



Sveriges lantbruksuniversitet  
Swedish University of Agricultural Sciences

Department of Urban  
and Rural Development

# ERASING BORDERS<sup>AT</sup> TELTOW CANAL BERLIN

AN APPROACH TOWARDS  
SMALL-SCALE INTERVENTIONS  
FLEXIBLE URBAN PLANNING  
AND INTERIM USE

Master's thesis  
Landscape Architect Programme  
Uppsala, 2016

Johan Jacobsson  
Svante Soldemo

Swedish University of Agricultural Sciences  
Faculty of Natural Resources and Agricultural Sciences  
Department of Urban and Rural Development, Division of Landscape Architecture  
Master's thesis for the Landscape Architect Programme  
EX0504 Degree Project in Landscape Architecture, 30 HEC  
Level: Advanced A2E  
© Johan Jacobsson, e-mail: johanjacobjacobsson@gmail.com, Svante Soldemo,  
e-mail: soldemosvante@gmail.com  
Title in English: Erasing Borders at Teltow Canal Berlin - an approach towards  
Small-scale Interventions, Flexible Urban Planning and Interim Use  
Title in Swedish: Radera gränser vid Teltowkanal - ett tillvägagångssätt med  
småskaliga ingrepp, flexibel stadsplanering och korttidsanvändning  
Supervisor: Gunilla Lindholm, Department of Urban and Rural Development  
Examiner: Ulla Berglund, Department of Urban and Rural Development  
Assistant examiner: Ylva Dahlman, Department of Urban and Rural Development  
Cover image: Greenery along Teltow Canal. Photo: Svante Soldemo  
All photos, illustrations and texts are created by the authors unless otherwise stated.  
All other material is used with the permission of the copyright owner.  
Original format: A4  
Keywords: Flexible Urban Planning, Small-scale Interventions, Interim Use, Landscape  
Architecture, Berlin  
Online publication of this work: <http://epsilon.slu.se>

# ABSTRACT

The thesis investigates alternatives to contemporary urban planning. The aim is to find solutions to how a more flexible development can be brought about in the specific area around the Teltow Canal on the outskirts of Berlin. In the thesis, it argues that planning regulations and methods have not been able to keep up with the rapid changes in society which has led to urban environments not being flexible enough when conditions change. To find methods and ideas for possible solutions, a literature study of contemporary sources on the subject was conducted. The literature study is presented in a theoretical framework divided into the three themes; Flexible Urban Planning, Small-scale Interventions and Interim Use. From the conclusions drawn from the themes, a number of design concepts are established and presented in a conceptual framework. The concepts include reusing and retaining elements of the area, multifunctional material and design, open planning process, accessibility to and adaptability of areas, and establishing clear frameworks for future development. The study of the district chosen for the thesis shows that it contains extensive green spaces along the Teltow Canal as well as built environment of historical and cultural importance. The area also exhibits a lack of infrastructure and accessibility. The proposal is based on the examples and methods studied in literature. The idea combines the strength of the existing green spaces with the implementation of a new green path network. It will act as a framework for future urban development and at the same time ensure a connectivity of green spaces. Within the green path network a series of interventions are proposed. By adapting to the existing conditions and reusing and retaining physical characteristics, the interventions open up spaces for new connections, uses and possibilities. All interventions are placed at strategic points in the area to have a catalytic effect, guiding the future development of the surrounding environment.

# SAMMANFATTNING

I det här sammandraget kommer bakgrund, syfte och frågeställning, avgränsningar, metod, teoretiskt ramverk, platsstudie, getaltningsförslag och diskussion att beskrivas kortfattat.

## Inledning

Ämnesvalet för det här examensarbetet är inspirerat av staden Berlin. Där har vi båda bott och praktiserat landskapsarkitektur och samtidigt mött innovativa idéer inom landskapsarkitektur, arkitektur och stadsplanering. Vi har även upplevt hur statisk och formulaisk stadsplanering kan vara. Det har skapat ett intresse för alternativa, flexibla planeringsmetoder. För att bättre förstå ämnet ville vi skapa något själva, med grund i en teoretisk undersökning. Därför valde vi att ställa upp i arkitekttävlingen AIV-Schinkelwettbewerb 2016 för att gestalta ett område omkring Teltowkanalen i utkanten av Berlin.

## Bakgrund

På grund av planeringsverktyg och lagstiftning som delvis bygger på 1900-talets funktionalistiska idéer har stadsplanering inte kunnat följa med i den snabba samhällsutvecklingen under århundradets andra hälft (Bergdahl & Rönn, 2001). Trots att det har funnits tankar om hur städer skulle kunna planeras för en mer flexibel framtidsutveckling, är dessa idéer svåra att genomföra med de verktyg, lagar och metoder som finns till hands idag. Thomas Sieverts (2013) menar att de nya peri-urbana typologier som idag blir allt vanligare föremål för stadsplanering, och samhällets utveckling i stort, kräver nya planeringsmetoder som tillåter en mer flexibel framtida stadsutveckling.

Tävlingsområdet är starkt påverkat av närheten till Berlin och den omkringliggande landsbygden och passar in i Sieverts (2013) idé om nya peri-urbana typologier och kräver därför nya flexibla planeringsmetoder.

## Syfte

Syftet med arbetet är att skapa ett gestaltningsförslag för den storskaliga stadsförnyelsen för området omkring Teltowkanalen i Berlin.

## Frågeställning

Hur kan området omkring Teltowkanalen transformeras med hjälp av arkitektoniska ingrepp för att leda till en mer flexibel långsiktig stadsutveckling?

## Avgränsningar

Arbetet avgränsas dels genom frågeställningen som begränsar litteraturstudien till litteratur som berör flexibel stadsplanering. Det avgränsas också geografiskt i resultatet till att beröra området omkring Teltowkanalen. Resultatet avgränsas också av formatet som är ett tävlingsförslag.

## Metod

Metoden är består av tre olika procedurer. Den första handlar om insamling av information genom litteraturstudie och platsstudie. Den andra handlar om att processa, analysera och strukturera informationen i ett teoretiskt ramverk och att presentera platsstudien. Den tredje och sista proceduren involverar att dra slutsatser från det teoretiska ramverken och utifrån dem skapa ett gestaltningsförslag för platsen.

Litteraturstudien påbörjades med att söka i relevanta databaser efter begrepp som flexibel stadsplanering, informell planering, småskaliga interventioner, tillfällig användning, stadsförnyelse, stadsförfall och post-industriella städer. På det sättet fann vi interdisciplinära källor inom områden såsom landskapsarkitektur, arkitektur, stadsplanering, kulturgeografi, sociologi, ekonomi och filosofi.

Även om studien innehåller varierade källor är de flesta kontemporära, från de senaste fem åren, på grund av ämnesområdets snabba utveckling.

I det teoretiska ramverket, där resultatet av litteraturstudien presenteras, struktureras informationen i tre övergripande kategorier som representerar de vanligaste idéerna från litteraturstudien. Dessa kategorier är:

- Flexibel stadsplanering
- Småskaliga interventioner
- Tillfällig användning

Själva undersökningen av platsen genomfördes dels genom skrivbordsundersökningar där information om platsen insamlades och behandlades, och genom fem platsbesök. Under platsbesöken utforskades platsen och dess karaktärer

grundligt. Utifrån slutsatser från det teoretiska ramverket togs ett antal gestaltningsmetoder fram som en hjälp att föra över teorin till gestaltningsförslaget. Med hjälp av dessa gestaltningsmetoder skapades sedan gestaltningsförslaget över området omkring Teltowkanalen.

## Teoretiskt ramverk

I det teoretiska ramverket presenteras litteraturstudien indelad i de tre kategorierna Flexibel stadsplanering, småskaliga interventioner och tillfällig användning. De exempel som presenteras inom kategorin flexibel stadsplanering visar på vikten av ett stramt men ändå flexibelt ramverk i stadsutveckling. Även att skapa sammanhängande nätverk är viktigt, både vad gäller infrastruktur, grönytor och sociala egenskaper. Att behålla viktiga egenskaper och identiteter och även odefinierade och informella ytor kan hjälpa till att skapa en flexibel framtida stadsutveckling.

I kategorien småskaliga interventioner studeras bland annat taktiska lösningar, som visar hur mycket som faktiskt kan återanvändas på en plats, där en stor förändring trots allt genomförs. Även hur man, genom att upptäcka katalytiska situationer, med en liten förändring kan uppnå en större effekt.

Den tredje kategorin, tillfällig användning, innehåller exempel om hur staden kan utvecklas mer flexibelt med hjälp av att aktivt jobba med olika tidsprespektiv. Undersökningen visar hur viktigt det är att involvera medborgarna i en öppen planeringsprocess, för att kunna inkorporera tillfällig användning. Den visar även hur man genom att göra platser tillgängliga för många olika grupper, kan öppna upp för många olika användningar och därmed på ett demokratiskt sätt leda samhällsutvecklingen. Det är också viktigt att det finns platser som går att anpassa efter brukarnas behov.

## Platsstudie

Studien av området omkring Teltowkanalen i utkanten av Berlin visar på ett historiskt mycket fragmenterat landskap som än idag innehåller många barriärer. Den historiska fragmentering består till stor del av att Berlinmuren gick rakt genom området mellan Schönow i Berlin på norra sidan och Teltow på södra sidan. Uppdelningen som rådde i och med muren kvarstår till stor del idag, dels på grund av att kanalen som utgör en naturlig barriär, löper längs murens historiska sträckning. Barriäreffekten förstärks även av att mycket av den bebyggda miljön i området till stor del byggdes under murens tid, och därför är riktad bort från kanalen med få kopplingar mellan områdena.

Det finns dock positiva karaktärer i området. Den främsta bland dem är kanske den stora informella grönstrukturen som har uppkommit i det historiska gränlandet längs kanalen. Den är i vissa delar mycket tät och skapar ett tydligt definierat grönt rum längs kanalen. Det finns dock brister i kopplingarna även i grönstrukturen, då den inte sträcker sig från kanalen för att knyta an till grönområden och parker i Schönow och Teltow.

## Gestaltningsförslag

Förslaget är en sammanvägning av slutsatserna från det teoretiska ramverket och platsstudien. Eftersom förslaget är del av en tävling ställs vissa krav på gestaltningen. Det handlar om att skapa ett övergripande förslag för omstrukturering av området. Tävlingsprogrammet definierar även ett antal specifika punkter som man vill att förslaget ska svara mot. Däribland vill man dels att stig- och vägnätet ska utvecklas och även att grönstrukturen ska förtydligas.

För att överföra det teoretiska ramverket till förslaget skapades ett antal gestaltningsmetoder baserat på slutsatserna. Dessa gestaltningsmetoder är:

#### **Flexibel stadsplanering**

Att skapa ett rigit men flexibelt ramverk.

Att koppla ihop viktiga platser i ett heltäckande nätverk.

Att behålla och förstärka viktiga identiteter och karaktärer.

#### **Småskaliga interventioner**

Att återanvända befintliga material och bebyggelse.

Att upptäcka och använda katalytiska situationer.

#### **Tillfällig användning**

Att gestaltningen är anpassningsbar för förändrade förutsättningar.

Att det tas hänsyn till vilka grupper som har tillgänglighet till olika platser.

Att medborgare involveras i en öppen planeringsprocess.

Dessa gestaltningsmetoder tillsammans med analysen av platsen har lett till framtagandet av konceptet för förslaget. Områdets största styrka är den omfattande grönstrukturen och den största svagheten är de bristande kopplingar inom och runt området. I konceptet kombineras grönområdena med en ny urban infrastruktur, för att skapa ett grönt infrastrukturnätverk. Det gröna infrastrukturnätverket skapar ett ramverk för framtida utveckling i området och vegetationen behandlas enligt en av fyra olika typologier, som spås utvecklas enligt olika mönster i framtiden.

Inom det gröna infrastrukturnätverket utförs också ett antal ingrepp. Dessa ingrepp utförs på platser där vi har dömt att de kan få en katalytisk effekt och öppna upp nya möjligheter i området på ett sätt som förstärker och uppgraderar befintliga karaktärer.

#### **Diskussion**

Under processens gång har det här arbetet förändrats och har i nuläget en bredare omfattning än vad tanken var från början. Allt eftersom information insamlades blev det tydligt att det skulle behövas för att få med de vinklar som vi ville få med. Mycket av arbetets omfattning har bestämts av hur frågeställningen formulerades. Även den har förändrats under arbetets gång och den ger nu en bra bild av de avgränsningar som vi har haft i arbetet, geografiskt i resultatet till Teltowkanalen, i metodval till arkitektoniska ingrepp, och i slutmålet som är en flexibel långsiktig stadsplanering.

Resultatet diskuteras med bakgrund i de framtagna gestaltningsmetoderna. Där ser vi att gestaltningsförslaget svarar mot de flesta av dessa metoder, dock finns det

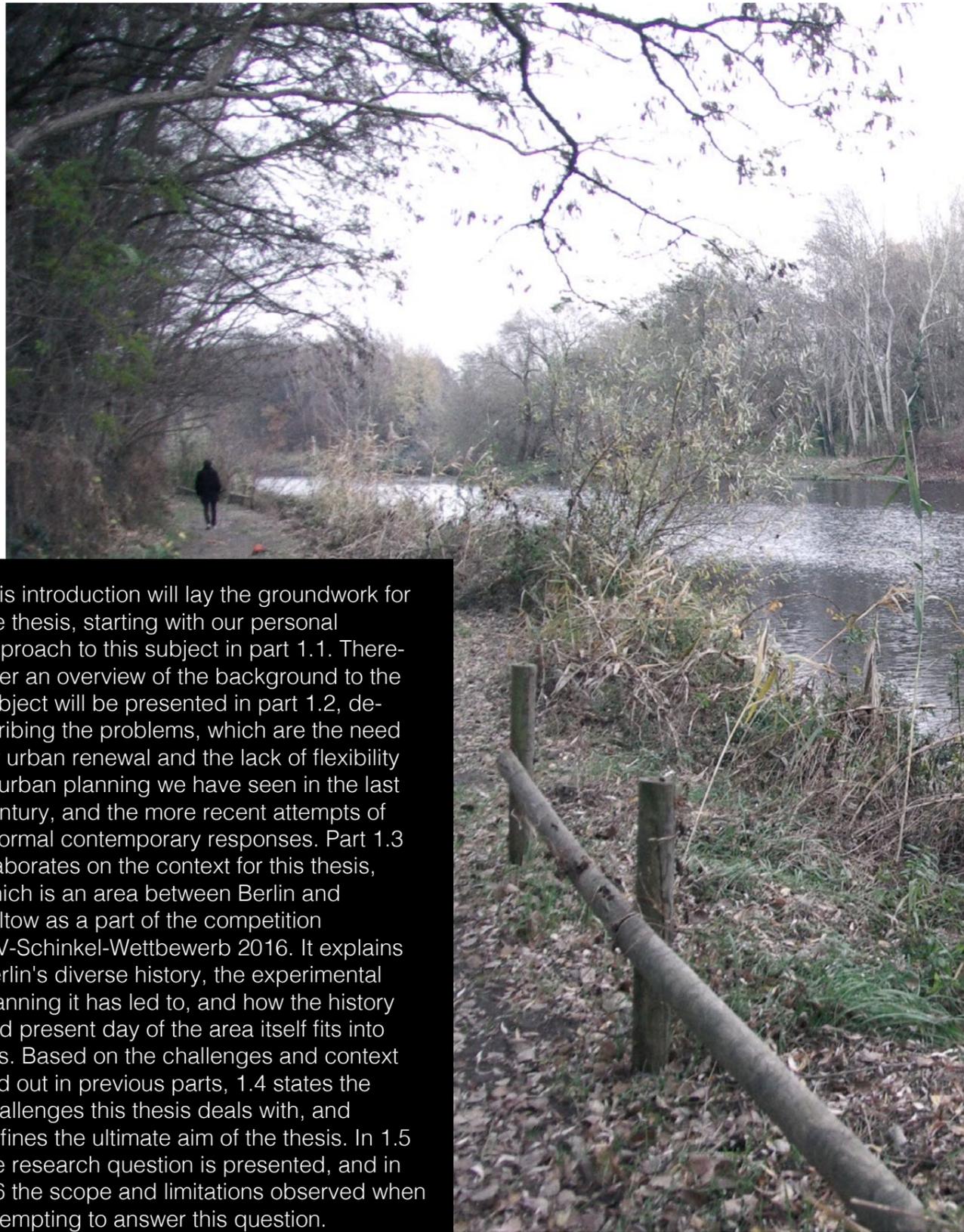
punkter som skulle ha kunnat utvecklas mer i förslaget, som den öppna planeringsprocessen som var svår att inkorporera i tävlingsformatet. För framtida forskning skulle det vara intressant att närmare undersöka hur själva ämnet som behandlas, flexibel stadsplanering, kan definieras tydligare. En följdfråga till arbetet är även hur den flexibla stadsplaneringen kan inkorporeras i riktiga offentliga planeringsprocesser.

# CONTENT

<b>1. INTRODUCTION</b>	<b>12</b>	<b>4. SITE STUDIES</b>	<b>52</b>
1.1 Personal Introduction	15	4.1 Site Definition	55
1.2 Background in Planning History	16	4.1.1 Connections	56
1.2.1 Solid Modernity	16	4.1.2 Barriers	56
1.2.2 Liquid Modernity	17	4.1.3 User	58
1.3 Context for Thesis and Proposal	19	4.2 Site Analysis	59
1.3.1 Historical Development in Berlin	19	4.2.1 Along Mahlower Straße	60
1.3.2 Planning for informality	20	4.2.2 Altstadt	62
1.3.3 Competition site	20	4.2.3 South of the Canal	64
1.4 Problem Statement and Aim	23	4.2.4 Meadows	66
1.5 Research Questions	23	4.2.5 Allotment Gardens	68
1.6 Scope and Limitations	23	4.2.6 Wharf	70
1.7 Linguistic Terms	24	4.2.7 Old Treatment Plant	71
		4.2.8 Northern Residential Area	72
<b>2. METHOD</b>	<b>26</b>	4.3 Photo Documentation	74
2.1 Approach	29	4.4 Informal Citizen Conversations	76
2.2 Procedure	30		
2.2.1 Literature Study	30	<b>5. DESIGN PROPOSAL</b>	<b>78</b>
2.2.2 Theoretical Framework	30	5.1 Competition Program	81
2.2.3 Site Studies	31	5.2 Conceptual Framework	82
2.2.4 Design Proposal	31	5.2.1 Flexible Urban Planning	82
		5.2.2 Small-scale Interventions	82
<b>3. THEORETICAL FRAMEWORK</b>	<b>34</b>	5.2.3 Interim Use	82
3.1 Flexible Urban Planning	37	5.3 Design Proposal	84
2.1.1 Framework	37		
2.1.2 Social Characteristics	38	<b>6. DISCUSSION</b>	<b>102</b>
2.1.3 Infrastructure	39	6.1 Personal Learning Experience	105
2.1.4 Loose Space	39	6.2 Research Question	106
3.2 Small-Scale Interventions	40	6.3 Method	106
3.2.1 Small-scale Intervention and Large-scale Effect	40	6.4 Result	106
3.2.2 Adaptive Reuse	42	6.4.1 Theoretical Framework	107
3.2.3 Tactical Urbanism	42	6.4.2 Design Proposal	107
3.2.4 Tactical Solutions	44	6.5 Relevance	107
3.3 Interim Use	47	6.6 Further Research	109
3.3.1 Temporary Use	47		
3.3.2 Types of Temporary Use	48	<b>7. REFERENCES</b>	<b>110</b>
3.3.3 Temporary Actors	50		



# 1. INTRODUCTION



This introduction will lay the groundwork for the thesis, starting with our personal approach to this subject in part 1.1. Thereafter an overview of the background to the subject will be presented in part 1.2, describing the problems, which are the need for urban renewal and the lack of flexibility in urban planning we have seen in the last century, and the more recent attempts of informal contemporary responses. Part 1.3 elaborates on the context for this thesis, which is an area between Berlin and Teltow as a part of the competition AIV-Schinkel-Wettbewerb 2016. It explains Berlin's diverse history, the experimental planning it has led to, and how the history and present day of the area itself fits into this. Based on the challenges and context laid out in previous parts, 1.4 states the challenges this thesis deals with, and defines the ultimate aim of the thesis. In 1.5 the research question is presented, and in 1.6 the scope and limitations observed when attempting to answer this question.

*Path along Teltow Canal.*

## 1.1 Personal Introduction

The choice of subject for our thesis is inspired by the city of Berlin. A place where we have both lived and practiced landscape architecture and experienced the possibilities of innovative approaches to architecture, landscape and urban design. On the other hand, we have also seen how static, formulaic and expensive urban development can be today, as a result of the traditional trains of thought and planning processes. We are interested in new methods of urban renewal and city buildin which do not necessarily have to cost a fortune or last for a very long time and as such are more responsive to the ever-changing urban environment of today. We are not the only ones with this interest and it has led us to finding some of the theories we want to examine further.

We, like many others who visit Berlin today, discovered the Tempelhofer Freiheit, the area of the old Berlin airfield, which was opened to the public after its closure in 2008, and is an impressive experience, in and of itself. What is even more impressive though, is the attitude of the people of Berlin. The opening of the airport grounds was only thought to be temporary until plans for new city and park development were determined. The people thought otherwise and fully embraced the old airfield, which was totally unplanned as a recreational area. It is so vast that it connects to several different neighbourhoods. When crossing it on a fine sunday in May, it is not uncommon to encounter people walking, strolling, jogging, running, skating, skateboarding, cycling, flying kites, windsurfing, kiting, gardening, playing football, volleyball, barbecuing, picnicking, resting, drinking, performing, and countless other activities both ordinary and unimaginable.

This should only have been temporary, but the will of the people was too strong and it came to a referendum, in which all of Berlin voted to keep Tempelhof totally unchanged. To learn of this was to discover a new way of urban development, citizens claiming the space by activity and activism. To see this as aspiring landscape architects, perhaps the best public space we had ever experienced, and realise that it was not planned by landscape architects, architects or planners, and not even planned for the purpose it was used, was intriguing, but also inevitably led to the question of what our role is in this, if this can all happen "naturally".

This is our personal starting point for the thesis, essentially we want to examine further what our role as landscape architects is and what it can become. We also want to study the benefits of the flexible urban development we have witnessed in Berlin and how it can be achieved within the realm of contemporary urban planning.

To try to understand this we wanted to create something ourselves, based on a new insight of what our role is. We have chosen to do this through a competition proposal for the AIV-Schinkelwettbewerb 2016 (An Organisation by Architects and Engineers who present an architecture competition each year in Germany), set in the outskirts of Berlin, in the area around the Teltow Canal.

## 1.2 Background in Planning History

The background will establish how ideas and the built environment go hand in hand in society and how we can understand our own possible contributions. It will explain how we have understood how planners and architects have dealt with the need for change and solved the problems they faced during the rapid development of the 20th century. Some more recent ideas will also be presented, which have tried to remedy problems of cities which the aforementioned planners of the 20th century did not foresee. Our own experiences have told us that it is still important to question how cities are, and have been, built, as well as suggesting new alternatives..

### 1.2.1 Solid Modernity

During the 20th century, ideas of how society develops and should develop have revolved around the concept of “modernity”, with engagement of the fast increasing number of social scientists. Sociologist Zygmunt Bauman (2004) means that modernity can be divided into two types: the solid and the liquid. The first half of the 20th century was dominated by the solid form which Bauman summarises as:

*“Solid modernity believed that one can achieve a fully rational perfect world, rationally perfect, or perfectly rational.” (Bauman, 2004, s.3)*

According to Peter Hall (2002), the aim for professional planners during most of the 20th century was to acquire enough information and technological skills to be able to construct such a perfect world. If following changes were needed, they were seen as temporary until the state where there would be no need for further changes was found. The ideas from this period of planning were often aimed at solving greater problems in society, such as overcrowded cities, pollution, disease and squalor, and also succeeded in solving them (Hall, 2002). Though solving the problems of their time, the built environment and the documents from this time do not provide evidence that the planners anticipated the pace of change in society during the 20th century. This type of approach to urban planning could make sense in a reality which did not change or changed very slowly, as was the situation in previous centuries, but which can not be said about the 20th century (Hall, 2002). Similarly to the idea of a liquid and solid modernity presented by Bauman, Carmona et al. (2010) describe two ways of controlling urban development, the mechanist way, and the organicist way. The mechanist view of city planning is that urban development and society can be controlled and planned and has dictated much of the modernist planning of the 20th century (Carmona et al, 2010). In the organicist view the development of the city is an incremental process which is adaptive and changes over time (Carmona et al,

2010). While the change according to this view should be incremental, it requires the changes together to create a wholeness, and the process should be controlled through natural self-correcting systems (Carmona et al, 2010). Though these processes can be called natural, they still need to be created within the man-made system which is the city, which could still lead to the problematic stand-off between controlling development, and a truly adaptive system (Carmona et al, 2010).

There are many examples of utopian planning from the first half of the last century, both of the mechanist view and of the organicist view (Carmona et al.). Already in 1898 Ebenezer Howard proposed the idea of the garden city which involved moving the people out of the squalid and overcrowded city, through a large-scale suburbanisation process, into pre-planned utopian garden cities (Hall, 2002). Howard’s ideas pioneered the importance of having a healthy city environment and urban greenbelts, yet in later use, the ideas of the city as a self-sustainable entity and of social reform in combination with the change of physical form have been lost in implementation and the resulting urban design has played a part in suburban flight (Larice & Macdonald, 2007). The idea of the garden city could be seen as a direct ancestor of the international phenomenon urban sprawl (Carmona et al. 2010) Other examples of planning in the same vein of believing in a rational development, though having very differing ideologies, include the regional city as proposed by Patrick Geddes and later Lewis Mumford, the modern housing estates of Berlin planned by planners and architects such as Martin Wagner, Bruno Taut, and Leberecht Migge, and even the planning attempts in Nazi Germany and other totalitarian entities (Hall, 2002). The ideas of Geddes and Mumford show evidence of a organicist view of urban development, while modernism, of which Wagner, Taut and Migge were early proponents, is characterised by the mechanist view of the city as a machine (Carmona et al. 2010). Though these ideas are examples of different ideologies and views on urban development, most

of them were understandable considering the context and situation at the time (Hall, 2002). This understanding aside, the rationale that the planners used to reach their solutions can still lose its relevance when unforeseen problems arise in future urban development, for example the expansion of automobile usage and infrastructure and the problems related to it (Hall, 2002).

One extreme and yet one of the most influential of all examples of early 20th century planning, is that of the Corbusian form of modernist city planning, championed by the modernist architect Le Corbusier (Hall, 2002). In the Athens Charter, Le Corbusier, proposes an urban planning to combat inadequate living space, insufficient connections to nature, too little sunlight, disease and sanitary issues (Le Corbusier, 1971). In a way his ideas for how cities should be planned contain some parts of both the garden city and the monumental totalitarian city (Hall, 2002). He proposed the demolition of entire cities and the rebuilding of them as giant high-rise buildings, spaced out in a park environment, and with a network of car roads servicing them (Hall, 2002). For example Le Corbusier proposed to demolish a large area of the Right Bank district in Paris and replace it with a grid of sixty story high towers (Larice & Macdonald, 2007). It was rejected at the time, but the kind of carte blanche urban renewal which it represented stuck in the minds of urban planners and architects (Larice & Macdonald, 2007).

The actual ideas of Le Corbusier were only explored to their full extent in rare cases such as the city Chandigarh, India, which was planned by him. Nonetheless the ideas did have a large effect on urban planning with some districts being built as proposed by Le Corbusier, and a number of historic city centers partially demolished and rebuilt, inspired by his ideas, among them cities as diverse in character as Detroit, Warsaw, Stockholm and Milan (Hall, 2002).

### 1.2.2 Liquid Modernity

During the last 50 years the development of society has been moving towards what Bauman (2004) calls the liquid modernity, where the thought of perfection has been given up. The perception of the liquid modernity is that changes are part of human life and therefore constantly present. It results in a need for planners and architects to take new directions, in search for space and shapes flexible enough for this reality of constant change (Bauman, 2004).

This liquid modernity can also be recognised in urban planning through some of the more experimental planning theories which have emerged during the latter half of the 20th century. These theories were often based on the idea that the city should not be planned and built by large public or private organisations, but by the citizens themselves

(Hall, 2002). This is a thought that has existed since the time of the garden city, which despite the utopianism essentially had anarchist roots, as it proposed not only to change the way cities were built but to restructure the way society works (Hall, 2002). Though these ideas always existed as a backdrop to the mainstream planning discussion, their emergence during the 1960s and 70s provided a very strong contrast to Le Corbusier’s ideas and the projects resulting from them (Hall, 2002).

One early critic who incorporated urban planning and architecture into a wider critique of the traditional arts, was Polish architect Oskar Hansen who criticised Le Corbusier already at the CIAM congress in Bergamo 1949 and even more with his Open Form Manifesto in 1959 (Pyzik, 2015). Hansen’s concept of open form questioned the exclusive and static character of modernist cities, architecture and art (Wieder & Zeyfang, 2015). He meant that they are not affected by the changes of time and are often personal achievements for the creator rather than meeting the requirements of the individual inhabitant or user, and because of this, do not meet the changing contemporary needs (Wieder & Zeyfang, 2015). With open form, he instead suggests organic development of the art, based on the time we live in and the individual, thereby better fitted to the complexity of the human psyche (Wieder & Zeyfang, 2015). This development of space would revoke the inadaptability of the relation between elements and instead give individuals a sense of discovery and empowerment (Wieder & Zeyfang, 2015). Oskar Hansen was a part of Team 10, the group of new modernists, critical to the Corbusian modernism, who conducted the last CIAM congress in Otterlo 1959. Even though his ideas were well received in the international architectural community, because of the oppressive nature of the Polish communist regime only two estates of his were ever built in the cities of Warsaw and Lublin (Pyzik, 2015).

The train of thought promoting participatory city building reached an early culmination in the 1970s, with the emergence of the community design movement (Hall, 2002). In the spirit of the time, this involved young professionals with idealistic motives, affiliating with local residents who wanted to change their local environments. According to Hall (2002), very little was actually produced, and such cooperations often ended with confusion, and with the professionals taking the lead, thereby turning it into a more traditional top-down process (Hall, 2002). Although this was the case and this kind of method was not overly successful at the time, it showed that the idea was alive and flourishing, and more importantly, it was a clear response to modernist planning and showed an intention for creating

something new (Hall, 2002).

Though there were examples of flexible and participatory urban planning such as the community design movement, according to Hall (2002) they failed to gain prominence and were during the 1980s and 90s overshadowed by large-scale developments initiated by commercial interests, often with little concern for the existing situation. Perhaps the most evident example is that of the Canary Wharf in London. It was an old wharf district, but was planned and constructed in the 80s and 90s to become one of the largest skyscraper business districts in Europe (Hall, 2002).

Another movement which started in the 1990s and has responded partially to the problematics of traditional planning is Landscape Urbanism. This movement has argued for a broader understanding of flexibility and time in urban development. In the article Terra Fluxus, landscape architect James Corner (2007) describes that Landscape Urbanism also responds to traditional planning by presenting a:

*looser, emergent urbanism, more akin to the real complexity of cities and offering an alternative to the rigid mechanisms of centralist planning (Corner, 2007, p. 29)*

He sees it as an idea which is actually focusing on the process of urban development with a more organic approach, where the landscape is a field of actions which is not bound to any particular scale (Corner, 2007). The landscape can be viewed as a grid with layers of flexibility and legibility. Landscape Urbanism is a contemporary movement with many projects taking place today around the world, inspired by its theories, but it has also received criticism. Some of the main detractors blame it for ignoring the social factors of urban design, and because of this, being ineffective as a holistic approach to city building (Duany & Talen, 2013).

Also New Urbanism, though being a counter-movement to the principles of modernist planning, present their own charters with lists of principles for the ideal city including Mixed Uses, Walkable and Compact Neighbourhoods and Safe Communities (Congress for the New Urbanism, 2001). These principles are to a large degree inspired by the morphology of pre-modernist cities. Planner and architect Thomas Sieverts (2013) points out that despite the positive aspects of the old towns of Europe, they can not be directly reproduced in our cities today, as society has changed too much, economically, culturally and politically.

Most large-scale contemporary urban development projects are taking place in the voids left by the retreating

heavy industry, previously not a part of the life of the city but instead an area of undefined transition between urbanity and rurality (Sieverts, 2013). The existing planning principles and regulations can not be prescribed directly to these areas, which have not yet gained their own identity in the eyes of policy-making, planning and architecture (Sieverts, 2013). According to Sieverts (2013) these areas, which he calls Zwischenstadt, or In-between City, require new forms of planning and architecture, which are yet to be clearly defined.

One reason that urban planning has not been able to keep up with societal changes might be that much of the bureaucracy and planning and zoning regulations we are using today are still based on the zoning laws of 20th century functionalism (Bergdahl & Rönn, 2001). As Bergdahl and Rönn (2001) point out, this school of urban design corresponds to the rationality of the industrial society, which could be seen as part of Bauman's solid modernity. In this theory of urban planning, functions in the city are typically separated through zoning with the purpose of solving one specific problem or meeting one specific need (Bergdahl & Rönn, 2001). The problem arises when planning for areas which match the description of Sieverts' Zwischenstadt, or when trying to make additions to the existing urban fabric or changing its functions, as the existing planning tools and regulations are based on an urban design of large inner city developments in the vein of modernism (Bergdahl & Rönn, 2001).

## 1.3 Context for Thesis and Proposal

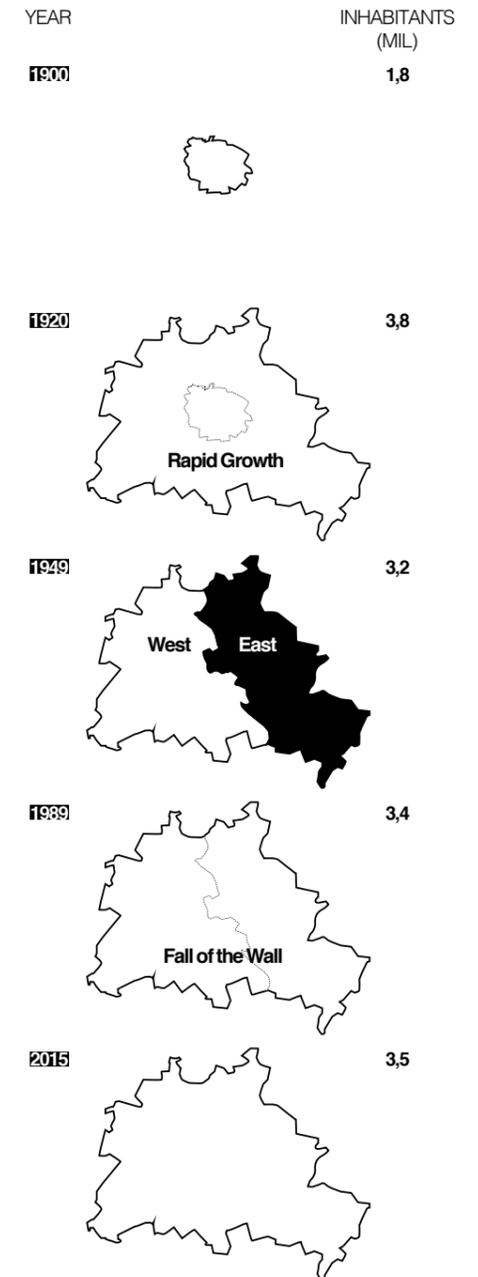
The thesis will result in a design proposal, as a part of the AIV-Schinkel Wettbewerb 2016 competition. The site area is on the outskirts of Berlin along the border with Brandenburg, at the Teltow Canal. First an overview of the urban history of Berlin will be presented, as it is an inevitable part of any urban development taking place in the area. The history of informal planning and temporary use will then be described, followed by a description of the competition site and its context.

### 1.3.1 Historical Development in Berlin

With the fall of the Berlin Wall in 1989, the era of division was over and the new era of a unified Germany, and Berlin, started (Colomb, 2012). The economic and political structures of both sides had to be totally transformed and the physical landscape of the city was changed dramatically. The area where the wall had previously stood, marking the border between the two Berlins, was suddenly a vast open landscape in the middle of the city, and construction commenced, on an unparalleled scale, most intensively around the Potsdamer Platz (Colomb, 2012). In the symbolic meeting between west and east, it was the defining urban development of the 1990's, meant to sow together the separate fabrics of the historic city center in the east and the modern City-West into one center of Berlin (Colomb, 2012). Although this was the intention, the emergence of Potsdamer Platz as a new centrality has in some aspects been hindered by how it was planned. In the zeitgeist of optimism following the fall of the wall, the planning of the area was of a totally different proportion and form than the pre-war square and its surroundings. The new highrise and business district does not fit well into the existing urban fabric and was poorly connected with the existing built environment (Colomb, 2012).

The rapid and sometimes uncontrolled development of Potsdamer Platz and other similar areas in Berlin, left as blank spaces as a result of the events of the 1900s, has led to a shift in the mindset of both the public and of governing bodies. Since the wild expansion of 1990's things have slowed down, and opportunities for new forms of planning and development have started to appear (Colomb, 2012).

The significant history of Berlin has created a rather special situation of "spatial obsolescence" (Sheridan, 2012, p. 202) compared to what other western cities have had due to post-industrialisation. The many gaps within the urban setting as well as within the power of the public authorities, has resulted in many self-generated activities that have been described as "networks of subcultures" (Katz & Mayer, 1983, p. 37), which has been seen as a special feature of Berlin.



### 1.3.2 Planning for Informality

The history of Berlin has resulted in a deeply fractured cityscape where underused or abandoned areas are a common sight in the city. These types of spaces can be deserted railway tracks, brownfields, vacant lots from the 19th century and remnant spaces along the former wall. Compared to other large European cities Berlin has a huge amount of disused and unplanned areas (Overmeyer et al. (ed.) 2007). The areas can form barriers between neighbourhoods and districts, but they also generate opportunities for informal developments (Overmeyer et al. (ed.) 2007). Economically weak actors can use these spaces in an unrestricted way and their initiatives can play a part in shaping the city (Misselwitz et al. 2003: 2). Many of the initiatives are not long lasting but the flow of changing temporary processes functions as a strong resource for Berlin and has become an important factor for the transformation of the city (Overmeyer et al. (ed.) 2007). Researchers have seen this factor as a possibility for informal approaches to be able to complement the difficulties with traditional planning, described earlier. By testing these alternative approaches, the traditional planning process can also be critically questioned (Urban Catalyst, 2003).

The importance of temporary and informal processes has become so profound in Berlin and Germany that several authorities have begun dealing with these subjects by, during the recent years, presenting alternative tools (Sheridan, 2012). One of them is the term *Zwischen-nutzung*, meaning interim or temporary use, that has been applied into the German planning system. Another is the Senate Department of Urban Development in Berlin that have launched the study *Raumpioniere* (2004) which focuses on the actors in charge of the processes of informal urbanism. Also the bureaucracy has become simplified in many cases. One example is the "Planning Permission for a Limited Period" that allows temporary projects to be tested in an area. Even attempts to stimulate projects without planning permissions have been tested by reducing state inspections and simplifying license processes (Senatsverwaltung für Stadtentwicklung Berlin, 2007). Local authorities can also receive Maintenance Contracts which allow them to manage a space, free of charge (Senatsverwaltung für Stadtentwicklung Berlin, 2007).

All these examples present a rather special situation and how informality in urban development is being valued in Berlin and Germany. Something that can be learnt from by other countries (Sheridan, 2012).

### 1.3.3 Competition Site

As mentioned, this thesis will be part of an architectural competition and here the direct context of the site will be briefly expanded upon. The competition is called the AIV-Schinkel-Wettbewerb 2016 and is organised by the Architekten- und Ingenieur-Verein zu Berlin, which is the Architects and Engineers Association of Berlin. It is a large competition with a long history, starting in 1852 and running almost every year, this is the 161st edition. It is named for the 19th century architect Karl Friedrich Schinkel, who has a high standing in the history of German architecture. The winning proposals will be chosen by a jury consisting of independent architects, planners and landscape architects, as well as city planners from Teltow and Berlin. The respective municipal governments will also have access to the proposals though winning the competition does not automatically lead to continued development of the proposal.

The competition site is located in the southern outskirts of Berlin and at the border between the regions of Berlin and Brandenburg. The site includes both natural landscapes and urban areas adjacent to the Teltow Canal. The areas on the north side of the canal belong to the Zehlendorf-Steglitz district in the Berlin region while the southern areas belong to the town of Teltow in the Brandenburg region. As the site is on the border of all administrative levels, borough, city, municipality, district and federal state, all planning instances are separate, and the conjoint planning ventures are non-existent. This makes this site extra interesting as there are no existing or upcoming plans from the authorities, before the competition, covering an area of this size and spanning the border.

The history of the city of Teltow is long, in fact almost as long as that of Berlin itself. In the year 1232 Teltow was the first settlement in the region to be mentioned while the village of Schönow was first mentioned in the year 1299. Large parts of the landscape were swampy and the settlements were located adjacent to smaller streams and lakes, most notably the river Bäke and four lakes it passed through. The development of the villages was slow and in the beginning of the 19th century large parts of the region were still uninhabited. However, due to the development of an enhanced infrastructure in 1832 between Zehlendorf and the rapidly expanding metropolis of Berlin the development in Zehlendorf became much stronger compared to Teltow in the south. The developments were mainly colonies of villas with gardens interspersed with multi-family houses.

During the years 1901-1906 the Teltow Canal was built, which started the industrialisation in the area. The construction of the canal rapidly changed the landscape and most

### Site Location

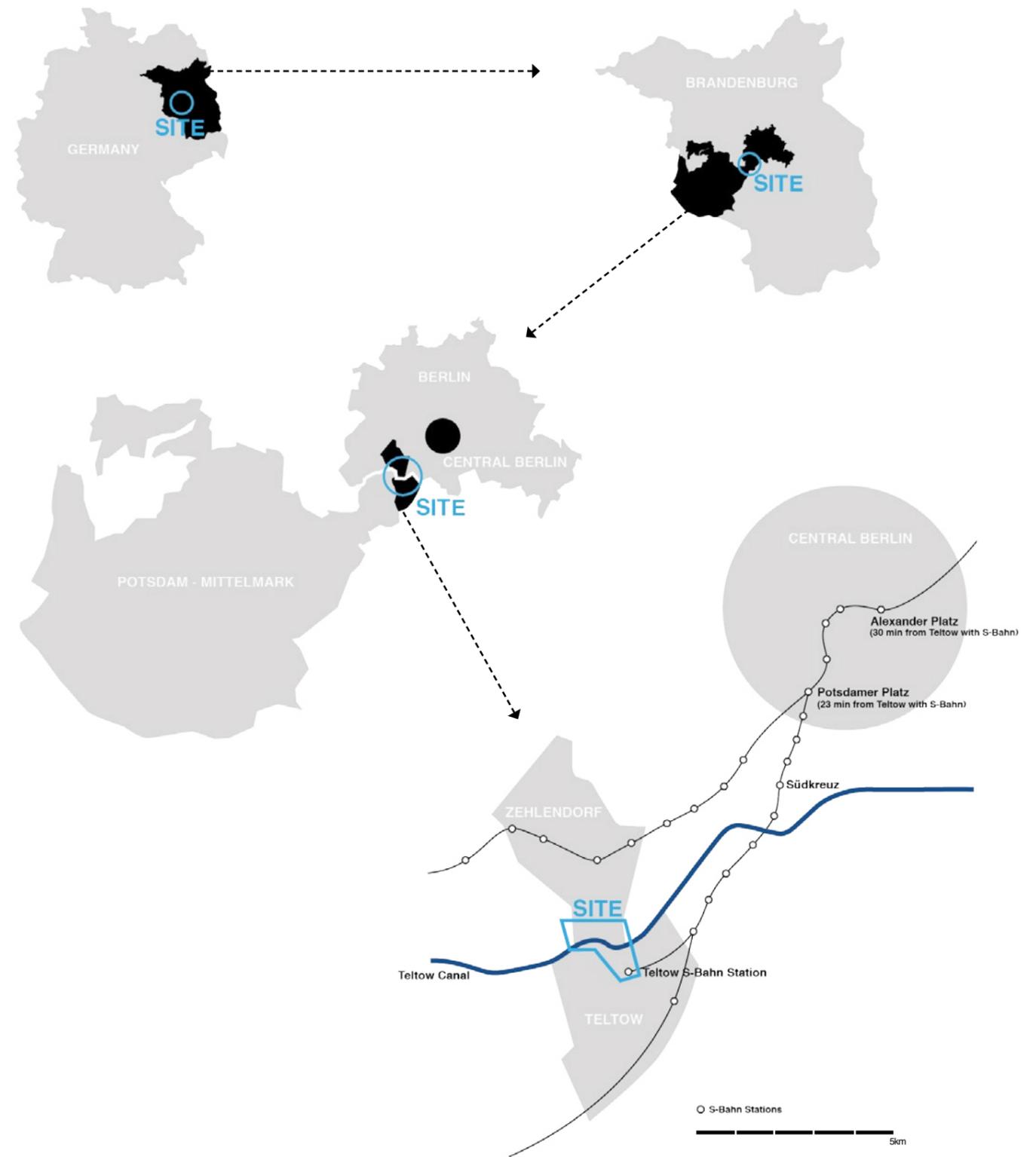


Diagram of the location of the site and its vicinity to central Berlin.

of the streams and lakes were dried out. The river Bäke was essentially replaced by the canal, which runs parallel to its historic path, and only small parts of the river remain as dikes or streams, the only of the four lakes still existing is the Machnower See located to the west of the competition area. Several industries were located along the canal. In the west a dockyard was established with an adjacent harbour and an electricity station which was later rebuilt into a power plant. Parallel to the canal on the Teltow side a tramway was built for industrial purposes. The tramway connected Teltow with the Machnower See but also to the newly built Teltow Station on the Berlin-Anhalt railway. In Schönow, north of the canal, a new industrial area was built containing textile- and porcelain industries. This development immensely changed the picture of Schönow as a garden city, which now had become completely

transformed through industrialisation.

In 1920 Zehlendorf and Schönow became integrated parts of the larger Berlin, which negatively affected the administrative connection to Teltow. Since Berlin at that time was experiencing rapid growth, parts of the middle class moved to Zehlendorf and its attractive colonies of garden villas.

During the Second World War the industries adjacent to the Teltow Canal were targets for air raids from the Allies. During an attack in 1943 large parts of Teltow were completely destroyed and from the original town plan only the former center of the Altstadt, or old town, has been re-established. The Allies also bombed all of the existing bridges spanning the Teltow Canal which worsened the connection even further between Teltow and Zehlendorf-Schönow. After the war, the area was divided between

the Soviet Union who controlled Teltow, and the Western Allies who controlled Zehlendorf-Schönow. The Berlin Wall was built by the East German DDR regime in 1961 and it followed the southern side of the Teltow Canal through the area of the competition site. Areas adjacent to the wall on the East German side were kept undeveloped to make it easier to oversee and spot illegal escape activities. The wall became the final manifestation of the division between the two towns.

During the DDR era, new industries such as 'VEB Geräte- und Reglerwerke Teltow' and 'VEB Elektronische Bauelemente Carl von Ossietzky' were established in Teltow. The new industries were in need of workforce and the population increased from 11.600 up to 15.300 in just one year in 1971. Between 1963 and 1989 the development of residential areas was also strong with three major housing projects implemented in adjacent areas around Teltow.

After the wall fell in 1989 two connections, the bridge Knesebeckbrücke, and Lichterfelde Alle in the east, were quickly reestablished. The old town center in Teltow was renovated and it is today under historical building protection. However, because large parts of the population living in other parts of town, the town center could not be reestablished as a commercial meeting point for the citizens. Instead large scale commercial developments were implemented in western part of Teltow where most of the people were living now, due the placement of the residential projects of DDR.

In 2005 a station for the S-Bahn commuter train was built in Teltow. The S-Bahn network was now connected to the town and its citizens who could reach Berlin much faster than before which enabled more people to commute. Since the opening of the S-Bahn station the population in Teltow began to drastically increase. The town is one of the fastest growing in Germany today with a population increase of 14.8 percent in 5 years. Recently, Teltow reached a population of 25000 people (Wiermer, 2015).

## 1.4 Problem Statement and Aim

The fixed system within which it occurs has led urban planning to not be able to keep up with the development of society in general during the latter half of the 20th century (Baumann, 2004). Though there are ideas of how to plan cities in a more flexible way, it is difficult within this system to fully accommodate such ideas through the planning tools, regulations, policy and even the theories and methods which are at hand. As Thomas Sieverts (2013) points out, the new peri-urban typologies which are being planned for today and the way in which society is developing call for new methods of planning, architecture and landscape architecture, which should allow for a more flexible future urban development.

The competition site, deeply affected by the vicinity of the metropolis Berlin and by the surrounding countryside fits in with Thomas Sieverts (2013) description of the Zwischenstadt, of being neither fully urban nor fully rural but something in-between and because of this, it also requires new methods of planning, which are flexible and open to future changes.

The main aim of this thesis is to create a design proposal for the large-scale urban renewal of the Teltow Canal area in Berlin which enables a more flexible and sustainable future development.

## 1.5 Research Question

How can the area around the Teltow Canal in Berlin be transformed through architectural interventions, leading to a more flexible long term urban development?

## 1.6 Scope and Limitations

The final result of the thesis is the presented theoretical framework, site studies and design proposal, none of which will be comprehensive. The theoretical framework is limited by the literature used in the literature study, which in turn is limited by the research question to literature concerning flexible urban development. The site study is limited by the actual site and its content, and by the factors which are relevant for the design proposal. The scope of the design proposal is limited by the format which is an idea proposal for a competition, thereby excluding certain factors and levels of detail, which are not possible to consider within the bounds of the competition. One such factor which has not been a part of this work is to include agent-networks and citizen participation in planning processes and strategies, which is important, but does not fit into the format of this thesis.



Aerial photo of the site showing the site line, important areas and the trail of the former Berlin Wall. Copyright: Senatsverwaltung für Stadtentwicklung und Umwelt Berlin, 2014. The photo has been manipulated by the authors.

## 1.7 Linguistic Terms

In this part, we describe our view and definition of the following linguistic terms which are used in the thesis.

### **Flexible**

Flexible as we use it is the opposite to static and fixed. Something that is flexible is open to different forms of change, progress and development.

### **Resilient**

When we use the term resilient, it means that something is flexible, but also has a capacity to retain positive characters, identities and structures, while adapting to change. It is when the change can be turned into something positive for the area and thereby the negative connotations of change are mitigated.

### **Interim vs Temporary**

The term interim is used in the theoretical framework to mark a distinction relative to the vaguer term temporary. Interim is more honest in its temporal meaning, defining the period between two other fixed points in time. In the thesis, the term temporary use is instead used to describe specific ideas from the literature that use this term.

### **Traditional Planning**

When we use the term traditional planning, it is as a broad referral to the whole modern practice and theory of urban planning, primarily of the 20th century, as explained further in the background (see part 1.2.2).

### **Sustainable**

We use the words sustainable and sustainability in a holistic capacity. This always entails both ecological, social and economic sustainability unless otherwise specifically stated. We have used the term sparsely, to avoid the common tendency of overuse and thereby devaluation of the term. Also because of the ubiquity of sustainability in the field of landscape architecture today, as part of research goals, processes and methods.



## 2. METHOD



This chapter describes how we have worked with and accomplished the thesis. In the part 2.1, the overall structure and approach of the thesis are explained shortly. 2.2 elaborates on the actual procedure and work involved in making the thesis. Also how the literature study produced a theoretical framework, the study of the site and the methods chosen for it, and how the competition proposal was developed, with the help of design principles based on the theoretical framework.

Semi-natural greenery at Teltow Canal.

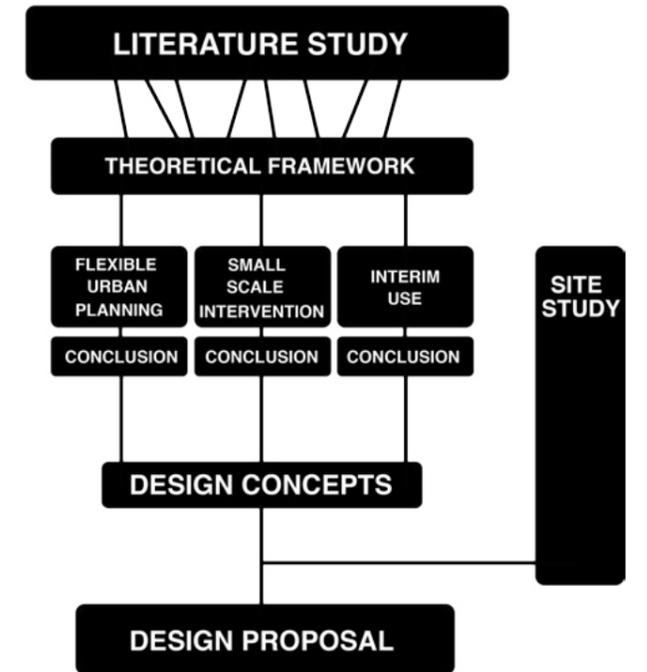
## 2.1 Approach

The professional stance we can take in this thesis is that of landscape architects. While being aware of this and the preconceived notions that come with it, a quote has stuck with us from the authors of *Urban Catalyst* (Misselwitz et al. 2013) regarding post-war Berlin and the many successful informal and temporary uses appearing in derelict and forgotten areas:

*For us as architects and planners, this discovery led to posing the question of how the growing irrelevance of our own profession could be overcome. (Misselwitz et al. 2013, p. 8)*

With this in mind we have taken a both reflective and critical approach to traditional and contemporary planning (see part 1.2). It is reflective in learning from mistakes and successful ideas of the past and critical in pointing out contemporary planning mechanisms which do not adapt to the changing conditions of society.

We do not claim to create our own theory and we have not conducted first-hand research based on observations and experiments. Being landscape architects, we have instead aimed to widen the perspective of landscape architecture by an interdisciplinary study of theories, ideas and projects, presented by practitioners and researchers in many neighbouring fields. We have then attempted to apply the resulting thoughts in the field of landscape architecture through the traditional format of an architectural competition.



Schematic view of method approach.

## 2.2 Procedure

The method can be summarised as three different procedures. The first consists of collecting information through literature and site studies. In the second, the collected information is processed, analysed and structured, creating the theoretical framework and presenting the site studies. Ultimately, the third procedure was to apply the conclusions drawn from the theoretical framework to the design proposal for the site, by creating a set of design concepts presented in a conceptual framework. In the following parts these procedures are described in closer detail.

### 2.2.1 Literature Study

The information for the theoretical framework of the thesis was collected through a literature study. After first getting familiarised with contemporary concepts such as Urban Acupuncture, Tactical Urbanism and Temporary Use and through them gaining interest for urban planning with flexible approaches, we started to study the theory and practice surrounding these ideas. We found sources through searching for literature on these concepts in relevant databases. We also searched for related terms such as flexible urban planning, informal planning, small-scale interventions, interim use, urban renewal, urban decay and post-industrial city.

Though we were aware that our result should be relevant in the field of landscape architecture, we quickly realised that the literature study would have to be interdisciplinary. In addition to landscape architecture, the sources come from fields such as urban planning, architecture, design, cultural geography, sociology, economy, and philosophy.

Though the study contains many different sources, a few books have been the backbone of the literature study. To establish the background for contemporary planning through an historic overview, the book *Cities of Tomorrow* (2002) by Peter Hall was very useful. For the theoretical framework, *Urban Catalyst* (2013), written by Philipp Oswalt, Klaus Overmeyer and Philipp Misselwitz was one of the most important sources. It contains useful information both about temporary and informal use in general, about how it is utilised in Berlin and about the state of urban development in Berlin in general. Another book that has been an important source is *Tactical Urbanism* (2015), written by Mike Lydon and Anthony Garcia, which contains an American perspective on how small-scale projects, often involving citizen action and bottom-up development, can assist in creating cost-effective urban renewal for whole neighbourhoods. As an anthology of projects of this kind during the last 20 years in North America, it has been very useful. A book that is used more as an inspiration than as a direct source, but is nonetheless worth mentioning, is *Urban Acupuncture* (2014), which is an ideological work in which

the acclaimed urban designer, architect and former mayor, Jaime Lerner, professes his love for cities around the world, and the small things which this appreciation is actually built upon. *The Temporary City* (2012), by Peter Bishop and Lesley Williams, has also been essential to the thesis for its thorough presentation of temporary urban interventions. To present a wider picture of this field of planning and architecture, we have also included some arguments of professionals and researchers who criticise the ideas we present. This serves both to give nuance, and as argument for the general approach of not leaning too heavily on one single idea. This has allowed us to make more balanced conclusions with solid argumentation.

What we also concluded at an early stage of this study is how quickly this field has developed only in the last decade, both the amount of projects, and the literature describing them. This inevitably led to the literature in the study being contemporary, mainly from the last five years. It might be the case that there have been projects in this field occurring in an urban and public environment also in the past which have not been documented in literature concerning urban development and planning, and because of this may be overlooked in the study.

### 2.2.2 Theoretical Framework

The result of the literature study is mainly presented in the theoretical framework. To add some structure and answer the theoretical part of the research question we have presented the ideas in the theoretical framework divided into three overarching themes. These themes are derived from the literature study and what we consider to be the most usual typologies of flexible urban planning and design as presented in the literature. The themes are:

- Flexible Urban Planning
- Small-scale Interventions
- Interim Use

We have intentionally left this categorisation partly undefined, this due to the overlapping character of much of

the literature, and ideas and projects presented therein. Described shortly, Flexible Urban Planning contains ideas and examples of large-scale planning, masterplanning in the traditional sense, which has a different, flexible or informal approach. Small-scale Interventions consists mainly of ideas of how small interventions have been used in a larger context, as a catalyst for greater change. The third theme, Interim Use, clearly overlaps with both other themes but the ideas presented are more focused on the users and the temporal aspect of urban spaces.

### 2.2.3 Site Studies

Parallel to the literature study, we started the process of studying the competition site (see part 1.3.3). Having the knowledge from the literature study as a basis gave us a special frame to view the site through. However, we thought it was important to conduct the site study in an as unprejudiced way as possible, at least partly separated from the results presented in the theoretical framework. This is because we saw a risk in projecting the ideas and examples from the literature directly on the site, as the solution here will not be the same as somewhere else. Margaret Crawford says that there is a danger in generalising and applying a general idea to projects which are similar (Misselwitz et al. 2013). It was a trademark of modernism and does not work in society today. For temporary or informal urban design to succeed it is essential that it is specific to the site (Misselwitz et al. 2013). To aid us in the site study we have consulted the theories of Andrea Kahn concerning how to define a site. She writes about the site being both influenced by what happens in a larger area, and having an effect on its surroundings and how that is important to consider when making an intervention in an urban environment (Burns & Kahn, 2005).

Our site study can be divided into different processes and the first comes from personal experience. Finding out the site for the competition, our preconceived notions of the area, though in no way comprehensive, was a foundation for our thought process about the site and about how best to proceed with the study of the site.

The next step was a desk bound study, going through the extensive material handed out by the competition administration containing maps, texts, programs, diagrams, photos, articles and plans from planning authorities, locals and media. The examined material included historical maps and descriptions of the historical development of the site. It also included current planning and zoning documents from the planning agencies of Berlin and Teltow. With this information much of the site could be understood, it was a shallow understanding, but helpful as a guide to what should be studied further. Reading the historical material

combined with maps and aerial photos of the present day situation gave us a basic understanding of the connections and barriers present in the site area and how they have come to be over time. Through local media articles and citizen dialogue protocols we could also get a picture of who some of the users of the site are and what their opinions are of the future development of the site. The planning documents gave us an insight into what the politicians and planners think is important and what current progress is being made in the urban development of the area and what to realistically expect of it in the future.

To evolve our understanding of the site, actual site visits were necessary. We visited the area on five different occasions between September and December 2015. Each time the understanding deepened, and the method for the visits, though informal, can be divided into different ways of experiencing the area. The most extensive of these experiences is that of walking on foot through the area. Urban planner Patrick Geddes taught more than one hundred years ago that before making a change, the real character of a place must be discovered on foot, to comprehend the movement patterns, environmental conditions and history and tradition (Hough, 2007), and we think that is still relevant today.

The very physical and time-consuming experience of walking through the area was accompanied by visual observations. By using photography as one of our mediums, forced us to make deliberate choices of what we thought were the most important to document. It enabled us to re-experience the area and see the instinctive choices we had made through the photography.

To delve deeper into the site we also had informal conversations with people we met in the area. Though the information gained from these conversations is relatively shallow, it gave us a perspective we ourselves could never have. We believed that these conversations would be very valuable to the process. With no profiling of the people we chose to speak with, the selection was dependent on the people we encountered and was a mix of residents on both sides of the canal, people passing through and visitors.

### 2.2.4 Design Proposal

From the conclusions drawn from the theoretical framework, a set of design concepts were decided upon and presented in a conceptual framework. Our interpretation of the underlying ideas from the literature study, was used as a base for the selection and shaping of these design concepts. They each contained a set of demands for the design which were used as a guidance for transferring the theoretical framework to the design proposal. Together with the site studies, the design concepts and their demands were the

basis for the design proposal. The conceptual framework is divided into the three overarching themes of the theoretical framework. Though they overlap in their content, and the categorisation is not definite, they were used as a toolkit, and have fulfilled their purpose.

#### **Flexible Urban Planning**

Shaping a rigid yet flexible **framework**.

Connect important locations in comprehensive **networks**.

Character and identity of an area should be **retained** and enforced.

#### **Small-scale Interventions**

Existing structures and materials should be **reused**.

Locate **catalytic situations**.

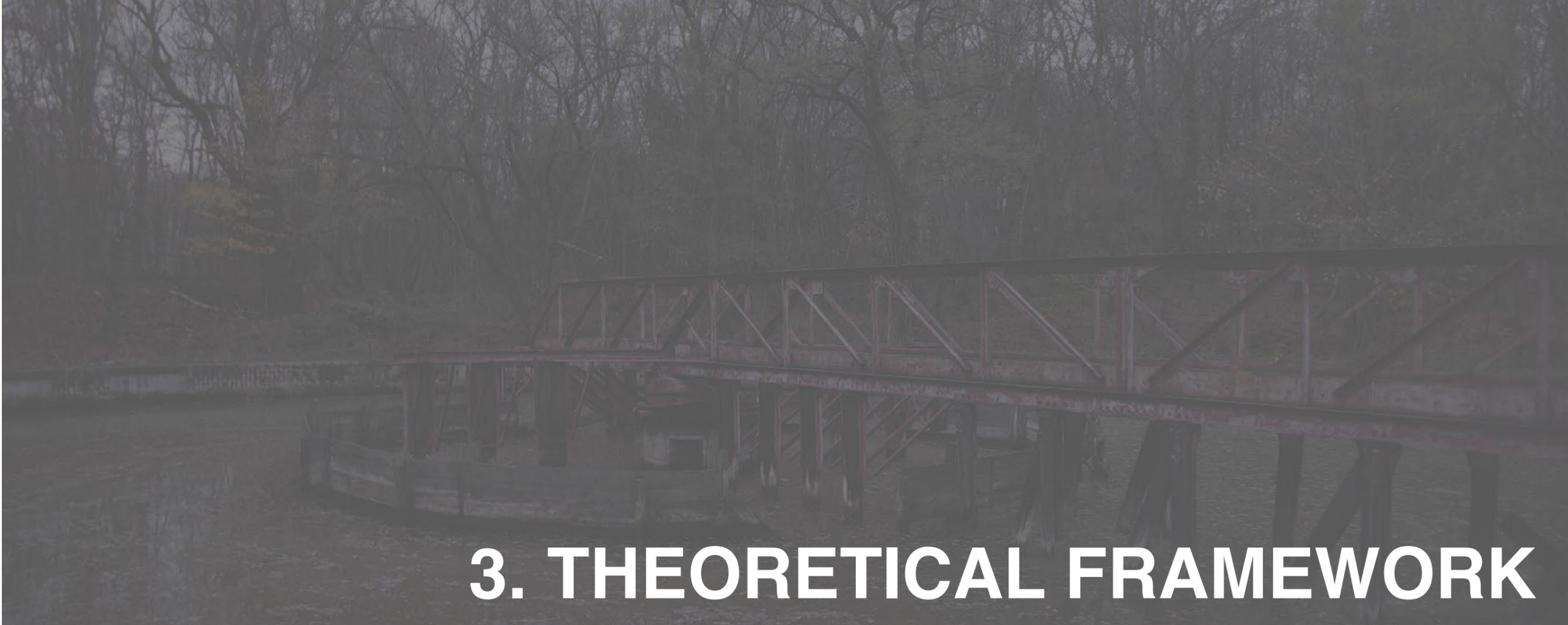
#### **Interim Use**

**Adaptable** design open to changing needs.

The area should be designed with **accessibility** in mind.

Involve citizens in an **open process**.

Having these tools to use in the design process, together with the site studies, allowed us to rely on the conceptual framework as the link between the design and the rest of the thesis. The design proposal for the competition and this thesis are dependent on each other but are also separate entities and should be viewed as such.



# 3. THEORETICAL FRAMEWORK

This chapter will present the theoretical framework for the thesis. It is based on the literature study and will explain relevant theories in contemporary landscape architecture and urban design, and how they can result in methods for long term development of a large urban area through flexible urban planning, interim use and small-scale interventions. These three categories are used to give structure to the theories presented in this framework, but they do not differ distinctly in theoretical standpoint. Instead the parts of the framework should be viewed as presenting different angles and scales of the same theories and therefore repeatedly overlapping in content. Part 3.1 begins in a large scale by describing ideas and examples of how traditional master-planning can be rethought and done differently. In 3.2 the idea of small-scale interventions in a larger context is elaborated. This part also considers urban interventions happening at the right time and in the right place, explaining how tactical city planning and solutions can be used, as a complement to traditional strategic planning. Finally in part 3.3 concerning interim and temporary use, different theories on how to consider the temporal dimension in the city are described.



Remnants from the Old Treatment Plant.

### 3.1 Flexible Urban Planning

Social, economical and technological transformations demand new features in urban societies. Overvaluing the needs of the present easily leads to projects where only the known problems are dealt with, without dealing with uncertainties of the future (Jovanovic, et al, 2015). Instead, recognising the uncertainty that time brings is the basis for sustainable urban developments, while also encouraging flexibility as one of the most important concepts (Jovanovic, et al, 2015).

#### 3.1.1 Framework

There is a need for future proof strategies which move away from traditional planning tools and are instead oriented towards uncertainty by using frameworks as a tool for allowing changes to happen (Kronenburg, 2007). The open-ended approach can be very efficient if it contains a rigid framework with an inbuilt flexibility that enables the development to be implemented throughout time. The planners must be aware that the implementations will affect both the surroundings and the following phases of the development. Therefore it is important that the design always can respond to changing conditions (Bishop & Williams, 2012).

Even though professional urban designers see the current informal phase of urban planning as a novelty (Bishop & Williams, 2012) there are cases with similarities that date back hundreds of years. One example is the renewal of Rome in the late sixteenth century. During that time the city was bankrupt and the majority of its districts were medieval slums. Due to lack of finances the former city plan of the architect Domenico Fontana could not be realised. Instead he proposed to reclaim six old obelisks by replacing them at key locations in the city. His idea was to mark and enhance the places where new piazzas favourable could be built. Throughout the following 200 years, his framework was updated by other planners who actually implemented piazzas at each place. The flexibility in the example lies in its undecided design along with the rigid but open-ended framework (Bishop & Williams, 2012).

A more contemporary example of this approach in an urban context is made by the Rotterdam based architecture studio Killing Architects which has presented a project which focuses on process for the development of an industrial harbour estate in Assen, Netherlands.

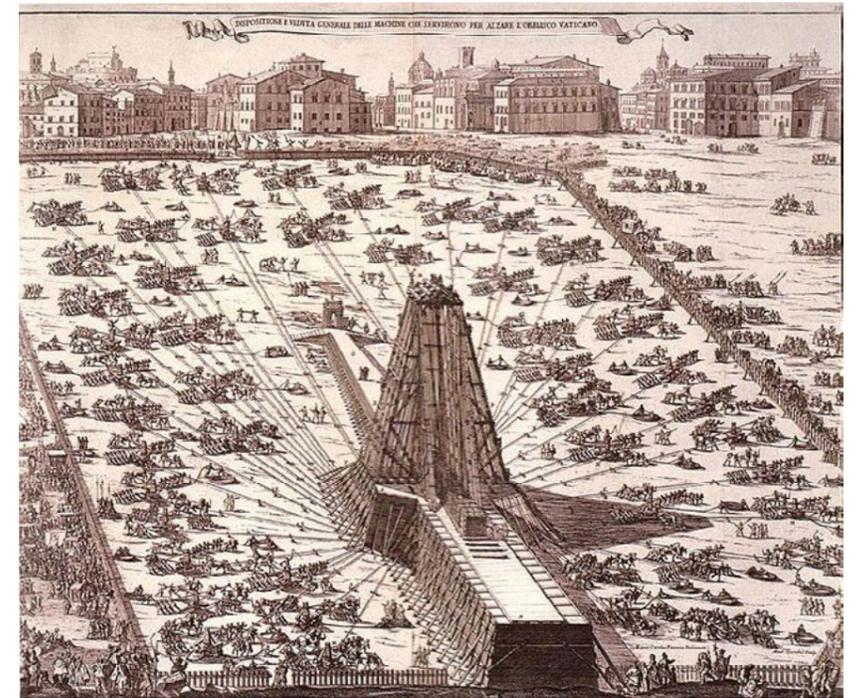


Fig.1. The erection of one of Domenico Fontanas obelisks in The Vatican 1586, drawn by Niccola Zabaglia in 1743.

The area is located next to the city center and is experiencing a transformation from an industrial area to a new residential neighborhood. There was a masterplan for the area, but due to financial problems it was put on hold. Instead, Killing Architects presented a long-term vision based on a framework containing the three zoning types which roughly point out the direction of development for each area. The zoning types are garden, park and woodland together with suggestions of preferable building structures. To investigate the area's future possibilities even further, a programme of temporary use was applied where current and new uses could co-exist. The aim was to develop a rigid but flexible framework which could function as guidance in the process without pointing out an end state (Killing, 2013). Another example is a project in Bankside, London by

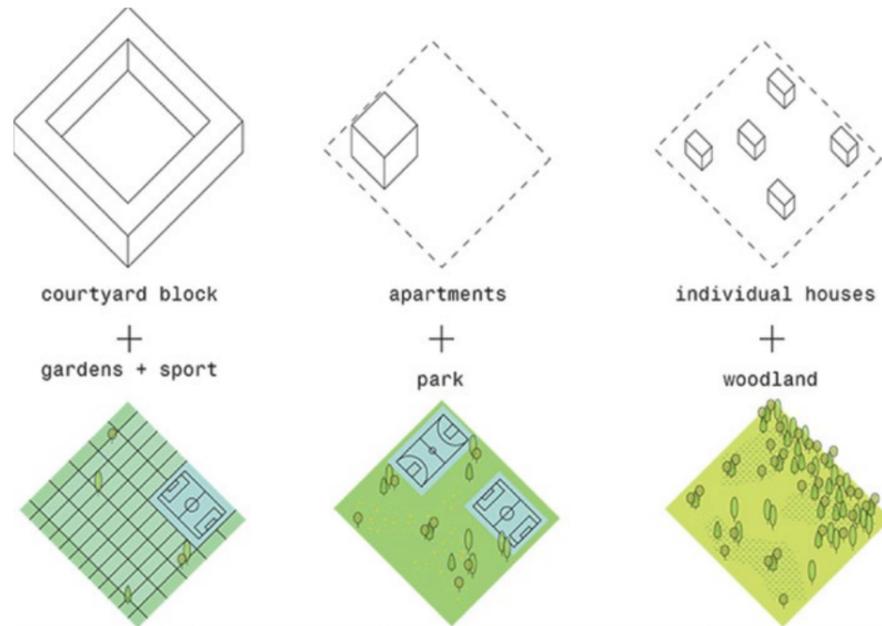


Fig. 2. Havenkwartier Assen, Killing Architects. Copyright Killing Architects

the office Witherford Watson Mann Architects (2007). The area was heavily damaged during the Second World War, leading to a patchwork of incoherent spaces and an unclear urban structure with a lack of green areas. The opening of Tate Modern in 2000 had a strong catalytic effect in the district but the land ownerships were many and scattered in the area (Witherford Watson Mann Architects, 2007). The budget for the project was also small and insecure which meant that a traditional masterplan would most likely have failed. The responsible office, suggested a strategy with the working title “Urban Forest” that engaged the residents in the district by developing the existing informal greenery. The idea was to enhance the many informal spaces by stepwise constructing a more coherent green structure throughout the area. Despite the tiny budget, the project’s first phase could be launched by presenting a clear framework with high flexibility along with a mixture of temporary and more permanent interventions. The project has no end state and the name “Urban Forest” was chosen to demonstrate the organic process of it (Witherford Watson Mann Architects, 2007).

### 3.1.2 Social characteristics

Bishop and Williams also present the existing social features as a central factor to value and nurture, instead of weakening them with new

and detached interventions. The existing characteristics should function as platforms in the shaping of new programmes (Bishop & Williams, 2012). The most important factor in this process is the engagement of the local people. It is often only possible to engage people through their own interests and concerns which, most of the time, are located in their direct surroundings and affecting their everyday lives. When working with large-scale and long-term planning, community engagement is thereby often difficult to apply. The scale and the time-frame of the masterplan becomes too vague and simply does not fit to the local and short-term initiatives of the public (Bishop & Williams, 2012). Therefore, it can be beneficial

to focus on a planning with an interim approach where a direction for further development can be pointed out. The new developments can be implemented through smaller projects which can be based on collaborations between the local users and thereby also generate involvement within the community throughout the process. Most likely many of the projects and activities will be temporary but their impacts can, over time, have both large-scale and long-term effects. This represents a way of planning which focuses on the process and not on the final product. The aim is thereby



Fig. 3. Making Space in Dalston, London. Copyright London Permaculture

not to determine the development, but rather to configure it, by searching for already existing opportunities (Bishop & Williams, 2012).

One example of this type of flexible approach is the project Making Space in Dalston by muf architecture/art and J.&L. Gibbons LLP (2009). Dalston is an area outside of London which was rather recently connected to the London Underground network leading to new possibilities for future developments. The idea was to work with two existing characteristics in the area: lack of green spaces along with strong cultural involvements. By implementing a programme of cultural events in former closed areas, the public realm was strengthened when new meeting places appeared in the district. Eventually, the project resulted in 76 interventions. Far from all of them were vital for the development of the area, but the sum of them generated an important fundament for future outcomes. A crucial factor for the implementation of the project was the close collaboration between the municipality, artists and local organisations (J. & L. Gibbons LLP, 2009).

### 3.1.3 Infrastructure

Another approach to resilient form is to establish an optimal pattern of urban network through a concrete urban infrastructure (Ganis, 2009). These networks can be structured by clusters of nodes and how well these interrelate through connectivity (Ganis, 2009). The development process tends to be that clusters connect to each other until a threshold is reached. After this point, shortcuts are established between some of the clusters to minimise the distances within the network. Usually, structures of networks are considered to be either regular or random (Ganis, 2009). The regular networks are typical for western cities who often have a rigid, evenly distributed network with bounded streets. This type of infrastructure has a high coherency but due to the lack of shortcuts it is still vulnerable when the grid becomes interrupted. In cases of changes, the adaption process of the grid is slow due to the inbuilt integrity of the system (Ganis, 2009).

Random networks are more typical for non-western cities. These networks are irregularly distributed and contain several shortcuts but tend to have many unbounded streets and a incoherency within the overall network. The adaption to change is fast because the random networks have no fixed pattern but they are still vulnerable to removal of connections which increases the already high incoherency (Ganis, 2009). Between these two extremes is the so called small world network. These networks aim to contain both the coherency of the regular grid as well as the adaptability of the random grid (Ganis, 2009). The coherency is seen to

be important for making spaces meaningful while the adaptability make the same spaces changeable for future needs. These characteristics make small world networks seen as a preferable approach in urban planning (Ganis, 2009).

### 3.1.4 Loose Space

When it comes to terms such as sustainability in urban planning, it is often only structures and buildings that are debated (Kärrholm, Nylund & de la Fuente 2012). Projects dealing with these two terms are presenting dense, compact and recycling cities as the main answer. This creates an unbalanced priority in urban planning projects since it leaves out the need for space within cities. The authors Kärrholm, Nylund and de la Fuente advocate that space is one of the most important aspects for addressing future needs because the spatial issue is a common challenge in many urban planning projects. Therefore, the aim should be to create urban environments where it is possible to change both built and spatial structures over time when new needs emerge. The spatial perspective is related to loose space (Wikström, 2013), which can be defined as spaces shaped by human activities where uses and meaning are fluid over time (Franck & Stevens, 2006).

Loose spaces generate three main qualities: *possibility* - which enables for multiple uses and functions, *diversity* - attracting many types of people, *disorder* - by not controlling or putting up rules for how a space is used, it enables for a high flexibility (Franck & Stevens, 2006). Urban environments containing these sort of spaces can thereby be more adaptable to changes due to their diversity and flexibility. Something than can enhance the resilience of cities (Wikström, 2013).

### Conclusion Flexible Urban Planning

Using a rigid yet flexible framework can be a well chosen method in urban renewal. Existing key characteristics should be nurtured and reinforced to create a positive effect in the area. One example is the Urban Forest project in Bankside, London, by Witherford Watson Mann Architects (2007). Where the existing wild vegetation was seen as the key characteristic for linking the area together. New vegetation together with the existing, formed new functions of smaller parks and enforced the public realm. The infrastructure networks should connect in a rigid way and short-cuts are to be implemented between larger clusters. Retaining or creating loose spaces is important for enhance the flexibility in an area in cases of new uses and needs.

## 3.2 Small-scale Intervention

In the world of globalisation, regionalisation and large-scale development, we want to examine methods and projects which still manage to consider smaller scales and through this consideration, reach a more sustainable and coherent result. Interventions of varying scale and with low cost can lead to more flexible urban environments, better embracing the dynamic character of cities (Lydon & Garcia, 2015).

### 3.2.1 Small-scale Interventions and Large-scale Effect

Planning and design processes are traditionally concerned with the immediate area of the intervention, while all urban design in reality concerns several spatial scales (Carmona et al., 2010). Little notice has been given to the interactions between different scales. It is important for the practitioner to realise that a large-scale development is built of many smaller parts, and that a small design can have an influence on a large surrounding area.

Urban Acupuncture is a term that was originally coined by the Spanish architect Manuel de Sola Morales and later expanded upon by the Finnish architect Marco Casagrande. It is a reference to acupuncture, the Chinese form of medical treatment which involves putting pressure on several points in the body with needles in order to cure whole body parts. Casagrande makes an analogy between the human body and a city and compares the small elements that he has introduced in a neighbourhood of Taipei to acupuncture, thus Urban Acupuncture (Casagrande, 2010).

The term has since become widely spread and appears in literature and research from around the world. One major proponent of the theory, who has helped popularise it and has released a book called *Urban Acupuncture: Celebrating Pin-pricks of Change that Enrich City Life*, is Jaime Lerner, an architect and politician who was formerly the mayor of the Brazilian city Curitiba. He writes that understanding the difference between cities, and to identify what is needed on a specific site, in a specific neighbourhood, before making an intervention, is essential for urban acupuncture to work. This site-specificity is at the heart of urban acupuncture, sometimes it involves highlighting existing natural elements in a city and sometimes to understand when not to do anything at all (Lerner, 2014). Depending on the scale of neighbourhood or city an urban acupuncture intervention can be anything from a small bench to a city square. It is not the physical form that is important, but the function, and the most important function to achieve in the urban environment is that of the meeting place that can draw people out into the streets and public spaces (Lerner, 2014).

In association to the work of Casagrande in Taipei, the city's Urban Regeneration Organisation launched a programme for urban acupuncture in 2010. The programme

introduces small interventions intended to act as catalysts and interest generators, and to give new energy and life to city (Landry, 2013). It is a method of planning that is softer and more flexible than traditional city planning. Strategically placed buildings or lots that are left vacant, in between uses, before construction or before demolition are matched with active citizens who want to do something in the urban realm, it can be both for profit or nonprofit. Such new uses in derelict areas can help sensibilise decision-makers to possibilities for Taipei's existing urban fabric, and help consolidate more of the old structure into the future development of the city, instead of demolishing and starting anew, (Landry, 2013).

A practitioner working with careful interventions to the existing is landscape architect Julie Bargmann. She talks about design being a catalytic process, and the need for more dynamic planning as opposed to traditional master-plans (Bargmann, 2015). This involves working with the existing, both the good and the bad. With resourcefulness and restraint as mottos, she wants to reframe the landscapes she works with in a new positive light. She wants to do this in the most cost-effective way by setting in motion a number of processes (Bargmann, 2015). One method she proposes is what she calls the "dirt dance," that is the reuse of soil within an area. By reshaping the terrain, the area can be better suited for new activities or needs.

Bargmann also describes a project of her design studio D.I.R.T., designing the new headquarters of Urban Outfitters in Philadelphia. In this project the design process was closely related to what existed in the area, which was an old dockyard. All the concrete was broken down to smaller pieces and turned into a new pattern ground tiling. Likewise, asphalt was broken up from the ground to uncover old industrial rail tracks which were used as design elements and for the structure of the designed space (Bargmann, 2015). Using the existing can have environmental friendly effects, by reducing transport and production, as well as socially, retaining an important historic identity. But also economically healthy, as it saves money by using what is already there, before spending it on new production.



Fig. 4. Conceptual drawing for Urban Acupuncture in Taipei. Copyright Marco Casagrande



Fig. 5. Milk Market, Limerick, Ireland. Copyright William Murphy.

### 3.2.2 Adaptive Reuse

In the architecture profession the term adaptive reuse is used and described in different but similar ways. Most of the descriptions focus on reusing buildings for new purposes. However, the same principles have been used in landscape architecture projects which deal with reusing industrial sites or brownfields (Tierney, 2014). One description of the term is:

*Adaptive reuse gives new life to a site, rather than seeking to freeze it at a particular moment in time, it explores the options that lie between the extremes of demolition or turning a site into a museum. Adding a new layer without erasing earlier layers, an adaptive reuse project becomes part of the long history of the site. It is another outcome. (Clarke, 2013, p. 4)*

The same principle is presented in the article *Shaping the Future* (2012) by The Department of Art, Heritage and Gaeltacht in Ireland. The article lists several projects dealing with adaptive reuse and where one of them, situated in the public realm, is the Milk Market in Limerick, Ireland. The market space is a courtyard framed by one storey high buildings, constructed in 1830. Through time, the space fell into decay which in 1988 resulted in large restoration project for both courtyard and buildings. The use of the space has always been as a markets space but in 2007 a new development project was launched, with the aim to broaden the usage and also create a catalytic effect for future developments of the surrounding areas. The solution became a

24 meter high tent roof, stretching to all four sides of the courtyard, giving the urban surrounding a landmark while redefining the role of the market space (see Figure 5.). Following results were that the customer number of the market space doubled. New types of markets, events, concerts and other performances became more common. The project actors also hope the intervention will stimulate future urban regeneration in this part of the city (Department of Arts, Heritage and the Gaeltacht, 2012).

### 3.2.3 Tactical Urbanism

Military terms such as strategy and tactics are widely spread as analogies in many different fields. They are both commonly used in urban design and research to describe different types of development. Though the dividing line between them may seem fine, it is crucial to understanding the difference between traditional city planning which can be described as strategy and new informal planning processes which are more tactical.

The French philosopher and sociologist Michel de Certeau describes strategy as a subject, in the case of planning it might be a city government, ultimately dependent on having its own clearly distinguished place of power (Certeau, 1984). Through this place of power, further actions can create a theoretical place within which physical places can be developed. Strategies work by combining these places of power, theoretical places and physical places and are mostly focused on relationships in the spatial dimension. Tactics are instead more relevant in the temporal dimension and could be described as rapid changes in the spatial organisation through specific successions of brief instants which together constitute an action (Certeau, 1984). In one sentence de Certeau summarises how he sees the difference between the two:

*strategies pin their hopes on the resistance that the establishment of a place offers to the erosion of time; tactics on a clever utilisation of time, of the opportunities it presents and also of the play that it introduces into the foundations of power. (Certeau, 1984, p.38)*

When it comes to the city, Peter Arlt means that strategic and tactical city planning both have goals for the development of the city, but have different means of accomplishing them. Strategic planning aims to clarify what changes have to be made and when, where and how they should occur, and it also carries out the intervention without outside input. Tactical city planning is instead involved with searching for and finding existing users and actors in the urban realm and engaging and stimulating them to create change (Arlt, 2013).

The shortcomings of city planning focused solely on strategic methods has led to the emergence of new, more tactical approaches, some of which have been collected in the definition Tactical Urbanism. Tactical Urbanism is a term stemming from the USA and describes a series of non-connected neighbourhood initiatives and activation plans with the common denominator that they consist of short-term, scalable and low-cost interventions or policies (Lydon & Garcia, 2015).

To distinguish Tactical Urbanism from other urban ideologies can be hard, it could be sorted into the overarching non-structuralist Everyday Urbanism or into Landscape Urbanism, which includes certain tactical notions and most definitely into New Urbanism, from which it directly borrows its theories of walkability and lively neighbourhoods. Tactical Urbanism also overlaps with several other movements described as urbanisms such as DIY Urbanism, Guerilla Urbanism, User-generated Urbanism and Pop-up Urbanism (Lydon & Garcia, 2015). To be able to differentiate, it could be said that all of these concepts are characterised by who the instigator is. For the study of the tactical urbanism interventions, this is not what is important, but instead the focus is on the word tactical, and how thinking tactically can help make urban development projects more sustainable (Lydon & Garcia, 2015).

Tactical urbanism requires dynamic rather than static solutions, and careful weighing of contextual aspects as the optimal solution will be different every time (Lydon & Garcia, 2015). Although many tactical urban interventions have been initiated or carried out in a hidden or unsanctioned manner, according to Lydon and Garcia (2015), this does not have to be the case. Traditional planning has had a strong tendency of being strat-

egy, but governments could, very well, be involved in tactical planning. The authors mean that the balance between strategy and tactics in a master planning process should be equal, and one way to improve on the tactical side would be to involve groups of people in the planning process who wouldn't normally partake, perhaps through new forms of citizen interaction (Lydon & Garcia, 2015).

Tactical urbanism activities can be divided into three common categories depending on who performs it, and with what purpose (Lydon & Garcia, 2015):

- Citizens exercising their self-prescribed right to the city
- A tool for city government, developers and non-profit organisations to during planning spark interest in and get public opinion behind a project
- A phase 0 tool for early implementation

We believe that all of these applications can be viewed as methods to get around outdated and long-drawn municipal planning processes, regulations and policies.



Fig. 6. Intersection repair in Portland, USA. Copyright Greg Raisman



Fig. 7. Guerilla Wayfinding in Chicago, USA. Copyright Metropolitan Planning Council

### 3.2.4 Tactical Solutions

Using tactical urbanism, no solution will be the same for two different places, Lydon and Garcia (2015) describe five different methods for using tactical solutions in order to generate a long-term change in the city, which have been successful previously. These methods are Intersection Repair, Guerilla Wayfinding, Build a Better Block, Parkmaking and Pavement to Plazas. All of these methods have their origins in the USA but some of them have also thereafter been used successfully internationally.

The idea of intersection repair as a tactical intervention started in the suburban detached housing environments of the city of Portland during the 1990's (Lydon & Garcia, 2015). The originators were a group of residents of the area who were dissatisfied with the non-existing social interaction in the neighbourhood, despite people living closely together. They identified the lack of public meeting places as one of the sources of this problem. The idea was to paint an intersection in order to turn it into a public space, slow down traffic, and give residents a neighbourhood square, but the proposal got no support from authorities. The group then took a semi-legal approach by applying for a permit to arrange a block party, thereby closing the street to cars, and painting a large mural in the intersection without permission, and also setting up a community bulletin board, a playhouse, and other amenities (Lydon &

Garcia, 2015). At first, the authorities did not take kindly to the alteration of the street environment, and threatened with fines. Through lobbying and surveys showing the positive effects, the group was able to change the minds of the decisionmakers and later the city itself took measures to enable the creation of similar projects around the city (Lydon & Garcia, 2015).

Perhaps the most interesting aspect of intersection repair for us, to consider when planning for similar interventions, is the location chosen for it. As we perceive it, the intersection as typology, was chosen ahead of for example a park, because it is a central well-connected spot, where everyone in the neighbourhood will pass by, even though it is not typically a place for people to stay in for a longer period of time. We also think that the simple and durable layout of the paved street makes it very flexible, open and allowing to user influence, at least when cars are no longer prioritised.

Guerilla wayfinding entails a smaller alteration to the urban environment than intersection repair but can influence a large area. In short the idea is that citizens put up signs or use other measures in order to improve sense of direction and distance in the city. It can be used for different modes of transportation, most prominently for pedestrians, as a way of promoting walkability (Lydon & Garcia, 2015).

One guerilla wayfinding initiative is the Walk [Your City] project, started in 2012 in Raleigh by landscape architect Matt Tomasulo (Lydon & Garcia, 2015). He grew frustrated with the car dependency in the city which he believed was unnecessary and only a result of ignorance about walking distances, and of laziness. So he mapped out important destinations, printed signs with walking distances in minutes and put them up around the city, without government permission. At the same he was careful not to cause any damage to property, not using adhesive materials to put up his signs. The project was well received by locals and it shows how much it is possible to accomplish in the city, even with small means and small interventions (Lydon & Garcia, 2015).

What we also gather from the methods used in guerilla wayfinding initiatives is the importance of knowing what already exists. We believe that, although in some cases overly simplistic, with a method like this the planner or designer does not actually need to add any new elements to the city, but can instead restructure the way we use what is already in the area.

Another initiative of tactical urbanism is Build a Better Block. It is meant to demonstrate the possibilities for a city neighbourhood by transforming just one block or street (Lydon & Garcia, 2015). It started in a suburb of Dallas in

2010 with a group of local activists wanting to change the environment they live in. They had identified a number of barriers preventing a good city life and street environment for people. They obtained a permit for block parties or street fests, but instead used this time to implement a number of changes in the block, a new bike lane, pop-up shops, street furniture, and vegetation. Many of the interventions were intentionally illegal and the group were open about the laws they were breaking. Instead of being charged for these violations, the outdated laws were changed by the City Council, when they realised that the laws prevented the positive development of the city. Some of the temporary changes, were also made permanent, such as the new bike lane (Lydon & Garcia, 2015).

We believe that the better block initiative shows how pin-prick interventions could have a positive effect on a whole neighbourhood and on society. Though it could be argued that such activism should not be depended on in urban planning and that it risks the marginalisation of neighbourhoods without strong civic leaders, we think it is a good example of how open planning and lawmaking processes can incorporate citizen action, and that it can eventually lead to a change in policy.

Parkmaking is what it sounds like, creating new park spaces. Perhaps the most famous example of this is Park(ing) Day, an initiative started in 2005 by the San Francisco design studio Rebar (Lydon & Garcia, 2015). It involves using the defined perimeter of a parking space in the city, and turning it into a temporary park. It is simple and cheap yet ingenious in the way it circumvents the law, rather than breaking it, by paying the parking fee and using the space for a park in the allotted time (Lydon & Garcia, 2015).

Park(ing) day has since then become a worldwide phenomenon happening annually every september in cities all over the world. Though it is a very temporary occurrence, it helped to inspire the city of San Francisco to start their own parklet program. It was aimed at transforming underused street space into new small parks or plazas (Lydon & Garcia, 2015).

The Pavement to Plaza method is based on expanding the public space of the sidewalk into the street, in order to promote pedestrians and cyclists over cars. This is similar to parkmaking, except that the format is different. Pavement to plaza is not focused on creation of a new typology, it is rather a way to show how vast spaces in our cities, already paved with asphalt, can be repurposed to become vibrant public places for social interaction (Lydon & Garcia, 2015).

A example of this kind of transformation is that of Times Square in New York City. Initiated in 2007, the city has a program for new public plazas, with the project for

Times Square being the most prominent because of its centrality and its size. It started with a pilot testing project in 2009, closing of the Times Square portion of Broadway to cars, and placing out movable chairs, umbrellas and potted plants. The experiment was a success with a significant rise in foot traffic and decrease in pedestrian injuries. This success led to a permanent design being drafted by an architectural firm and the implementation of the design during 2014-15, turning one of the most busily trafficked thoroughfares in New York City into a public square (Lydon & Garcia, 2015).

Though specific to the American urban context, we believe that this use of a full scale experiment in the center of one of the world's largest cities was brave. It shows that it can be a valid method to test a design or new functions temporarily before deciding on how to go forward with the permanent design. It even shows that it can be profitable for the city and save money that would otherwise have been needed for future corrections and alterations.

All of these methods can be described as tactical and together they show how a tactical, rather than traditional and strategic, urbanism, can be applied in the city. The types of interventions described are mostly results of a bottom-up movement, started by normal citizens or activists. Because of this, they are often difficult for professionals to incorporate in planning processes and landscape architectural design. But as Lydon and Garcia (2015) mention, tactical approaches are not suitable in all situations, they need to be applied within an existing well-functioning urban framework. What can be seen in some of the examples, such as Park(ing) Day is that solutions are copied directly from between contexts which are completely different. For example, a method used in the American context of San Francisco will never be possible to implement in exactly the same manner in an European environment like Berlin.

### Conclusion Small-scale Intervention

All of these methods can be described as tactical and together they show how a tactical, rather than traditional and strategic, urbanism, can be applied in the city. The types of interventions described are mostly results of a bottom-up movement, started by normal citizens or activists. Because of this, they are often difficult for professionals to incorporate in planning processes and landscape architectural design. But as Lydon and Garcia (2015) mention, tactical approaches are not suitable in all situations, they need to be applied within an existing well-functioning urban framework. What can be seen in some of the examples, such as Park(ing) Day is that solutions are copied directly from between contexts which are completely different. For example, a method used in the American context of San Francisco will never be possible to implement in exactly the same manner in an European environment like Berlin.

It is also clear from studying the tactical solutions, how much can actually be reused on the site while still effecting a change. For example the Pavement to Plaza projects, which are often based on changing the function while basically keeping the existing form with smaller adjustments. By reusing what is already there, new implementations should function as layers in the urban context and the new layers should strengthen the existing ones. The examples of Urban Acupuncture, such as the projects from Taipei, show how locating catalytic situations and making small interventions can potentially have a large effect, reaching far outside the immediate surroundings. Many of the concepts of Tactical Urbanism also show this, such as working with easy means of creating a new sense of direction in Guerilla Wayfinding, and the Intersection Repair projects which use the catalytic location an intersection provides to effect neighbourhood change.

## 3.3 Interim Use

Urban planning researcher Margaret Crawford presents the theory of everyday urbanism. It is what happens in the in-between-spaces that are not at home, at work or at some other fixed location, but in the "everyday space" of the city (Crawford, 2013). This space is impossible to define and plan according to the traditional top-down planning which is set on permanence, because of the fluid and temporary nature of the activities which create it. To make use of this space, we need to think from a bottom-up perspective, letting people access it as they wish, in the interim between more fixed uses, creating a more flexible urban environment.

### 3.3.1 Temporary Use

Temporary uses are generally not seen as being a part of the common cycle for urban progress. It is often even referred to as urban neglect, crisis or chaos. However, in cities like Berlin, their existence has proven to take an important and successful role in the urban development (Studio Urban Catalyst, 2003). Temporary uses can both have a stimulatory effect on the future development of the site where they happen, and also help to establish new concepts in the urban realm (Misselwitz et al. 2013).

Time is an often overlooked dimension of urban design, closely linked to the spatial dimension. It is important for designers and planners to understand and accept that what they do can have a long-lasting effect on the urban environment, but also that it might be gone and forgotten by tomorrow (Carmona et al. 2010). This is the double-edged sword of the temporal dimension of planning. It is this we must accept for our cities to be as dynamic as the activities and uses they play host to. The use of public space in our cities is always exposed to a number of temporal cycles of varying length. The most obvious are the ones affected by the 24-hour circadian cycle and by the seasonal cycle. All 24 hours of the day have the potential for harboring distinct functions and activities in the same place. There are established notions of a daytime economy depending on a strong working population in the area, and an evening economy depending on a large residential population (Carmona et al. 2010). The combination of functioning daytime and nighttime economies enhances the probability for creating lively and resilient urban neighbourhoods.

With the urban population in the big cities steadily rising, the hours of urban activity during the day have increased and the concept of the 24-hour-society is on the rise. At the same time, every year the conditions for public life change drastically in most parts of the world due to the varying external conditions of the seasons. A sustainable future will call for a more flexible and dynamic planning that effectively uses public space during the whole

year (Carmona et al. 2010).

Even though the rulers and people of western society have always dreamed of attaining invincibility, for themselves, for their societies and for their cities, it seems like everything in the end is temporary. The cities that we build now are expected to last for ever, but that belief has been proven wrong many times before throughout history (Bishop & Williams, 2012). Some of the world's greatest cities, Babylon, Pompeii, Carthage and many more, have been wiped out by natural disasters, war or disease. Even today we see cities thought to be permanent, turn out to be partly temporary, with ancient cities like Aleppo and Damascus, being ravaged by war.

There are also other long-term cycles of irreversible urban transformations, brought about by humans, which change the urban landscape time after another and are destined to be replaced as research and knowledge advances. A few of these processes that have had large effects on the cities of today are the industrialisation, the motorisation and then the deindustrialisation. This succession of societal evolution, that has led to the post-industrial society of today, calls into question any surety of urban futures and calls for a more flexible and adaptive city planning (Carmona et al. 2010).

This knowledge of the evolution of society and the many temporal aspects to the development of the city prompts enabling new forms of short-term planning and design for temporary use (Bishop & Williams, 2012). Such activities are still often frowned upon by the planning and design establishment, and the temporary uses have instead been forced to find their own way into our cities (Bishop & Williams, 2012). This way has partly been provided in the latter half of the 20th century with the decay and dismantlement of industrial areas. The spaces vacated by this development have in their interim phases worked as prime breeding grounds for all kinds of temporary uses, which has sparked the discussion on the subject (Misselwitz et al. 2013).

The book *Urban Pioneers* (Overmeyer et al. (ed.) 2007) presents a review of different locations in Berlin where temporary projects were active in the year of 2007. The authors describe that not all sites are suitable for temporary uses, which are affected by key factors such as: available space, sizes of sites, architectural structure, topography, social environment, imminent development, and central location.

The review shows that the most essential factor is the availability of space with an owner that is willing to develop the site in a positive direction. But also the size of a space can have a hindering or stimulating effect for temporary uses. For example, vast areas are, compared to smaller more defined spaces, more likely to fail in providing strong platforms for establishment of small projects and businesses (Overmeyer et al. (ed.) 2007). Built structures as warehouses and other industrial buildings have shown to be more suited for temporary uses. Also locations with a more defined topography as the riverbanks of Spree, where the Berlin wall ran before, have become common sites for temporary projects (Overmeyer et al. (ed.) 2007). We believe this is a result of the leftover spaces which were created after the fall of the Berlin wall as well as the recreational value of the Spree river.

Certain population groups have a higher probability to function as both producers and consumers of temporary uses. The tendency in Berlin so far shows it is more likely for new and young residents to become accustomed with under- or disused areas. While the older and established groups of people have a lower tendency to acclimatise to new uses since many of them have become too habitual with their surroundings (Overmeyer et al. (ed.) 2007).

An area can be under pressure of interest by commercial and residential developments. If the development pressure is high it is common that site-owners hinder initiatives for temporary uses. Sites of that sort are often centrally located and have good transport communications which in contrast can have a strong stimulating effect on temporary use initiatives (Overmeyer et al. (ed.) 2007).

There is a higher demand for central areas since the presence of actors is higher there, compared to more peripheral sites. This does not mean it is unrealistic to establish temporary use projects in peri-urban areas. But to establish successful projects at those locations, the dependence on public authorities or public agencies is high. However, these actors are often, compared to private actors, more willing to establish and support non-profit projects since these can have stabilising and unifying effects on neighbourhoods and districts (Overmeyer et al. (ed.) 2007).

Professional urbanists have criticised temporary use as a tool unable to establish long-term effects. The researcher Mara Ferreri calls one of her articles *The Seduction of Temporary Use* (2015) where she attempts to clarify the inability of temporary uses for presenting a distinct future. She acknowledges the initial benefits and strengths of temporary uses but also means that in a western economic context, the word meanwhile is more accurate. She describes it as:

*In this 'meanwhile' narrative, the fast and flexible connectivity of people and spaces is thus constructed as alternative and marginal, but not antagonistic, to the mainstream imperative of urban growth and development."*  
(Mara Ferreri, 2015, p. 186)

As we understand this, 'meanwhile' use can have a fast and positive effect in an area but should not stand in the way for future developments of the area which uses and function might not have any relationship to the initial 'meanwhile' use. Though this is a valid point, and many temporary uses might not serve as catalysts or become consolidated in the future urban development, temporary uses have some valuable characteristics which cannot be denied. One such quality is the built-in adaptability of a temporary use, as they rarely inflict any physical changes on the original site, merely redesigning function, they also allow for a preservation of the identity and the history of a location (Misselwitz et al. 2013).

### 3.3.2 Types of Temporary Use

Bishop and Williams (2012) describe different categories, or themes, of temporary use, but the authors themselves profess how difficult it is to categorise temporary uses because the boundaries between some of the uses are very blurry and the subjects often overlap.

Types of temporary use include small commercial interests such as food-trucks, pop-up shops and restaurants, as well as larger commercial interests such as property owners looking to raise the property value through a temporary activity (Bishop & Williams, 2012). Temporary use can also mean the use of otherwise abandoned space for activities as diverse as children playing football and large festivals and events (Bishop & Williams, 2012). It can also be cultural phenomena like busker music or street art, or activism such as demonstrations or protest rallies, or even squatting or occupying buildings (Bishop & Williams, 2012). Temporary use can, according to Misselwitz, Oswald and Overmeyer (2013), be sorted into several different categories.

- Stand-in, a short-term temporary use between two permanent uses which has no long-term effect on the site.
- Free-flow, like the stand-in this is a type of use which happens on a site between two permanent uses but is able to move around between different temporary sites and in this way also upgrade its activity through a new environment.
- Impulse, a temporary use that has a lasting effect on the site and the functions and activities are carried over to the permanent use when it is established.
- Consolidation is a temporary use which with time becomes permanent.
- Co-existence, when a temporary use is able to find its own niche and is able to continue on a smaller scale alongside the permanent use.
- Parasite is a temporary use which in its function is dependent on the permanent use for its survival.
- Pioneer, temporary use is established on a formerly unused site and if it is successful becomes more permanent with time.
- Subversion, when a temporary use on the site of an existing permanent use tries to disturb and change the existing function.
- Displacement, a permanent use that is temporarily moved to a new location and there generates impulses for new activities on the site.

Even though these different types of temporary use are often bottom-up processes that are largely unplanned, we believe they can be studied as a way of starting to understand how to more actively plan the informal use of the city.

Misselwitz, Oswald and Overmeyer (2013) also name six strategies for action, ways in which temporary use in city can be approached.

- Enable, is a strategy focused on making temporary use easier, for example by pointing out fitting sites, removing initial problems that might occur early on in the process and helping with legal questions and communication. This strategy needs to be initiated by city officials, property owners or other agents and lends the temporary project a certain security and legality that it would not otherwise enjoy.
- Initiate is when agents such as city planners or associations help to facilitate a number of different temporary uses within in a relatively close vicinity to each other in a large unused or derelict area. This can lead to a diverse set of activities and functions in the area and raise its status and create new identities.
- Claim, a strategy where the temporary users stand in conflict with officials, or property owners, involves the users themselves fighting for the spaces, with motives of making a social and cultural impact in an area without commercial interests being involved.
- Coach involves different groups of users and other actors forming networks to give the projects higher status and recognition. These networks can be self-organised, organised by private agents, or by the government.
- Formalise, when several functioning temporary uses amass in a certain area, the potential of the area becomes clear and long-term permits and renting agreements are worked out and the project receives a solid legal base for its activity.
- Exploit is the strategy with which private interests seek to initiate temporary use as a marketing strategy or to capitalise on it otherwise. Despite the harsh sounding term exploitation, this strategy can be positive for all parts if the temporary user can get space and permission for their project and the investors and property get publicity.

In Vienna, an example of the enable strategy is the Einfach Mehrfach project, initiated by the municipal government in 1997 (Misselwitz et al. 2013). It was started as an attempt to remedy the lack of available open spaces in the city. The spaces that do exist often have very strictly prescribed uses and are not possible to use for different purposes. To solve this problem, a group of planners within the municipality started looking at how spaces in the city, which are today very monofunctional, could be turned into dual-use spaces, adaptable to fit different uses (Misselwitz et al. 2013). Such spaces are for example schoolyards, sports facilities and

vacant lots. Many of the open spaces are used very intensively during certain hours of the day, and not at all during other hours. This is a potential for temporary use that the city wanted to tap (Misselwitz et al. 2013). The first projects were in fact concerned with the development to make schoolyards available after school hours. The idea is that the yards should be available as activity spaces to children living in the neighbourhood. The initiative and management for individual projects of this kind was handled by interested citizens and youth associations, but the city and districts took legal responsibility, solved certain administrative issues, and paid for built changes that would have to be made for the projects to work (Misselwitz et al. 2013). This was a successful combination, and it has since then developed from mostly schoolyards to more cultural uses and also some indoor venues, such as pedestrian underpasses. This temporary use of open spaces is today integral in the public space network of Vienna (Misselwitz et al. 2013). We believe this shows how an open process inviting the public to take part in both planning and the use itself, can be successfully utilised in a dense urban environment. It is also a good example of general principle of multiple uses of adaptable open spaces.

### 3.3.3 Temporary Actors

According to Misselwitz et al. (2013) there is a large number of different actors involved in the temporary use of the city. The most important actors are the people performing the interventions, by the authors named the “users.” Other actors who play a role are agents, who are the people who instigate temporary uses and mediate between other actors, but do not necessarily participate as users themselves. Municipal politicians and policymakers are also important actors, as well as property owners, city planners, officials, administrators, and the media. The temporary users can also be divided into three categories by their motives and by how they relate to the established society (Misselwitz et al. 2013).

The first category consists of young, often well-educated people who view temporary use as a low cost method to test an idea or concept in an urban environment in order to later be able to expand it and capitalise on it. The low-risk, high-reward character of this kind of project attracts groups such as students and migrants, who are typically in-between different periods of their life.

The second user group is those who start a project as a hobby of sorts. Having a regular income, these users often seek other than monetary gain, for example they could be looking to enrich their own life with new experiences through sociocultural projects or to contribute to society by community outreach. These actors are often well established

in the community and are not pursuing a whole new social structure within which to operate.

For the third group, temporary use is a lifestyle more than an activity. Homeless people and those who live in mobile homes can be counted to this group. They have dropped out of society and are looking to temporary use as a way to find their social and physical place in the city.

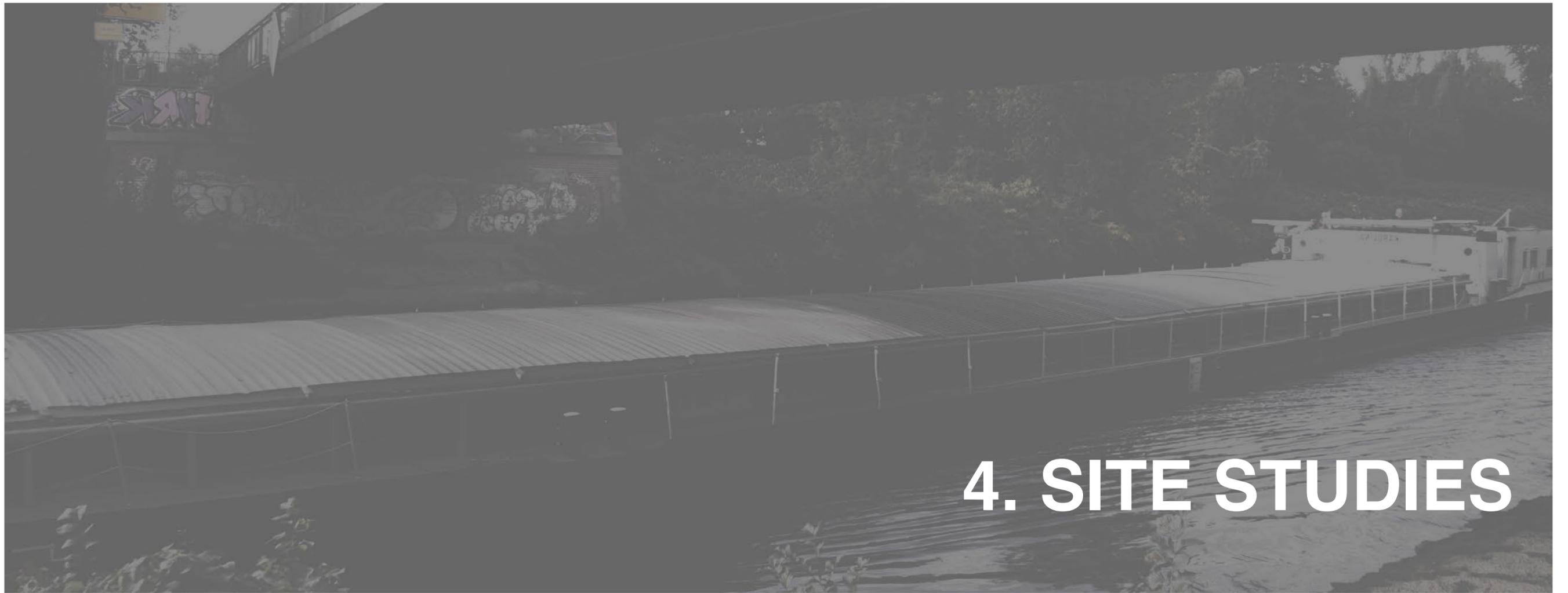
What all the actors identified as users have in common is that they work with unconventional methods, they are accepting of existing site conditions, they work quickly and with an experimental process, and they are very apt at fitting the space they claim to what they want to do (Misselwitz et al. 2013).

### Conclusion Interim Use

The methods and types of temporary use are in general based on bottom-up principles and citizen action. This means that we, in the capacity of designers and planners have to do what Misselwitz et al. (2013) describe as planning what is normally unplanned. Studying the strategies for action that the authors put forward, we can see that they are all in a way, open processes, some more than others. In any case they all show how temporary use in the city revolves around the user, and how important it is to have the viewpoint of the user in mind when planning. The open process used for the Einfach Mehrfach project in Vienna shows that both planning and projects can be successful in involving citizens more directly in the process.

The nine categories of temporary use described all depend on the site of the intervention being adaptable, that it is not full of obstacles for future new and temporary uses. The site should also be accessible to the right groups, all the categories require people spontaneously using the site, and the easier it is for users to access the site, the more likely it will be that temporary uses will occur there.

Practising landscape architects and architects could fit into a few of the different groups of actors described. As temporary users, landscape architects could use their knowledge and apply it directly on a site, though this is not precisely within the practitioners zone of comfort, it could very well make the intervention better. Perhaps landscape architects would be more comfortable playing the role of an agent of temporary use. This role might be closer to the normal work of the professional, though the monetary profit would be small, and it would require them to take a step back and actually keep their own hands away from the actual work.



## 4. SITE STUDIES

In this chapter the site study is presented. The conclusions drawn in the theoretical framework show how important it is for a successful planning process to understand the site, not as a *carte blanche* but to reuse, retain and restructure the existing while effecting a change. This presentation is structured to first give a general overview of the area based on the findings of the desk-bound study in part 4.1, including some of the defining factors of the site such as connections, barriers and users. Thereafter the findings from the site visits are presented in part 4.2 by delving deeper, presenting experiences of specific places, areas and activities in an investigative walkthrough providing thoughts and photographs which also presented further in part 4.3 with a photo documentation. In part 4.4 we present the result of several informal citizen conversation we did with people in the area during our site visits.



Boat traffic under Knesebeckbrücke.

## 4.1 Site Definition

Planning and design professions have always viewed sites as something clearly delineated by the fixed boundaries that have been set forth, such as plot borders (Burns & Kahn 2005). To be able to accommodate new forms of planning, more informal in their character, we also need a looser way of studying and defining a site. Burns and Kahn (2005) describe how a site can be described as three different areas, each of its own scale. The first is the area of control, which is the prescribed immediate area where the physical changes will be implemented. The second area is the area of influence on the site, how the surroundings affects the area of control. The third is the area of the of effect of the site, how the surroundings are affected by the area of control. This gives a concept of site which is more dynamic than the traditional meaning, as the size of the site areas can change. The site is the area of control and everything that relates to it (Burns and Kahn, 2005).



Aerial photo of the site showing the site line, important areas and the trail of the former Berlin Wall. Copyright: Senatsverwaltung für Stadtentwicklung und Umwelt Berlin, 2014. The photo has been manipulated by the authors.

#### 4.1.1 Connections

It is impossible to define a single urban scale when designing, urban sites are inescapably multiscalar (Burns & Kahn, 2005). Different scales of the site will have varying reach and interaction with the surrounding urban environment. Thinking of the city like this, the overlaid scales are all part of networks, the size of which depends on the level of connectivity between the site and surrounding areas (Burns & Kahn, 2005).

On the scale of planning, the Teltow Canal site has a complicated relationship, internally, and to surrounding areas. The planning of the area is administratively divided between Steglitz-Zehlendorf on the Berlin side and the district of Potsdam-Mittelmark in Brandenburg. The two sides of the canal have barely seen any cooperative cross-border planning initiatives, even after the fall of the wall, and they also play very different roles in their respective planning network (Architekten- und Ingenieur-Verein zu Berlin, 2015). The Berlin side, consisting mostly of the former village of Schönow, is on the outer border of the city and of the city district, which itself is a semi-peripheral district of Berlin proper. With this in mind it is understandable that the area has been given the corresponding typology, and low priority in the planning. On the other side of the canal lie the historic and modern center of Teltow in a close vicinity. It should be noted that Teltow is the largest town in the district, or Landkreis, of Potsdam-Mittelmark, which is one of the largest districts by area in all of Germany. This of course gives Teltow a certain level of importance in the planning structure of the district, and definitely in the smaller planning area of Teltow-Kleinmachnow-Stahnsdorf where it is the absolute focal point (Architekten- und Ingenieur-Verein zu Berlin, 2015). This has given the site area a character on the Teltow side that is more clearly an integral part of a city structure than that of the Berlin side. On the other hand, the Berlin side is a direct part of a large city, and will be planned into an urban network, and because of this, is a part of a plan where it has its specific role to play.

Infrastructurally the connections within the site area are also hampered by the Berlin-Brandenburg divide and the historical divide of the wall. With only the one bridge connecting the two sides of the canal in this area and a long distance until the next bridge, the orientation of both road and rail traffic on both sides is clearly oriented along, instead of over, the canal towards Berlin in one direction, and Potsdam in the other.

The principal roadways in the area are the Teltower Damm crossing the only bridge Knesebeckbrücke, Beeskowdamm along the canal on the Zehlendorf side, and

the Zeppelinufer/Lichterfelder Allee on the Teltow side. Other road connections from the area is the continuation of the Teltower Damm north towards central Zehlendorf and the streets starting from Ruhlsdorfer Platz in Teltow and Mahlower Straße.

The expansion of the S-Bahn to the station in central Teltow has greatly increased the possibility of commute in the area with the closest commuter railway stations previously being those of Lichterfelde Süd in the east and Zehlendorf in the north. With the new station, the Teltow side of the canal is well connected to the central districts of Berlin, with 23 minutes travel time to Potsdamer Platz in Mitte, and only 16 minutes to the large interchange at Südkreuz on the S-Bahn ring line. That is a considerably faster commute than from the other side of the canal.

One aspect in the area that might actually have benefitted from the wall is the green structure. Much of the open space in the former border area along the canal is today made up of a semi-natural vegetation. This connects the green areas of Teltow and Schönow to a belt of green spaces of varying size and quality reaching into the very center of Berlin on the one side and out towards the river Havel and the lakes Wannsee and Griebnitzsee in the Grönwald forest to the west. Though this green connection exists, it is not very accessible from the residential areas on both sides of the canal, and like with many factors the north-south connection between green spaces is nearly non-existent. This means that the large and qualitative city parks in Schönow and Zehlendorf are not connected to the green areas along the canal. Likewise, in Teltow, the green spaces along the canal are not connected to the existing city park and the fields further to the south.

#### 4.1.2 Barriers

Within the site there are several factors which limit use and movement. The Teltow Canal, which the whole competition site is focused on, is a barrier on many different layers. It is an administrative barrier, Berlin on one side, Teltow on the other, meaning people have different living conditions, pay different taxes, have different housing policies, and different political leaders. The canal was the border between East and West Germany, a border which still has a serious psychological impact on the minds of those who experienced it. It is also still a visual border, not the canal itself, but the dense vegetation along it, inhibits line of sight, and distorts the mental maps of people who are in the vicinity of the canal but unable to identify anything on the other side. Most obvious perhaps, is the physical barrier effect of the canal, stretching for several kilometers on



..... Barriers

Aerial photo of the site showing important areas, streets and our own defined barriers. Copyright: Senatsverwaltung für Stadtentwicklung und Umwelt Berlin, 2014. The photo has been manipulated by the authors.

either side of the Knesebeckbrücke without any possibility to cross. This leads to a disconnection between the opposite sides of the canal, it remains a backdrop to look at, just as impermeable as the wall was before.

Another barrier is the road system on the Teltow side of the canal. The larger roads are dimensioned for several car lanes and for high speeds, which gives the impression that this is an area to pass through and not for people to walk, bicycle or stay in. Because of this road structure, the building blocks are mostly built with a calculated distance to the roads, leaving wide parts around the roads open, and the buildings turn inwards on themselves, leading them to become barriers of their own.

There are many large allotment garden areas within the site limits and in the surrounding neighbourhoods. The

largest of these areas within the site limits is the one lying between the residential areas of Schönow and the canal. This effectively stops all movement between these two areas, with no paths running through it in the north-south direction.

South of the large allotment garden area are the Schönow Meadows. As a large open grazing area of cultural importance and it is a valuable recreational asset for the area. However, there are no paths over it which only adds to the barrier effect of the allotment gardens, giving a feeling of a long distance between the inhabitants of Schönow and the canal.

#### 4.1.3 Users

For the design of a project of this scale to be successful, it is important to understand, facilitate and negotiate between the different stakeholders and interests who have a connection to the site (Burns & Kahn, 2005). Each party will have their own view of what is the optimal solution for the future planning of the area, and all of them will have specific knowledge claiming to have the best understanding of the site. The designers role is to filter these knowledges and find the dynamic room of common understanding between different stakeholders, where their interests are not opposed. This requires a mobile ground for understanding how urban sites work and a design that allows for progression and constant reevaluation of the site (Burns & Kahn, 2005). The different age groups of the people in the area are today rather equally divided. However, the future forecast shows a much larger increase of elderly people compared to people in the ages between 15 to 65. The strong population growth in the area is almost only represented in Teltow (Landkreis Potsdam - Mittelmark, 2012).

Some politicians have a very positive future perspective on Teltow which can be seen in the project of the construction of a new marina by the canal. The project is seen as way to activate the area with new functions as a café/restaurant, boat decks and new paths. However, the project has run over budget and is being criticized for not being transparent enough to the public. It is also being debated who will end up paying for the project and by which company it should be built. The future profit of the project is also unclear, and is seen by some as pure speculations (Schuster, S. 2016).

## 4.2 Site Analysis

Here we present our own experiences of the site when walking through it, observing it and analysing it at different occasions. For making the large site somehow easier to grasp we have loosely divided it, after our own evaluation, into the following eight areas.



*Aerial photo of the site showing our division of it into eight areas.  
Copyright: Senatsverwaltung für Stadtentwicklung und Umwelt Berlin,  
2014. The photo has been manipulated by the authors.*



Copyright: Senatsverwaltung für Stadtentwicklung und Umwelt Berlin, 2014. The photo has been manipulated by the authors.

#### 4.2.1 The Area Around Mahlower Straße

Between the S-bahn station and Altstadt runs Mahlower Straße. The street is the main connection to reach the S-bahn station from northern Teltow. Even if the street is wide and decorated with trees, it is difficult to understand if you are walking towards or away from the town center. The reason is the many unclear spaces shaped by the DDR-housing developments; the road and the buildings are separated units without any interrelationship and the unclear spaces are rather vast and do not leave many traces of human activity. The street mainly serves as a transportation route for cars and do not provide any higher visual experiences for pedestrians or cyclists.

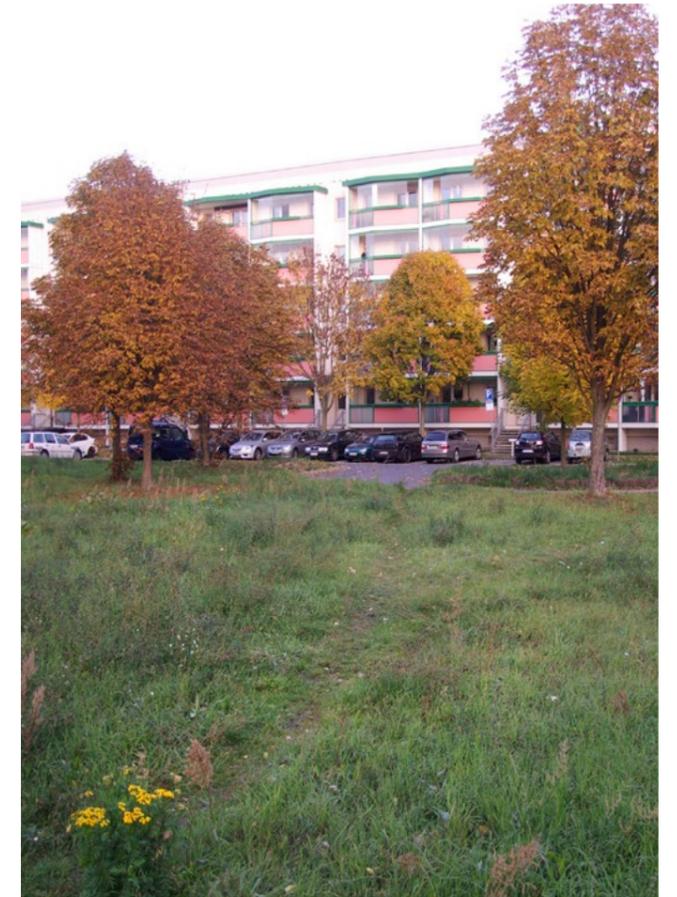
The readability decreases further when Mahlower Straße reaches Ruhlsdorfer Platz, an intersection without clear hierarchy. The directions towards Altstadt or Potsdamer Straße are presented equally. Also the existing design of Ruhlsdorfer Platz does not present its importance as a main intersection dividing different types of urban areas.



Ruhlsdorfer Platz.



Loosely formed courtyard.



Open space between Mahlower Straße and housing units.



Streetscape along Mahlower Straße.



Copyright: Senatsverwaltung für Stadtentwicklung und Umwelt Berlin, 2014. The photo has been manipulated by the authors.

#### 4.2.2 Altstadt

The Altstadt has a picturesque character which create a profound contrast to its surroundings. The sense of place is strong due to the intimate scale and the seclusion that it gives. Defined spaces and buildings, such as the church, the town hall and the main square, function as landmarks which guide you within the area. Even if it is midday Saturday, the overall atmosphere is rather quiet and not much of any activity can be seen. Some conversations can be heard from a café, a couple is walking down the streets, another person is raking up some leaves in front of his doorstep. Otherwise, it is silent. In one of the corners of the square lies a bakery but it seems to be closed. The square is empty but is still welcoming with its furniture and its big oak that shapes a roof over the space.

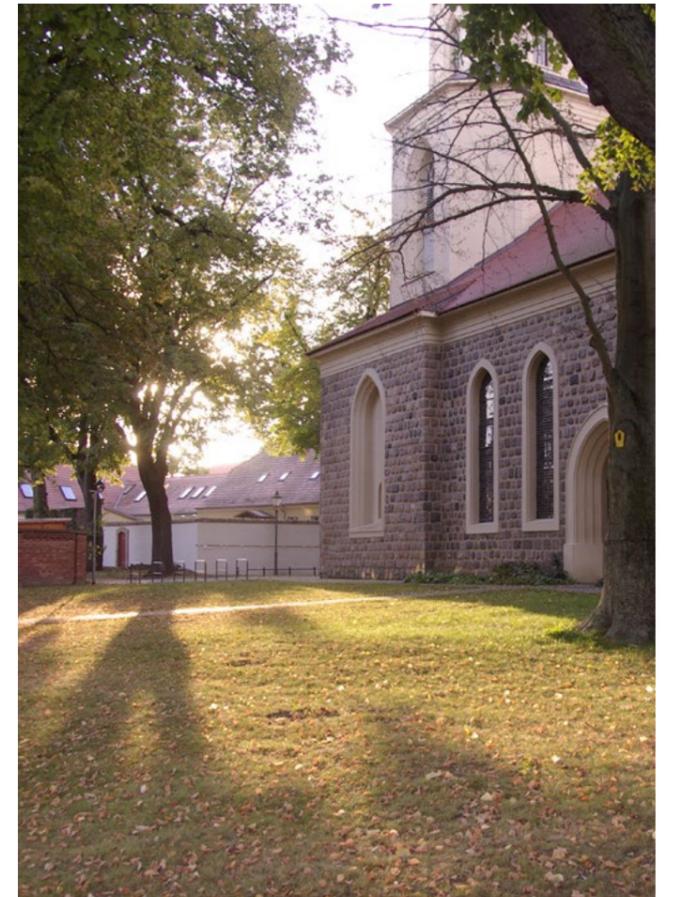
At some places the Altstadt's connections to its surrounding areas are weak. One example is the two paths leading towards the canal without any of them connecting to it. Another example is the corners in the east and west of the road system where the roads do not continue toward the canal which inhibits the Altstadt's connection to its surroundings.



The Bakery in the corner of the Square.



The east corner.



Green surroundings around the Church.



The large oak tree, shaping a roof over the square.



Streetscape character in Altstadt.



The Square after sunset.



Copyright: Senatsverwaltung für Stadtentwicklung und Umwelt Berlin, 2014. The photo has been manipulated by the authors.

#### 4.2.3 The Area South of Teltow Canal

The area that runs along the south bank of the canal is divided from the rest of Teltow by Zeppelinerufer and its heavy traffic. Due to the traffic, the street is difficult to pass as a pedestrian. There are only a few visual connections to the canal which is hidden behind a wildly grown vegetation strip that runs along the whole south side. The grass fields in front of the vegetation strip do not show any traces for being used by people and there is no existing path running along the canal which makes it difficult to reach. However, there are some beaten pathways by which a few spots along the canal can be reached, which create spontaneous rest stops. The wild vegetation makes these places secluded and hidden without covering the view over the canal. This makes them rather well suited for spontaneous gatherings and they seem to be used rather often, judging by all the rubbish left there such as cigarette butts, beer cans, coffee mugs and barbecue ashes.

To the west of Zehlendorfer Straße, along the existing asphalt path, is the most park-like part of the canal area. The strip is furnished with benches and next to the canal a platform of concrete and grass has been constructed. Even if this part has high noise pollution coming from Zeppelinerufer, it is actually being used as a park. People spend some time there by walking their dogs, sitting on the benches and the platform, looking out over the canal area.

The western part of the area contains several large-scale commercial developments with generous accompanying parking areas. These buildings act as both visual and physical barriers against the canal. On the east of Zehlendorfer Straße is the part of the site which is least built and appears to have the most natural character. A bicycle and pedestrian path runs along the canal here as a part of the Mauerweg, The Wall Trail, but it runs mostly through dense vegetation and the canal is invisible and inaccessible to passers by. This area is not too far from where the wall turned south from the canal along the border between Teltow and Berlin-Lichterfelde, so this area was essentially cornered in by the wall, and it very much still feels like a dead end with little development having happened since the fall of the wall. The area and the canal are, with the exception of the Mauerweg running through, inaccessible to pedestrians from all surrounding neighbourhoods because of the barriers made up of Zehlendorfer Straße, Schönower Straße and Lichterfelder Allee. The vegetation is most dense close to the canal along the pathway and the rest of the area is partly open with a wet marshland character.

The southeast part of area contains a larger grass field which, according to some posters that are placed there, occasionally is being used for bigger events such as tivolis and festivals.



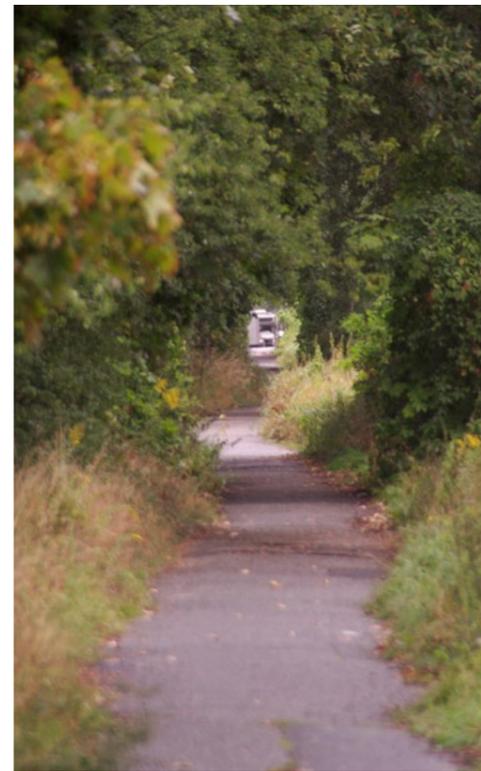
Remnants from the Berlin Wall.



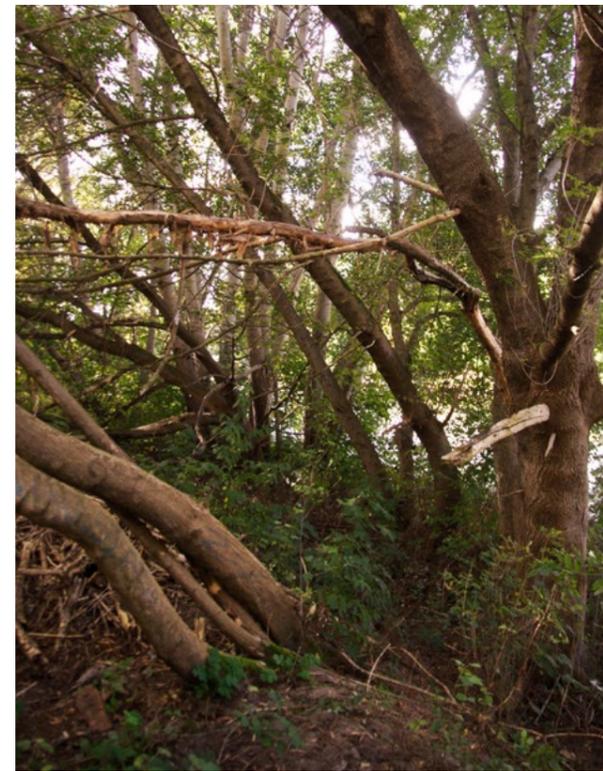
Park-like character west of Zehlendorfer Strasse.



The vegetation strip in front of the canal.



The Wall Trail in the east part of the area.



Inside the vegetation strip next to the canal.



Zeppelinerufer.



Knesebeckbrücke, seen from the south side of the canal.



Copyright: Senatsverwaltung für Stadtentwicklung und Umwelt Berlin, 2014. The photo has been manipulated by the authors.

#### 4.2.4 Meadows

The meadows on the northern bank of the canal reach from the Teltower Damm in the east to the Sachtlebenstraße in the west, and are bordered to the north by the Schönow allotment garden area. This area shows considerable cultural heritage as a grazing area, and it is still used as such today, mainly for horsekeeping. As it is still used for keeping animals, the whole meadow area is fenced in, and thereby effectively shuts off the asphalt bicycle and pedestrian path running along the canal from any of the residential areas north of the meadows. Other uses to be mentioned is an agility club and a small petting zoo that are located directly west of Teltower Damm. The meadow area is visually disconnected from the canal and the path, with dense vegetation along the fence shrouding it from view. Because of this, the area today has a barrier effect both on the recreational and functional qualities of the site, and the potential of the cultural heritage present is far from fulfilled. Talking purely of aesthetics, the meadows have a certain pastoral beauty, a small glimpse of the not so far distant idyllic Brandenburg landscape. The bicycle and pedestrian path south of the meadows is today a part of the Mauerweg, although it would be more historically accurate if the Mauerweg ran south of the canal as that was where the wall was. The path runs on the raised bank of the canal with a varying degree of density in the vegetation in between, and with small informal trodden paths through the underbrush leading down to the canal. These informal paths show the lack of arranged access points to the canal and the strong will of people to reach the water.



One of the informal paths leading down to the canal.



A part of the Wall Trail in a more forested area to the west.



Some parts of the meadows are for grazing horses.



People fishing on the northern side of Teltow Canal.



The fenced in meadows, the Wall Trail and Teltow canal.



Copyright: Senatsverwaltung für Stadtentwicklung und Umwelt Berlin, 2014. The photo has been manipulated by the authors.

#### 4.2.5 Allotment Gardens

There are several allotment garden areas inside the limits of the competition site but also in the vicinity and in suburbia all around Berlin. The major connected allotment garden area within the site lies north of the meadow area and is shared between the two associations Dauerkleingartenkolonie Alt-Schönnow and Dauerkleingartenkolonie Teltowblick. It is traversed by the small public road Kleinmachnower Weg from east to west but possibilities to move through the area in the north-south direction are non-existent. There are a few paths entering the area from the residential areas to the north, but no paths to the meadows and canal in the south.

The activity provided by the allotment gardens gives a feeling of human presence and care which is lacking in many of the large-scale industrial and commercial areas around the canal, and which therefore is welcome. However, because of the missing connections to surrounding areas it is not very accessible to the public and it has a significant barrier effect on the connection between the residential areas of Schönnow and the canal.



The allotment gardens provide the area with a romantic character.



All paths towards the meadows are cut off by fences or allotments plots.



The human care can be seen in the well kept hedges throughout the area.



Garden associations with a long history.



Kleinmachnower Weg.



Lush gardens.



Copyright: Senatsverwaltung für Stadtentwicklung und Umwelt Berlin, 2014. The photo has been manipulated by the authors.

#### 4.2.6 Wharf

The Teltow Wharf is a small but meaningful area in the context of the Teltow Canal. It has played a big part in the industrial history of the area, as a shipbuilding harbour. Today it is important because of the well-preserved industrial buildings which are still there, some of which have been repurposed. The grounds of the old wharf are today private and fenced in, not accessible to the public, depriving people of the possibility to experience this historic milieu. This also creates yet another barrier within the site, putting an end to the possibility to move further west along the canal, as the property of the wharf runs all the way down to the canal. The repurposed buildings today house a variety of businesses, from technology start-ups to car mechanics.

Right next to the wharf is the location of the planned new pedestrian and bicycle bridge in the extension of the Sachtlebenstraße. It will give the wharf a more central place in the transportation network in the area, and open up potentials for new uses in the wharf as it will be close to the retail areas on the opposite side of the canal and on the path of many passers by. The planned bridge will be placed where remnants of an old bridgehead is located by the wharf's side of the canal.



The east facade of the Wharf facing the visitors coming from the meadows.



Space for car mechanics is one of the Wharf's uses.



Copyright: Senatsverwaltung für Stadtentwicklung und Umwelt Berlin, 2014. The photo has been manipulated by the authors.

#### 4.2.7 Old Treatment Plant

East of the Teltower Damm on the north bank of the canal is an inaccessible and overgrown area, containing an old water treatment plant which is today abandoned. It consists of a system of small canals connecting one circular open treatment pond with three open large rectangular ponds. Though the area is not used anymore for water treatment purposes it is closed off and fenced in. The reason is probably because of safety hazards, as the brick buildings are crumbling and the open ponds have no safety fences. There are probably also contaminants in the grounds which could constitute a health risk.

Along the canal, south of the treatment plant, runs a small pedestrian path. It is narrow and uneven, and as shown by outcropping rocks which are marked with bright colours, it can be dangerous to use when it is dark.

The whole area surrounding the treatment plant is bordered to the north by industrial and commercial businesses, to which it is not connected. This means that the path along the canal is the only possibility to move through the area, which thereby constitutes a serious barrier effect.



One of the open ponds.



The small pedestrian path along the canal.



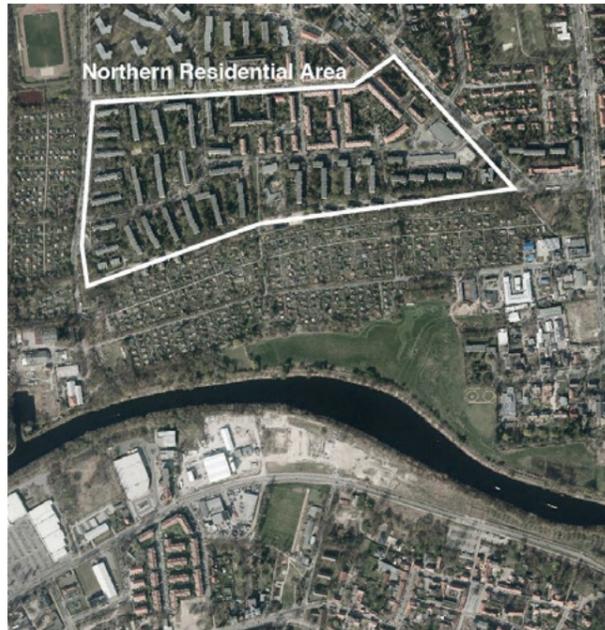
The inner court of the Wharf which is not accessible for the public.



Remnants of the train path and the old bridgehead facing the canal.



Remnants of the Treatment Plant.



Copyright: Senatsverwaltung für Stadtentwicklung und Umwelt Berlin, 2014. The photo has been manipulated by the authors.

#### 4.2.8 Northern Residential Area

In the northern part of the site area, adjacent to the allotment gardens lies a residential area with multi-story housing. This area is where most people live in a close vicinity to the canal on the Schönow side. There is a small commercial center in the neighbourhood containing a grocery store, a pharmacy and some other smaller businesses. The built environment is structured according to modernist planning with freestanding buildings not facing the street, instead standing in the large parklike yards. The street system in the area is also modernist with very few right angle street intersections, and thereby decreasing orientation and legibility. Towards the canal there are a few connections from the residential neighbourhood to the allotment gardens, but as described, there are no connections further from the gardens to the canal, so the allotment gardens have to be circumvented to reach the canal from the neighbourhood.



One of the two connections to the allotment gardens.



The area contains many green spaces between the housing units.



Some parts of the area have a more hard surfaced character.



One of the connections where the residential area and the allotment garden area meet.



Park-like courtyard with an open lawn and matured trees.



The most common edge between the residential area and the allotment gardens.

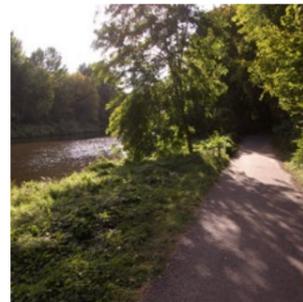
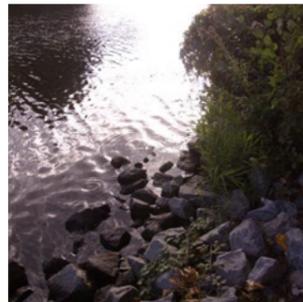


West German housing estates.

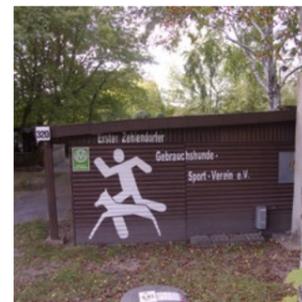
### 4.3 Photo Documentation



**Buildings**



**Canal**



**Activities**



**Transport**

## 4.4 Informal Citizen Conversations

We have among others observed people jogging, horse-riding, drinking, having small hidden away parties, barbecuing and fishing. We have also observed several activities within more formal circumstances, clubs and associations for example, such as allotment gardens, an agility club, a small petting zoo, and a large grass field used for markets, tivolis and other events.

During our site visits we had informal conversations with 22 people. Even if the number of people was not so high, it surprised us how similar their thoughts were about the area. Many of them mentioned the vegetation and the green areas as the most important character. The green areas was the reason why some of the people who did not live in area, spend their time visiting it. The built areas did not seem to be so highly valued, except the Altstadt that was very appreciated. When we asked about the population growth the S-Bahn station in Teltow was seen as the main reason. Some also thought it was difficult to move about, due to the lacking path system. The project with the new marina was criticized, because of the costs and that they thought it would exclude too many citizens. One thing that surprised us was that the history of the Berlin Wall was still very present. Even if the wall is gone the people were very clear about which side of the canal we were on. Some people in Teltow corrected us and explained that we were not in Berlin, and that Berlin began on the other side of the canal, 25 meters away. The overall conclusion we got from the conversations was that the people did not want the area to change too much. If something was about to change it had to benefit all of the citizens and not just a few.

The following quotes are some of the comments from people we met during our site visits:

*"It is a shame that they spend so much money on a something that will gain so few people. It is just a water canal for industrial transportation, not for boat tourism."*

- Horst (Regarding the new Marina), 2015-12-05, around 12:00.

*"I do not live here but I know that Teltow is very requested due to the S-Bahn station. However, the traces from the DDR-era is still very present here. But I really like the old town and the church."*

- Dorit, 2015-11-21, around 13:00.

*"The new marina lies a bit off, there are better located marinas closer, and further out from Berlin. I think it is difficult to attract German tourists by building that marina, the competition is just too high."*

- Frank, 2015-12-05, around 13:00.

*"You do not come here for nature, but it is the best thing here. I think it is important not to exploit it."*

- Michael, 2015-10-24, around 12:00.

*"Actually, I do not like Teltow, it is so industrial. But the area around the canal is nice. One thing that I miss though is better paths for walking."*

- Dorethe, 2015-11-21, around 16:00.

*"I ride my bike along the 'Mauer-Weg'. I usually stop here along the canal because it is the best location."*

- Wolfgang, 2015-10-24, around 14:00.

### Conclusion Site Visits

The site contains many areas with rather special characters such as the Altstadt, the Wharf and the remnants from the old water treatment plant. However, larger areas are fenced in which make it difficult to fully experience all of the characteristics the site actually offers.

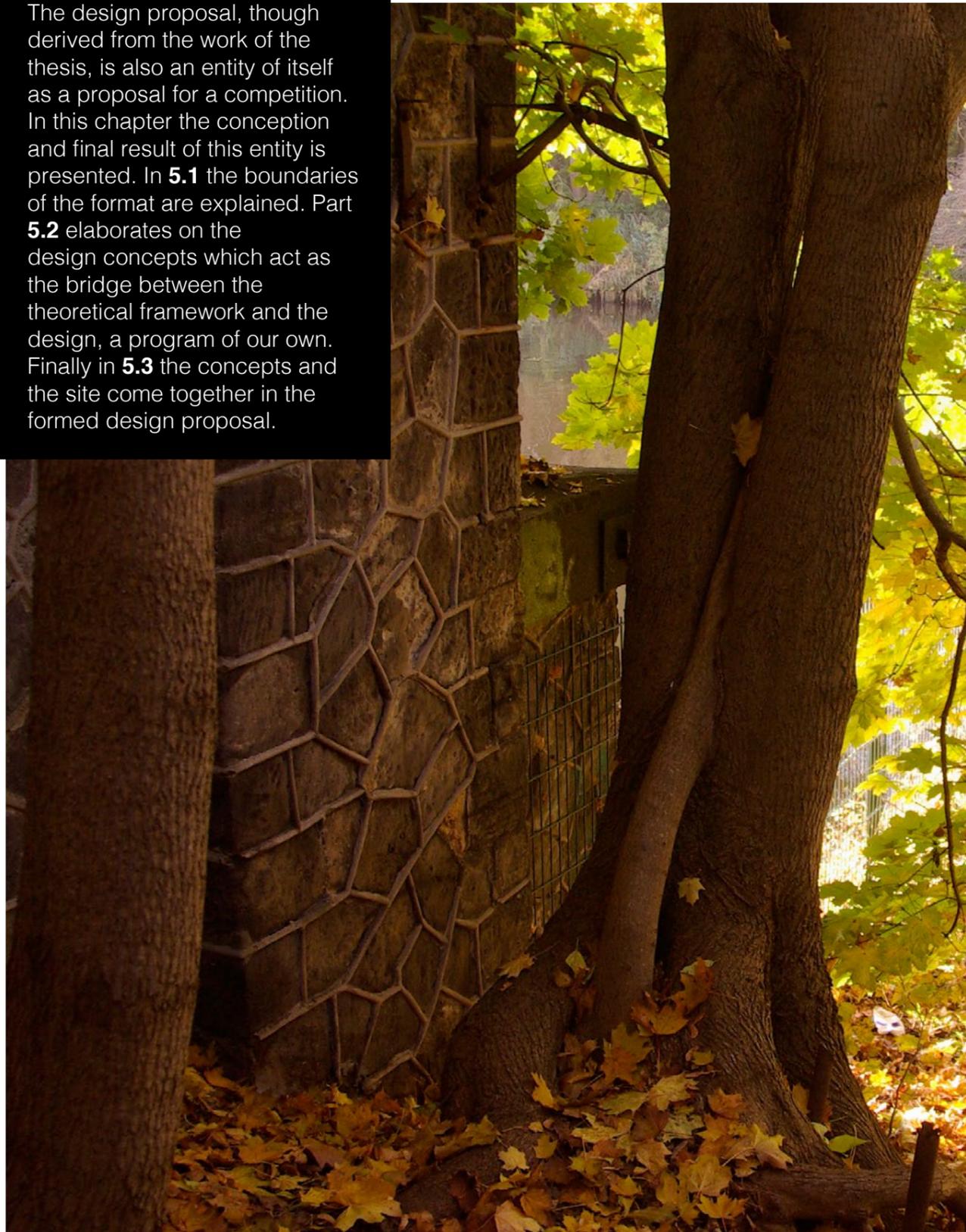
On the site there are also large green spaces with semi-natural vegetation which have recreational values. However, the site is rather difficult to walk through due to the lack of paths and the many fenced in areas which decreases the recreational values of the green spaces. During our first site visit we thought it was rather difficult to find our way to the different areas. There were no obvious main connections leading from one area to another. The canal is a main feature of the area but it also has an effect as a barrier by being difficult to reach from the Teltow side. The public spaces on the site is used in many ways.

The overall conclusion drawn from the conversations were that most of the people did not wanted any major changes in the area. If any changes were to be made it should benefit the majority of the people.



## **5. DESIGN PROPOSAL**

The design proposal, though derived from the work of the thesis, is also an entity of itself as a proposal for a competition. In this chapter the conception and final result of this entity is presented. In **5.1** the boundaries of the format are explained. Part **5.2** elaborates on the design concepts which act as the bridge between the theoretical framework and the design, a program of our own. Finally in **5.3** the concepts and the site come together in the formed design proposal.



*Wall of the old bridgehead outside the Wharf at Teltow Canal.*

## 5.1 Competition Program

The format of a competition puts certain requirements on the design proposal, both on the design itself and on how it can be presented. The competition is divided into three participation groups, the one we are participating in is called Network and Public Space, and is the one focused on landscape architecture. The general evaluation criteria are the same for all participants in the competition and they are:

- Comprehensibility and conclusiveness of the concept
- Quality and succinctness of the urban design framework and the public spaces
- The spatial-architectural quality and the implementation of the concept
- Relation to the context and the existing situation
- Innovativity of the idea
- Orientation and street and path system
- Flexibility, phasing and sectioning
- Dealing with the factors mixed usage, land use and density
- Level of attention to detail and clarity in the purpose of details
- Quality of the presentation and legibility of plans and drawings
- Completion of the required documents

The most important and first point of the competition program is that the urban, industrial and landscape fragments of the area today, should be restructured and rearranged. At the same time the residential areas of Teltow and Zehlendorf, today also fragmented, should be better connected to each other. The goal is to create a relationship between city and landscape, and to provide accessibility to the canal front. These measures should aim to control the spatial-structural development of the area in the long term. Potential areas for new development and densification of the existing built environment should be identified. A more intensive future use of the landscape and the canal area should also be assumed when creating the design. The existing different natural and open spaces should be developed and differentiated further.

Based around the area of the Teltow canal, an overarching framework for the open and green spaces should be developed. Starting point should be the neighbourhoods running parallel to the canal, the canal with the partially existing network of paths running alongside it, and also the north to south connections, both from the Teltower Damm over to Ruhlsdorfer Platz, and at a planned new bridge connection in the extension of the Sachtlebenstrasse, beside the Teltow wharf. A close network of paths and green spaces should be developed with pedestrians and cyclists in mind. A widening of the old bridge Knesebeckbrücke is to be assumed. The existing protected landscape areas and the marina being built at the moment should be taken into consideration.

More specifically for the landscape architecture part of the competition, the open landscape areas around the canal should be developed, with a focus around the location of the historic Schönau village, the connection to the Schöw meadows and also to Ruhlsdorfer Platz on the Teltow side. The spatial and creative qualities of the open spaces should be shown in the scale 1:2500.

Paths and areas along the canal should be designed with consideration to the protected areas, historical traces and the unique character of the area. Accessibility to the water should become an experiential value and mixed uses should be integrated into the design. Connections between existing and planned neighbourhoods, and green spaces, should be developed through an attractive path network.

## 5.2 Design Concepts

The conceptual framework is a result of the conclusions drawn from study of literature and the relevant cases presented in the theoretical framework. The aim was to define the key ideas which were common in both literature and cases and thereafter translate the conclusions into the concepts which are presented in the conceptual framework. The concepts are not to be seen as solutions applicable to any site, rather as guidelines that have to be combined with the specific conditions on the site at Teltow Canal. As is the case for the theoretical framework, the conceptual framework is presented divided into the categories flexible urban planning, interim use and small-scale interventions. The categories frequently overlap, but the overall conceptual framework aim to represent the entirety of the theoretical framework.

As the competition calls for actual physical changes to be made in the area, the design concepts are our own interpretation of how we as landscape architects can best apply the theory while still diverting from the examples which have been studied. Many of the example solutions described in this thesis are not possible for us to directly apply within the rules of the competition as they are of a social or economic character. Instead the design concepts are intended as guidelines for constructing the physical realm in order to in the best possible way facilitate solutions with a similar purpose.

### 5.2.1 Flexible Urban Planning

#### Framework

In a larger urban area the approach should be to define its key characteristics which could be developed for shaping a rigid but flexible framework. New developments might be needed, but it should be thought of as a restructuring of form and function. Landscape architecture can be used to restructure an area with smaller changes in the built environment.

#### Network

Keeping with the idea of renewing an area through restructuring, this could effectively be done, by establishing new networks in the existing environment. New physical links and connections in the city can, with little exploitation, open up access to many new places. Creating these new connections is closely linked to creating new social and cultural networks in the city, which is just as important. Well functioning social and infrastructure networks are key to urban renewal.

#### Retain

Retain as much as possible from the existing site. In a larger development it might mean that some areas should not be changed at all. Preserve the sense of place by retaining the spatial, structural, functional character and the people who use it. The retention and strengthening of the cultural and social identity can help to transform the physical structure of a neighbourhood to the better.

### 5.2.2 Small-scale Interventions

#### Catalytic situations

If small-scale interventions are strategically applied they can generate large-scale effects. By defining an area's ongoing activities and its key situations, it is possible with rather simple interventions to unlock hidden qualities.

#### Reuse

Reuse of material is something that has appeared in many of the theories described in this thesis. It is the essence of small-scale interventions, making a change adding as little new as possible to an area. Material already available in an area should be reused, everything including plants and construction material.

### 5.2.3 Interim Use

#### Adaptable

While retaining as much as possible in an area, the design should also be adaptable. Prone to change of both function and form. This means that the design should also allow for users to adapt the place to their own wants and needs. Adaptable site design will require flexible and durable materials combined for maximal functionality. Open spaces with an adaptable character, such as schoolyards and vacant lots, can often be used for multiple uses, thereby inviting temporary use.

#### Accessible

For stimulating interim use, it is important to design sites with accessibility in mind. There is physical, legal and mental accessibility, which all need to be considered. Not necessarily all areas need to be made accessible to all, but the design needs to take into account for whom the space is accessible. If the space is accessible to all, there are groups who will not use it.

#### Open Process

The planning process for the development of a large area should be open and transparent. It is important that citizens can participate from the start of the process. Participation should not be conducted only through traditional town hall meetings. Planners and designers should also actively consult groups of people, inhabitants or users, who would not otherwise be a part of the process, and there should be communication throughout the whole planning and building process.

### 5.3 Design Proposal

The idea for the design is a result of the theory, translated through the design concepts. The history of the Teltow Canal area has resulted in a scattered urban fabric with an underdeveloped infrastructure but also a well established network of green spaces which stretches over large parts of the area.

#### Green Path Network

The idea is to develop and combine the urban infrastructure with the green spaces into a green path network. Vegetated public and disused spaces function as a base for new paths and connections to erase barriers of the underdeveloped infrastructure. Teltow, Schönow and Kleinmachnow are all connected by the network, creating a coherent and accessible green urban fabric.

The green path network serves as a flexible framework by securing a green connectivity within the area while at the same time allowing surrounding spaces to be freely developed. By dealing with both short and long term effects the proposal presents a sustainable urban development with a high flexibility to changing conditions in future needs and possibilities.



Illustration: Svante Sodermo

Plan showing the overall proposal with the green path network and the interventions.

## Diagrams

### Abundant Green Structure



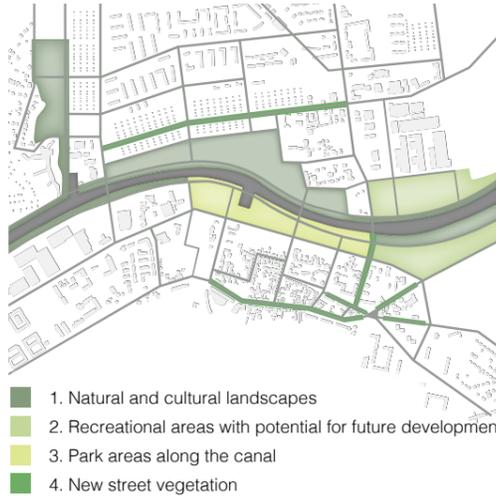
The site has an underdeveloped infrastructure as well as an abundant green structure.

### Green Path Network



By using the green areas as a base for new paths, a green path network is established throughout the site. The network serves as backbone which ensures a green connectivity to be retained and developed along with future needs.

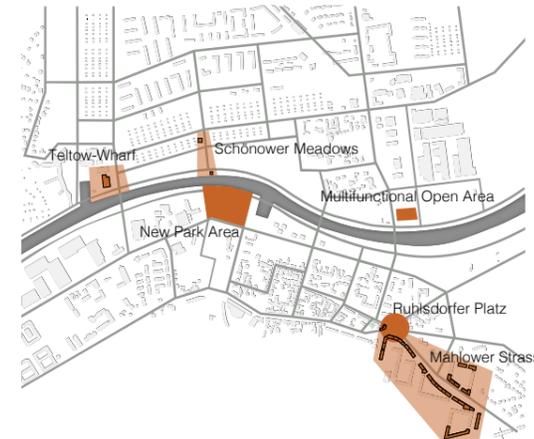
### Development Typologies



The green path network is constructed by four typologies which presents different relationships between paths and greenery, as well as their future flexibility.

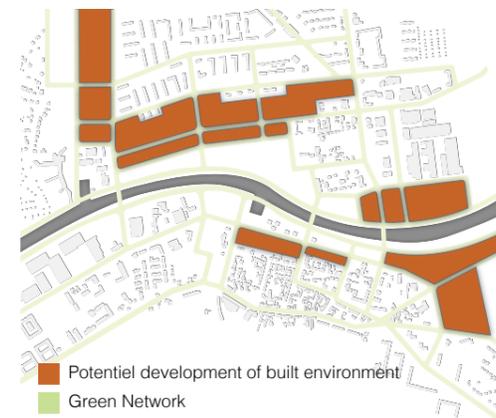
- 1. Natural and cultural landscapes
- 2. Recreational areas with potential for future development
- 3. Park areas along the canal
- 4. New street vegetation

### Interventions



Throughout the site six interventions are proposed, including new connections, a park, a square and housing.

### Possibilities for flexible development



The green path network allows surrounding areas to be freely developed when new needs appear.

### Road and path system



The new paths are based on the green structure which enhances their recreational value. Together they open up a larger semi-natural park area which is easy to access from both Teltow and Schönow.

## Typologies

The green infrastructure network is shaped by four typologies which each presents its own relationship between infrastructure and green structure.

1. In the vegetated areas surrounding the meadow field, along the canal and the Buchgraben parkland new recreation paths are constructed. The paths make the areas more accessible and enhances their connections to the surroundings. The areas can be developed further but preferably be kept unbuilt.
2. In the forested area around the old treatment plant new paths are laid out. The paths make the area accessible and enables recreational uses. By placing them along property borders, the paths can play a natural role in possible future development projects, where infrastructure and existing vegetation can function as important structural elements.
3. A part of the vegetation along the canal will be reshaped to create a park atmosphere which can be developed further but preferably be kept unbuilt. This area is a part of a larger park strip, running from Knesebeckbrücke down to the Buchswiesen open areas.
4. By planting new tree rows, larger streets become connected to the green structure. The new street vegetation enhances readability and function as green urban axes also in surrounding future developments.

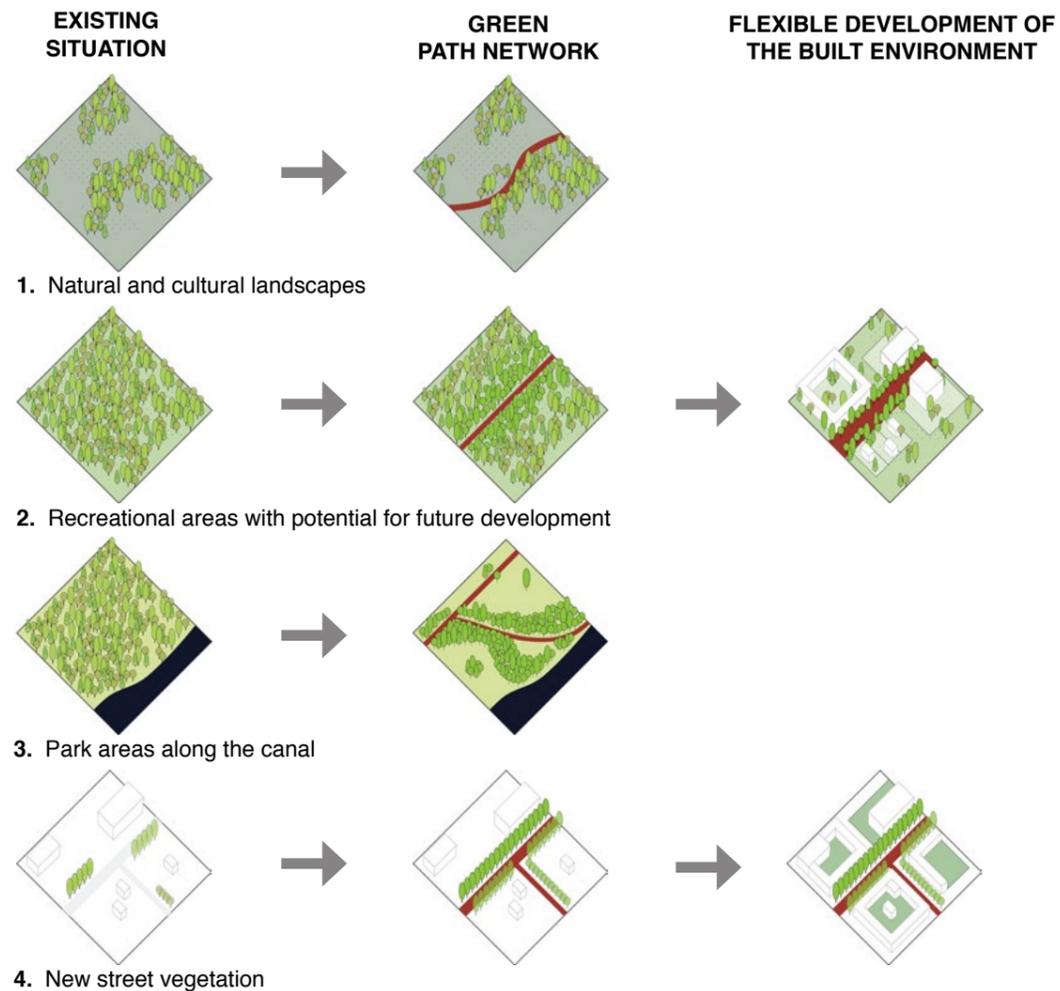


Illustration: Johan Jacobsson

## Aerial View Visualisation



Visualisation: Svante Soldemo

Aerial view showing the green path network and the densification along Mahlower Straße.

Plan Zoom



Illustration: Svante Soldemo



10m 50m 100m 200m

Plan zoom showing the new park area, the Wharf's entrance square and the new connection to the northern residential area.

Visualisation New Park Area



Visualisation: Svante Soldemo

Visualisation of the new park area which is framed by the existing vegetation along the canal.

Visualisation Teltow Wharf

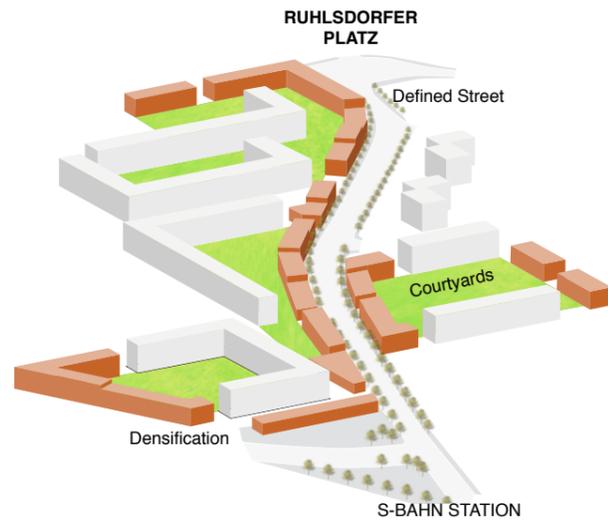


Visualisation: Svante Soldemo

Visualisation showing the Wharf's new entrance square and its relationship to the old bridgehead.

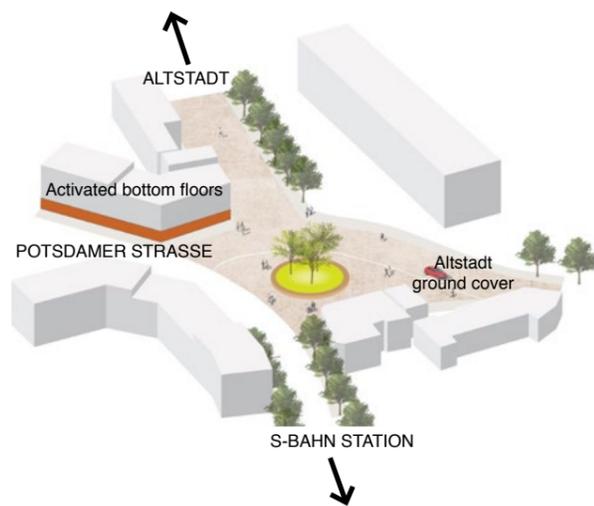
## Interventions

Within the green infrastructure network a series of interventions are conducted. By adapting to the existing conditions and reusing and retaining physical characteristics, the interventions open up sites for new connections, uses and possibilities. All interventions are placed at strategic points in the area to have a catalytic effect, guiding the future development of the surrounding environment.



### Densification along Mahlower Strasse

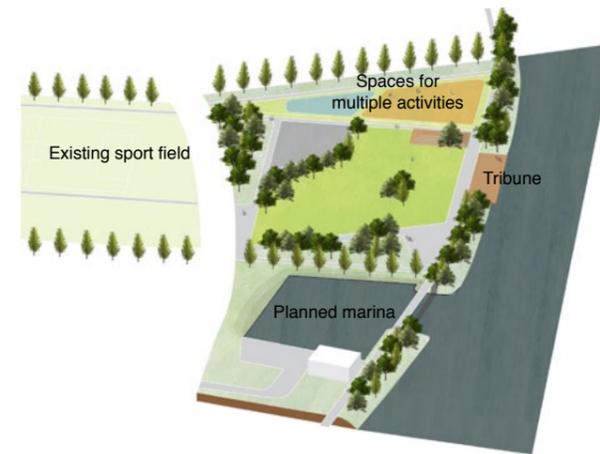
The area along Mahlower Strasse will be densified with new buildings that create a coherent urban structure together with the existing buildings. The new buildings connect the Old Town to the S-Bahn station by framing Mahlower Strasse and giving it a more urban character as a main road. Thereby, a new order for this part of Teltow will be created, with Mahlower Strasse becoming a clearly delineated urban street. The bottom floors of the new buildings can be used for commercial purposes which enable Mahlower Strasse to develop into a more lively and active street. Together with the existing buildings, the new buildings shape courtyards which can benefit the inhabitants, by leading to new functions and uses in the living environment. The new buildings differ in heights depending on how close they are placed to the existing buildings which also create variations in the urban environment.



### Ruhlsdorfer Platz

Ruhlsdorfer Platz is today an unclear traffic intercross with a weak connection to the Altstadt. The idea of the intervention is to upgrade the function of Ruhlsdorfer Platz as the important junction it is. To heighten the square character and enhance the connection to the Altstadt, the Altstadt's ground cover is extended over Ruhlsdorfer Platz. A new tree row is placed to define the direction towards Altstadt making it a natural continuation from the square. A round bench-island with plants and trees in the middle is placed on the square which will be a new focal point for defining Ruhlsdorfer Platz as a meeting point.

Illustrations: Johan Jacobsson



### New Park Area

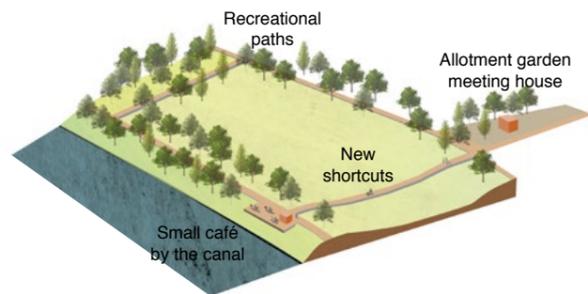
The most important feature of the new park is its location. It fills the gap between the planned marina and the existing sport field creating a park strip which stretches along the canal down to the existing city park. The new Park area will allow for new activities which are not present in the area today. The park contains features such as an open lawn for recreation, a playground, a sport field and a skatepark. The concept of using the existing vegetation is here used to frame the park towards the canal which adds a wild character and creates a contrast to the shapes and materials of the park. The canal is included in the park through a gap in the existing vegetation where a wooden tribune stretches down to the water, making it accessible for park visitors. Some remnants of the Berlin Wall are placed in the park becoming a special trademark as a public gallery presenting the history of the area.



### Teltow Wharf

The Teltow Wharf becomes more defined in its environment by creating a clearing in the existing vegetation and thereby shaping a gravel surface in front of the main building. The surface will surround the main building to make it more accessible to the public. The old bridgehead serves as a key structure for a new wooden tribune which is designed to fit the existing terrain. The tribune frames the new square which also creates new visual connections between the main building and the canal. The gravel surface, the new bicycle- and pedestrian bridge, and the new path along the canal create a new situation for future functions and activities of the main building. This makes it a possible node and also a catalyst for adjacent future urban developments.

Illustrations: Johan Jacobsson



### Schönow Meadows

A new pedestrian path runs through the Schönow Meadows. It creates a direct connection between the residential areas in the north, the meeting house of the allotment garden society, the meadows and the canal, where a small café building is placed. This is a connection which has been lacking previously and gives people easy access to a large part of the area.



### Multifunctional Open Area

In the forest on the Schönow side of the canal, east of Knesebeckbrücke, there is a large opening with gravel as groundcover. The new paths within the area make it more accessible and a part of the gravel surface is covered with asphalt to diversify the possible uses. It will function as a distinctly shaped space framed by the surrounding forest. The asphalt surface enables for functions and activities which do not fit into other, more planned, urban spaces. If new uses begin to occur in the area it will become an integrated part of the urban environment. If the new uses become important enough the probability is higher they will be kept or developed through possible future building projects.

Illustrations: Johan Jacobsson



First poster showing the overall plan, the aerial view, the typologies and the diagrams.



Second poster showing the plan zoom, the interventions and the visualisations.



## **6. DISCUSSION**

The aim of this thesis has been to create a design proposal for the Teltow Canal area in the outskirts of Berlin based on an informal planning approach, in order to facilitate a more flexible future urban development. Through a study of literature and an extensive site study we were attempting to answer the question:

*How can the area around the Teltow Canal in Berlin be transformed through architectural interventions, leading to a more flexible long term urban development?*

The end result of this is a design proposal for the area, which is a concrete answer to the posed question. This proposal, together with the results of the literature study can be a help and inspiration to urban planners, landscape architects and architects in the search of methods for a more flexible form of urban design and planning and hopefully for future research on the subject. In part 6.1 we will discuss our personal learning trajectory. Part 6.2 will concern the research question and its accuracy and relevancy for the thesis. The methodology we have used will be discussed in part 6.3 and in 6.4 the different parts of the result and what answers it provides to the posed question. 6.5 will give some concluding reflections and ideas for further research.



*Greenery at Teltow Canal.*

## 6.1 Personal Learning Experience

The process of the thesis was always aimed at learning, due to the outset being us two landscape architecture students, doubting our knowledge and at the same time looking for new opinions and inputs. The result of the project became something very different from what we first thought when starting it. However, the result was to us equally interesting. What we knew all along was that we wanted to study cities and landscape architecture. More specifically how time and scale is considered in planning and why some errors seem to occur again and again and what role we, as landscape architects, should actually have in this process. Through the whole thesis process, we have also had the idea of putting the knowledge we acquire to practical use by making a design proposal based on it.

Though we had these ultimate goals from the beginning and kept with them, the scope, aim and specific problems of the thesis have changed continually throughout the process. Becoming alternately wider and more narrow with the acquisition of new knowledge. Initially this was unsettling as it led to uncertainties of whether or not the project was feasible to be finished in time and if we would be able to find the appropriate scope. After some time we found ourselves accepting this constantly changing character of the project as something which happens naturally in such a process. Eventually the end state of the thesis settled and we have realised that these changes have been essential to reaching and understanding the end result, content and structure of the thesis.

The subject of the thesis led us to primarily search for recent sources of information. These kind of flexible solutions are not widely written about in classic landscape architecture literature and by us considered to be insufficiently covered in the field of urban planning. Though this was important for the end result we also noticed that it in some cases led us to arbitrarily reject theories with a stronger character of the solid modernity of urban planning. Theories which in their time and place had large benefits, from which we might could have learned some lessons for the content of the thesis. This insight has led us to be more humble in how we view some sources and in how we treat theories which ultimately can lead to a more nuanced background and problem section of the thesis. It has hopefully provided a more clearly resounding result.

Now, at the end of the work process we are satisfied with the results. We are starting to realise how much use we have had of working with each other. Being two people together in this has helped a great deal, giving feedback, criticism and support. The thesis would not have been the same, nor even remotely similar, if it had been conducted individually by one of us.

## 6.2 Research Question

*How can the area around the Teltow Canal in Berlin be transformed through architectural interventions, leading to a more flexible long term urban development?*

This is the research question which we deemed to be most relevant in association to the aim and problem field. To simplify, it can be divided into three parts. The location, the Teltow Canal, the method, architectural interventions, and the end goal, a flexible long term urban development.

Starting with a more narrow approach than the current question, we noticed as we went along that our scope was wider than we initially had thought.

One part of the question which we debated internally and which can be questioned, is that we included the geographical context, Teltow Canal. Another option would have been a more general approach, viewing the competition site as a test object for a general theory, but this would have been flawed, as the subjects of this thesis are very much dependent on the context of the site involved.

Another part which was not certain from the start was how the end goal of the question should be achieved, for example if the type of intervention should be specified already in the question. One option would have been to limit the question to our direct field of study, landscape architecture, but we realised early in the process that the kind of flexible planning which we wanted to achieve could not be accomplished through only landscape architectural interventions. It needed a more holistic and interdisciplinary approach. The term architectural interventions is used to include interventions through both landscape, buildings and urban planning. Another idea which was discussed was whether terms from the subject matters interim use, flexible planning or small-scale interventions should be included in the question. This would perhaps enable us to limit the result, but we decided against it, as we think there is a risk that it would also forego the result and thereby limit it in a negative way.

The third part of the question can also be discussed, the goal of the thesis, which is a flexible long term urban development. Terms such as adaptable, sustainable, or resilient could have been used in the research question. However, the term flexible was chosen as it is commonly used in the field of architecture and urban planning (Kärrholm, Nylund & de la Fuente, 2012). Though it has a wide scope, the keyword flexible thereby narrows the question down to be more limited to the field of urban planning.

## 6.3 Method

The main method of acquiring information for the thesis was through a literature study. We chose this method as we deemed it to be the most suitable way to gather such a wide array of ideas and examples in one study. We knew our literature study could only be fragmental because of the wide field of flexible urban planning. An alternate method for acquiring information about contemporary projects would have been to conduct case studies, visits or interviews. However, our belief is that this would have been too time consuming and given the study a more narrow scope than what we were hoping to achieve.

The theoretical framework was used to present the information gathered from the literature study. We chose to present it using this method rather than a pure presentation of scientific theory, because it enabled us to include ideas and examples from different kinds of sources, not exclusively from published scientific studies or reports. When it was clear that the thesis would result in a design proposal, the site study was necessary for understanding the site. It was a process of extended inventory and analysis of the competition site area. In hindsight the methods used for the site study were effective in defining the site, even though they were mostly thought up during the process as we went along. Alternating between studying texts and maps and actually visiting the site several times proved to be well suited.

We started working with the actual design proposal rather late in the thesis process, after we had conducted most of the literature study. The proposal is both a result of the thesis and a separate entity, developed independently. Another option would have been to start working on the design proposal earlier, parallel to the literature study. This might have led to a stronger relationship between the theoretical framework and the proposal. However, it could also have led to the conclusions drawn in the framework being affected by the site itself and thereby losing their general character.

## 6.4 Result

In this part we will discuss the result as presented in the theoretical framework, the site study and the design proposal.

### 6.4.1 Theoretical Framework

The theoretical framework is the basis for the result as it contains the ideas and examples which fit to the category architectural interventions leading to a more flexible long term development. Though it could not provide us with the full answer to our question as the study was not site specific to the Teltow-Schönnow area, by studying the common denominator of the studied ideas we did come up with our design concepts. We used them more as basis to follow rather than concrete solutions. We found that this became the natural way forward, to be able to free ourselves from the ideas and methods we had studied. Obviously, the gathered information could not be directly prescribed to our site and our solutions needed to be site specific, based on the existing conditions. It is inevitable that the selection of the design concepts from the theoretical framework is subjective. From the large amount of information, we chose the factors which we thought were most representative. This might then lead to a result partially based on our preconceived notions.

### 6.4.2 Design Proposal

Returning to our research question, and our aim of creating a design leading to a more flexible future development, we consider the design proposal to be a partially conclusive result, with room for further questions. Using our design concepts as a checklist of factors to be considered, we can see that many of them have been present in the design proposal or in the process of creating it. However, others have been more difficult to incorporate and have fallen away in the final design.

### Flexible Urban Planning

#### Framework

We defined the existing vegetation as the key characteristic of the area and used it for creating the design idea which includes establishing a framework. The framework leaves room for a future flexibility by allowing large areas to be freely developed. It is difficult to tell how rigid and realistic the framework actually is at a site, like ours, with many ownerships and planning regulations. However the framework is mainly an overall vision for the area and should not be viewed as a definite plan. Instead it can be used as a guiding document for the people and authorities

of Teltow, Schönnow and Kleinmachnow when discussing future development plans.

#### Network

The idea also includes an enforced infrastructure network with new physical links. By enhancing the connectivity, we also hope to enhance the social network between the different areas. The network is partly presented through the four typologies which deal with short to long term effects. These typologies can be seen as presenting phases of developments which are rather fixed. However, the typologies are not controlling the outcome of future developments but rather try to push them in a positive direction.

Even if most parts of the network are in public and disused areas, some of the new paths are running in between privately owned lots which could make them difficult to establish. Why some connections are more important than others is not explained in the proposal which could be seen as a flaw. Also the materials of different paths are not clearly defined in the proposal which might make it harder to understand their connection to the surrounding environment.

#### Retain

We thought the vegetation was one of the most important parts of the identity of the area. That is why one idea was to retain most of the existing vegetation. However, there may be some unclarities in the presentation of how to retain the vegetation. For example, it lacks more detailed information of how the vegetation should be managed over time. Large areas throughout the site are also retained and not changed at all. It can be discussed whether the correct areas are retained or not. It could have been a better solution to, instead of densifying the area around Mahlower Straße, build new housing units on the large grass lawn in the east part of the site. Again, the decision of which areas to retain was based on our interpretations. A better result could possibly have been reached through more citizen participation and dialogue.

### Small-scale Interventions

#### Catalytic Situations

The placement of the interventions in the design proposal was aimed to adhere to the design concepts by identifying catalytic situations in the area. The identification of the catalytic situations is mainly based on our own interpretations. It is difficult to predict how catalytic these situations will actually be in the future. The site could also contain other situations which are more suitable for being developed through interventions and which we have not identified. How large the effects of the presented interventions will be is also difficult to predict.

#### Reuse

One aim for the design proposal was to reuse materials and structures on the site. This aim is presented in different ways in the interventions, where buildings, vegetation and materials are reused. We have been able to reuse many relevant existing structures in the design proposal. However, to what extent the different structures and materials are reused can be discussed further. For example, the approach of reusing, is more defined in the intervention around the Wharf where the buildings, old bridgehead and existing vegetation are actively reused, compared to the intervention at Ruhlsdorfer Platz where only the ground cover of the Altstadt was extended. The value of reusing as much as possible is difficult to define. To reuse materials and structure is not a goal in itself and should be applied when suitable. In some cases it is questionable, for example in the densification around Mahlower Straße, where we chose to reuse the existing buildings in the new block structure. Though we believe that there is a value which justifies this, there are many possible factors which could change this evaluation, including aesthetic incoherence, physical deterioration, energy consumption or safety measures. The intervention is obviously not small-scale but the design shows how the existing structures can be reused and how to enhance the connection between the S-Bahn station and the Altstadt.

#### Interim Use

##### Adaptable

The adaptability of the area for future functions and uses was an important part of the design. Some of the adaptable spaces we have suggested in the design proposal is the asphalt surface in the woods, the entrance square to the Wharf area, the park and the large grass area in the east part of the site. We think our approach of using durable materials such as asphalt, gravel and grass enhances the

probability that these space can adapt to future functions. However, the shape and overall design of these areas does not guarantee that the goal of them turning into activated public spaces is accomplished.

##### Accessible

The accessibility of the design can be discussed, there is no specific focus in the proposal to make the whole area accessible to all. For example many parts will be hard to reach for those who have some kind of physical disability, which is obviously a negative point. The accessibility which has been added to the site with the design proposal is instead focused on making as much as possible of the site accessible to as many as possible. Especially locations which have unusual or interesting features and are today inaccessible to the public. Some more secluded spaces along the canal have been saved without them being presented in the proposal. We thought it was important to recognise that a fully accessible design will inevitably exclude some groups of informal users. This realisation means that there will always be a conflict of interests in the design, even if it is seemingly accessible to everyone.

##### Open Process

One of the main factors of a flexible urban development in many of the examples of the theoretical framework, was to involve the public in an open process. This has been difficult to incorporate within the format of both the competition and the thesis, which can be seen as a flaw in the validity of the design. Though this is a problem, it was still something we were aware of, both during the site study when we held spontaneous citizen dialogues, and during the design process. We tried to use the input we had and also to understand the perspectives of the many different user groups of the area which we would not normally come in contact with. For instance, the vegetation was one of the aspects of the area which through the dialogues emerged as most appreciated by the citizens. It was one of the reasons why this aspect was so central in the design proposal.

A greater citizen involvement could have been achieved and still work within the format of the competition. However, in order to accomplish this, the focus would have been needed to be shifted from other parts of the work process, at the expense of other aspects of the design. In a hypothetical real world situation when planning for actual changes to be made, the citizens should also be included in the actual idea process for the site and be allowed to actively participate in the development.

### Conclusion

Returning to the research question and to accomplish the aim of the thesis, the design should follow the ideas of the theoretical framework as represented by the design concepts. All of the design concepts are in some way incorporated in the proposal, some more clearly defined than others. However, we think the overall result of the proposal shows that we have managed to present a flexible long-term development for the area around Teltow Canal. The green path network enables the surrounding areas to be freely developed without erasing the green path connections throughout the site. In this sense, we find the inbuilt flexibility of the proposal high and therefore the proposal is also adaptable to future changing needs in the area. On the other hand, the design proposal presents rather fixed structures throughout the site which arguably represent a lack of flexibility. It could also be said that the overall design proposal, created by landscape architects, is a top-down solution for the area. However, our approach was to incorporate people's thoughts in the idea and also to present an open-ended proposal where the thought of flexibility is incorporated in the design. We believe this could be a preferable strategy to use in architectural competitions or similar projects.

## 6.5 Relevance

Though being site specific, our result shows how a design proposal for a more flexible urban planning could look in practice. Studying the ideas in the literature, we perceive a gap between theory and practice in the field of flexible urban planning. With this thesis we wanted to contribute in filling this gap, and we believe that there is a relevance to our work in that aspect. It also has a relevance to the context, the Teltow Canal area in Berlin, for which the design proposes a very real concept for the renewal of the area. As an idea proposal for a competition, it is still visionary and not ready to be directly developed, but could be used as guiding document for the future planning and development of the area. Also the fact that the proposal will be examined by the competition jury of architects, urban planners and local politicians, strengthen the relevance of the thesis, due to the chances that the ideas will be discussed further among actors who have the authority to enact real change.

## 6.6 Further Research

A problem we have grappled with during the process of the thesis is the difficulty of defining the subject with which we have been working. Perhaps flexible planning is the single term which can best describe it. Instead this is today more of an anti-subject, defined by what it is not, which is planning with too large-scale a scope, too set on permanence, and too expensive. Realising this, an interesting question for further research is, how can this field of urban planning be more clearly defined by what it is?

A follow up question could be, how can this field of urban planning, and the methods studied in this thesis, be incorporated into real public planning processes?

Furthermore, it would be interesting to study the dynamic and difference between flexibility in design, and flexibility as brought about by informal proceedings and happenstance.

# 7. REFERENCES

Arlt, P. (2013) What City Planners Can Learn From Temporary Users. In: Misselwitz, P., Oswald, P. & Overmeyer, K. *Urban Catalyst: The Power of Temporary Use*. Berlin: Dom Pub.

Baumann, Z. (2004) Postscript from Lecture on the ANSE-conference, Value dilemmas as a challenge in the practice and concepts of supervision and coaching. May 7th 2004 in Leiden, The Netherlands. Online: [http://www.anse.at/tl\\_files/anse/docs/history/2004%20Leiden/bauman%20englisch.pdf](http://www.anse.at/tl_files/anse/docs/history/2004%20Leiden/bauman%20englisch.pdf) (accessed 21 November 2015)

Bargmann, J. (2015) Lecture at Oyster Seminar. Online: <https://www.youtube.com/watch?v=W2-TqkvWujM>

Bergdahl, E. & Rönn, M. (2001). *Planering för funktionsintegrering - problem och utgångspunkter*. Umeå: Cerum.

Bishop, P. & Williams, L. (2012). *The Temporary City*. London: Routledge.

Burns, C.J. & Kahn, A. (ed.) (2005). *Site Matters: Design Concepts, Histories, and Strategies*. New York: Routledge.

Carmona, M., Tiesdell, S., Heath, T. & Oc, T. (2010). *Public Places - Urban Spaces: The Dimensions of Urban Design*. 2. ed. Oxford: Architectural Press.

Casagrande, M. (2010) *Urban Acupuncture*. Taipei: Ruin Academy. Online: <http://thirdgenerationcity.pbworks.com/f/urban%20acupuncture.pdf> (accessed 10 October 2015)

Certeau, M. d. (1984). *The Practice of Everyday Life*. Vol. 1, *The Practice of Everyday Life*. Berkeley: University of California Press.

Clarke, J. (2013) *Adaptive Re-use of Industrial Heritage: Opportunities and Challenges*. Publisher: Heritage Council Victoria. Melbourne. Online: [http://architectureinsights.com.au/media/uploads/resources/Adaptive\\_Reuse\\_of\\_Industrial\\_Heritage.pdf](http://architectureinsights.com.au/media/uploads/resources/Adaptive_Reuse_of_Industrial_Heritage.pdf) (Accessed 10 January 2016)

Colomb, C. (2012). *Staging the New Berlin - Place Marketing and the Politics of Urban Reinvention Post-1989*. Abingdon: Routledge.

Congress for the New Urbanism (2001), *Charter for the New Urbanism*. Online: [https://www.cnu.org/sites/default/files/charter\\_english.pdf](https://www.cnu.org/sites/default/files/charter_english.pdf) (accessed 18 December 2015)

Corbusier (1971). *La Charte d'Athènes*. Paris: Seuil.

Corner, J. (ed.) (1999). *Recovering landscape: essays in contemporary landscape architecture*. New York: Princeton Architectural Press.

Corner, J. *Terra Fluxus*. In: Waldheim, J. (ed.) *The Landscape Urbanism Reader* (2007), New York: Princeton Architectural Press.

Crawford, M. (2013) *Everyday Urbanism*. In: Misselwitz, P., Oswald, P. & Overmeyer, K. *Urban Catalyst: The Power of Temporary Use*. Berlin: Dom Pub.

Department of Arts, Heritage and the Gaeltacht (2012), *Shaping The Future - Case Studies in Adaptation and Reuse in Historic Urban Environments*. Ireland. Online: <http://www.ahg.gov.ie/app/uploads/2015/07/shaping-the-future-case-studies-in-adaptation-and-reuse-in-historic-urban-environments.pdf> (accessed 19 November 2015)

Duany, A., Talen, E. (ed.) (2013). *Landscape Urbanism and its Discontents: Dissimulating the Sustainable City*. Canada: New Society Publishers.

Ferreri, M. (2015) The seductions of temporary urbanism. In: *Ephemera Journal*, Volume 15 pp. 181-191. Online: <http://www.ephemerajournal.org/sites/default/files/pdfs/contribution/15-1ferreri.pdf> (accessed 21 November 2015)

Franck, K. Stevens, Q. Routledge.(2006) *Loose Space: Possibility and Diversity in Urban Life*. New York: Routledge  
Online: [http://samples.sainsburysebooks.co.uk/9781135993184\\_sample\\_535687.pdf](http://samples.sainsburysebooks.co.uk/9781135993184_sample_535687.pdf) (accessed 17 November 2015)

Ganis, M. (2009) *Planning adaptable and resilient cities: a small world paradigm*. The University of Queensland, School of Geography, Planning and Environmental Management  
Online: [www.universitas21.com/relatedfile/download/129](http://www.universitas21.com/relatedfile/download/129) (accessed 20 November 2015)

Hall, P. (2002). *Cities of tomorrow: an intellectual history of urban planning and design in the twentieth century*. 3. ed. Malden: Blackwell Publishing.

Hough, M. (2007). *Principles for Regional Design*. In: Larice, M. & Macdonald, E. (ed.) *The Urban Design Reader*. London: Routledge.

Howard, E. (1965). *Garden Cities of To-Morrow*. New ed. Cambridge: MIT Press.

J&L Gibbons LLP, muf architecture/art (2009). *Making Space in Dalston*. London: London Borough of Hackney.

Jovanovic, G. Kondic, S. Zivkovic, M. (2015) *Flexible Planning Strategies of Sustainable City Development*. In: *Architecture and Civil Engineering*, Volume 12, pp. 273 -286. Online: <http://caso-pisi.junis.ni.ac.rs/index.php/FUArchCivEng/article/view/610/437> (accessed 20 November 2015)

Katz, S. & Mayer, M. (1983) *Gimme Shelter: Self-help housing struggles within and against the state in New York City and West Berlin*. *International Journal of Urban and Regional Research*. Online: [http://www.academia.edu/7337577/Gimme\\_shelter\\_self-help\\_housing\\_struggles\\_within\\_and\\_against\\_the\\_state\\_in\\_New\\_York\\_City\\_and\\_West\\_Berlin](http://www.academia.edu/7337577/Gimme_shelter_self-help_housing_struggles_within_and_against_the_state_in_New_York_City_and_West_Berlin) (accessed 20 January 2016)

Killing, A. (2013) *Havenkwartier, Assen*. Online: [killingarchitects.com/havenkwartier-assen/](http://killingarchitects.com/havenkwartier-assen/) (accessed 6 November 2015)

Kohoutek, R. & Kamleithner, C. (2013) *Economy of Temporary Use*. In: Oswald, P., Overmeyer, K. & Misselwitz, P. *Urban Catalyst: The Power of Temporary Use*. Berlin: Dom Pub.

Kronenburg, R. (2007). *Flexible: Architecture that responds to change*, London: Laurence King Publishing Ltd.

Kärrholm, M. Nylund, K. & Prieto de la Fuente, P. (2012) Spatial resilience and urban planning: Addressing the interdependence of urban retail areas. In: *Cities*. Malmö University. Online: <http://www.sciencedirect.com/science/article/pii/S0264275112001898>

Landkreis Potsdam - Mittelmark (2012) Demografiebericht Nr. 2 Fachbereich Soziales, Jugend, Schule und Gesundheit. Bad Belzig, November 2012. Online: [http://www.potsdam-mittelmark.de/fileadmin/Redakteure/Bilder/Bildung%20%26%20Soziales/PDF/Demografiebericht\\_Nr2\\_PM\\_2012.pdf](http://www.potsdam-mittelmark.de/fileadmin/Redakteure/Bilder/Bildung%20%26%20Soziales/PDF/Demografiebericht_Nr2_PM_2012.pdf) (Accessed 25 January 2016)

Landry, C. (2013). Urban Acupuncture & Taipei. Charles Landry's Blog [Blog]. 1 April. <http://charleslandry.com/blog/urban-acupuncture-taipei/> (accessed 9 October 2015)

Larice, M. & Macdonald, E. (ed.) (2007). *The urban design reader*. London: Routledge.

Lerner, J. (2014). *Urban Acupuncture*. Washington, DC: Island Press.

Lydon, M. & Garcia, A. (2015). *Tactical Urbanism: Short-term Action for Long-term Change*. Washington, DC: Island Press.

Misselwitz, P., Oswald, P. & Overmeyer, K. (2003) Strategies for Temporary Uses - Potential for Development of Urban Residual Areas in European Metropolises: Final Report (Extract). Online: [http://www.studio-uc.de/downloads/suc\\_urbancatalyst.pdf](http://www.studio-uc.de/downloads/suc_urbancatalyst.pdf) (accessed 22 October 2015)

Misselwitz, P., Oswald, P., & Overmeyer, K. (2013). *Urban Catalyst: The Power of Temporary Use*. Berlin: Dom Pub.

Overmeyer, K. & Lauringer, H. (ed.) (2007). *Urban pioneers: Berlin - Stadtentwicklung durch Zwischennutzung = temporary use and urban development in Berlin*. Berlin: Jovis Verlag.

Pyzik, A (2015) Oskar Hansen (1922-2005). In: *Architectural Review* vol. 238, October 2015. Available online: <http://www.architectural-review.com/view/reputations/oskar-hansen/8684657.article> (accessed 21 November 2015)

Radoslav, R., Branea, A. & Găman, M. (2013) Rehabilitation through a holistic revitalization strategy of historical city centres – Timisoara, Romania”, *Journal of cultural heritage*, vol. 14, pp.1-6.

Ronneberger, K. (2004). *Krisenhafter Kapitalismus*, In: Philipp Oswald (ed.), *Schrumpfende Städte. 1: Städtischer Wandel im Zeichen von Postfordismus und Globalisierung*. Ostfildern: Hatje Cantz Verlag.

Schuster, S. (2016). *Verbaut Teltow seine Zukunft?*. Teltower Stadt-Blatt. Verlags- und Presse GmbH. Online: <http://www.stadtblatt-online.de/regional-rundschau/9-teltow/768-verbaut-teltow-seine-zukunft> (Accessed 16 February 2016)

Semmer, M. & Zahiri, C. (2015). *AIV-Schinkel-Wettbewerb 2016, Zwischen Teltow und Zehlendorf, auslobung zum 161. Wettbewerb*. Berlin: Architekten- und Ingenieur-Verein zu Berlin e.V.

Senatsverwaltung für Stadtentwicklung Berlin (2004) *Raumpioniere*. Berlin: Senatsverwaltung für Stadtentwicklung.

Sheridan, D. (2012). *Urban wildscape processes in practice*. In: Jorgensen, A. Keenan, R. (ed.) *Urban Wildscapes*. London. Routledge.

Sieverts, T. (2013). *Zwischenstadt - zwischen Ort und Welt, Raum und Zeit, Stadt und Land*. Basel: Birkhäuser.

Studio Urban Catalyst (2003) *Urban Catalysts: Strategies for Temporary Uses*, Berlin: Studio Urban Catalyst. Online: [www.template.com/think-pool/attach/download/1\\_UC\\_finalR\\_synthesis007b.pdf?object\\_id=4272&attachment\\_id=4276](http://www.template.com/think-pool/attach/download/1_UC_finalR_synthesis007b.pdf?object_id=4272&attachment_id=4276) (accessed 22 October 2015)

Tierney, L. Top 10 Reused Industrial Landscapes, Published: 16 April, 2014 <http://landarchs.com/industrial-landscapes/> (accessed 29 November 2015)

Wieder, A. & Zeyfang, F. (ed.) (2014). *Open Form - Space, Interaction and the Tradition of Oskar Hansen*. Berlin: Sternberg Press.

Wiermer, C. (2015) *Bevölkerungsentwicklung Teltow ist die beliebteste Adresse*. Online: <http://www.berliner-kurier.de/brandenburg/bevoelkerungsentwicklung-teltow-ist-die-beliebteste-adresse,7169130,31463354.html> (accessed 6 October 2015)

Wikström, A. (2013) *The Challenge of Change: Planning for social urban resilience. An analysis of contemporary planning aims and practices*. Master's Thesis in Urban and Regional Planning, Department of Human Geography, Stockholm university.

Wetherford Watson Mann Architects (2007) *Bankside Urban Forest Report*. Online: [www.weare-bankside.com/sites/default/files/files/BanksideUrbanforestReport.pdf](http://www.weare-bankside.com/sites/default/files/files/BanksideUrbanforestReport.pdf) (accessed 21 October 2015)

**Pictures in theoretical framework:**

Fig. 1. (1743) The erection of one of Domenico Fontanas obelisks in The Vatican 1586. Niccola Zabaglia. Public domain. Online: [https://commons.wikimedia.org/wiki/File:1586\\_Rome\\_obelisk\\_erection.jpg](https://commons.wikimedia.org/wiki/File:1586_Rome_obelisk_erection.jpg)

Fig. 2. (2013) Havenkwartier, Assen. Allison Killing. Online: <http://www.killingarchitects.com/havenkwartier-assen/>

Fig. 3. July 24, 2009. Shelter. London Permaculture. Online: <https://www.flickr.com/photos/naturewise/3762156892/in/album-72157621734074455/>

Fig. 4. (2010) Taipei Organic Acupuncture. Drawing Marco Casagrande. Public Domain. Online: [https://en.wikipedia.org/wiki/Urban\\_acupuncture#/media/File:Taipei\\_Organic\\_Acupuncture\\_by\\_Marco\\_Casagrande.jpg](https://en.wikipedia.org/wiki/Urban_acupuncture#/media/File:Taipei_Organic_Acupuncture_by_Marco_Casagrande.jpg)

Fig. 5. June 9, 2014. Cornmarket Row - Images from the Street of Limerick. William Murphy. Online: <https://www.flickr.com/photos/infomatique/14457643305/in/photolist-9MWJAM-9LmTrW-twmWfG-ur4qmb-usXNTw-utA5T4-ubMNkE-9MWXEc-9MWKzH-9MZxwU-9MWMcT-9MWNzV-9MZG6S-9MWVpx-9MWPG6-9MZFvJ-9MWSce-9MWT6V-9MZJe1-9MZz5J-9o8h8z-o2zcEa-o2ses9-deHXqF-4Dg126-deHXNT>

Fig. 6. June 22, 2013. Installing 6th & Going. Greg Raisman. Online: <https://www.flickr.com/photos/gregraisman/9127563564/in/photolist-eUz9DA-7oGcY8-7oGdCt-7oL6rG-pyXC58-9P3L2f-9P3Meu-9NZVoM-9P3LTQ-9NZWer-9P3LJJ-9NZVBV-9P3LyY-9P3Lis-pRdtTV-pRscTV-oUDMgH-nKuMYL-cdBGzL-bWeqn4-bWeVSH-bWe6XH-cdAS5G-cdAZwJ-cdABKS-cdB5Q3-bWf82X-cdAPNS-bWeBMZ-bWe8dp-bWesuV-bWfhsz-bWf3ov-cdBj1Y-bWfkkK-bW-eR8T-bWfgmB-bWf6bD-bWeJbX-cdAYQ3-bWeYik-cdAycL-bWeDsH-bWe3kV-cdBoYS-bWeG-GT-bWe1qa-bWeusx-bWeQ2n-cdAHeu>

Fig. 7. September 12, 2013. Guerilla Wayfinding signs. Metropolitan Planning Council. Online: <https://www.flickr.com/photos/metroplanning/9737633334/in/photolist-8qwce-pB2z9G-fQtV8U>

**Aerial photo**

March 30, 2014. Senatsverwaltung für Stadtentwicklung und Umwelt Berlin. Online: <http://fbinter.stadt-berlin.de/fb/index.jsp?Szenario=luftbild>