



Towards Tactical Urbanism for Transport

*The Exploration of Parklets in Berlin Neighbourhood Streets:
Facilitating Active Mobility through Livable Streets*



Parklets as multifunctional space in Friedrichstraße, Bergmannstraße and Oranienstraße (Photos taken by Author, 2023)

Colophon

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Abstract

The dominance of automobile-dependent transport systems has resulted in environmental, social, and economic challenges, compromising the quality of life for urban dwellers. To address these issues and pave the way for sustainable futures, transitioning to more sustainable transport modes and designing streets for the human scale have become imperative. Hence, cities such as Berlin are utilising tactical strategies such as parklets to further facilitate and enable active mobility. By integrating street observations and short surveys in three different neighbourhood streets (Friedrichstraße, Bergmannstraße and Oranienstraße), this research aims to explore who uses these parklets as well as how and their potential impacts on facilitating more active modes of transport by creating livable streets. Based on this research, it is evident that parklets help create livable streets by replacing parking spaces for cars with public, green, and multifunctional spaces for active mobility users. Moreover, the parklets by themselves do not have as much of a direct influence on active transport behaviours. However, in combination with slow-traffic interventions, parklets facilitate active mobility by prioritising the needs of pedestrians to rest and walk in a safe, and lively street. Overall, it is apparent that although parklets are not big motivators per se, they can be strong facilitators for active mobility when combined with sufficient greenery and placed in slowed-down neighbourhood streets.

Key Words:

Tactical Urbanism, Parklets, Livable Streets, Active Mobility, Walkability

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1. Introduction

1.1 Background

Transport planning has been an essential aspect of city planning and development by providing a blueprint of the city dweller's mobility between all the different land uses. Currently, Berlin, a dense, and highly urbanised area, is still predominantly automobile dependent. Thus, the use of cars and motorised transportation have monopolised the roads and have obstructed the urban fabric to not only sprawl but manifest street conditions that go beyond the human-scale (Okeke et al., 2020). As indicated by Burke (2016), the human scale refers to ensuring that all settings people interact with on a daily basis are easy to deal with and use in terms of dimension and form. Overall, when taking into account noise pollution and transport inequality, the vicious cycle of auto-dependency has not only led to serious aggregate environmental, social and economical conundrums but also issues and disturbances to the individual lives of the urbanites in a micro-scale.

With the many issues that stem from car-oriented planning, there has been a paradigm shift in various areas of studies in the last decades, particularly in city planning revolving around active or human scale mobility. Koszowski et al. (2019) elaborates how the emphasis on increasing physical activity levels on a daily basis is currently a goal in public health strategies, but also immensely overlaps with the goals of transport and urban planning. Thus, the strategies of implementing and pushing active mobility is an important agenda across disciplines that is also a solution to the cross-sectoral issues caused by auto dependency. This is also evident from the recent announcement that the Members of the European Parliament (MEPs) in the committee of transport and tourism (TRAN) recently voted in favour of the "European Cycling Strategy" resolution at the end of January 2023 (*Resolution on developing an EU cycling strategy, 2023*), and Berlin's Mobility Act in 2018.

The concept of tactical urbanism, initially originated as a purely bottom-up rebuttal to the bureaucratic formal spatial planning processes. However, as this movement grew, several public authorities have institutionalised and provided room for more tactical strategies making it more of a collaborative process with the public actors. Throughout the years, there have been more cities implementing parklets as an urban tactical strategy including San Francisco, Bern, Paris, Wien, and Amsterdam (Campisi et al., 2021). Similarly, The Senate Department for the Environment, Mobility, Consumer and Climate Protection of Berlin has recently implemented a support programme for the development of parklets, and has created 60 parklets thus far (*Parklet-Förderung, 2023*). Through this governed tactical intervention, the city aims to invite civil participation, to reutilise space that was 'stationary traffic', as public space that can enhance a sense of community and urban greenery. This intervention also prioritises space for active mobility users. In relation to these implied benefits of parklets, Berlin's Department for the Environment, Mobility, Consumer and Climate Protection

(2023) recently re-opened the Parklet support program in six main districts: *1. Charlottenburg-Wilmersdorf, 2. Friedrichshain-Kreuzberg, 3. Mitte, 4. Reinickendorf, 5. Schoeneberg and Treptow-Köpenick.*

1.2 Policy & Societal Relevance

With cities rapidly expanding and are expected to grow from 56% in 2021 to 68% in 2050 (UNHABITAT, 2022), magnifying on transportation and how it impacts the urban quality of life is a crucial matter when foreseeing the sustainable potentials for the future. Hence, with the growing concerns of the climate crisis, and rising public health concerns in many urban environments, the inclusion and integration of active mobility and drifting from passive or motorised mobility is becoming an important aspect of sustainable urban mobility that benefits multiple dimensions of human well-being (Weir, 2019).

Furthermore, the Directorate-General for Mobility and Transport highlighted in their study on *New Mobility Patterns in European Cities (2022)* that following The European Green Deal (EGD) and the Strategy for Sustainable and Smart Mobility (SSMS), the “EU is striving to reduce transport-related greenhouse gas emissions by 90% by 2050 compared to 1990 levels, delivered by a smart, competitive, safe, accessible and affordable transport system, as required by the Climate Law”. The study also underlines that there has been a positive trend in not only increasing multimodal travel behaviour but an overall increase of active modes. This positive trend can also be found in Germany where the young adults aged 18-29 have overall reduced their use of automobiles as opposed to the stagnant increase in auto dependency in the 1990s (Kuhnimhof et al., 2012). Moreover, the research indicated that this is a result of not only an increase in multimodality, especially among car owners but also “the decrease in car ownership and use among men”.

Overall, when taking into account the advantages and human-centricity of active mobility it overall covers 15 of the 17 UN Sustainable Development Goals (Neun, 2020). Therefore, when discussing transport planning in an urbanising world, diving into how the built environment and design of streets influences active travel behaviour is an important discourse. Although there is a plethora of existing research highlighting the influence of tactical urbanism on active mobility (Weir, 2019), there is limited research as to how and to what extent tactical interventions, such as parklets can further promote this travel behaviour. Hence, with parklets being a growing movement and intervention in various streets worldwide, this research aims to explore who uses these parklets as well as how and their potential impacts on facilitating more active modes of transport by creating livable streets. These concepts are then integrated with empirical evidence from three different neighbourhood streets that implement parklets in Berlin, to explore their potential influences on further promoting active mobility. Following the results are recommendations and suggestions on how

policy makers, urban planners and public health workers can broaden their urban agendas and policies to utilise methods of tactical urbanism as a toolkit to integrate active and a more human scale mobility within their urban, neighbourhood streets.

1.3 Research Objective

The central research question for this paper is "*To what extent do the parklets in Berlin neighbourhood streets attract pedestrians through livable streets to facilitate active mobility?*"

In order to holistically answer this main research question, three sub-questions will follow:

1. *Who are the parklet users and how do they use them in the streets?*
2. *To what extent are the parklets in the neighbourhoods contributing to more livable streets?*
3. *How do the parklets influence the pedestrians' interaction with the streetscape and promote active mobility, particularly walkability?*

2. Theoretical Framework

2.1 Active Mobility & the Built Environment

According to Gerike et al. (2016), 'Active Mobility' can be defined as utilising walking and cycling for single trips or within a trip in combination with public transport, and can also be referred to as active travel, or soft mobility. In recent years, active mobility research has grown substantially in different fields, spawning a multitude of new conceptual frameworks evaluating the determinants of active mobility (Koszowski et al., 2019). This trend of shifting and widening the scope of urban mobility has grown in response to the negative and vicious cycle of environmental, physical as well as social implications of car-dependent transport networks and car-dependent users.

In terms of research oriented around public health, frameworks oriented around socio-ecological factors are often utilised. Articles by Giles-Corti and Donovan (2002), differentiates the ecological or environmental, along with the more individual determinants towards active travel behaviours (e.g. socio-demographic variables). Meanwhile, socio-psychological frameworks oriented particularly Ajzen's Theory of Planned Behaviour (1991) are also integrated to better understand mediating variables such as attitudes and norms of an individual that then drives a particular travel behaviour. Alternatively, transport and urban planning research relies more on frameworks that include and examine the overall built environment at a macro-scale as a crucial determinant towards active mobility. Hence, recent papers written by Kang (2015), particularly Götschi et al. (2017) have constructed a multi-layered and comprehensive framework to illustrate and elaborate on not only social and individual but also spatial variables where these behaviours are located. Therefore, through

these socio-spatial layers, the framework elaborates that the built environment (regional, city or neighbourhood scale) is composed of the Type of Area, Public Space, and Transport System. These supply, general framework conditions are then crucial in influencing the individual-related determinants such as perception of travel patterns (Attitude, Norms, Habits, and Behaviour Control).

Kallenbach (2020) highlights, employing a social constructivist approach, that there is a growing transformational urban mobility (including active mobility) narrative in Germany. This can be seen in Berlin's Berlin Mobility Act in 2018. Through this implementation, the city aims to mobilise urban movement centred around multimodal travel behaviour, where enabling and promoting active mobility would be key (Berliner Vorschriften- und Rechtsprechungsdatenbank, 2018). However, improving and enabling this in urban agendas often faces many complex challenges. Therefore, enhancing active mobility should not only be done through long-term urban planning and public health strategies, but could be faced through other short-term trials and micro-scale street interventions. This could be incorporated through tactical urbanism.

2.2 Tactical Urbanism & Parklets

There are several complexities and obstacles that arise from conventional planning approaches such as resource barriers, institutional barriers, social and cultural barriers, regulatory barriers, side effects and physical barriers (Rietveld & Stough, 2005). Hence, there has been an increase in attempts to approach planning from a more experimental and non-linear approach.

In pursuit of a more flexible, and scalable approach to transport planning, there has been a growing amount of initiatives, both by the government and by the public in implementing “tactical urbanism” (Lyndon & Garcia, 2011). Similar to what Elmqvist et al. (2018) defines as “urban tinkering”, it is an approach that overall leans to a more adaptive top-down, bottom-up and participatory approach. Moreover, as compared to a bureaucratic approach to planning, tactical urbanism gives room for a more proactive dimension to planning rather than reactive and centres more around human and social capital. Especially given its temporal flexibility, these interventions can be used to test and evaluate different kinds of interventions in a certain time period. Overall, the concept ‘tactical urbanism’ highlights an “*approach to neighbourhood building and activation that uses short-term, low-cost and scalable interventions to catalyse long term change*” (Lyndon & Garcia, 2011).

Despite the many examples of Tactical Urbanism, this paper focuses on the implementation of Parklets as a tactical intervention. As defined by UCLA Luskin School of Public Affairs (2012) parklets are “*low-cost conversion of small and under used residual spaces, originally devoted to cars, into spaces for the passive or active recreation of people*”. Parklets are small public spaces created by

converting parking spots into a temporary or permanent outdoor area for public use. As indicated by Young (2018), Parklets are typically installed on the street in urban areas and can be used for a variety of purposes, including seating areas, green spaces, bike racks, and more. Hence, with tactical urbanism, spaces that are under-utilised such as car parking spaces in neighbourhood streets can be occupied and humanised by parklets for more livable streets.

2.3 Livable Streets to Facilitate Active Mobility in Neighbourhoods

The term “livable streets” was originally framed by Donald Appleyard (1981), where he highlights that “*streets need to be redefined as sanctuaries; as livable places; as communities; as resident territory; as places for play, greenery, and local history.*” These six components are crucial in what Appleyard calls ‘A Charter of Street Dwellers’ Rights. Although these criterias have several overlaps, through the tactical interventions of parklets, four out of six of these components are indirectly or directly influenced: *1. Street as a Livable, Healthy Environment, 2. Streets as a Community, 3. Streets as a Place for Play and Learning, 4. Streets as a Green and Pleasant Land.* Complementary to these criterias are also the “Types of Needs” people have in diverse public spaces by Carr et al. (1992). These five types include: *1. Comfort, 2. Relaxation, 3. Passive Engagement, 4. Active Engagement, and 5. Discovery.*

Complementary to the idea of livable streets, there is a growing debate on the traditional concept and utilisation of streets. As highlighted by Creutzig et al. (2020) and Bertolini (2020), streets have originally been multifunctional spaces instead of the dominant perception of streets being an only one dimensional tool for transport. Alternatively, they can be better understood in terms of three prevalent normative perspectives including *streets for transport, streets for sustainability* and also *streets as a place*. From their case study based in Berlin, they have discovered that cars have been prioritised and provided significantly more space as compared to active mobility (that need more space). Interestingly, this space given to cars counts for both drivers and non-drivers, meaning that the overweighing use of space distribution is more a result of parked cars rather than driven cars.

Furthermore, as highlighted by Gehl (2010), attraction to public spaces is enhanced when focus is reallocated from centering spaces around cars to active modes of transport. This enhances a ‘reinforcing cycle of attractive public spaces’ where the presence of humanised streets and spaces through parklets continues to attract more people within the proximity (Koszowski et al., 2019). This change and reinforcing cycle of attraction on a micro level can also be referred to as the process of ‘urban micro-regeneration’, in which Zhu (2023) highlights as “opening up and improving the quality of previously closed or under-utilised neighbourhood spaces”.

In synthesis, there has been a growing pressure to reconfigure the city's use of streets as a crucial aspect of their environmental and social sustainability, especially given that street space distribution is still predominantly car-centric. As a result, creating more livable streets by reinforcing micro public and green spaces above parking spaces in the built environment is crucial in further embracing streets for people. Consequently, tactical urbanism projects such as parklets can encourage and facilitate active transport by enabling active mobility users to be more involved in the streetscape.

3. Conceptual Model & Expectations

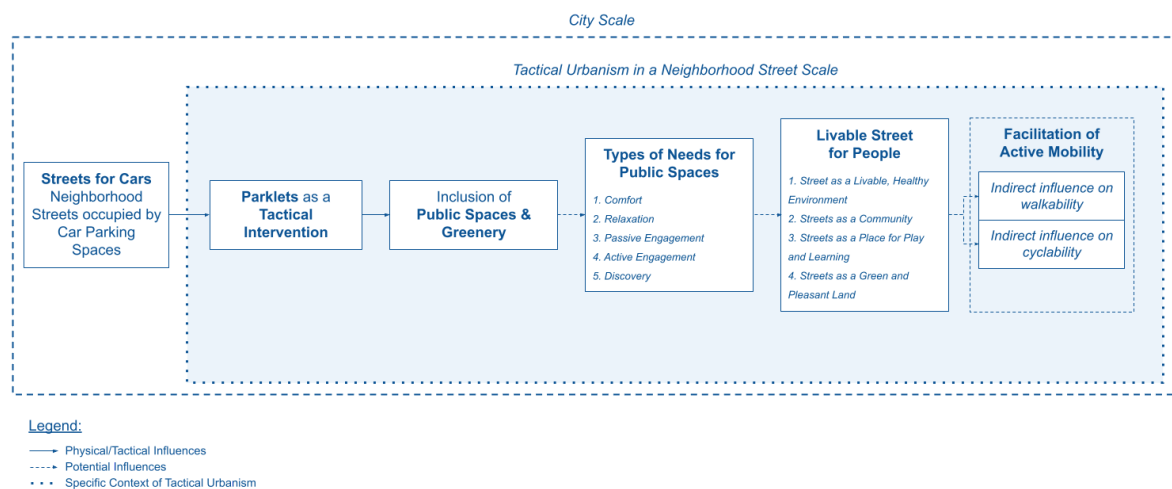


Figure 1. Conceptual Model: Parklets as a Tactical Intervention to Facilitate Active Mobility in Neighborhood Streets (Author, 2023)

As illustrated by the conceptual model (see figure. 1), the research embedded in the theoretical framework has highlighted an expectation that tactical interventions such as parklets are able to contribute to livable neighbourhood streets for people by temporarily converting car parking spaces to micro public spaces that enable various interactions or engagements. Hence, through this contribution and stimulation of livable streets, people within the proximity would be attracted and motivated to not only utilise *active mobility* to spend time in the public space but also walk and also cycle through the specific street due to the vibrancy and liveliness of the streetscape.

4. Research Design & Methodology

4.1 Site Selection & Data Collection

In order to respond to the main and sub questions, the research implements street observations and questionnaires (short surveys) on parklet users and non-users in three different kinds of neighbourhood streets to find common influences or differences in response to their different surroundings. This research methodology is largely inspired by another study by Young (2018) focusing on how the parklets further engaged neighbourhood interactions in San Francisco. However, whilst Young's work only focuses on Parklets as public space to foster neighbourhood interactions, this research differs in also exploring how the vibrancy and components that contribute to a livable street, from parklets could also motivate active mobility.

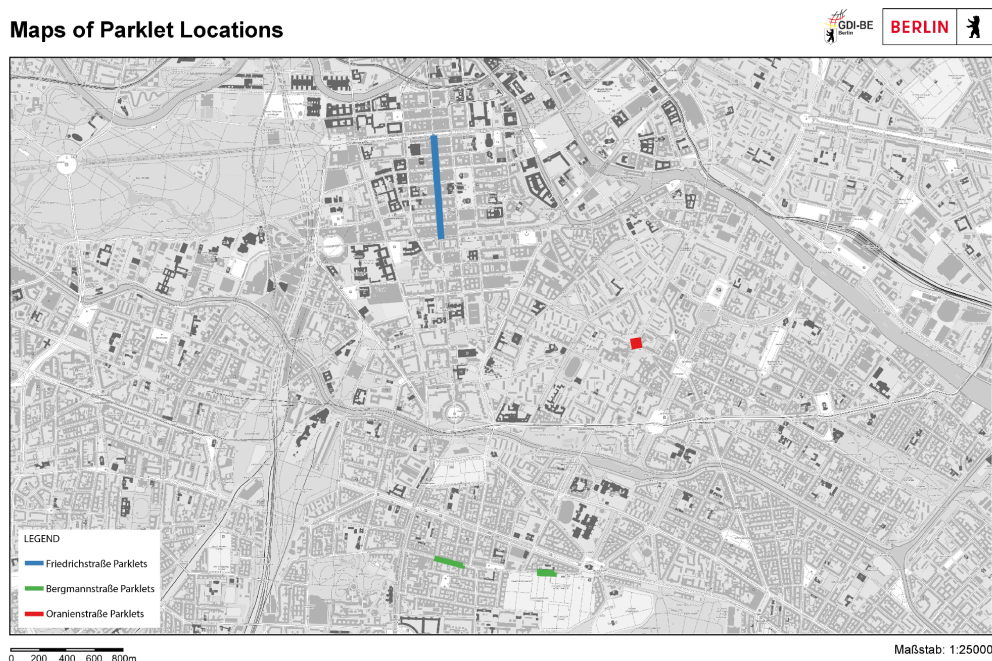


Figure 2. Map of different Parklet Locations

The research data was collected in three different streets: *Friedrichstraße*, *Bergmannstraße* and *Oranienstraße* (refer to figure 2). These sites have been specifically chosen given their differences in: surrounding land-use, urban structure, demography, street traffic regulation and traffic volumes (Refer to Table 1 below for details). Hence, observing different streets widens the breadth of the research, to better explore the use and potential impacts of the parklets in different kinds of neighbourhood streets.

The research and particularly the data collection process was part of an Erasmus+ BIP (Blended Intensive Programme) called STOURIE (Sustainable Transformation of Urban Regions in Europe). Hence, this research was a collaboration between 5 students from different universities (University of Groningen, University of Stockholm, and Politecnico di Milano). Given the restrictive time the observations and surveys took place on three separate days. This was to give time for data collection (both observations and short surveys) in the different neighbourhood streets.

Neighborhood Street of Parklet (District)	Type of Neighborhood	Street Traffic Regulation
Friedrichstraße (Mitte)	Commercial	Pedestrian Zone (No cars)
Bergmannstraße (Kreuzberg)	Mixed-use	Pedestrian Zone & Encounter Zone (20km/h speed limit)
Oranienstraße (Kreuzberg)	Commercial	Traffic lights in intersection

Table 1. Summary of Neighbourhood Characteristics and Traffic of located Parklets

4.2 Data Collection Instrument 1: Street Observations

Firstly, this study utilises non-participatory observations as one of the research methods to answer the first and second sub-question. According to Shamsuddin (2011), the observational research method will enable the researcher to establish and record the general routine of the local people over a day's cross section. Hence, a non-participatory observational approach is most viable to capture the local and pedestrian's natural interaction with the streetscape. Specifically to see whether the parklets indeed foster engagement and interactions within the neighbourhood scale to create more livable streets.

To conduct the street observations, a standardised printed form and checklist was referred to during the observation. The questions in the checklist for the non-participatory observation, is a synthesis of Appleyard's 'A Charter of Street Dwellers' (1981), but also the "Types of Needs for Public Spaces" by Carr et al. (1992). Although Appleyard's charter or criteria provide components that determine what is required for livable streets, they are difficult to operationalize given their overlaps and vague terms. Thus, by incorporating Carr et al.'s criteria, one can derive more direct questions in relation to parklets as multifunctional public spaces, and translate them into questions for the checklist (Refer to Table 2, and refer to Appendix A.1 for full Observational Checklist form). Whilst, noting down the observational data based on the checklist, photos will also be taken as recordings to illustrate the different kinds of engagements and parklet users.

During the street observations, visual recordings of how pedestrians use the parklets and interact within the streetscape was taken discreetly using photos to minimise disturbing their activities. Finally, as indicated by Young (2018), it is also important to take note of the location but also, weather conditions, time and also how many people were at the parklet or used the parklet to keep track of how busy or to what extent were the parklets used by the public (refer to table 3 for summary of observational data).

'A Charter of Street Dwellers' (Appleyard, 1981)	'Types of Needs for Public Spaces' (Carr et al., 1992)	Questions for Checklist
<p><i>1. Street as a Livable, Healthy Environment</i></p> <p><i>2. Streets as a Community</i></p> <p><i>3. Streets as a Place for Play and Learning</i></p> <p><i>4. Streets as a Green and Pleasant Land</i></p>	<p><i>1. Comfort</i></p> <p><i>2. Relaxation</i></p> <p><i>3. Passive Engagement</i></p> <p><i>4. Active Engagement</i></p> <p><i>5. Discovery</i></p>	<p>1. How lively is the street? (<i>How occupied are the sidewalks, and the mainstreet?</i>)</p> <p>2. What are the Parklets Characteristics? (<i>Does it provide greenery, what kind of sitting area does it provide, and does it include bicycle parking?</i>)</p> <p>3. How occupied are the parklets?</p> <p>4. What are the age groups of the parklet users? (<i>Children, teenagers, young adults, adults, elderly?</i>)</p> <p>5. What are the people doing while using the Parklet (Active or Passive Engagement? (<i>Are they socialising with others, relaxing or sitting, eating, reading, etc.?</i>))</p> <p>6. If they don't use the parklet, do they still indirectly interact with it when passing by? (<i>Are they intrigued by how the parklets are being used, or are they stopping to have a better look at the parklets?</i>)</p>

Table 2. Synthesis of Criterias for Observational Questions

Parklet	Total Amount of People Observed	Age Groups	Weather Condition
Friedrichstraße	208	<u>Children:</u> 15 <u>Teenagers:</u> 21 <u>Young Adults / Adults:</u> 117 <u>Elderly:</u> 55	<u>Day 1:</u> Morning: <i>Cloudy/Windy</i> Afternoon: <i>Sunny/Windy</i> <u>Day 2:</u> Morning: <i>Sunny/Warm</i> Afternoon: <i>Sunny/Warm</i>
Bergmannstraße I	44	<u>Children:</u> 10 <u>Teenagers:</u> 18 <u>Young Adults / Adults:</u> 10 <u>Elderly:</u> 6	
Bergmannstraße II	31	<u>Children:</u> 4 <u>Teenagers:</u> 1 <u>Young Adults / Adults:</u> 22 <u>Elderly:</u> 5	
Oranienstraße	49	<u>Children:</u> 0 <u>Teenagers:</u> 3 <u>Young Adults / Adults:</u> 38 <u>Elderly:</u> 8	

Table 3. Summary of Observational Data

4.3 Data Collection Instrument 2: Short Surveys

Alongside the observational aspect of the study, are the short surveys that were filled in using a google form (refer to Appendix A.2). This second data collection instrument will be used to answer the third sub-question. Hence, the short surveys are crucial to further explore the perception of the parklet users but also pedestrians (the sampling frame in the neighbourhood streets). Particularly on how the parklets could play a role in their active mobility patterns.

In order to ensure that research participants would like to partake in the survey as much as possible, there are only 9 questions in total that are composed with direct and simple language and are also translated into German to optimise readability for the respondents. The first 2 is a multiple choice, second being a yes or no question, followed by five likert-scale questions to measure their perceptions on various specific topics. By providing a likert-scale of 1 to 10, the questionnaire provides more options for the respondents when rating the scale. Moreover, the last question is a short open ended question, to provide space for the respondents to elaborate or explain as to why they specifically provided that rating. In order to see all the short survey questions refer to appendix A.

4.4 Data Analysis Scheme

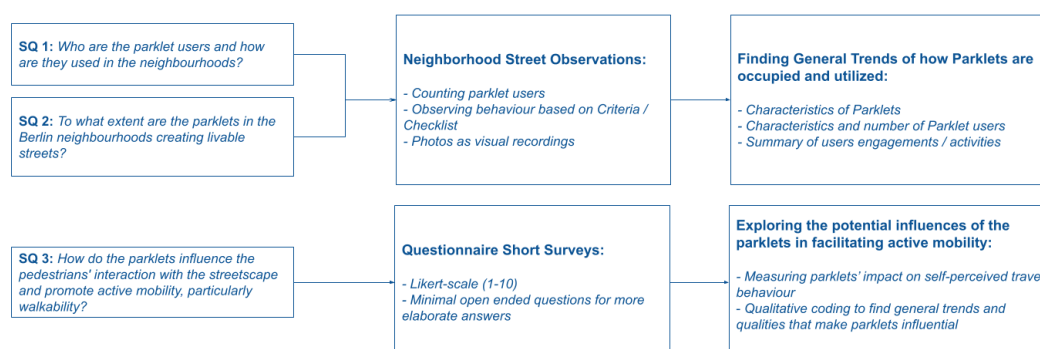


Figure 3. Data Analysis Scheme (Collection methods in response to sub-questions)

Overall the neighbourhood street observations is a tool to analyse and explore who uses the parklets and how they are utilised, whilst the short surveys aim to explore the potential impacts that the parklets have towards the pedestrians in the sidewalks. From the observational data, a table is used to summarise how often the parklets are used, but also the activities and engagements that take place. Whereas data from the short survey will be analysed through a descriptive statistics table and qualitative inductive codes for the open-ended questions (refer to Figure 3 for Data Collection and Analysis Process).

4.5 Reliability & Ethical Considerations

It is important to note that given the data collection process was gathered with the STOURIE Mobility group. This meant that the data collection process was conducted with multiple questionnaires combined for the three different streets. Although this may have impacted how the participants answered, it aided the process of getting more respondents from the three different streets. Given the street observations took place in public, and the questionnaires were completely anonymous and did not require any personal data, no consent forms were needed. Additionally, given the visual recordings are also taken in public, no consent is required. However, photos will be deleted if pedestrians were to feel uncomfortable (or feel that their privacy is violated) and request for the image to be removed. After the data collection took place, all the data including the photos was safely kept and protected in the university students' google drive with an authenticator.

5. Results & Discussion

5.1 Parklets as Multifunctional Spaces for Livable Streets

The empirical results from the street observations from the three different neighbourhoods will be used to elaborate on and discuss the first sub-question, "*Who are the parklet users and how are they used in the neighbourhoods?*" and the second sub-question, "*To what extent are the parklets in the Berlin neighbourhoods creating livable streets?*".

5.1.1 Friedrichstraße



Figure 4. Photos of parklet users & their different engagements in Friedrichstraße

The pedestrian zone project at the Friedrichstraße stretches along the main street (from Unter den Linden to Leipziger Straße) with a total of 10 parklets provided in the street. Hence, there were a total of 208 parklet users observed during the two days. During the observations that took place before

noon (10:00 to 12:00), the weather was cloudy and relatively windy. During that time period, only 38 users were observed and therefore the parklets were relatively vacant. The age distribution of the users skewed older and the majority of the activities were relatively short which included sitting and taking a break, smoking and calling on the phone (refer to images 1-3, figure 4).

On the other hand, during the afternoon (13:00 to 15:00) the weather was sunny and warm for both days. The remaining 170 parklet users were observed during this time period, meaning the parklets were often occupied. Additionally, most of the people who were using the parklets were not coming or leaving from the shops and were mostly coming from the cafes, offices or the university (refer to image 7, figure 4 for groups of students using the parklets). From the observation there was a diversity in user activities with people engaging in passive interactions such as listening to music, lying down to enjoy the sun or just people watching whilst there were also people talking and chatting with each other, eating and drinking together (refer to images 6, 7 and 9, figure 4). Moreover, in one instance there was also a group of people skating on one of the parklets (refer to Image 8, Figure 4). During this observation, it was also notable that 7 people were with their bikes while using the parklets to have a break and talk with their family where they stood their bikes next to them (image 4 & 5, figure 4).

5.1.2 Bergmannstraße

For the Bergmannstraße neighbourhood, there were two main locations where parklets were located. One was located in a residential street between a secondary school (Ferdinand-Freiligrath-Schule), and a cemetery that is surrounded with greenery. The street is a closed pedestrian zone where only buses and bicycles can pass through (image 2, figure 5). To differentiate the two different parts of the street, this parklet location is referred to as Bergmannstraße I. For this street, there are two large parklets that provide multiple places to sit, and also tables surrounded by small plants and greenery. Moreover, 44 parklet users and their interactions with the streetscape were observed. For both days, the parklets were completely filled in the mornings by students who were waiting for school to begin. It was however very interesting to see that despite there being five benches on the sidewalk, they all chose to sit on the provided parklets to interact with their friends before school. On the other hand, during the afternoon after 13:00, the parklets remained occupied but by a more diverse age group. from young kids to elderly (refer to image 1, figure 5). It was also observed during this period that eight people arrived at the parklet using a bicycle where they parked their bikes on the bicycle racks located right next to the parklets and also beside the parklet (image 3, figure 5). During this time, not only were kids sketching on the tables (image 5, figure 5), but several were playing games and sports on the side of the parklets. Additionally, adults were spending time reading, chatting and enjoying a drink. The same also applied for elderly people who spent time

chatting but also just resting and listening to music (image 4 & 6, figure 5) and taking part in more passive interactions (e.g. watching children play sports or looking at greenery around the cemetery).



Figure 5. Photos of parklets, street signs & different engagements of parklet users in Bergmannstraße

The other parklets in this street were located more on the west of the neighbourhood on the shopping and culinary streets surrounded with restaurants, bars, antique and vintage shops (location referred to as Bergmannstraße II). However this street was not a pedestrian zone but an ‘encounter zone’ where there is a speed limit of 10 km/h for cars and a designated lane for bikes (image 9, figure 5). There were a total of five parklet spots with each providing two to four chairs, greenery and a trash bag for waste. Despite the provision of trashbags, there was litter visible in every parklet area including cigarette buds, beer bottles and shoes (image 10, figure 5). For this street section, 31 parklet users were observed. During the mornings, the majority of the parklets are empty with an exception of

several elderly people who were resting or reading on the chairs, and a man and his child talking to each other (image 7 & 11, figure 5). Contrastingly, during the afternoon the parklets were very occupied, skewing mostly (27 of the 31 parklet users) young adults, adults and elderly people drinking, eating, smoking or sitting while being on their phone (image 8, figure 5). Despite the crowdedness and liveliness of the street, the interactions that took place in these parklets were often shorter and more temporary as compared to the interactions that took place on the other street section.

5.1.3 Oranienstraße



Figure 6. Photos of parklet users & their different engagements in Oranienstraße

In terms of the parklets at Oranienstraße, they were located at the Rio-Reiser-Platz on one of the small streets beside the intersection. Moreover, this street had no speed regulations, and often had cars passing around them. For this location, there were two parklets right next to a bicycle parking area that provided benches and was surrounded by litter. Although they had space allocated for greenery most of the plants have withered (image 1, figure 6). Overall, the street is very well known for its vibrant and alternative lively streets. This was very clear during the observation where the area was relatively crowded with most of the sidewalks occupied by outdoor spaces for pubs, cafes during the sunny days of this observation. However this location differed in how the main streets were relatively wide and predominantly for cars and with less greenery as compared to Bergmannstraße.

For this section, 49 parklet users were observed and none were children whereas the majority of them were young adults to elderly people (46 of the 49 observed parklet users). An important observation from these parklets was that although they were very rarely vacant they were only occupied for brief or very temporary passive and active engagements (image 3 and 4, figure 6). As an

example, after a group of people were socially interacting (image 5, figure 6) for a short period of time and left the parklet, two different men came a few minutes after to read and be on the phone while sitting on the parklet (image 6, figure 6). Throughout the observation, it was also noted that most of the activities that took place were individual activities such as reading, calling or being on the phone or people watching.

Overall, it is evident from the observation that the parklet users varied across the neighbourhood streets. In Friedrichstraße, the users were skewed towards older individuals, while in Bergmannstraße and Oranienstraße, there was a mix of young adults, adults, and elderly people. Additionally, although there were children using the parklets in Bergmannstraße there were none in Oranienstraße. Moreover, from all the observations several relations can be made with Appleyard's concept of "livable streets" and Carr et al's Types of Needs. Through the placement of parklets in the neighbourhood streets, not only were individuals provided with spaces to partake in passive engagements such as smoking, resting and people watching, but they were also enabled by the more active engagements. This includes social interactions such as chatting, eating together and socialising which aids in fostering a sense of community in the neighbourhood streets. Furthermore, particularly for Bergmannstraße I, streets were more of a place for play and learning for the children, where they were able to sketch, and play games together.

5.2 The role of Parklets in Facilitating Active Mobility

Survey Questions (Likert Scale)	Parklet Locations																			
	Friedrichstraße (N=20)					Bergmannstraße I (N=16)					Bergmannstraße II (N=12)					Oranienstraße (N=15)				
	N (Users)	N (Non-Users)	Mean	Median	Std. Dev.	N (Users)	N (Non-Users)	Mean	Median	Std. Dev.	N (Users)	N (Non-Users)	Mean	Median	Std. Dev.	N (Users)	N (Non-Users)	Mean	Median	Std. Dev.
1. How would you rate the liveliness of the parklets here? (1-10)	15	5	7.98	8.00	2.28	11	5	8.13	8.00	1.09	10	2	8.00	8.00	0.74	13	2	8.38	8.00	1.08
2. How much do you like the fact that there are Parklets on this street? (1-10)			8.58	9.00	2.02			8.50	8.00	0.87			8.08	8.00	0.62			8.00	8.00	0.97
3. How would you rate the quality of these parklets? (1-10)			8.47	8.25	1.47			9.47	10.00	0.72			8.25	8.00	0.62			8.50	8.50	0.97
4. How likely are you to walk/cycle and use the Parklets on this street (again)? (1-10)			7.03	7.00	2.50			8.07	8.00	1.54			6.83	7.00	1.34			7.00	7.00	1.41
5. How much does seeing vibrant Parklets motivate you to walk and/or cycle in this street? (1-10)			6.13	6.91	2.44			8.07	8.00	1.22			7.25	7.00	0.87			6.81	7.00	0.98

Table 4. Descriptive statistics of likert scale survey questions from three different neighbourhood streets

The survey results focused on how parklets influence pedestrians' interaction with the streetscape and promote active mobility, particularly walkability. A total of 63 respondents participated in the survey, with the majority being parklet users (78% of respondents). It is noteworthy

that a high percentage (98%) of the respondents were active mobility users. Descriptive statistics, such as the mean and median, were used to analyse the likert scale responses, providing an average scale of agreement or disagreement. The standard deviation indicated the variability of the responses in relation to the mean. These statistical measures were combined with qualitative codes derived from the open-ended question, "Why does seeing parklets motivate you to walk and/or cycle on this street?" (qualitative codes provided in Appendix B.2).

Firstly, when looking at the statistics in relation to the parklets in Friedrichstraße (refer to table 4), it is indicated that the highest average rank is in relation to how much the respondents like the fact that there are parklets on the street (Question 2), with a mean of 8.58 and median of 9.00. Whereas the last question resulted in the lowest mean of 6.13 and median of 6.91 in comparison to the other neighbourhoods. The majority of the responses have a standard deviation exceeding 2. Especially with question 4 having a standard deviation of 2.50, this highlights from the collective results that there is a relatively high variability or dispersion in the data from the low means. This variability can be reflected, in response to the codes derived from the open-ended question. There are not only mentions of 'Rest & Comfort' as a motivating factor from the parklets, but also respondents highlighting that the street being a no car zone was a bigger motivator rather than the parklets (coded 'Absence of Cars & Safety'). One of the respondents replied "Having no cars is more influential" while another highlighted "No cars is more of a factor. 100% don't build cities for cars. Less cars the better". On the other hand, several respondents also expressed another opinion on how the parklets were in fact not that much of a motivator (coded 'Parklets as Irrelevant or Unattractive'). One respondent replied "*It's quite hot and a bit bland or unattractive without any greenery*", while another mentioned "*Placements of the benches or parklets seem a bit too all over the place*".

When analysing the different rankings from Bergmannstraße I, the highest average rank is in response to the quality of the parklets with a mean of 9.47 and median of 10.00 (Question 3) which is also the highest average rank for this question when compared to other neighbourhoods. However, in contrast to Friedrichstraße, likeliness to walk and/or cycle to the parklets (Question 4) and vibrant parklets as motivators for active mobility both scored a higher mean of 8.07 and median of 8.00. For the open-ended question, there were overall positive responses which mostly fell under the codes 'Rest & Comfort' or 'Vibrancy'. Quoting one of the respondents they highlighted how "*it's comforting and often gives room for spontaneous activities*".

For Bergmannstraße II, the overall average ranks for the different questions are generally lower than of the ranks from Bergmannstraße I. Although the average rank for the quality of parklet scored a mean of 8.25 and median of 8.00 and similar results for question 1 and 2 (with a standard deviation less than 1), Bergmannstraße II scored the lowest average rank for how likeliness to walk

and cycle to parklets (question 4) with a mean of 6.83 and mode of 7.00. This is also in relation to the neighbourhood's highest standard deviation (1.34) meaning there were more dispersed responses. For this street, there were less respondents highlighting how the parklets were nice rest areas, but how the fact that there were less cars passing due to the slowed street (coded Absence of Cars & Safety) was an influence. As one of the respondents wrote "*Great that less cars are passing through or parking*".

In Oranienstraße's although the parklet in this neighbourhood scored a relatively high average rank for the quality of the parklets (question 3) with a mean of 8.50 and median of 8.50, and similar results for question 1 and 2, it received a low average rank for vibrant parklets as motivators for active mobility (question 5) with a mean of 6.81 and median of 7.00. For the open-ended questions, although the majority of the replies highlighted how the parklets were nice for breaks and resting, 3 replies fell under the code 'Parklets as Irrelevant or Unattractive'. One of the respondents highlighted that "*Although accessible, not exactly that great to walk here*".

6. Conclusion & Reflection

In conclusion, the parklets in Friedrichstraße, Bergmannstraße, and Oranienstraße provided spaces for pedestrians of different ages to engage in various activities or active and passive engagements, which according to Appleyard (1981) and Carr et al. (1992) are important aspects and contributions to a livable street. Surprisingly, the observations of the parklets from the various neighbourhoods also indicate that they attracted or were used by cyclists as rest areas or gathering points. However, from the observation, there were some limitations, such as the continued presence of cars on the streets, which affected the overall comfort and safety of pedestrians. Additionally, the short survey results suggest that although the presence and quality of parklets are generally appreciated, their influence on promoting active mobility, particularly walking and cycling, varies among the different neighbourhoods. According to the inductive codes, factors such as the absence of cars (especially in Friedrichstraße), safety, restfulness, and attractiveness of the parklets play a role in motivating pedestrians to engage with the streetscape. The variability in responses highlights the diverse preferences and experiences of individuals when it comes to the impact of parklets on active mobility.

While this study provides valuable insights into the influence of parklets on active mobility and pedestrians' interactions with the streetscape, it is important to highlight several limitations. Due to the exploratory nature, the study does not establish causation between parklets and active mobility. It provides descriptive statistics and qualitative insights, but these do not allow for definitive conclusions regarding the causal relationship between parklets and active mobility. Moreover, the

study acknowledges the need for more surveys to obtain a more representative sample as the current sample may not fully capture the diverse perspectives and experiences of parklet users and non-users. Lastly, due to time constraints, this study only conducted data collection in a week during spring season and the study did not compare streets with and without parklets or evaluate the impact of parklets over time. A comparative analysis between streets before and after the implementation of parklets would provide a more robust assessment of their influence on active mobility.

Further research should investigate the long-term impact of parklets on street livability. While the current study provides insights into immediate usage and perceptions, assessing the lasting effects of these temporary interventions on the overall street environment and community dynamics is crucial. Longitudinal studies can track changes in user behaviour, street activities, and livability perceptions over an extended period. Additionally, conducting comparative analyses across different cities or regions can offer a comprehensive understanding of parklet usage and its impact. This approach can identify commonalities and differences in usage patterns, user demographics, and outcomes, providing insights into parklet transferability and adaptability. In terms of practical implications, research highlights that parklet design should include seating, tables, and greenery to enhance user experiences and encourage longer stays. However, integration with existing bicycle infrastructure is as important to accommodate cyclists and promote active mobility holistically. Therefore, further vertical and horizontal collaboration among urban planners, transportation departments, and local authorities is necessary to create a well-designed streetscape prioritising active mobility and enhancing livability.

References

- Ajzen, I. (1991) The theory of planned behaviour. *Organ Behav Hum Decis Proc* 50:179–211
- Appleyard, D. (1980) “Livable Streets: Protected Neighborhoods?,” *The ANNALS of the American Academy of Political and Social Science*, 451(1), pp. 106–117. doi: 10.1177/000271628045100111.
- Bertolini, L. (2020) From “streets for traffic” to “streets for people”: can street experiments transform urban mobility?, *Transport Reviews*, 40:6, 734-753, DOI: 10.1080/01441647.2020.1761907
- Berliner Vorschriften- und Rechtsprechungsdatenbank (2018). *Berliner Mobilitätsgesetz vom 5. Juli 2018*
- Burke, S. (2016). Placemaking and the Human Scale City. Available at: <https://www.pps.org/article/placemaking-and-the-human-scale-city> (Accessed: June 8, 2023)
- Carr, S., Frances, M., Rivlin, L.G. and Stone, A.M. (2007). Needs in public space. In M. Carmona & S. Tiesdell (Eds.), *Urban design reader* (231-240). Oxford, UK: Elsevier, Architectural Press.
- Campisi, T., Caselli, B., Rossetti, S., & Torrisi, V. (2022). The evolution of sustainable mobility and urban space planning: exploring the factors contributing to the regeneration of car parking in living spaces. *Transportation Research Procedia*, 60, 76–83. <https://doi.org/10.1016/j.trpro.2021.12.011>
- Clifford, N. J. *et al.* (eds) (2016) *Key methods in geography*. Third edn. London: SAGE.
- Creutzig, F., Javaid, A., Soomauroo, Z., Lohrey, S., Milojevic-Dupont, N., Ramakrishnan, A., Sethi, M., Liu, L., Niamir, L., Bren d’Amour, C., Weddige, U., Lenzi, D., Kowarsch, M., Arndt, L., Baumann, L., Betzien, J., Fonkwa, L., Huber, B., Mendez, E., ... Zausch, J. M. (2020). Fair street space allocation: ethical principles and empirical insights. *Transport Reviews*, 40(6), 711–733. <https://doi.org/10.1080/01441647.2020.1762795>
- European Commission, Directorate-General for Mobility and Transport, Armoogum, J., Garcia, C., Gopal, Y. (2022). *Study on new mobility patterns in European cities : final report. Task A, EU wide passenger mobility survey*, Publications Office of the European Union. <https://data.europa.eu/doi/10.2832/728583>
- ETSC (2021). EU Road Deaths Down by 3900 in 2020. Available at: <https://etsc.eu/eu-road-deaths-down-by-3900-in-2020/> (Accessed: March 1, 2023)
- Weir, D. (2019) *Unlocking the Potential of Tactical Urbanism for Active Transport Promotion in Auckland*; The University of Auckland: New Zealand, NZ.
- Gehl J (2010) *Cities for people*. Island Press
- Gerike R, de Nazelle A, Nieuwenhuijsen M, Panis L I, Anaya E Avila-Palencia I, Boschetti F; Brand C, Cole-Hunter T, Dons E, Eriksson U, Gaupp-Berghausen M, Kahlmeier S, Laeremans M, Mueller N, Orjuela JP, Racioppi F, Raser E, Rojas-Rueda D, Schweizer C, Standaert A, Uhlmann T, Wegener S, Götschi T (2016) Physical Activity through Sustainable Transport Approaches (PASTA): a study protocol for a multicenter project. *BMJ Open* 6(1)
- Giles-Corti, B. and Donovan, R. J. (2002) “The Relative Influence of Individual, Social and Physical Environment Determinants of Physical Activity,” *Social science & medicine* (1982), 54(12), pp. 1793–812.
- Götschi, T., Alasya, B., de Nazelle, A., Brand, C., Gerike, R., Anaya, E., Avila-Palencia, I., Banister, D., Bartana, I., Benvenuti, F., Boschetti, F., Brand, C., Buekers, J., Carniel, L., Carrasco Turigas, G., Castro, A., Cianfano, M., Clark, A., Cole-Hunter, T., ... Riegler, S. (2017). Towards a comprehensive conceptual framework of active travel behavior: a review and synthesis of published frameworks. *Current Environmental Health Reports*, 4(3), 286–295. <https://doi.org/10.1007/s40572-017-0149-9>

Kang, C-D. (2015). The effects of spatial accessibility and centrality to land use on walking in Seoul, Korea. *Cities* 46:94–103

Kallenbach, T. (2020). Narratives of urban mobility in germany: On the threshold of a departure from the car-centered city? *Sustainability: Science, Practice and Policy*, 16(1), 197-207. doi:10.1080/15487733.2020.1799625

Kuhnimhof, T., Buehler, R., Wirtz, M., & Kalinowska, D. (2012). Travel trends among young adults in germany: Increasing multimodality and declining car use for men. *Journal of Transport Geography*, 24, 443-450. doi:10.1016/j.jtrangeo.2012.04.018

Koszowski, C., Gerike, R., Hubrich, S., Götschi, T., Pohle, M., Wittwer, R. (2019). Active Mobility: Bringing Together Transport Planning, Urban Planning, and Public Health. In: Müller, B., Meyer, G. (eds) *Towards User-Centric Transport in Europe*. Lecture Notes in Mobility. Springer, Cham. https://doi.org/10.1007/978-3-319-99756-8_11

Lydon, M., & Garcia, A. (2015). *Tactical Urbanism: Short-term action for long-term change*. Washington, DC: Island Press.

Okeke, F. O., Okosun, A. E., Udeh, C. A., & Okekeogbu, C. J. (2020). Cities for People: The Dependency & Impact of Automobile in the Life of City Dwellers. *European Journal of Sustainable Development*, 9(3), 157. <https://doi.org/10.14207/ejsd.2020.v9n3p157>

Parklet-Förderung (2023) Berlin.de Startseite. Available at: <https://www.berlin.de/parklets/aktuelles/> (Accessed: February 18, 2023).

Resolution on developing an EU cycling strategy (2023) Legislative Observatory | European Parliament. Available at: <https://oeil.secure.europarl.europa.eu/oeil/popups/ficheprocedure.do?lang=en&reference=2022%2F2909%28RS P%29> (Accessed: February 17, 2023).

Shamsuddin, S. (2011). *Townscape Revisited: Unravelling the character of the historic townscape in Malaysia*. Universiti Teknologi Malaysia.

UCLA Luskin School of Public Affairs. (2012). *Reclaiming the right-of-way: a toolkit for creating and implementing parklets*. University of California Los Angeles. Available at https://nacto.org/wp-content/uploads/2015/04/reclaiming_the_right_of_way_brozen.pdf

UNHABITAT (2022). *Envisaging the Future of Cities*. World Cities Report 2022

Yeung, J., Wearing, S., & Hills, A. P. (2008). Child transport practices and perceived barriers in active commuting to school. *Transportation Research Part A*, 42(6), 895-900. doi:10.1016/j.tra.2007.12.007

Zhu, J. (2023). Micro-regeneration in Shanghai and the public-isation of space. *Habitat International*, 132, 102741–102741. <https://doi.org/10.1016/j.habitatint.2023.102741>

Appendix A

Appendix A.1. Street Observation Questions & Checklist

Location of parklet:	
Number of People Observed:	
Weather Condition:	
1. How lively is the street? (<i>How occupied are the sidewalks, and the mainstreet?</i>)	
2. What are the Parklets Characteristics? (<i>Does it provide greenery, what kind of sitting area does it provide, and does it include bicycle parking?</i>)	
3. How occupied are the parklets?	
4. What are the age groups of the parklet users? (<i>Children, teenagers, young adults, adults, elderly?</i>)	
5. What are the people doing while using the Parklet (Active or Passive Engagement? (<i>Are they socialising with others, relaxing or sitting, eating, reading, etc.?</i>))	
6. If they don't use the parklet, do they still indirectly interact with it when passing by? (<i>Are they intrigued by how the parklets are being used, or are they stopping to have a better look at the parklets?</i>)	

Appendix A.2. Short Survey for Parklet User and Non-users

Towards Tactical Urbanism for Transport: The Exploration of Parklets in Berlin Neighbourhood Streets to Promote Active Mobility through Street Revitalisation

Parklets are small public spaces created by converting parking spots into a temporary or permanent outdoor area for public use. Overall, tactical urbanism such as Parklets can be an effective tool for promoting active mobility and revitalising streets and public spaces, particularly in communities where resources are limited or where traditional approaches to urban planning may be slow or costly to implement.

The research aim of this paper is to explore how the Parklets in Berlin revitalises the neighbourhood streets and how this currently attracts the use of active mobility. Hence, the central research question is:

"To what extent do the Parklets in Berlin neighbourhood streets attract pedestrians through street revitalisation and further promote active mobility?"

* Indicates required question

1. 1. Please indicate which neighbourhood street you are currently at: *

1. Bitte geben Sie an, in welcher Nachbarschaftsstraße Sie sich gerade befinden:

Mark only one oval.

- Friedrichstraße
 Bergmannstraße I
 Bergmannstraße II
 Oranienstraße

4. 4. From 1 to 10 how would you rate the liveliness of the parklets here? *

4. Wie würden Sie die Lebendigkeit dieser Straßen auf einer Skala von 1 bis 10 bewerten?

Mark only one oval.

Very Low / Sehr niedrig

1

2

3

4

5

6

7

8

9

10

Very High / Sehr hoch

2. 2. What combination of transport modes did you use to travel here? *

2. Welche Kombination von Verkehrsmitteln haben Sie für die Anreise benutzt?

Tick all that apply.

- Walking / Laufen
 Cycling / Radfahren
 Public Transport / Öffentliche Verkehrsmittel
 Car / Auto

3. 3. Are you currently using one of the Parklets on this street? *

3. Benutzen Sie derzeit einen der Parklets in dieser Straße?

Mark only one oval.

Yes

No

5. 5. From 1 to 10 how much do you like the fact that there are Parklets on this street? *

5. Auf einer Skala von 1 bis 10: Wie sehr gefällt Ihnen die Tatsache, dass es in dieser Straße Parklets gibt?

Mark only one oval.

Very Low / Sehr niedrig

1

2

3

4

5

6

7

8

9

10

Very High / Sehr hoch

6. From 1 to 10 how would you rate the quality of the Parklets on this street? *

6. Wie beurteilen Sie auf einer Skala von 1 bis 10 die Qualität der (meisten) Parklets in dieser Straße?

Mark only one oval.

Very Low / Sehr niedrig

1

2

3

4

5

6

7

8

9

10

Very High / Sehr hoch

7. From 1 to 10 how likely are you to walk/cycle and use the Parklets on this street (again)? *

7. Auf einer Skala von 1 bis 10: Wie wahrscheinlich ist es, dass Sie die Parklets in dieser Straße (wieder) nutzen?

Mark only one oval.

Very Low / Sehr niedrig

1

2

3

4

5

6

7

8

9

10

Very High / Sehr hoch

8. From 1 to 10 how much does seeing vibrant Parklets motivate you to walk and/or cycle in this street? *

8. Auf einer Skala von 1 bis 10: Wie sehr motiviert Sie der Anblick lebendiger Parklets dazu, in dieser Straße zu Fuß zu gehen und/oder Rad zu fahren?

Mark only one oval.

Very Low / Sehr niedrig

1

2

3

4

5

6

7

8

9

10

Very High / Sehr hoch

9. How do you think the parklets motivate you to walk and/or cycle on this street? *

9. Was denken Sie, wie motivieren Sie die Parklets dazu, auf dieser Straße zu Fuß zu gehen und/oder Rad zu fahren?

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Google Forms

Appendix B

Appendix B.1. Table of Survey Results

	1. Please indicate which neighbourhood street you are currently at: <i>1. Bitte geben Sie an, in welcher Nachbarschaftsstraße Sie sich gerade befinden.</i>	2. What combination of transport modes did you use to travel here? <i>2. Welche Kombination von Verkehrsmitteln haben Sie für die Anreise benutzt?</i>	3. Are you currently using one of the parklets on this street? <i>3. Benutzen Sie derzeit einen der Parklets in dieser Straße?</i>	4. From 1 to 10 how would you rate the liveliness of the parklets here? <i>4. Wie würden Sie die Lebendigkeit der Parklets hier auf einer Skala von 1 bis 10 bewerten?</i>	5. From 1 to 10, how do you like the fact that there are parklets on this street? <i>5. Auf einer Skala von 1 bis 10, wie sehr gefällt Ihnen die Tatsache, dass es in dieser Straße Parklets gibt?</i>	6. From 1 to 10, how do you like the quality of the parklets on this street? <i>6. Wie beurteilen Sie auf einer Skala von 1 bis 10 die Qualität der (neuen) Parklets in dieser Straße?</i>	7. From 1 to 10 how likely are you to walk/cycle and use the parklets on this street (again)? <i>7. Auf einer Skala von 1 bis 10, wie sehr motiviert Sie der Anblick lebendiger Parklets dazu, in dieser Straße zu Fuß zu gehen und/oder Rad zu fahren?</i>	8. From 1 to 10 how much does seeing vibrant parklets motivate you to walk and/or cycle in this street? <i>8. Auf einer Skala von 1 bis 10, wie sehr motiviert Sie der Anblick lebendiger Parklets dazu, in dieser Straße zu Fuß zu gehen und/oder Rad zu fahren?</i>	9. How do you think the parklets motivate you to walk and/or cycle on this street? <i>9. Was denken Sie, wie motivieren Sie die Parklets dazu, auf dieser Straße zu Fuß zu gehen und/oder Rad zu fahren?</i>
Bergmannstraße I	Walking / Laufen	Yes	9	9	9	9	5	7	Ihr ist eine schule in der nähe und ihr bringe ich meine pausen
Bergmannstraße I	Public Transport / Öffentliche Verkehrsmittel	Yes	9	8	10	10	5	5	Es motiviert mich, da ich immer die möglichkeit habe mich auszuholen.
Bergmannstraße I	Cycling / Radfahren	Yes	9	8	10	10	8	6	I just don't really notice it. But good because there is a place to sit.
Bergmannstraße I	Walking / Laufen	Yes	7	8	8	10	8	9	It's nice to people-watch and rest here. Also, it's nice especially with the area being quite
Bergmannstraße I	Car / Auto	Yes	6	10	10	9	6	9	Because it makes the traveling around the city more amusing. In some cases it's annoying for finding a parking spot but as a pedestrian it's a very much appreciated
Bergmannstraße I	Walking / Laufen, Public Transport / Öffentliche Verkehrsmittel	No	7	7	9	7	7	8	Nature. Find ich gut
Bergmannstraße I	Walking / Laufen, Public Transport / Öffentliche Verkehrsmittel	Yes	10	9	9	10	8	8	Greenery and good for pedestrians, but not sure how annoying it is for cars
Bergmannstraße I	Walking / Laufen	Yes	8	8	8	10	8	9	It's nice to see people around when walking or cycling. Great idea. Although better in some streets as compared to others.
Bergmannstraße I	Walking / Laufen, Public Transport / Öffentliche Verkehrsmittel	No	9	8	9	9	9	7	I often walk with friends to get here and talk
Bergmannstraße I	Walking / Laufen, Public Transport / Öffentliche Verkehrsmittel	Yes	9	9	9	8	9	8	Wir gehen oft vor der Schule hierher
Bergmannstraße I	Walking / Laufen, Public Transport / Öffentliche Verkehrsmittel	Yes	7	10	10	9	9	9	I take my kids here and also to the cemetery when we walk because it's green and lively
Bergmannstraße I	Walking / Laufen	Yes	8	8	8	8	7	9	Better than walking in a quiet street. However its important to have these for a busy city like Berlin
Bergmannstraße I	Walking / Laufen, Public Transport / Öffentliche Verkehrsmittel	No	9	9	10	9	9	9	Not exactly sure, kinda annoying for cars but overall a good idea
Bergmannstraße I	Walking / Laufen	No	8	9	9	9	7	9	It's comforting and often gives room for spontaneous activities
Bergmannstraße I	Walking / Laufen, Cycling / Radfahren	Yes	8	8	8	10	8	8	I can rest here
Bergmannstraße I	Walking / Laufen, Public Transport / Öffentliche Verkehrsmittel	No	9	10	10	9	7	8	The liveliness is nice, overall a great idea if maintained and located in strategic places
Bergmannstraße I	Walking / Laufen, Public Transport / Öffentliche Verkehrsmittel	No	9	9	9	10	7	8	When it's sunny it's nice walking next to lively streets
Bergmannstraße I	Walking / Laufen, Public Transport / Öffentliche Verkehrsmittel	No	8	8	8	8	5	7	Nice to rest and enjoy the sun. Great for pedestrians and works best with streets with speed limits.
Bergmannstraße II	Walking / Laufen, Public Transport / Öffentliche Verkehrsmittel	Yes	9	9	9	9	7	7	Feels safer. It's set up for walking. Definitely pro the idea! Best for pedestrians more bikes and less cars.
Bergmannstraße II	Walking / Laufen, Public Transport / Öffentliche Verkehrsmittel	Yes	9	10	10	9	9	9	Less cars, and great to bring kids when walking around the city!
Bergmannstraße II	Walking / Laufen, Cycling / Radfahren	Yes	8	6	6	9	9	8	Comfortable in feeling of safety, great way to publicize streets for pedestrians
Bergmannstraße II	Walking / Laufen	Yes	7	8	8	7	8	7	More space for pedestrians!
Bergmannstraße II	Walking / Laufen	No	8	9	9	9	7	8	Although cars still pass through, great to see people sitting outside on the parklets
Bergmannstraße II	Walking / Laufen, Cycling / Radfahren	Yes	8	8	8	7	6	7	There is more space to sit down and rest
Bergmannstraße II	Walking / Laufen, Public Transport / Öffentliche Verkehrsmittel	Yes	8	7	8	8	7	7	Great that less cars are passing through or parking
Bergmannstraße II	Walking / Laufen, Public Transport / Öffentliche Verkehrsmittel	No	9	7	7	8	6	6	Comforting
Bergmannstraße II	Walking / Laufen, Public Transport / Öffentliche Verkehrsmittel	Yes	8	8	8	8	6	7	-
Bergmannstraße II	Walking / Laufen, Public Transport / Öffentliche Verkehrsmittel	Yes	7	7	7	8	5	7	Good rest area
Bergmannstraße II	Walking / Laufen, Public Transport / Öffentliche Verkehrsmittel	Yes	8	6	6	6	6	6	Not sure
Ortiansenstraße	Walking / Laufen, Cycling / Radfahren, Public Transport / Öffentlich	Yes	10	10	10	8	10	7	Seeing the parklets gives the idea that pedestrians are being prioritized! Need more of it. Absolutely fine with it, it's the right direction! They use this one often for the office, and can use it to sit during the break. However the general area is not that walkable due to most of the street still being used by cars
Ortiansenstraße	Walking / Laufen	Yes	9	7	7	6	5	5	Although accessible, not exactly that great to walk here
Ortiansenstraße	Walking / Laufen	Yes	8	8	9	8	6	6	Sometimes nice to stop in this area and read a book
Ortiansenstraße	Walking / Laufen	No	7	8	8	7	5	5	Not too nice to sit around the main street
Ortiansenstraße	Walking / Laufen	Yes	8	7	8	8	7	7	A nice public area to stop by when walking
Ortiansenstraße	Walking / Laufen	Yes	9	9	9	9	7	8	Great resting area in this area! Usually super crowded so nice to stop for a bit
Ortiansenstraße	Walking / Laufen	Yes	9	8	8	9	9	7	The greenery is captivating when walking around the city
Ortiansenstraße	Walking / Laufen	No	8	9	9	8	6	8	Usually, stop by for a break
Ortiansenstraße	Walking / Laufen, Cycling / Radfahren	Yes	7	8	8	7	6	8	Good bench to sit when tired
Ortiansenstraße	Walking / Laufen, Public Transport / Öffentliche Verkehrsmittel	Yes	10	8	8	9	8	8	It's nice to sit down around a vibrant street

Appendix B.2. Qualitative Inductive Codes from Open-ended Question

Codes (Frequency)	Quotes
Rest & Comfort (26)	Ihr ist eine schule in der nähe und icr verbringe ich meine pausen
	Es motiviert mich, da ich immer die Möglichkeit habe mich auszuruhen
	I just don't really notice it. But good because there is a place to sit.
	It's nice to people-watch and rest here. Also, it's nice especially with the area being quite
	Wir gehen oft vor der Schule hierher
	It's comforting and often gives room for spontaneous activities
	I can rest here
	Nice to rest and enjoy the sun. Great for pedestrians and works best with streets with speed limits
	There is more space to sit down and rest
	Comforiting
	Good rest area
	Seeing the parklets gives the idea that pedestrians are being prioritized! Need more of it. Absolutely fine with it, it's the right direction! They use this one often for the office, and can use it to sit during the break. However the general area is not that walkable due to most of the street still being used by cars
	Sometimes nice to stop in this area and read a book
	A nice public area to stop by when walking
	Great resting area in this area! Usually super crowded so nice to stop for a bit
	Usually, stop by for a break
	Good bench to sit when tired
	Nice benches
	Its comforting to have seating areas in this location, but still annoying with cars severywhere
	There's actually not a lot of benches in this area. so great after a long walk
	I usually walk a lot in this area. Always go back here for a break
	Want more parklets. I love them and I want more, especially since I started using these ones. I actually discovered that I haven't even seen or appreciated the architecture of the building of this street before. And I love that the street has no cars
	It's great to rest here when you're walking. If it's full here she will sit somewhere else. Avoid big crowds. Don't want to smoke around people. Loves it. Sitting space are dope. A lot of people have to walk slot and having break and rest spaces are important. Take break have good time after psych for 3 months
	It makes a different how you feel and behave. I think they are fantastic and important to motivate people. Perfect to prioritize people and much nicer to walk around and have a break. Great addition and need more.
	Because I never actually don't use the parklets, the only function would be if I needed to rest and sit down.
	Convenient that it's there when you need a break
It's not about how vibrant the parklets are, for me it's more important to have seating arrangement that you don't have to pay for. I love it! It is the best idea that Berlin ever had.	
Liveliness & Vibrancy (8)	Because it makes the traveling around the city more amusing. In some cases it's annoying for finding a parking spot but as a pedestrian it's a very much appreciated
	It's nice to see people around when walking or cycling. Great idea. Although better in some streets as compared to others.
	I take my kids here and also to the cemetery when we walk because it's green and lively
	Better than walking in a quiet street. However its important to have these for a busy city like Berlin
	The liveliness is nice, overall a great idea if maintained and located in strategic places
Nature & Greenery (3)	Nature, Find ich gut
	Greenery and good for pedestrians, but not sure how annoying it is for cars
Absence of Cars & Safety (10)	The greenery is captivating when walking around the city
	Feels safer, it's set up for walking. Definitely pro the idea! Best for pedestrians more bikes and walking.
	Less cars, and great to bring kids when walking around the city!
	Comfortable in feeling of safety, great way to publicize streets for pedestrians
	More inviting, I like it since I'm studying in one of these buildings and think it is good with no cars since it is also bad for the environment
	Safer, I think it is awesome. More because it is really unsafe with the cars and the pedestrians in the same street
	More motivated by no cars
	More inviting, Good! I like that there is no cars because it makes it more enjoyable since it is quiet and safe
	There is no cars and see more people and bicyclwvs. It's something else no noise and air pollution. It should be everywhere. That's amazing and perfect. Less crowd less cars less horns. You feel that's it's spacious.
	No cars is more of the factor. 100% don't Build cities for cars. less cars the better
Active Engagement (1)	Great that less cars are passing through or parking
Parklets are Mislplaced or Unattractive (8)	Having no cars is more influential
	I often walk with friends to get here
	Although accessible. not exactly that great to walk here
	not too nice to sit around the main street
	A bit too noisy for my liking
	Horrible, because I have to drive from outskirts and expensive parking and a lot of work
	It would be nice if it was a bit more vibrant since an ice cream shop or something like that would be more inviting
	The parklets aren't too attractive.
	It's quiet hot and a bit bland or unattractive without any greenery
	Placements of the benches or parklets seem a bit too all over the place

