro-welfare state policies or they are linked with the neo-liberal policies. Both sides have two main arguments that characterize the debate.

The side linked to the welfare state first argument is that public goods make it important for the government to plan and develop. Because it is about public goods, "something that concerns us all" (Klosterman, 1985, p. 67) the government should be in charge of providing and maintaining these types of development. The second argument is that phenomena like the prisoner's dilemma create an "impossible position for investors and that the government needs to help out" (Klosterman, 1985, p. 68) in order to create a positive economic climate.

The other side, linked to the neo-liberal policies, uses two arguments that are more focused on the free 'market' principles. The first argument that is used is "the market should be able to regulate itself." (Ibid) The second argument that is used is the fact that the government "should be the regulator" (Klosterman, 1985, p. 62) and make sure that no party can dominate the market. In order to do so the government shouldn't be a party on the market itself.

2.2 Lost space

Part of the public goods dissuasion is the theory of lost space. Lost space theory is used to describe the theories that are about the concepts of voids, lost paces, negative spaces etc. The theory and the connected debate started in the 1980s about "underused and deteriorating spaces." (Trancik, 1986, p. 2) These spaces can "provide exceptional opportunities to reshape an urban centre" (Ibid), so that downtown areas are being revitalized and "counteract urban sprawl and suburbanization" (Ibid)

Trancik defines lost space as the "undesirable urban areas that are in need of redesign" (Trancik, 1986, pp. 3–4) making no "positive contribution to the surroundings or users." (Ibid) "They are ill-defined, without measurable boundaries and fail to connect elements in a coherent way." (Ibid) On the other hand, they offer "the opportunity for rediscovering the many hidden resources in our cities." (Ibid)

In his book Finding lost space Trancik states that there are five main categories of lost space: (1) an increased dependence on the automobile; (2) the attitude of architects of the modern movement toward open space; (3) zoning and land-use policies of the urban-renewal period that divided the city; (4) an unwillingness on the part of contemporary institutions- public and private- to assume responsibility for the public urban environment; and (5) and abandonment of industrial, military, or transportation sites in the inner core of the city. (Trancik, 1986)

Where Trancik goes into great detail about what lost space is, Allen Berger contributes to the discussion in a more fluid way. He connects the spatial categories that Trancik describes and the social systems that are present in the city. "Cities are not static objects," (Berger, 2006, p. 203) but are an ever changing collection that are marked by "continuous transformation of buildings and landscapes." (Ibid) These "transitions manifestations" (Ibid) are what makes a city feel alive.

Berger insists furthermore that the future of every space and in particular lost space lays in the "interaction of human agency" (Berger, 2006, p. 211) and will be derived from "transferring and sharing knowledge." (Ibid) Therefore he sees that designers should "resist closure and univalent expertise" (Ibid) and should always draw from local information sources while designing.

Additionally "the inescapable entropic counterpart to evolution and urbanization" (Berger, 2006, p. 214), is far away from being a "failure and it will show previous success" (Ibid) and a design should challenge this for its continuance. There is hardly a need "to emphasize the increasingly amount of lost space" (Ibid) we can find in the real urban world.

To make the discussion of lost space more quantifiable Paula Viganò introduced the word porosity into the discussion. With this term she means the percentage of voids in the urban and social networks among others. These voids have not only big implications on density but also the "sustainability; ecological, social and economic development and decisions" (Pellegrini, 2006, p. 336) that we have going on in our cities. Porosity opens at the "conclusion of an economic or social cycle, following on from a breakage in the modes of use" (Pellegrini, 2006, p. 343) of space and enables the rethinking and redevelopment of cities.

2.3 Conclusions

To conclude the public goods literature research, public goods are used by everyone and it is hard to define how much someone uses of it. There are different amounts of how much something is a public good, a sort of gradient. These can be measured by economic numbers, development and by public perception. Lost space is part of the negative side of public goods and becomes an important argument in the debate about the role of the government in planning.

3 Analytical research method to measure public goods

The theory, described above, will form the framework of the graduation project needs to be translated into a usable tool to uncover the necessary information to assess the situation on a specific location, therefore there is a need for a tailor made research method that will be used during the analysis of the case studies.

Lost space is a part of public goods and is connected to many different factors contributing to it, as stated before. In order to be able to do research on a specific location there needs to be quantifiable data to measure the changes instead of statements like "it improved" or "it got worse". Like any other space factors like size; ownership; accessibility; usage or public awareness changes over time are important for lost space as part of public goods. To investigate the public goods and in particular lost space the ground value development around the location and the public appreciation will be investigated.

When looking at the ground value over time it will show the trends of how much the area is valued by the 'market' as defined by the neo-liberalism. An average land value called 'Bodenrichtwert' in German will be measured in $€m^2$ based on the official Berlin public information system. An example for this can be seen below in which the price per m^2 after the fall of the wall on five prominent locations is illustrated.
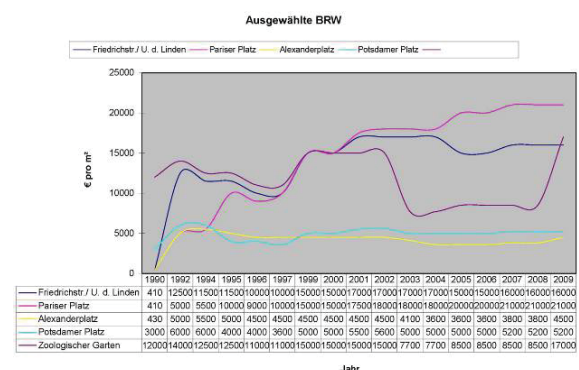

Figure 2 | Bodenrichtwert example (by Real Estate department of the municipality of Berlin)

The development around the location will tell something about the willingness of investors, from the 'market,' to take risks and the need that is

perceived by the government to invest into an area. Development will be measured in investments made in the location and its immediate surroundings.

Public appreciation is important because the public is in general not often willing or in the position to invest into a location but still has a massive influence on the location. This factor is harder to quantify but there will be a research in the media coverage of an area. Due to a limited amount of time for this project will this part not be very in-depth. Nevertheless conclusions can be drawn from a general overview of the news coverage.
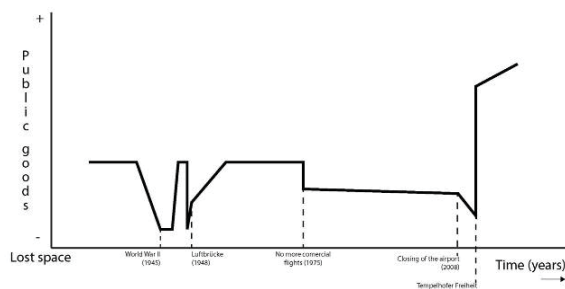
Figure 3 | Public goods changes over time of Tempelhof airport (by author)

These individual factors are interesting to look at but when they are laid on an identical time scale the factors will show positive and negative trends. These trends will possibly show patterns of a positive or negative influence on the location in a certain time period, for example in the case of Templhof the period after the closing of the airport, the area started to decline. The figure above shows a diagram that is a collection of all the factors and therefor can show the level of public good that an area is trough time.

# 4 Testing the public goods measure method

In order to start using the method that is described above it is important that it is tested and used with an example, this way the method will become familiar. It will also possibly change the method because of logical steps that where thought of during the development of the method might not work that well while using it.

4.1 Introduction of Alexanderplatz

For the graduation project that this article is linked to the method is used for many cases, but for testing it only one of these cases will be used. The case of Alexanderplaz, in Berlin will be used in the following chapter.

Alexanderplatz is a well-known Berlin square in the former East Berlin area. The square is one of the big touristic sights in Berlin with world time clock and

the skyscrapers and the view of the 'Fernsehturm' are all part of the area's identity. The square is officially only located between the buildings, the smaller area in the figure below. For many people the Alexanderplatz is more an area than a square that stretches all the way from Alexanderstraße to Grontardstraße and from the Grunerstraße all the way Karl-Liebknecht-Straße, see the bigger area in figure 4.
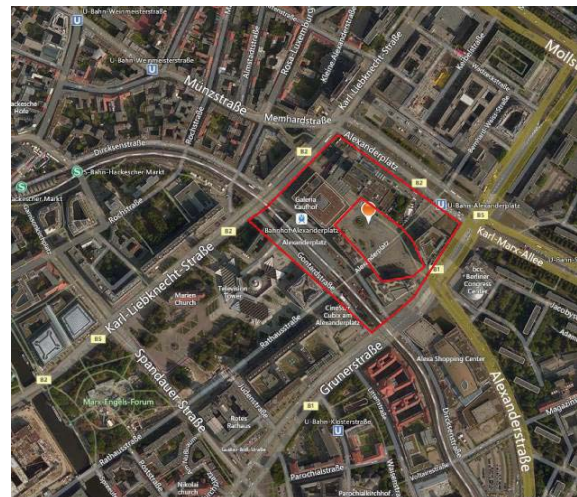
Figure 4 | Alexanderplatz in its surroundings (map by Bing maps)

4.2 Historical overview

To get a better understanding of an area a historical overview can show the ways an area has developed over time. Therefore there will be a short overview over the historical redevelopment of Alexanderplatz in the following chapter.

The neighbourhood surrounding the Alexanderplatz was founded after the redevelopment that followed the thirty years´ war in the 17th century. The square, totally unrecognizable with today's square, itself was used as a "market square were mostly cattle was sold". (Behrens, Fiedler-Bender, Häfchen, & Pfalzgalerie Kaiserslautern., 1993) Afterwards it went through multiple faces of redevelopment until it became a parade square in the 18th century. In 1805 the square was renamed after the Russian czar Alexander the first, in his honour. During the early 20th century the area starts to form more like it is today with the construction of the station and the street layout. (Jochheim, 2006, p. 107)

In the Second World War during the battle of Berlin, the area surrounding Alexanderplatz was heavily fought for. With one of the biggest air-raid shelters in the city and the metro tunnels where used as barricades for the German 'Wehrmacht' to make a last stand. (Jochheim, 2006, p. 109) After the war the area started slowly to be redeveloped but the real improvement started in 1958 after the DDR

government decided to create an Eastern axis along the Stalin Allee, now the Karl-Marx-Allee. The area surrounding the square was redeveloped in the 1960s following the '16 Grundsätze des Städtebaus' created by Kurt W. Leucht. The DDR government issued these 16 principles that should lead to an urban planning and architecture that would be conform to socialism and communism principles. Many of the points define how to create a good economy and a healthy city and therefore show the strength of the communistic state. For example point 3 "Cities are built for industry by industry. Growth of cities is defined by the 'forming factors': industry; government institutions and cultural sites." (Bolz, 1951, p. 36) or point 11 "A healthy city is in need of the right amount of light and air. Not only density and direction but also transportation is important factors in this." (Ibid, p 45) This design formed the basis of the Alexanderplatz as it is known today.

After the redevelopment was completed in 1969 the square was used for many international events to prove the might of the communistic party. Until on the 4th of November 1989, the day that the square was used by protestors that wanted more freedom and less power for the SED, the Germany communistic party. Five days later the wall fell and the square became a relic of the past. The square reminded people of the DDR days and their policies, therefore an international competition was created in 1993 to start the redevelopment. This development lead to a "construction boom" (Jochheim, 2006, p. 181) that has transformed most of the buildings surrounding the square. Plans were made for 13 150+ meters high towers but only "8 buildings have gotten a permit" (van Lessen, 2008) and "three of them are completely cancelled." (Fülling, 2007) Since 2007 redevelopment of buildings has been starting to finish, with the opening of the Alexa Mall and the centre as the first two redevelopments to finish. Since then a new cinema open next to the station and further development, like a shopping area and huge retail shops have been started.

4.3 Testing the method

Like stated before public goods is a vague term and hard to quantify, therefore research needs to be done about the ground value; development around the location and the public appreciation will be investigated. This will be explained in the following chapter.

4.3.1 Land value

The city of Berlin has a system called GAA or Boris Online, in which data is made publicly available. This system is very handy when researching the land value. The available data dates back until the fall of the wall. Since Alexanderplatz was East Germany

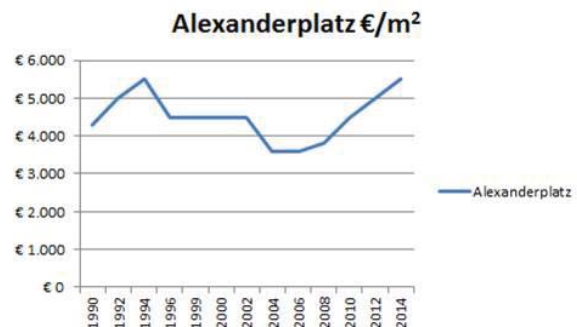before there are no public data about land value from the DDR times available.

Figure 5 | Land value Alexanderplatz area (by Author)

Figure two shows the land value through time, starting with a sign of confidence from the 'market' after the announcement of the development competition in 1993 with an upward trend. Then after a year of stagnation the value started to drop, the first drop between 1994 and 1996 is because of the lack of improvements. The second drop is dated between 2002-2004 in which there was a big delay in the planning when the world cup was hosted in Germany and "much of the construction work was delayed because of demanding requests of construction labour." (APU, 2005) Finally the land value starts to increase when the first buildings are finished, this upward trend is believed to continue since many new developments are happening right now surrounding the area.

4.3.2 Development trough time

As illustrated before many plans have been made for the development of the area around Alexanderplatz. The figure below shows an overview of the most important and influential plans over time.
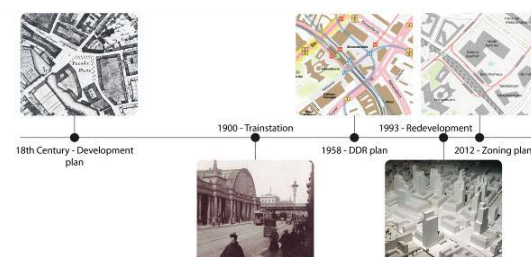
Figure 6 | Timeline of the most important plans for Alexanderplatz (by Author)

First is the map of the area around the end of the 18th century. The second picture is of the station after the development that happened at the beginning of the 20th century. The third plan is the DDR development plan of the 1960s. The next one is a picture of a model of the 1993 development plan with high-rise development. The last plan is the current development plan that is aimed to add the more economical improvement to the area.

4.3.3 The public appreciation

Since Alexanderplatz is such a well-known place there has been much coverage in the media of it. This next chapter will be focus on some of this coverage.

Figure 7 | Barrikadenkampf Alexanderplatz 1848 (by Klaus Günzel)

Two of the earliest pieces of media are paintings and prints that cover events that occurred in the area. A good example is the painting of the fighting, see figure 6, that happened during the March revolution in 1848. It is a painting, in the German romantic style, which shows the events that happened in that time. There are many paintings that can be found in some of Berlin's museums.

During the 'wild' 1920s and 1930s many literature was written in Berlin and much was written about Alexanderplatz. One of the iconic books was Berlin Alexanderplatz by A. Döblin. This book is considered one of the most important books of that time and describes very well the area during the early 20th century. There was also a (West) German television adaptation of the book made by the famous German director Rainer W. Fassbinder.

The complexity of Alexanderplatz and where the square actually ends is also discussed in many urban and architectonic books. One of the most famous ones is the '5 Plätze - 1 Name. Der Berliner Alexanderplatz' by Alexander Schug.

As stated before Alexanderplatz was the site on the 4th of November 1989 where the final protests against the DDR government where held. This makes it an important location in many documentaries about the last period of the DDR giving the square an important political (historical) dimension.

Alexanderplatz is also featured in many German and Hollywood movies that are set in Berlin. For example the 2003 German movie 'Goodbye Lenin' about the fall of the DDR or the 2004 Hollywood

action movie 'The Bourne Supremacy' that uses Alexanderplatz as the place where the CIA has it European headquarters.

Much is written in the papers about what is happening in and around Alexanderplatz. Not many of these events are influencing the public opinion but sometimes a single event does. In October 2012 a young adult with a Thai background got killed in front of a night club after an altercation between young adults with Thai and Turkish backgrounds. The altercation leads to a massive media coverage of violence between minorities. The incident also influences the way the public perceives the area "as this was one of many violent incidents going to the clubs surrounding Alexanderplatz." (Bundtrock, Reichelt, & Dassler, 2012)

And lastly because Alexanderplatz is so well-known it is often used as a location of research. The project 'Verlust der Nacht' for example uses the Alexanderplatz area to show how much light pollution is at the location by making a picture every five minutes for the duration of a whole night.

4.4 Location analysis conclusions

The previous three chapters showed the conclusions of the research in order to quantify public goods. While the development around the location and the media attention are used to define when the change in trends of the public goods are, is the factor of the land value a number that is used to determine the strength of its changes.
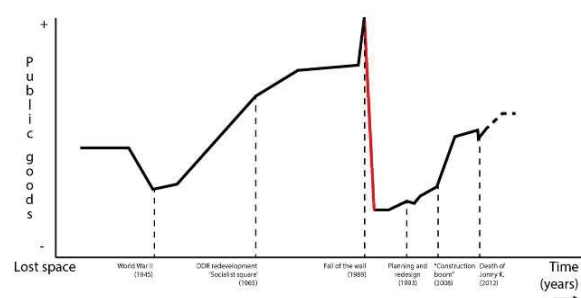
Figure 8 | Public goods factor of Alexanderplatz (by Author)

After the Second World War the rebuilding boosts the location in the spotlight with the communistic 'Billboard' planning. The area becomes an important public space to show the might of DDR. When the wall fell the area became a relic of the past that nobody wanted to be associated with. In the period afterwards the redevelopment had some setbacks but it was improving. Because of the commercial functions the area will likely stagnate because of the lack of public function and the room for improvement.

5 Conclusions

In the debate about what the role of the government is in planning there has been much attention about economical and even social arguments. Continuing on this debate there has also been much talk about who is in charge of improving the quality of public space. Much has been written about public goods and the lost space part of it but not much has been written about identifying these spaces and how to tackle the problems specific about lost spaces.

This article proposed a method and tested this method with a case study to identify the 'amount' of how much public good an area is at a certain point in time. In the case of Alexanderplatz it shows that the area has been a positive public good in general but at certain points in time due to the change of political and planning regimes the area was temporarily a lost space. This article is part of a graduation project that has the aim to discover lost spaces and in the end lead to a proposal on how to intervene when an area is confirmed to be a lost space.

6 Literature references

APU. (2005, 09). Kein kompletter Baustopp zur Fußball-WM 2006 in Berlin. *DIE WELT*. Berlin. Retrieved January 6, 2015 from http://www.welt.de/print-welt/article165100/Kein-kompletter-Baustopp-zur-Fussball-WM-2006-in-Berlin.html

Behrens, P., Fiedler-Bender, G., Häfchen, H., & Pfalzgalerie Kaiserslautern. (1993). *Peter Behrens, Berlin Alexanderplatz : Pläne, Zeichnungen und Photographien zum Wettewerb und der Bebauung, 1929-1932*. Kaiserslautern: Die Pfalzgalerie.

Berger, A. (2006). *Drosscape: Wasting land in urban America*. New York: Princeton Architectural Press.

Bolz, L. (1951). *Von deutschem Bauen; Reden und Aufsätze.* (Author, Trans.). [Berlin: Verlag der Nation.

Buchanan, J. M. (1965). An economic theory of clubs. *Economica*, 1–14.

Bundtrock, T., Reichelt, T., & Dassler, S. (2012, 10). 20-Jähriger stirbt nach brutalem Angriff am Alexanderplatz. *Der Tagesspiegel*. Berlin. Retrieved January 5, 2015, from http://www.tagesspiegel.de/berlin/mordkommission-ermittelt-20-jaehriger-stirbt-nach-brutalem-angriff-am-alexanderplatz/7253442.html

Fülling, T. (2007, 05). Alexanderplatz wird zur Einkaufswelt. *DIE WELT*. Berlin. Retrieved January 6, 2015, from http://www.welt.de/regionales/berlin/article894791/Alexanderplatz-wird-zur-Einkaufswelt.html

Jochheim, G. (2006). *Der Berliner Alexanderplatz*. Berlin: Links.

Klosterman, R. E. (1985). Arguments for and against planning. *Town Planning Review*, *56*(1), 5.

Pellegrini, P., Viganó, Paola.,. (2006). *Comment vivre ensemble : prototypes of idiorrhythmical conglomerates and shared spaces*. Roma: Officina.

Trancik, R., ,. (1986). *Finding lost space : theories of urban design*. New York: Van Nostrand Reinhold.

Van Lessen, C. (2008, 08). Die Riesen kommen kleckerweise. *Der Tagesspielel*. Berlin. Retrieved January 5, 2015, from http://www.tagesspiegel.de/berlin/alexanderplatz-die-riesen-kommen-kleckerweise/1308972.html

Apendix 2:
Ten exploretory case studies

2. Berliner Stadtschloss / Palast der Republik

The Berliner Stadtschloss / Palast der Republik area is located in the heart of Berlin on Spree Island, Figure 6. The island is the historical heart of Berlin including the palace where the kings of Prussia, Brandenburg and the German emperors ruled.

Figure 6 | location of the site in Berlin (by author)

Figure 7 | Berliner Stadtschloss (author unkown)

Figure 8 | Palast der Republik (by Dietmar Rabich)

Historical overview

The original Berliner Stadtschloss was built in the 15th century as the residence palace for the king of Brandenburg. The castle was positioned on an island on the spree river in order to use the geographical advantages of the river for defense as well as trade. The palace "expended several time through history with each expansion in its own architectural style". (Rothfels, 1961, p. 318)

During the Second World War around the palace there was heavy fighting between the Russians and the Germans. This fighting destroyed much of the palace. After the war the Spree Island was part of the Soviet sector until this division of the city was reshuffled in 1948. The island and its surroundings became part of the SED led East Berlin.

In 1949 the palace was used as a film location, for a soviet movie featuring the battle of Berlin, by this "more parts of the palace were destroyed for the movie." (Petras, 1992, p. 110) In 1950 the palace was completely torn down because of a declaration by the new communistic government stating an unsafety of the building. Furthermore it was not considered appropriate by the new governmental regime.

The space that was set free by the destruction of the palace was used as a parade plaza. Until the construction of the Palast der Republik started in 1973. This building was supposed to be a new people's hall for the communistic government. Until the fall of the Berlin wall was this building the symbol of the DDR government. (Holfelder, 2008, p. 196)

After the fall of the wall the Palast der Republik became one of the major relics that were connected to East Germany's history. Soon after the reunification the building was closed because of asbestos contamination. Although an extensive renovation was undertaken it was decided that the building should be deconstructed, because it was too expensive to maintain. (Holfelder, 2008, p. 209)

In 2006 the deconstruction started and in 2009 the location on the Spree Island was once again an empty area. This time it was not used for political functions but it became "a temporary park until the start of the reconstruction of the Berlin Stadtschloss started in 2013." (Alexander, 2013) The palace will be housing the Humboldt-forum, a cultural collection that will provide space for museums, learning and assembly facilities inside a reconstructed version of the Stadtschloss. There has been much resistance to the plans by citizens, arguing that the plans are too costly and that the design selection process was not according to the rules. (Guratzsch, 2009)
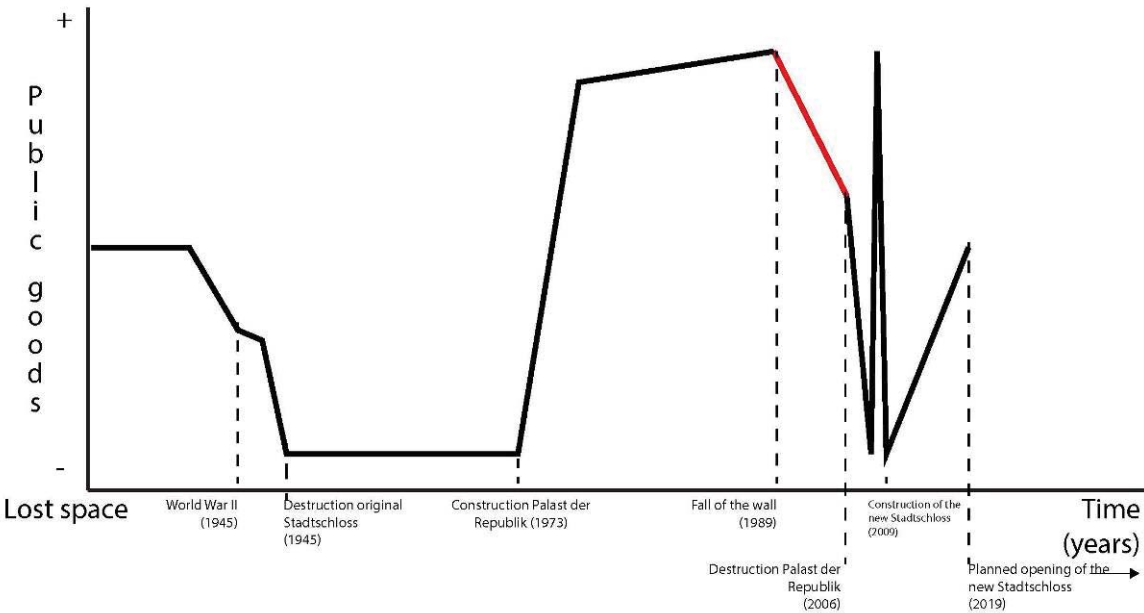
Location analysis conclusions

Figure 9 | Public goods factor of Berliner Stadtschloss / Palast der Republik (by Author)

The case of the Berliner Stadtschloss / Palast der Republik is an example of a temporary lost space by a loss of function. After the Second World War the old palace was damaged and without a function in East Germany therefore it was decided to remove the building. Between the demolition in 1950 and the start of the construction of the Palast der Republik in 1973 the area was not provided with a specific use, therefore it became a lost space. With the construction of the Palast der Republik and its people's hall function it became the symbol for the DDR government. This building was under one regime a public good of the highest order while after the fall of the wall and the change of regime that followed it became a lost space without defined function.

After the reunification it lost its function and because of health issues with asbestos had to be closed. In this period until the end of the demolition the area turned once again into a lost space. Between the demolition and the start of the reconstruction of the Stadtschloss the area was left open without a plan. Citizens could use the area to their own liking, which made it a public good. When the construction started the area lost this status again. With a new building and a public function the future looks might look positive, but the plans have had much public resistance. This leads to a future perspective which holds many uncertainties.

3. Potsdamer Platz

The Potsdamer Platz is a square in Berliner that was situated on the border between East and West Berlin. Its square is a busy transport hub and it was home to the first traffic light in the world. Today it is an economical and transport hotspot.

Figure 11 | Potsdamer Platz (by Norbert Aepli)

Historical overview

Until the division of Berlin the Potsdamer Platz was one of the busiest areas in Europe. Cars, busses and trams used the square to get to the Potsdamer station that connected the inner-city with its surroundings which reflects in the fact that the area was home to the first traffic light in Europe.

During the Second World War the station was bombed and the square had to be closed off because of safety issues. (Meyer-Kronthaler & Kramer, 1998, pp. 228 – 230) The area was reconstructed after the war but with the construction of the Berlin wall in 1961 alongside the square the whole area was abandoned and slowly demolished. Until the fall of the wall the area was an empty space.

After the unification the complete area around the square was transformed into one big construction site. In the following decade many big international and German companies settled around the square. The Sony center is a good example of this, where Sony placed its European headquarters in a building that not only houses offices but also residential and cultural functions in the complex. Even though Sony moved out of the building, the complex legacy is still growing.

Location analysis conclusions
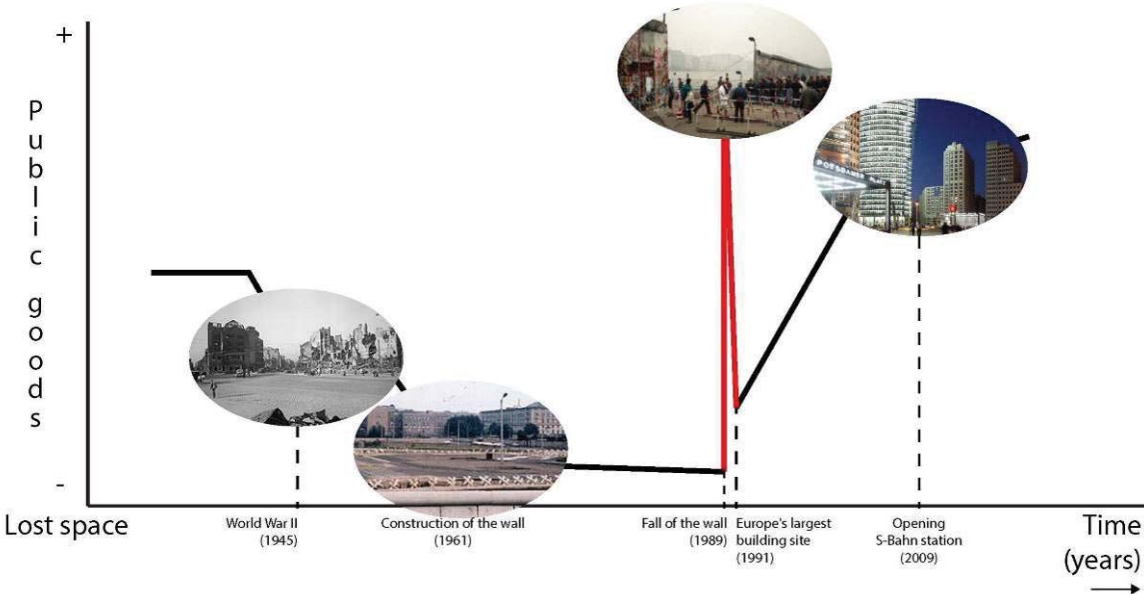
Figure 12 | Public goods factor of Potsdamer Platz (by Author)

The case study of Potsdamer Platz was chosen because it was a cultural square in the 1920s and 1930s. The construction of the Berlin wall had the effect that the square had to be closed, making it a lost space without a function. After the reunification the square opened up and with a highly diverse mixture of cultural facilities, shopping, housing, entrepreneurial and infrastructural investment catapulted it to the same level of importance in Berlin as it had before the Second World War. Therefore does this case study show how a status of an area can be changed from a lost space to an area with highly diverse public goods in less than 20 years.

4. Kaiser Wilhelm Gedächtniskirche / Breitscheidplatz

The Kaiser Wilhelm Gedächtnis-Kirche / Breitscheidplatz area is located at the end of the famous Kurfürstendamm shopping street in the district of Charlottenburg, see Figure 13. The church is a modern complex of which a part is rebuild with parts of the old church that were not destroyed during the Second World War.

Figure 13 | location of the site in Berlin (by author)

Figure 14 | Kaiser Wilhelm Gedächtniskirche (by Alfred Englert)

Figure 15 | Europa Center (by Hans Pul)

Historical overview

The current day Breitscheidplatz was often called "the new West" before the Second World War. Located at the square was the Romanesque Café, a legendary meeting place for artists in that time. (Sawall, 2014, pt. 19.37) During the war the area was bombarded with heavy artillery and not many buildings were left standing at the end of the war.

The memorial church was not only built with the idea to remember the destruction of the former church but furthermore to construct a central point in the area which the commercial functions could not accomplish. By this it was also attempted to increase the attraction of tourists for this area. With this plan it could become one of the centers of West Berlin. (Sawall, 2014, pt. 20.51)

Right after the construction of the church the next important building, the Europa Center, was built in direct proximity. This center was Germany's first shopping mall and it was a big success from the beginning. (Gerlach, 2004, p. 164)

Over the next decades the area was one of the centers of West Berlin and the commercial development around the area kept improving the area. With the unification of Berlin the focus shifted though towards developing the governmental heart of the city. In the last decade new investments were undertaken in the City West though such as the re-development of the Bikini-Haus, a pop-up shopping center standing in between the Zoo and Breitscheidplatz. By this the area could gain a new economic boost. (DPA/SEI, 2014)
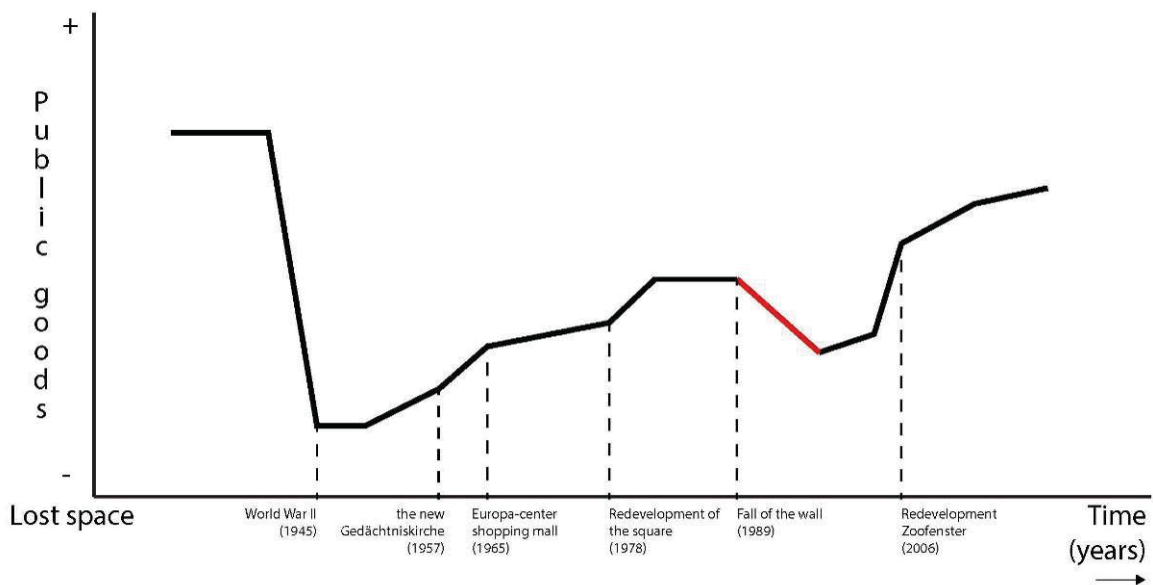
Location analysis conclusions

Figure 16 | Public goods factor of Gedächtnis-Kirche / Breitscheidplatz (by Author)

The Breitscheidplatz next to the Gedächtnis-Kirche was an important part of West Berlin city life, which is the reason for selecting it as a case study. After the Second World War the whole area surrounding the site of the Gedächtnis-Kirche was destroyed or highly damaged. The church was damaged so severely that it was decided to build a new church and use the parts that were still standing as a memorial. The destruction in the area led to voids in the urban tissue which consequently resulted in the area being temporarily a lost spaces, one without a function. Because of a mixture of public and private investment in the area there was a steady increase in the public goods in the following years. Therefore became the square and its surrounding one of the cultural and commercial centers of West Berlin which ended the period of the status as a lost space.

After the Berlin wall fell the area's public and political attention decreased, which is clearly visible in the Bodenrichtwerte of the area. The mentioned increase of attention in the last years, mostly by commercial investors, led to improvements of the public goods in the area again. By this resembles the case the East Berlin case study of Alexanderplatz. It can therefore be seen as the commercial counterpart of the political space on Alexanderplatz.

This case was chosen as a West Berlin example to illustrate what happened to a central square in the same time as the other case studies. Where other cases have a clear ongoing moment in time were the area is a lost space, this area only has this only temporarily after the war.

5. Bahnhof Zoo / Hardenbergplatz

Another important square in West Berlin was the Hardenbergplatz. It is the square in front of Bahnhof Zoo. This was the main station in West Berlin transforming this area into the entrance to Berlin. The area is located in the district of Charlottenburg, see Figure 17.

Figure 18 | Bahnhof Zoo (by Wolfgang Pehlemann, 2007)

Historical overview

The station was built in 1882 as an addition to the S-Bahn system. For the Berlin Olympic games of 1936 the station was redeveloped into a mixture of S-Bahn and regional trains. (Schwalm-Dittfurth & Berliner S-Bahn-Museum, 2011) After the war when the city was divided became the station was one of the only stations in West Berlin which had long distance trains running, with the trains going both to West and East Germany.

During the 1970s and 1980s the surroundings of the station had many problems with drugs and prostitution. The most famous publication about Bahnhof Zoo is the 1979 book *Wir Kinder vom Bahnhof Zoo* and its 1981 movie adaptation *Christiane F.* It portraits the daily life of one young junkie and the problems in the area. With these publications the area gained international fame and it became known to be a shady area. Therefore startet the municipality with the use of police force to remove the people who caused the problems in the end of the 1980s,.

With the fall of the Berlin wall the station lost much of its importance as the only train station in West Berlin. The station and surroundings were developed in a new transport hub during the next decade. When in 2006 the new Berlin central station is opened Bahnhof Zoo lost its importance in

long distance transportation. Many trains are no longer stopping at Bahnhof Zoo which results in fewer passengers.

Location analysis conclusions
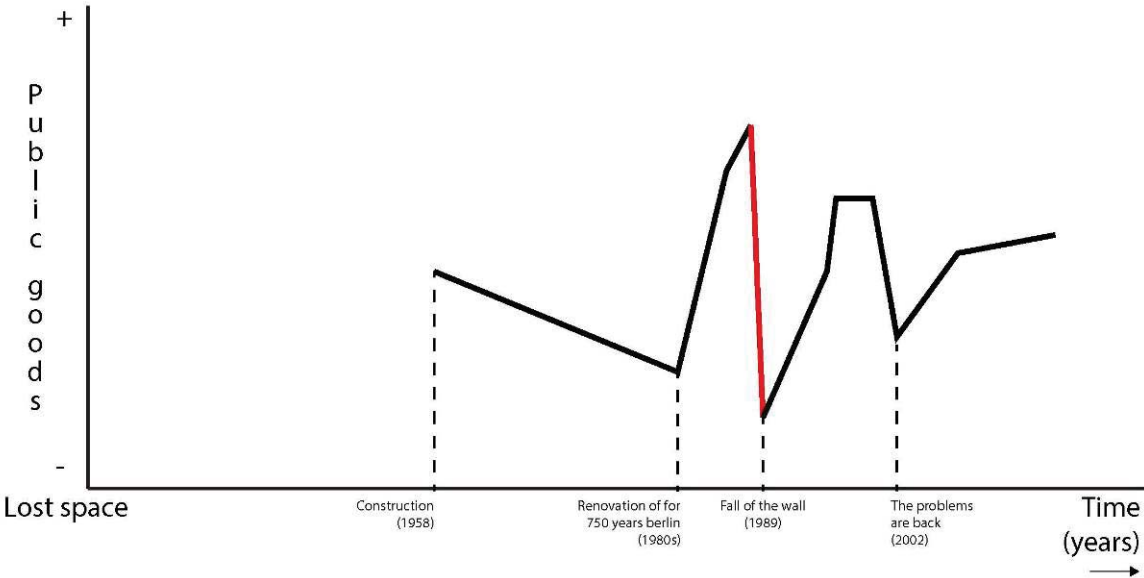
Figure 19 | Public goods factor of Hardenbergplatz / Bahnhof Zoo (by Author)

The Hardenbergplatz in front of Bahnhof Zoo is a good example of lost space by appreciation. Due to the publication of the book *Wir Kinder vom Bahnhof Zoo* and the movie adaptation *Christiane F.*, in which the area was presented as a drugs heaven, even for little children, the surroundings of the station were not highly appreciated. Public investment helped the area out of the status as a lost space, but these only relocated the problems since no social actions were taken to solve the problems of the clientele which was publicly unappreciated there. Therefore the root of the problem of becoming a lost space in the first place was not solved. This investment on the other hand can be understood as first signs of neo-liberalism by trying to improve the city image in order to make it more economically competitive. Because the core of the problem was not taken care of in the early 1980s, there is a recurrence of the former problems so the area begins to deteriorate again. With new public investment the area was improved once again but without going to the roots of the problem there is always the potential to fall back.

6. Warschauer Straße station area

Located on the east side of the famous Oberbaumbrücke lays the Warschauer Straße station. Close to the East side gallery it is the station used by tourist to travel to this famous site as well as the popular district of Friedrichshain in which the area is located see Figure 20.
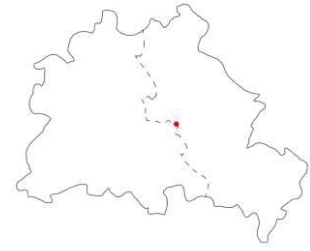
Figure 20 | location of the site in Berlin (by author)

Figure 21 | View from the Warschauer straße bridge (by Author)

Historical overview

Since the completion of the Warschauer straße station in the 1880s the station and the tracks have been used intensively. After the Second World War the area became a border between East and West Berlin. Since most of the tracks belonged to the West Berlin U-Bahn system, with the division and the construction of the Berlin wall this part of the system was cut off from the rest, making it obsolete. (Ulrich Stockhorst, 2013, p. 83) During the following decades the area was cleared out and became a death strip towards the Wall.

Between 1989 and the reopening of the station in 1995 the area underwent a massive redevelopment of the old infrastructure. (Ulrich Stockhorst, 2013, p. 85) Since then the area has gone through several expansions of the infrastructure and big redevelopment along the Spree.

The S-Bahn tracks and the station form a barrier nowadays between the Spree, the East side gallery and the O2 World on one side and the residential neighbourhoods of the district Friedrichshain on the other side. While the Berlin wall used to be on the left side of the picture above, separating the East and West, now the railways separate the touristic developed area from the residential districts on the right.

Location analysis conclusions
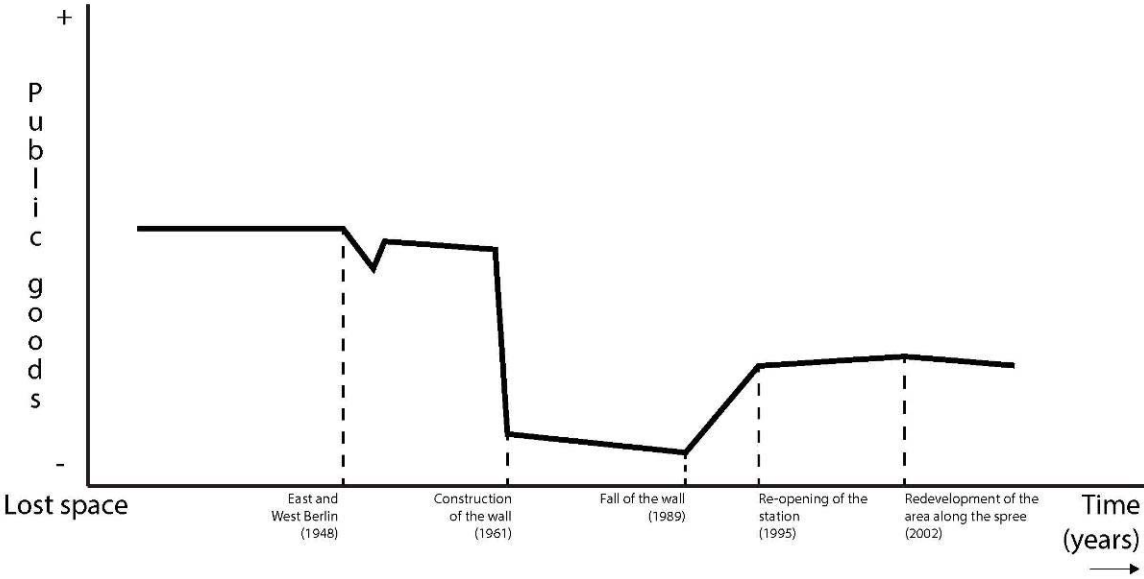
Figure 22 | Public goods factor of Warschauer Straße station area (by Author)

The Warschauer Straße station is an infrastructural lost space but has a history that is connected to the loss of function lost space. During the German division this area was on the border between East and West as a death strip. This meant that everything along the wall needed to be removed and therefore it became a lost space. After the fall of the wall the area was redeveloped and with the opening of the station the station became a transport hub. Because of the increase of traffic and the addition of several tracks the area became an infrastructural lost space. This example shows that solving one type of lost space doesn't mean to solve lost space in general.

7. Märkisches Viertel

All the case studies before are public buildings or squares with its surroundings. Märkische Viertel is a modernistic housing estate area that represents the first of West Berlin densification that was necessary because of limited available space in West Berlin during the German division. The area is located in the district of Reinickendorf, Figure 23

Figure 24 | Berlin Märkisches Viertel (by fotos-aus-der-luft.de)

Historical overview

The project of Märkisches Viertel was located on a undeveloped area of land that was housing people in inadequate conditions, shacks and residential pavilions without any sanitary facilities and electricity. To improve the quality of the housing in this area redevelopment was deemed necessary. (Der Spiegel, 1968)

With the division of Berlin, West Berlin was constrained in space, this brought an enormous challenge the increase in demanded housing. The West Berlin authorities started housing experiments with the Urbanity through density motto. Märkisches Viertel would be the first experiment to be realised. These tenants would be part of "an exciting urban planning experiment" (GESOBAU, 2009, p. 5) in West Berlin. It was designed for roughly 17,000 apartments or 40,000 people." (Ibid) The first tenants moved into the estate in 1964 and the last apartment building was finished in 1974.

After forty years Märkisches Viertel is facing new challenges. The lack of "adequate infrastructure and to little commercial and educational facilities" (Luuk, 1987, p. 103) created a negative image for the area. Without improvements of these problems and with aged buildings and low social standards of living the area has become isolated as a result. The modernistic building style of the project created disconnections in the urban fabric that until now cause social problems in the neighbourhood.

Location analysis conclusions
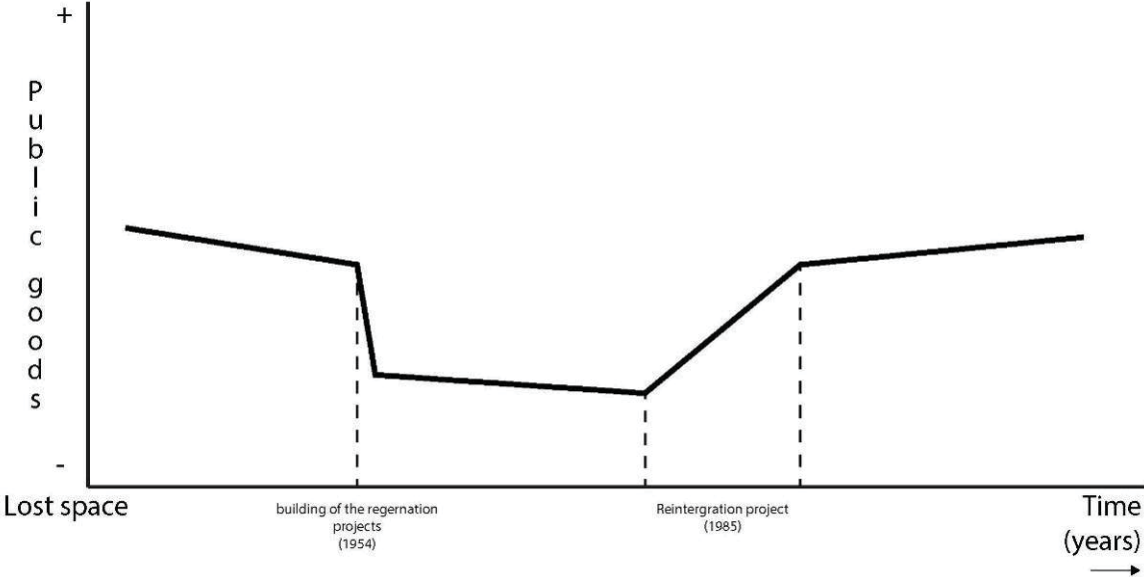
Figure 25 | Public goods factor of Märkisches Viertel (by Author)

The Märkisches Viertel is a two layered lost space. Firstly it is a lost space because of connection problems with its surroundings. The lack of integration with the surrounding urban tissue leads to social and morphological tensions between the area and its surroundings. Lost spaces grew in between the neighbourhood and its surroundings which led to a further isolation of this social housing project. The second layer is the decrease in political attention that the area has been struggling with. The area was developed during the height of the welfare state. After the switch to neo-liberalism all the promised improvements were cancelled due to economic viability concerns. Without a renewed political interest an improvement in this area seems unlikely.

8. Tempelhofer Feld

Located on the south side of the city centre is a 220 hectare big former airport, see Figure 26. The airport is part of Germany's rich aviation history. After the closure of the airport in 2008 it became a city park that opened in 2010.

Figure 26 | | location of the site in Berlin (by author)

Figure 27 | Tempelhofer Feld terminal (by DDP)

Figure 28 | Tempelhofer Feld from the air (by picture-alliance/ ZB/dpa-Zentralbild)

Historical overview

The Tempelhofer Feld is a former airport on the south side of Berlin's inner city. The airport is most famous for the 'Luftbrücke' that was established there during the blockade of West Berlin in 1948 in order to connect West Berlin with West Germany and provide the city with necessary goods. (Tempelhofer Freiheit, 2012, p. 3) Due to innovations in aviation the size of airplanes increased until in the 1970s the airport became too small for the intercontinental flights. From the 1970s onwards the airport was therefore mainly used for cargo and private flights until it was closed down in 2007. (Ibid) This was mainly done because of the construction of a bigger and modern airport in Berlin. The abandoned site and buildings have been part of a large public discussion that even led to a referendum about if the airport should stay open or not in 2008. The local citizens used the old airport as their city park and fought the redevelopment plans in order to keep their park. A second referendum was held in 2011 (Litschko, 2011) about the future of the area. Policy makers had to succumb under the pressure and in the end the area stayed a park instead of becoming a residential development area. Because of this second referendum the Tempelhofer Feld is the school example on citizen participation.

It is rumoured that former major Klaus Wowereit used his power to block development plans for the buildings by leasing the hanger out for two months a year, (Berliner Morgenpost, 2009) while plans were made for a Cold War museum, a technical museum or even a film and television studio to place in the hanger. (Schicketanz, 2009) All these plans were made, but nothing has been of a permanent solution. While the building is limitedly accessible and deteriorating, the Feld itself is open during the day. Especially in the summer it is widely used as a park for sports and recreation as well as for urban gardening.

Location analysis conclusions
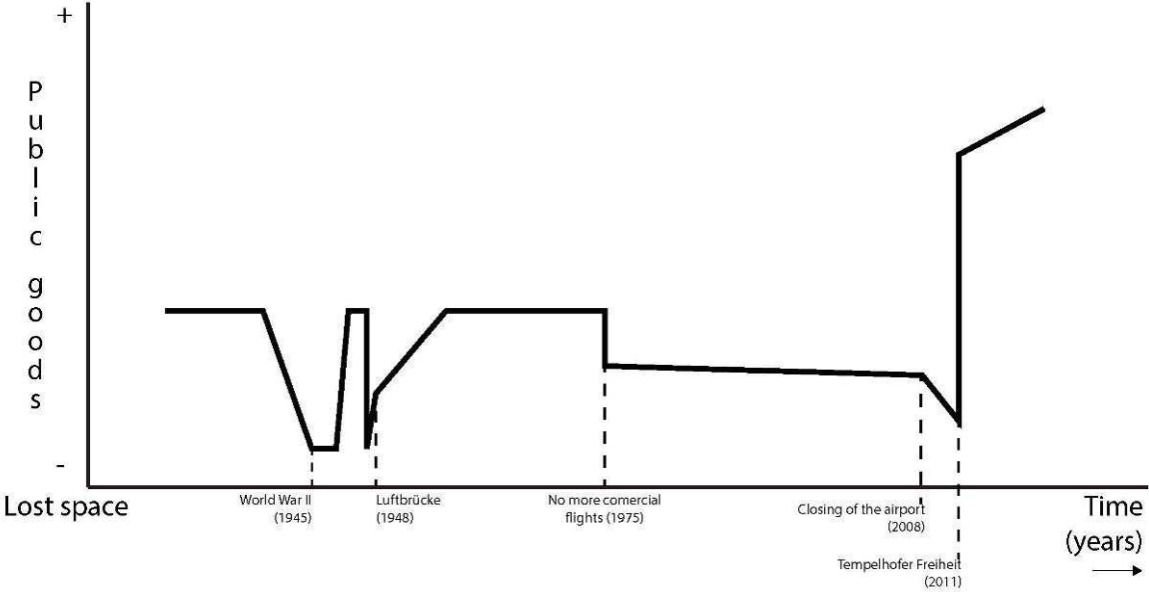
Figure 29 | Public goods factor of Tempelhofer Feld (by Author)

The Tempelhof airport has a rich history. After it lost is function as an airport the area was closed off it was considered to be a lost space without a function. When the area was transformed into a city park in 2010 it became a very valuable public good to the citizens of Berlin. So much even that in 2011 the citizens used social pressure and a referendum to change the zoning plans. It shows that with societal pressure changes can made to planning documents. Now it is the school example on citizen participation. This case shows that the involvement of society is an important asset in tackling the problems of lost space.

9. Spreepark

Located in the district of Treptow-Köpenick on the south bank of the river Spree is the former amusement park north of Plänterwald. This former East German park was abandoned after 2001 when the owner went bankrupt.

Figure 31 | Spreepark (by Abandoned Berlin)

Historical overview

Opening in 1969 the Spreepark was the only amusement park in East Germany. Covering nearly 30 hectares the park was home to several themed villages and a Ferris wheel. After the division the park transformed from a communistic relic into a modern 'western' theme park. (Mazuhn, 2006)

In 2001 the Spreepark GmbH & Co filed bankruptcy and the park became an abandoned area with nobody claiming responsibility for the park. Between 2002 and 2009 the park was not accessible for anyone. Since then the park was reopened first only 2 hours in the weekend. Due to popular demand this was changed to the whole weekends since 2011. The park was run by volunteers and proceeds of the visits were completely used to improve the park. (Berliner Spreepark, 2014a) In 2011 the park became part of the setting of the Hollywood movie Hanna, creating a big demand on visits to the park.

In early 2014 the municipality and district of Treptow-Köpenick acquired the ownership (Berliner Morgenpost, 2014) of the park and were looking for ways to revitalise and to exploit the park. In the summer of 2014 there was a big fire at the Spreepark that damaged a big part of the park. (Berliner

Spreepark, 2014b) This was a major setback for the new owners that wanted to use the old remains of the amusement park to start a new park.

Location analysis conclusions
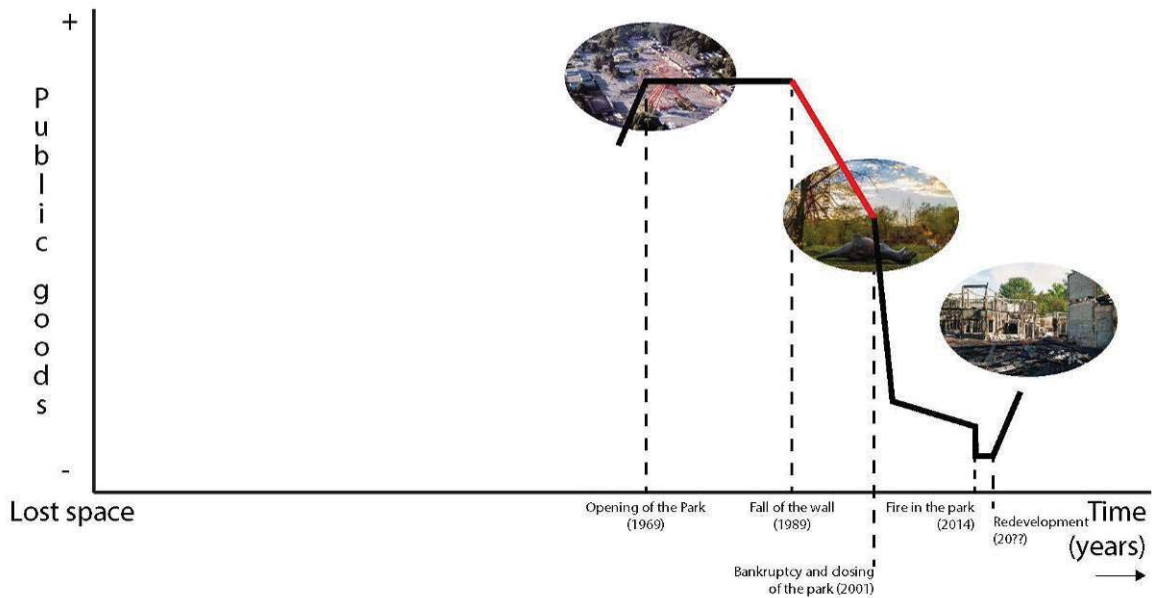
Figure 32 | Public goods factor of Spreepark (by Author)

As a conclusion of the analysis it can be stated that the Spreepark is a lost space because of the lack of responsibility by the lack of function for the location. The old entertainment park on the bank of river Spree has fallen into disarray has attracted attention because of the movie that was shot at the park and the fire. The park has potential, a green park along the river with a rich history and it is located close to the city centre. Since it is now in the property of the municipality, which aims at investing in the transformation of the lost space into a new park next to the river it can be considered that the prospects for a future development in this area are positive.

10.   Former Iraqi embassy

Located in the district of Pankow, in the north of Berlin, this former embassy of Iraq has fallen into disarray after it lost its function. While the surroundings are known to be a wealthy upper class neighbourhood this building mostly attracts urban explorers.

Figure 33 | location of the site in Berlin (by author)

Figure 34 | The abandoned Iraqi Embassy (by digitalcosmonaut, user on Flickr)

Historical overview

Build in 1974 as part of a complex of four embassies the former embassy of Iraq. It was the first non-socialistic state to recognize the DDR as a sovereign state.

When the first gulf war started in 1991 the German government expelled the Iraqi ambassador and thereby the whole staff. Therefore the embassy building in the former diplomatic compound of East Berlin was abandoned overnight and it is left empty until this day. (Abandoned Berlin, 2010) The political debate about the property started when the Iraqi government returned to Berlin to a new building. The German government still considers it Iraqi property while the Iraqi consulate considers it German property.

The building was in decent shape until in the urban exploration started in 1998. Many artefacts were taken and the New York Times published in 2003 an article about this fascinating building, since not only the furniture but furthermore most documents and decorations were left behind it provoked a heightened interest of urban explorers. (Winter, 2003)

Location analysis conclusions
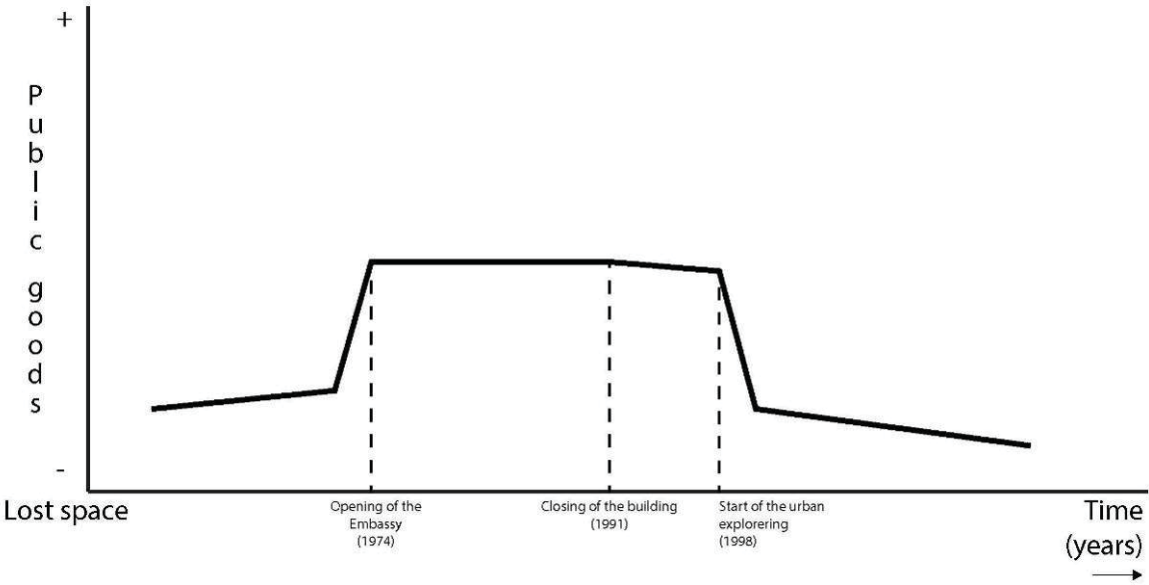
Figure 35 | Public goods factor of Iraqi Embassy (by Author)

After being the Iraqi embassy for 30 years the building was closed down in 1991. It was left unchanged until ever since, therefore making the former Iraqi embassy a lost space because of its loss of function.

Since the former user and the German government are in a standstill about who is responsible for the site, it has become a sore eye for the neighbourhood. Because of the debate the future of this building remains unclear.

Apendix 3:

Exploretory case study numeric results

Ground value analysis Spreepark

Spreepark	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
North	310	280	240	240	240	240	240	240	105	90	80	80	300	300	300	300	300	300	300	330
East	270	250	210	210	210	210	210	210	90	80	70	70	60	60	60	60	60	60	60	60
West	550	550	520	520	490	440	420	420	170	150	140	140	140	140	140	140	140	140	140	150

Spreepark (edited numbers because of switch DM to Euros)

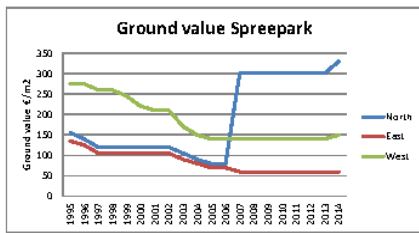|	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
North	155	140	120	120	120	120	120	120	105	90	80	80	300	300	300	300	300	300	300	330
East	135	125	105	105	105	105	105	105	90	80	70	70	60	60	60	60	60	60	60	60
West	275	275	260	260	245	220	210	210	170	150	140	140	140	140	140	140	140	140	140	150

Ground value Spreepark

Chart — Ground value €/m2 (legend: North, East, West), years 1995–2014.

Media analysis Spreepark

Berliner Morgenpost

Morgenpost articles about Spreepark

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Okt	Nov	Dec	total per year
2002					3	7	4	6	2	3	1	2	28
2003	3	3	1	4	3	2	1	1	1	6	7	1	33
2004	2	2	6	6	4			7	3			2	34
2005	1	1	1	1		1		5	1		4	2	18
2006	4	1	1	1		1		4	2		1	3	16
2007	3		1					1	1	1			7
2008	1	1		1			1	4			3		10
2009								4	3				7
2010		1				3		5	1				10
2011						6		3	2		2		1	14
2012							1	1			2	1	5
2013							10	9		2		1	2	24
2014		2	3	2	1				10				18
2015	1												1
													225

Chart — Morgenpost articles per year (2002–2014).

Der Tagesspiegel

Tagesspiegel articles about Spreepark

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Okt	Nov	Dec	total per year
1999								1				2	3
2000			1	2		1		2			2		8
2001			1		2			1	1	2	1	2	10
2002	9	10	6	3	1	3	1	1	1		1		36
2003	1				2					3	5		11
2004	2		2	2	1			2					9
2005					1	1	1	1		1	1		6
2006					1		1	2		1		2	7
2007	2					1					1		4
2008	1	1						3					5
2009		1	1					2	4		2		10
2010						3		1	2	4	1		4	15
2011		2		1	7			4	3		1	1	19
2012			3		5		4				1	1	14
2013	2		1		1	2	7		1			14
2014	5	1	4	1			2	9	1			4	27
2015	1												1
												Total	199

Chart — Tagesspiegel articles per year (1999–2014).
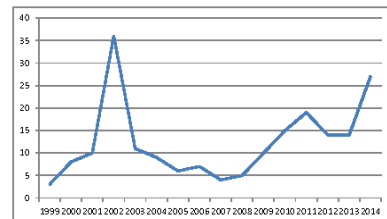
Ground value analysis Tempelhofer Feld

Tempelhofer feld		1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
North		1300	1300	1200	1200	1200	1200	1150	1150	500	450	380	380	380	380	380	380	420	460	500	600
East		1300	1300	1200	1200	1100	1100	1050	1050	450	400	340	340	340	340	340	340	340	340	370	410
South		1000	900	720	720	720	720	720	720	280	240	180	180	160	160	160	160	160	160	160	160
West		850	750	720	720	680	660	650	650	270	260	230	230	230	230	230	230	300	380	420	460

Tempelhofer feld (edited numbers because of switch DM to Euros)																					
North		650	650	600	600	600	600	575	575	500	450	380	380	380	380	380	380	420	460	500	600
East		650	650	600	600	550	550	525	525	450	400	340	340	340	340	340	340	340	340	370	410
South		500	450	360	360	360	360	360	360	280	240	180	180	160	160	160	160	160	160	160	160
West		425	375	360	360	340	330	325	325	270	260	230	230	230	230	230	230	300	380	420	460

Ground value Tempelhofer feld
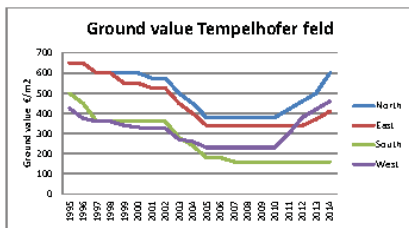
Media analysis Tempelhofer Feld

Berliner Morgenpost

Morgenpost articles about Tempelhofer Feld

	Jan 1	Feb 2	Mar 3	Apr 4	May 5	Jun 6	Jul 7	Aug 8	Sept 9	Okt 10	Nov 11	Dec 12	
2002	0	1	0	0	0	2	2	0	1	0	2	0	8
2003	0	0	2	0	0	0	0	1	0	0	0	0	3
2004	1	2	0	0	0	4	0	1	0	0	0	2	10
2005	0	0	1	0	0	0	0	0	1	0	1	1	4
2006	1	0	0	0	0	0	0	0	1	0	0	0	2
2007	0	1	1	0	0	1	0	2	0	0	0	0	5
2008	0	0	3	2	0	1	0	0	0	1	3	1	11
2009	4	0	1	0	3	1	2	0	6	1	3	2	23
2010	1	3	3	13	21	9	3	7	6	5	0	6	77
2011	9	5	6	17	5	2	4	9	6	12	9	3	87
2012	13	4	13	5	7	3	10	11	10	7	13	4	100
2013	7	4	13	17	14	17	19	21	26	8	16	7	169
2014	31	24	42	38	82	32	20	25	14	1	7	5	321
2015	3	1											4
													824
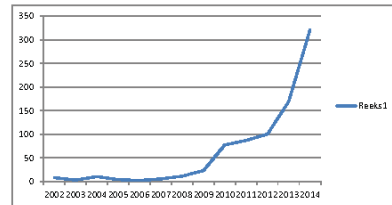
Morgenpost articles about Flughaven Tempelhof

2002	66
2003	103
2004	264
2005	72
2006	202
2007	293
2008	296
2009	362
2010	325
2011	207
2012	157
2013	125
2014	185
total	2657
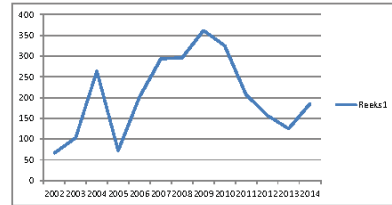
Morgenpost Total articles

2002	74
2003	106
2004	274
2005	76
2006	204
2007	298
2008	307
2009	385
2010	402
2011	294
2012	257
2013	294
2014	506
total	3477
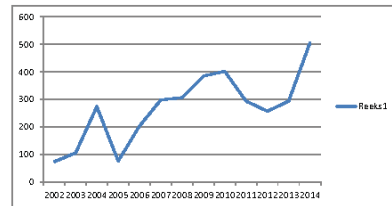
Der Tagesspiegel

Tagesspiegel articles about Tempelhofer Feld

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Okt	Nov	Dec	total per year
	1	2	3	4	5	6	7	8	9	10	11	12	
1997													2
1998													0
1999													3
2000													1
2001													10
2002													3
2003													5
2004													7
2005													5
2006													5
2007													57
2008													102
2009													35
2010													99
2011													119
2012													143
2013													194
2014													352
2015													16
												Total	1158
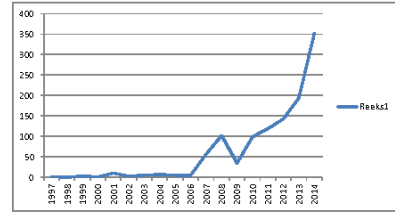
Tagesspiegel articles about Flughaven Tempelhof

	total per year
1997	24
1998	43
1999	59
2000	68
2001	99
2002	83
2003	113
2004	132
2005	109
2006	214
2007	387
2008	529
2009	373
2010	264
2011	227
2012	215
2013	188
2014	188
Total	3315
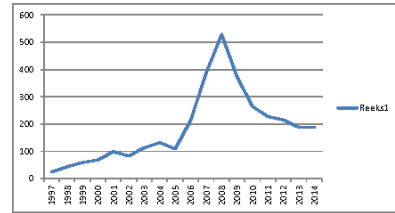
Tagesspiegel total articles

	total per year
1997	26
1998	43
1999	62
2000	69
2001	109
2002	86
2003	118
2004	139
2005	114
2006	219
2007	444
2008	631
2009	408
2010	363
2011	346
2012	358
2013	382
2014	540
Total	4457