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Abstract

This thesis explores the issue of unproductive car infrastructure and the potential for reclaiming public space in cities. The authors argue that the neighbourhood street as a public space has decayed into car-centric infrastructure, resulting in a loss of life quality and neighbourhood communities. With the hypothesis that small scale-activism leads to discussion and serves as an exemplary actuator for a bottom-up-movement, it looks at how people within a neighbourhood can express their needs for streets, and prototypes different approaches and solutions to act for and change streets. Through a methodology that includes strollology, interviews, research through prototyping, and a co-design process with residents, the authors examine the potential of self-initiated planning, occupation and repurposing of brownfields and unproductive spaces to give expression to imagined ideas and enable community building. From the explorations in reclaiming public space from parking infrastructure, a development toolkit for a more "public" and community-driven urban environment has been developed. The thesis presents its methodology of interactive prototyping on location as a possible solution to improve city planning processes. It outlines different possibilities of activism to improve and promote change in a grass-roots movement style. more emphasis on the community surrounding the action, using digital and analogue "traces" to enable discovery and more permanent discussion of the matter.

Keywords

Urban planning, public space, car infrastructure, community building, sustainability, location scouting, interviews, field research, self-initiated planning, brownfields, prototypes, experiments, user tests.

Acknowledgments

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Main Content

General Introduction

1. Research Field

This chapter dives into the underlying issues, reasons, statistics and argumentation ground for our concept. It discusses our stance in regard to cars and the infrastructure they consume, how this shift from the productive, public spaces we had to the unproductive spaces, we know as streets, historically happened . It tries to analyse the term "public space" and inquiries on its applicability for describing the street. From this broad overview regarding our issue, it draws conclusions regarding our work methodology of being active within a hyper-local space, also formulating a hypothesis, that our streets lack interaction, personality and freedom to create, that is reflected in our research questions and forms the basis for our process and the ambition to enact change.

1.1 Background and Context

1.1.1 We Have to Talk about Cars

Close your eyes and imagine an image of an ideal street in your neighbourhood.

What does this street look like? Do you see cars? Shopfronts? Street vendors? What surrounds you? How does it feel?

It's very likely that none of you who have imagined a street in the ideal city had lots and lots of cars in it or multiple lanes for the cars to travel through. There is a reason for this. We all share an intrinsic desire to feel comfortable within an urban environment. This includes community, safety, inclusion and wonder. (Klanten & Stuhler, 2021) As we designed our streets solely with the purpose of transit, these public spaces have turned into traffic spaces (Bendiks & Degros, 2019)and do not serve the needs of the public. These places don't evoke the perception of being places to stay but only places to drive through by car to get to another place. They also function as a sign of non-belonging and thus kill a space and its identity/community. We have the same problem with parking spaces. They are not only a huge waste of scarce space in a dense city (Robin Chase) but also waste the opportunities and solutions we could build for cities that are serving the mentioned needs to feel comfortable. As we are imagining our ideal street, it's a fact that cars must be a part of it because everyone has a need for mobility, and there are numerous people with disabilities dependent on cars. It's safe to say though, that streets completely lined with parking spaces are undesirable and that citizens are neither able to participate nor willing to stay here. As these are communal spaces this is something we

can change and that's also where our biggest chance as a community lies. These creations can range from self organised spontaneous events to small community gardens or meeting points. The most important point is that inhabitants of streets or neighbourhoods have an active part in the creation of their public space.

1.1.2 Public Spaces as Such

There is an ongoing ownership debate with space in cities. As this is a limited medium, the design of it is also at stake. The city is often involved or accountable for these processes and provides public spaces such as parks, libraries or community centres. These meeting points are very important, because they are available to everyone, regardless of income or cultural background; and serve as a place to connect and discuss. There have been many sociological observations, such as "Palaces of the people" (Klinenberg, 2018), that show the importance of these spaces. With an ongoing privatisation and also the notions of compact cities, unused or designable spaces in Switzerland disappear ever more.(Rérat, 2012) We believe that people also have the urge to help shape their environment and have an active impact on it. That's why public spaces in cities go beyond parks or squares. They are an essential part of the identity of certain cities. Places created with a self initiated process act as an expression of the participants involved. The role of the people changes from just being passive users to participants within a system. It also makes these places more resilient and more adaptable to changes, because there is a local community that's invested and designs the place in a way that benefits the people who live there. This allows for a more durable way of housing and more social and financial security.

In the recent publication "Self Made City" (Ring, 2013) the authors also emphasise the importance of self-initiated planning and the existence of brownfields and unused spaces to give expression to imagined ideas and community building. We also see this in Zurich with such examples as: the Stadionbrache, the Binz, the Rote Fabrik or the Zentralwäscherei. These places serve as a cultural enrichment and help to create a community and serve as a canvas for ideas to be implemented. One aspect that also makes these places unique is the way they are organised. They work on a shared basis and thus can be used by many people. The management of a certain space however is always bound to a shared responsibility. This enriches community building and can be applied to many other aspects of infrastructure. If we look at the examples of cars again, one car takes up 15 times more space than a

shared car. The aspect of sharing is not only saving space regarding cars but is also saving resources within every other aspect of an urban lifestyle. This could extend as far as self-owned housing/settlement construction within cities.

1.1.3 The Early History of the Swiss City

To understand how cities have developed to the lively organisms they are today, we have to look at the historical context of urbanisation and the politics involved in these processes. As we are working very locally in the city of Zurich, we will also look primarily at the developments in Switzerland.

In contrast to earlier perceptions of the city, we are now characterised by a rather positive attitude towards it. Especially during the first Industrial revolution, as cities started to grow quickly, there was a big dissent towards cities (Bernard & Cavin, 2007). The changes brought by the capitalistic system of mass production made these developments possible, as there was the possibility to house and work for a lot of people with minimal space. There has always been a rift between rural and urban life, especially at the time of the first critics, such as Jean-Jacques Rousseau. He lashed out violently against big cities: 'Cities are the abyss of the human species. After a few generations, races die or degenerate. They need to be refreshed, and it is always the countryside which furnishes replenishment'. (Rousseau, 1979, 59)

The ideologies proposed by JJR were still a big part of the later executed planning of Jean Francois Gravier and Armin Meili. They both had a big influence in city planning in France (Gravier) and Switzerland (Meili). After the Second World War and the accompanying financial upswing in Switzerland, they were both involved in the emergence of anti-urban ideologies in space planning. What is interesting to see is that a lot of their statements didn't necessarily have a practical aspect, but rather a political one. (We can still witness this notion today with a lot of prestige projects.) They saw cities as a threat to the morality of society. People who lived in cities also did not correspond to the traditional values of having a family and being a normed citizen, let alone of the established patriarchal system. There were also many other aspects involved , but the main cause of the anti-urban critique is that cities don't support the traditional and conservative lifestyle that these two men imagined. As of their political nature they would have never seen a benefit or gain an acceptance to new ideas that emerged in these urban environments. These power dynamics have mainly led to a disempowering and neglect of urban planning and thus led to a very organic and disorganised urban growth.

With the emergence of modernist ideologies, a planning hype to counteract the previous developments has started. This led to very strict and regulated forms of planning that wanted to understand the city as a whole and to include everything within this planning. A lot of ideas of building a city completely from the ground up emerged, such with Max Frisch and Lucius Burckhardt and Le Corbusier. (Kutter et al., 2016) Although they were revolutionary at the time, they lacked the potential to react within given circumstances and were mainly constructed from a very distant perspective. A previously neglected, albeit very important discourse in city planning was started. Discussions about ownership of common ground, such as the ideas of Bernoulli (Hertweck, 2020), that one mustn't own ground but only the infrastructure on top of it, emerged. Many self organised cooperatives have been founded since then and have shaped urban developments in a positive way.

When looking at a lot of the infrastructure that is being perceived as valuable these days, the emergence of these places had a very pragmatic background. During recent years our cities experienced the threat of a global pandemic again. From a historical perspective, it is notable that the first public green areas f.e.. in our cities were created for infection control reasons during the latter half of the 19th century. Overcrowding, narrow alleys, and dirty gutters caused epidemics such as cholera, typhoid, and tuberculosis to flourish in the urban, working-class neighbourhoods. Green areas have been a very important part of public participation and community building as seen with f.e. the free lunch programs on playgrounds that date back to food-scarcity in the Second World War. (Rohrer et al., 2021) These unused spaces had the potential to provide space for self-initiation, help and thus community.

1.1.4 The Consumption and Cost of Space in Zürich
Statistics / numbers on Parking Spaces / Cars in Zürich

To add some context to the claims about unproductive car infrastructure the following section outlines some of the most relevant statistics regarding parking infrastructure in the city of Zurich.

The standardised size for a parking space in Switzerland (norm from VSS) is 5 × 2.35 metres in length which equals 11.75 square metres of parking space. According to the open data tool that the city of Zürich provides, there are about 49'000 open-air, roadside car-parking spaces in Zürich. If the spaces in condensed parking infrastructure (such as park-houses) are included, this number grows to about 70 '000 spaces. This discrepancy of open-air parking spaces in relation to parking infrastructure also shows the inefficiency of space usage and therefore about 575'750 square metres (0.575 Square

Kilometres) of ground are covered by Parking spaces in the city of Zürich. That is roughly the size of 80 soccer fields. The total area of the city of Zürich is 87.88 square kilometres. Averaging out the density of car-parking spaces per square kilometre this equals to about 800 parking spaces per square kilometre. Usually parking spaces in Zürich are occupied to about 90% to 97% of the entire capacity. This results in at least 44'100 cars standing on the roadside at any given time, in close proximity to a residential building. When matched with the number of households in Zürich, this results in about 1 occupied car parking space per 4 households. (GIS-Zentrum, Geomatik + Vermessung, Tiefbau- und Entsorgungsdepartement, 2021)

When rented at an average rental fee, these 11.75 square metres would cost about 2800.- in one year. But the city of Zürich sells parking cards for their blue zone parking spaces for 300.- a year. This card has to be used in a registered light motor vehicle to allow parking in any blue zone space in the chosen district.

When looking at the same numbers for bike parking infrastructure, the site lists about 2000 public bike parking spaces which are able to hold about 44 '000 bikes, and calculating it down to average density per square feet, we come to a number of 500 bike parking spaces per square kilometre. Why is there such a discrepancy in infrastructure between the car and the bike as a much more space- and emission-efficient vehicle of individual mobility?

According to "unparking", a project by the MIT senseable city lab, the average car sits parked 95% of its time. Assessing the IMT (individual motorised traffic) on the criteria of transport efficiency per space used, its drawbacks of increased pollution and increased danger for all other forms of traffic, should lead to the realisation that cars and their infrastructure are one of the least desirable means of transportation in a city.

Zürich is one of the most densely populated (Bundesamt für Statistik, 2017) cities in Switzerland, with its number of inhabitants having grown by about 21% in the last twenty years, space is becoming a scarce resource. In the same period, the cost of housing has increased by about 22%. In 2022, the average price for apartment rental in Zürich was 19.9.- per square metre / month.

This equals to 1470.- in monthly rental fees and 17'640.- in yearly rental fees for a 3-room apartment. According to the rental price index, Zürich is the second most expensive city in Switzerland. (ImmoMapper, 2023) Alternative housing solutions like residential communities or student housing are common in Zürich.

So where does one find space available for use? Could we use
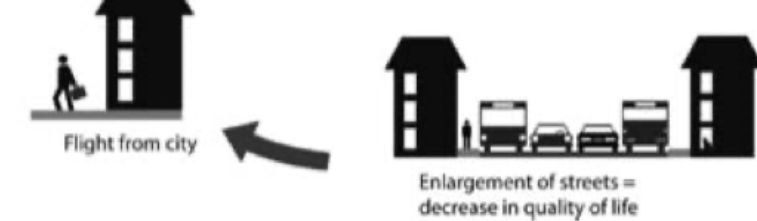
1.1.5 Private, Public and communal Ownership.
Or "Who is managing whose possession?" / Wer verwaltet wessen Besitz?
And why cars are, by nature, exclusive.

When talking about private, communal and public ownership, many questions arise regarding the conditions of possession, control and maintenance. The implementation of use cases only adds further complication and problems of individual consideration. To gain a better understanding of their definition the following section tries to define a framework of considerations that should aid in quickly assessing objects and their status.

In categorising a realm with one of the attributes found above, several criteria are relevant. I. Assessing its ownership status: is it attributed to a specific person, a group of people, or a nation? How opaque is the structure of ownership? II. The accessibility issue asks for its status of admission. Who is allowed "the right of use" or "the right of way" to a realm? To what amount are use cases regulated and is there an instance of control? III. The issue of government agency, closely connected to the ownership structure, executive power, and feedback loops are subject to the interaction of stakeholders. Who can propose and decide on use, development and adaptation?

These questions might be originating in an encounter with reality. Some inherent exclusivity in a space drew attention to it. Through imagination, a vision of how the space could be improved, or used in a more inclusive fashion, might form. But when contemplating said imagination, all the hurdles in its realisation inevitably arise. How is legitimacy for action or the call to action gained? When and how does this individual concern become a common matter? — The answer might be hidden in the term «common». From several individuals with shared interest, a community might form that tries to realise their goal through activism. The amount of space one is occupying regarding their number is also describing the scale of the common matter. The distribution of value for a broader community however is an act of empowerment that contains its own legitimation and doesn't necessarily needs a community involved.

Diving deeper into the notion of the "public realm" we can observe a shift in its understanding. In its semantic origins, the public realm was understood as the ground for the political life of a citizen. Its contrary, the private realm was designated space

for the "existential" life, where basic needs were to be handled and control and influence was not practised based on speech and thought, but based on necessity and hierarchy. It was not as much about the question of ownership but more about the questions of rule and governing principles. (Arendt, 1998)

Locating the two realms in the example of individual mobility, we are able to outline the conflict that has emerged between them. Infrastructure, as a communal good, is funded through the governmental institution. Its function is always founded in something we state as "public need". But when looking at contemporary jurisprudence, the car is seen as a private entity. A car, in its idea, is serving the individual need for mobility. Transporting to work, goods of provision, and to activities of self-fulfilment. These purposes, although sometimes intertwined with the public sphere, can be categorised as private in their nature.

When comparing the statistics of motorised individual mobility with others (as outlined in the former chapter), we get a grasp of its numerical absurdity. Is not, in every other system we developed, efficiency the most important evaluation metric? The ability to take part in modes of individual motorised transport is dependent on financial means and comes with a huge ecological and spatial footprint. Car infrastructure, through its inherent danger and consumption of vast spaces is, in essence exclusive for all other shareholders of mobility.

1.2 Research Questions - Hypothesis

This chapter will outline the different focus points of our own research. It emphasises the importance of qualitative and local research and the agency and the impact of design within the field of urban planning. We talk about how stories are tied to objects and spaces and how the inclusion of people shapes these. Furthermore we pose different questions surrounding the aspects of digital tools and their connection to non-permanent actions.

Regarding our Research questions, we start by setting a scope of which areas of a city we want to focus on and where we can actually have the biggest impact. Urban planning is a very complex topic and there are a lot of stakeholders involved. To realise a project one must overcome numerous administrative hurdles. These processes are time consuming and often the stage in which most projects die. The "urban equipe collective" published a book regarding exactly these questions and how to act within the legal and administrative frame.(Brückmann & Grandel, 2020) It focusses on self-initiated projects and works as a step by step manual. This mostly includes the different municipalities to whom one must talk to and how to connect within a neighbourhood. Although not less important, this permanent direction isn't realistic within our timeframe.

We are exploring the different interactions happening within urban traffic systems, specifically neighbourhood streets and parking spaces. Regarding data from people we target the residents of Imfeldstrasse. Considering the time and resources we have in this project, quick and qualitative feedback from a local community suffices and helps us most to further iterate our project. As we come from a design background it's more important for us to find out how we can gain a resonance from the people and how to gain acceptance not from an official but communal standpoint. When looking at public spaces we use different locations in Zurich. The infrastructure provided is very similar and we observe and intervene in these spaces to see how the reactions differ and how it changes the affordance of such spaces.

We are aware that we are working in a legal grey-zone, as one must only park a lightly motorised vehicle in a parking space. As our research includes the perception and creation of public space and also the shift of these, we don't see these given circumstances as limitations though.

We think that the discipline of design contributes to this very relevant topic by having the abilities to work in a very quick, local and action-based way. There are a lot of projects we could find on how designers can contribute to the surprising aspect of a city. The strength of these often lies in a manifestation of a political topic. This can include new ways of thinking about politics and testing it out on a small scale but also experiments within spaces that propose a different solution to known circumstances. What we really want to investigate is how design can contribute to a more self-initiated and democratic way of behaving within a city without being dependent on municipalities or official institutions. A further aspect of public interventions is how they are perceived. There is a lot of stigma against urban occupations and the aesthetics involved play a big role. That's why we think it's very important to evaluate people's reactions to different designs and aesthetics. Is a refined design necessarily better? As it proposes an already established infrastructure we expect to have more criticism towards an elaborate appearance.

As every object also tells a story we chose different approaches to an involvement within an infrastructure or an action. This includes simple incorporations as setting up a bench but it can also be more conceptual such as the development of ideas for improvement. We also look at other similar projects and ask us how people identify with a place according to the aesthetics and the co-creation provided? An aspect of perception is also found within the wording of slogans or the name of a project. We test out different questions and descriptions, ranging from provocative to unstimulating to find out how discussions evolve and how answers differ.

When it comes to designing within a community, inclusion plays a large role. We believe that projects have a longer life-span if people are involved in the process by actively creating or passively deciding within them. However these processes always take time and more opinions lead to a more diverse project but also to more time spent in discussions. As stated earlier we will focus on qualitative research and will thus not have numerous answers or participants. This approach needs multiple iterations to get a feeling of how and why the data differs. We research different neighbourhoods and vary the time and setting for the same neighbourhoods. This gives us a feeling of how many iterations are needed to get the right and required feedback.

Our goal is to provide the tools to start interactions with little effort and preparation. That's why we look at the motivation of people to act within their cities. Is the willingness to act in the public space curbed by large administrative hurdles? What do people think is needed within their neighbourhoods and how do they raise these concerns? How many people have actually thought about getting active and if not why? Part of our project is a conceptual way of thinking about the use of public space and the distribution of it. Another part is the actions we organise and empower. They should be fun and motivat-

ing for others to join and iterate. We include different friends and people we meet during our actions to see how they react when being involved and what they like about it.

The last part we research is the manifestations of non-permanent actions. We choose a digital realm to document the different actions and couple them with physical plaquettes at the site. We tag each action on public Map-Services to enlarge the visibility next to our website and social media channels. We want to find out how the rating and visibility system on these services can help the impact of our project and if we encounter people that become aware of it through these tags. That's why we ask each participant of our action to leave us a review on these services as they work as a visibility-enhancer. The text- and rating based reviews also work as a discussion platform and feedback loop. We want to find out how this non time-based comments can add to the political and mediating aspect of the project.

1.3 Methodology chosen for your Investigation

Within the following chapter the principles that are underlying our approach will be explained. The accompanying methodologies are being discussed in the possibilities they provide when approaching our project.

The discussed problems about enacting change in public spaces leaves us wondering about possible strategies and solutions for the outlined issues. City planners, as they are named, will plan some change, politicians are concerned with budget and their agendas, civil engineers usually work in the framework of public contracting work. All that has its purpose to control and regulate the quality, need, functionality and budget of public infrastructure, but does not provide a framework for communal interventions. They lack the possibilities of creative, spontaneous and decentralised creation of urban infrastructure and events. We see design as a discipline that adds to this discussion by being flexible and quick and can already manifest a certain change without months of planning. The goal that we wanted to achieve with our methodologies is if and how people can have an active part in the creation of their street. With an open mindset we try to not be too focussed on one methodology but rather see the possibilities each method provides. We differentiate two sort of methodologies: One being a passive observing one such as analysing data, infrastructure or the behaviour of public spaces and an active one that always has the goal of starting discussions that are bound to propositions represented in actual "things". We choose this two-laned way of working because we think that the data and papers the city and scientists provide offer a

great insight of how traffic systems and urban politics influence the way we behave within a city. We do however also see that the conclusions provided in these papers are very generalised and lack a part of action and relation one can identify with and discuss about. Our main goal in our active methodologies was thus not to provide a perfect solution but to design a framework within which discussions can happen. We think that personality and interaction can only happen if conflicts exist. These conflicts are the streets we do not find desirable in our neighbourhoods. These challenges have to be tackled in a communal way and the way we shape that process is our main concern. We start with rather theoretical and observing methods such as strollology and a simulation in the form of a game. These approaches offer us the possibility to react to the observations made and are followed by actual prototypes and solution oriented public brainstorming sessions. We assess the discussions and the feasibility of these different methods and change them accordingly. At least we look at how the different actions can be manifested and how a non-time based discussion can be established both in a physical and digital realm. This method aims to counteract the non-permanency and its lacking visibility of prototypes and interventions. The goal of all methods is to generate a feedback loop to get an understanding of a neighbourhood and its needs. The data collected during this time have the goal to empower people to raise their concerns and needs in action-based interventions that serve as prototypes for further solutions.

1.3.1 Data analysis

A lot of cities are offering open data tools today. They are a great approach to have quick access to very specific data such as where and how parking spaces are distributed. During the first phase we use the open data tool of the city of Zurich. The datasets we chose for the neighbourhood we decided to work in were very mobility-based. They include the number of parking spaces for cars and bikes, how many cars/bikes/pedestrians pass a certain street within an hour but also a showcase of where and when the civil engineering office is planning to do new projects. One could go much further and also look at the number of cooperatives within a neighbourhood or the accessibility that differs from neighbourhood to neighbourhood. Our main goal with this data however was to get numeral evidence for the observations we have made within the streets and to start the discussion of space distribution according to the data provided.

For the Imfeldstrasse we chose a radius of 200 metres and analysed the infrastructure within this area. When looking at parking

possibilities for bikes we identified 10 public two-wheeler parking spaces that equal 100 bikes and about 135 square metres of occupied space. (GIS-Zentrum, Geomatik + Vermessung, 2023) Comparing this to car-parking spaces we identified 204 parking spaces that are publicly available. (GIS-Zentrum, Geomatik + Vermessung, 2021) When calculating 11.5 square metres per parking space we get to 2346 square metres that are occupied by parking cars. That is over 17 times more space needed to have twice the possibility of parking spaces. Only this simple data analysis showcases the distributional absurdity we can find in our streets. Furthermore we would have liked to look at numbers of bike/pedestrian traffic in comparison to car traffic but we couldn't find a dataset that measures both at the same spot.

The data we can collect through this method certainly changes nothing just by saying it but it helps to look at the consumption of space from an objective standpoint. This helps to open the bias and habits we have within given circumstances.

1.3.2 Game Methodology

In our cities we have different democratic systems in place. These can range from votes that concern the whole city and include budgets of multiple millions or also small decision making processes that happen within a neighbourhood association or even a tenants' meeting. To get a grasp of how discussions can shape and how concerns are handled within such a community we decided to "play it out" and design ourselves a little lab situation. Games are an excellent tool to research different connections and dynamics within a system. As there is a common goal to be defined, there are also certain rules that apply to everyone. Furthermore specific skills and limitations can be thought through with different characters. This means that by tweaking the different abilities the players have we can also automatically look at the outcome each iteration provides. Creating this canvas we hope to also identify certain leverage points within the urban system. As there are so many parties involved it's very hard to gain a holistic view and to understand and include all the actors. By creating different personas and roles in our game we can get an overall view and a summary on how and why everybody is involved. As cited in „Play the City", consider the complexity and potential variations in a game of chess. Despite its simple, easy-to-comprehend rules, it is almost impossible to predict the moves of two opponents after three or four steps, and all of the intricate and responsive solutions generated during the play process.
Following the guidelines of Play the City (Tan, 2017), we want to create a game that enables different parties to shape a process and

have an active part within the emergence of a project and the change that is undergoing within their street.
The game will first be played in a Dungeons & Dragons RPG style. This can also be explored with people who aren't specialised within the field of urban development. Another focal point will be how the different outcomes vary when changing certain responsibilities. How will the street look if the civil-engineering office is solely responsible and how would it look if no restrictions would be given? As we have a direct representation of the street at the end of the game, we can directly find out if and for whom it will generate an added value and what political motives were behind a planning process.

1.3.3 Public brainstorming

The public brainstorming session started with us being active within that space. We feel that we have gathered enough knowledge with the previous methods and it's time to enact a discussion within a public space. The framework underlying these public brainstorming sessions are very similar to the later mentioned components of working in public space because we need people to participate and thus an inviting component is necessary. We have done this either with a coffee in return or also tried to incorporate it in later actions such as the "Pop Up Repair Workshop". The public brainstorming sessions have been done 3 times on a weekday afternoon in Wipkingen. We did the same framework 2 times at the same spot at Imfeldstrasse to get a comparison on how the results differed. We have had about 10 to 30 participants during 3 hours, depending on the weather and the people around. Our age group ranged from kids (10-12 years old) to seniors (about 75 years old). All of them were residents at the street where we did the sessions. Our main goal was to have a multitude of ideas that serve as a canvas for the change needed within that street. We handed out idea cards on which one can describe and sketch an idea. (Examples can be found in the Appendix and the results will be discussed in more detail in the "Ideen-Kafi" Chapter.) These idea-based discussions have the possibility that the participants can choose the topic they want to talk about and that they want to address and evoke a certain excitement as a need suddenly seems to find a solution. However we can observe that many people struggle to come up with ideas directly and the support from our side is needed. We can also observe this on different platforms such as NEXTZurich (Nextzürich, 2016) where different ideas are sketched. The quality of the ideas isn't very good and it is important to look at the needs rather than the solutions.

1.3.4 Prototyping

The term of prototyping has a very broad connotation and is easily misinterpreted. We begin with laying out what goals we have when talking about prototyping and what concept and mindset is underlying its nature. A prototype always is a representation of the current state of a project. It is also a base for discussion and a manifestation of an idea. This said we have different prototypes we incorporate during our process that showcase our current state but also incorporate the mindset of prototyping as a visualisation of different solutions with the underlying problem. With every prototype and every action we organised we always stated the different goals we had and what unknown aspects we wanted to investigate. When playing the game f.e. we wanted to find out how the outcomes change when we shift power dynamics within an urban planning system. When planning an action on a parking space it was mainly the perception residents have of this reclaimed space and how the reaction to this proposal looks. Least it is a very important tool within the area of a city because it's very hard to predict certain outcomes and the only method that works is trying out. After all, we did some prototypes multiple times and the outcome varied a lot without us changing anything but the environment we can't influence.

1.4 Motivation and intended contribution

This chapter will outline the need for change we have experienced and the frustrating everyday-life that it originated from. While not being experts within the fields of urban planning or traffic-engineering it will also look at how the aspects that make us, as inhabitants of a city, still valid experts within this realm.

Living in a densely populated neighbourhood in Zurich is both interesting, and challenging. While being at the heart of an ever-changing and quickly developing hive of people it can also cause a lot of frustration. The frustration began with us moving through this multipart system of streets and squares by bike. When riding a bicycle in Zurich many questions start to arise and the more often we are nearly run over by a car or almost hit a pedestrian, the more we ask ourselves, why is it in a city where we might have the best public transportation system in the world, everything still planned for and revolving around cars. How many people actually use that infrastructure and how should a neighbourhood be centred around the needs of its inhabitants or the needs of the people who drive through it? We realised the sheer absurdity of the

space that cars and their infrastructure occupy. If focussing solely on traffic one could argue that the car serves as means of transportation and thus is needed e.g. for business and for commuting or the public transportation system. Even though it still is leading to a point where everything is, again circling around cars and one could only discuss the accessibility that is being provided to drive within a city, we started to look at another less productive and, in our opinion, more interesting part of car infrastructure, that is the parking space. When examining the blue zone parking-spaces , we realised that it is not only a strange system that allows for very cheap housing of cars, but also a big potential that this space could provide for a street and a community. We realised that we take the occupation of this space as a given, but that the ability to use it is very exclusive for car owners and does only provide a benefit for a small part of a city's population. We started to imagine what else could be built, organised and changed in that space and also how this can help to transform a street and its social factors. After our first research we started to get a grasp of the potential this semi-public space can have and what interesting solutions it can provide to shape a neighbourhood and the interactions that happen within them.

When using "our" city, we often get alienated by its nature, and depending on how we move, we feel excluded from vast spaces of its area, and many places, although accessible, seem dead and lacking any inviting character. Our private space is scarce and expensive, while much of the city's area lies idle, scarcely used and contradicting reasonable measures of utility. Should not we, as interaction designers, try to improve that situation? However marginal the contribution might seem? Do something where our skills seem to find their perfect application scenario? We want to create systems for better interaction with each other and with the "public infrastructure". We want to motivate others to participate and innovate by themselves. We want to "hack" the bureaucratic and prohibitive system to create some controversy but more importantly, some value.

Whilst getting oneself into the "mills" of permits, institutions, and the public our motivation is also heavily focussed on a prototyping and realistic approach. In a "how far can we get" manner we also hope to get a feeling of where our skills can be useful and how a certain change can or should be achieved. With a curious and open mindset we hope to be able to start discussions with a variety of different actors and learn from different institutions and disciplines.

As outlined in our research, many projects that intervene in the

public sphere face difficulties on political, infrastructural and social level. But what many of them achieve is a small step towards more decentralised and inclusive urban development. Almost all of them document their gained knowledge and provide it as a resource and possible inspiration for other people. Through that they create a continuously growing toolset of communal empowerment in urban interventions. In our eyes, this decentralised activism has the potential to marginally improve life quality in a city. By going through the process of activism, we want to create a "model-principle" intervention. Its goal is not to overthrow the old system, but to serve as a model and inspiration for reflection on the status quo and to provide possible points of departure for other empowerment projects in Urban intervention.

2. Concept

This chapter summarises the issues that were identified as in the most dire need of work and begins to outline a framework for our thesis project. It phrases our research questions and discusses the different tracks that we followed to get an idea of the different possibilities these approaches provide. It describes the leverage points that we identified as the most relevant ones and how we aim to tackle them, namely the contribution of people on the street, the more democratised discussion about their concerns and ideas, the need to investigate defining attributes of public character, and how ownership plays an important role in redeveloping and maintaining space.

2.1 Concept and Angle

With its changed strategy in regard to shaping the city centre and traffic characteristics in districts the city of Zurich has a defined goal of reducing the amount of cars present in the city. In different studies they prove that car traffic is not strictly required to the businesses' success in a neighbourhood. In their conclusion, they visualise some possible change to streets and argue that other solutions such as centralised parking-infrastructure and residents-only parking suffice to cope with the demand for parking spaces. However what we still deemed as missing in that strategy is an effective, creative and inclusive way of redeveloping the areas in question. Although projects in that manner exist with "Brings ufd Strass" and other neighbourhood-based redevelopment projects, they lack public attention and discourse around them. In our view, recent redevelopments still fail to transform transportation infrastructure towards more public spaces. (Willi, 2021)

Space is very scarce in Zurich. Unused areas and brownfields are disappearing ever more and there is hardly a place that hasn't been planned out yet. These spaces are however a very important part of urban development and neighbourhood identity. Having a space where one can get active, has the possibilities and mindset to change and initiate is a space where ideas can thrive and where needs can be expressed. We hope to incorporate these factors in a project that isn't based on a specific locality, but to bring this mindset to the street, or more specifically to parking spaces. With lots and lots of parking spaces being removed and having no actual supplement, we also think of these spaces as brownfields and they can be found everywhere in Zurich. This led us to the angle of changing streets and neighbourhoods through

temporary conversion of parking spaces with a mobile architecture or spontaneous low-fidelity interventions.

The core of our concept lies in two simple, albeit difficult questions:

1. How can we empower people in a Neighbourhood to change / create / their "Quartierstrassen"?

2. How can streets, with the focus on parking spaces as a model, be reshaped towards a more public appearance?

Up until now the decisions regarding public spaces are mainly made from one perspective; the civil engineering office point of view. This is surely not a completely bad thing but it poses the very important question: Why do we manage public space, that, as its name suggests, is public from a single and very strict perspective? Couldn't we create a more personal, lively and resilient structure if different views would be taken into consideration? Where people are not only living passively, but contribute actively to the existence of a public sphere. This is where we hope to have an effect — to change spaces that are designated for traffic and individual mobility to spaces that are designated for humans.

2.1.1 Shift of perspectives

During the first phase of our project we try to disrupt the dynamics and perceptions we have of a classic street. Without much doubt we take it for granted that streets should primarily be centred around cars and parking spaces and perhaps more importantly, that we are incapable of changing the purpose of this semi-public space. We aim to do that from different points of views, so we can also assess which methodology works best. This can include a model of the street that is rearranged within a game, small ideas and sketches or a direct repurposing of a parking space. The playful aspects of these approaches also aim to lower the expectation one has regarding the creation of public space.

If we look at the percentage and history of street usage we can observe that cars shouldn't be preferred within that setting. Furthermore the street is a public space and by blocking that street with our individual goods, that is the car, we take designated public space and use it for our own individual needs. This also changes how we perceive this street. A very impersonal and traffic-centred space isn't a place we would like to stay or where we feel a certain hint of personality or ownership within the neighbourhood. The images that we create during this process thus aim to include objects, interactions and activities that transcend the street away from its traffic-heavy character. On a very functional level this includes shielding from the street such as hedges or trees but also the other infrastructure, such as benches or walkways play an important role. To understand the usage and role of these it is necessary to realise that every object affords a certain activity and thus how we act and perceive a space. A bench for example has the affordance of sitting and lingering. Because of its length we are also able to sit as a group of two or three. If passengers are more than a group of three they might not choose a space where no facing benches can be found. This will not invite larger groups of people to dwell within this setting. If one wants to work or do some crafts a bench also doesn't provide the necessary working surface for that. A table in front of a bench, as found in forests or parks has a different use and also attracts other activities. If we want to shape a space in a way that enables more involvement we necessarily have to change the affordances of the infrastructure provided.

Other aspects that every object in itself carries is a political and a historical one. We perceive everything around us in a different manner with the aesthetics and the story it provides. With current infrastructure that is used most within the streets we see that everything is regulated and looks the same. The benches or dwelling places are designed in a way that they are almost immune to vandalism and outside influences. Because of this impersonal factors it makes these places very easily replaceable as there is no personal involvement or uniqueness attributed to it. If we have taken part in the building process of a certain space or are actually cultivating it, we can experience a shift of agency and ownership. This is especially important regarding shared and common infrastructure as it automatically adds a feeling of responsibility for changes. (If I have created a space and new changes appear, do I want my creation to be changed?). This is contributing to a long-term effect of a project and also to the acceptance it gains.

2.1.2 Local vs Urban

During the preparations of our concept we were confronted with the question of the scope, within the city of Zurich, we want to work in . We knew that our project would have a bigger and more enduring effect if we work locally as we are able to engage with people on a more regular basis. With a city that is so diverse though, we also wanted to get a feeling of how our approach can work within different settings and neighbourhoods. After our first actions we realised that wherever we work, we have to think in a hyperlocal way. Having streets that are directly in front of the involved actors' house, we realised that this sense of ownership is an important key to having motivated and involved people. Even public squares and schools aren't considered as personal space and thus the "right" to

have an active part within shaping this space is limited. The area that interested us the most was the in-between; or a semi-public space. The advantages of these somewhat unassigned spaces are that there still is a sense of ownership but not a claim to it. This leads to a more engaged and involved audience as there is a feeling of legitimacy and responsibility, but also a willingness to cooperate with each other. We also think of parking spaces as a part of these semi-public spaces as they are a communal good that is then later used for individual purposes. During our actions we have also witnessed that the people who lived in the house which the parking space was in front of, were often the most engaged and talkative during our stay there. This said, we realise that it is helpful to work in a neighbourhood where we are also involved. Doing the actions near the place we live has a better effect because there is more trust, relatability and also more local incidents and objectives to talk about. This led us to a concept that should be reproducible with very little knowledge and low effort. In this way we could achieve a change in every neighbourhood with different local actors involved that work independently and decentralised, even from us.

Another problem we have encountered is the management required in the involvement of people and municipalities. With Zürich having a very high population density, the impact of democracy in decision-making and the distribution of finite resources for near infinite concerns consumes a considerable amount of management capacity. If the civil engineering office plans a big bike route through the street, do the residents get to decide if they are in agreement or not? These bigger projects can't involve every single opinion but the planning committee behind it can take different opinions and propositions into consideration. Digital tools such as "decidim" or "bikeable" offer great options to tackle these decision-making processes. A project can also gain more acceptance even if one was only involved via passive vote. These processes lack a qualitative discussion part to them, though. We think that the physical representation and the co-alignment of these two realms is very important to consider. We can also observe this with the "Quartieridee Wipkingen". They had a broad physical representation within the neighbourhood during the project and thus gained a lot of trust for the project they were planning. The digital tools they used to accompany it were a great organisational tool as it is almost impossible to manage these kinds of approaches without an additional platform. This said we also hope to incorporate this aspect and use each tool for what they can do best. Because community building, in our opinion, still happens in person and a physical form. As there are also a lot of people that struggle with digital tools we always have to keep this exclusion in mind when trying to involve as many actors as possible.

2.1.3 Our role as designers

When working closely with a group of people, where we take inputs and ideas from the outside it is always important to be clear about one's role during the project. While enjoying organising these little neighbourhood meet-ups we stated for ourselves that we want to provide a platform for people to exchange and express themselves, but also that our task is not only to mediate between the different actors involved but rather to empower and enable people to voice and realise their ideas. We have an active part in presenting solutions and presenting insights through our research that enables residents to get involved within this movement without having to test everything out and get visible. We will mainly work on a manual of ways to become active and we will look at the ideas that are being provided as a suggestion that can be implemented and assessed as people's needs. Having the slow processes in mind that interacting with multiple actors involved brings, we would like to speak through actions and prototypes rather than having a lot of meetings that can then bring forth the best solution. In the next step it is also very important to us that our process and our methods are as transparent as possible. By providing a digital platform that documents each of our steps we hope to enable and inspire other people to reproduce our approach. We also want to provide a manual that can demonstrate how one can become active and be involved within the reshaping process. As Interaction Designers our competence is heavily based on designing processes. Through documenting our project and the interplay of the different actors in mind we hope to advertise our activism in an attractive form to create interest and contribute to the discussion in official entities. We imagine our prototypes and communication methods as active "things" to be talked about from both sides, putting us into the spotlight to have a ground for discussion.

In design, the attitude towards acquiring knowledge about problems and developing solutions is less traditional than in other subjects.(Preece et al., 2019) Its prototyping methodology consists, as described by the book "Interaction Design: Beyond Human-Computer Interaction" of four stages: "discover requirements, design alternatives that meet those requirements, prototype the designs so that they can be communicated and assessed, and evaluate them." This way of prototypes informing a next generation of prototypes is inherent in all interaction design processes, and is something that is not practised by many other disciplines. To upscale this approach into the contemporary systems of city planning would consume an exorbitant amount of resources and overextend their limited amount of resources. This "research trough prototyping methodology" therefore presents itself

as one of the "unique selling propositions" our process could offer.

2.1.4 Goals

Our goal is heavily based on the prototypes we provide. Having a "researching through prototyping" mindset, we strive to get a sense of what's possible in a realistic manner. We realised that it is much easier to discuss a proposal or an idea rather than an abstract theory of traffic dynamics. With this approach we are able to lower the perception of how much knowledge one must have to be involved in this process. Even a small action, such as colouring a parking space with drawing chalk, can serve as an expression of a need for more personality and aesthetic diversity within a street. Our goal is to empower people in a manner of speaking through actions that on one hand have a benefit for the street and the neighbourhood as it allows people to connect and dwell, but also to have a political component that is being expressed in a public manner. In our research we have different political bullet points we distilled as "problematic" that we would like to address. When talking about the scarcity of space we want to show how absurd the waste of space is by having all streets parked with cars. and also how much relevance is given to the possibility to park a car from a monetary aspect as this possibility is extremely inexpensive. We are aware that getting rid of cars within a city is not a possible objective, but in comparison to the current situation, thinking and encouraging better solutions such as underground car parks or car sharing could lead to much improvement. The city has realised that the current number of parking spaces is clearly unnecessary and thus a lot of them are being removed. Following this movement we would like to provide a direct solution to how this space can be used and substituted.

Within the framework of the many different actions and the possibilities they offered, we were repeatedly confronted with the question of longevity and manifestation. In many situations we have noticed the apparent motivation and willingness to create ideas on the part of the residents. However, since we also want to have an impact after the action, it is also our goal to develop a digital documentation tool which, together with a physical legacy (e.g. a plaque with a QR code), functions as a portrait and solution library and can thus also offer added value in the longer term. Furthermore, it is our goal to compile a manual that outlines the most important clues for street-level action, and presents many different ideas that can be carried out by oneself, with varying degrees of effort.

Finally, our aim is that the actions should always have a playful aspect, people should feel that being active is not a chore.

2.2 Related Projects

When talking about these related projects we think it's very important to state how self-initiated or municipal the process has been designed. Having a lot of official and heavily funded projects in cities we would also like to look at "self made" projects from cooperatives in Berlin or different brownlands in Zurich. Whilst analysing the projects we always had different questions in mind that we tried to answer. Some of the most important questions were: What has been done before? Where did the drive in the project come from? How actively has everybody been involved? What long-term success has been achieved? These different criterias in mind we realised that there is a very big span on the duration of the planning processes and also the impact the different projects have had. An interesting thing to point out though, is that projects that have been addressed in a financially cooperative way had the most long term effect and were resistant to a lot of changes that gentrification and urban developments have brought up.

2.2.1 Brings uf d Strass

"Brings uf d Strass" is a project that was initiated by the civil engineering office in the city of Zurich. In cooperation with the "Denkstatt Sàrl 3" and local residents, several streets in Zurich have been closed down for car traffic during summer vacation and furnished with possibilities to play and dwell on them. Created as a reappearing project and proving ground for participative city planning processes by the Zurich civil engineering office, the annual recurrence allows for a constant assessment and improvement of its iterations. But this co-creation process with local residents seems to bring a diminished flexibility for both actors, as all decisions and plans have to be sanctioned by multiple parties. This results in big lead times and the diminishing of ideas through compromises and objections. There seems to exist a strong polarisation in the city council regarding the use, budget and right to exist for this project. Interests of the car-lobby and local commerce argue about reduced revenue, are unhappy about the implication for car traffic and accuse the organising bodies of "Gambling money on some useless gamification of valuable traffic space". They lack understanding for the declared project goal to research and prototype spaces for recreational activities in close proximity to dense living

spaces. (Tiefbauamt Stadt Zürich, 2022)

2.2.2 Self Made City

The publication "Self Made City" highlights different projects and cooperatives in Berlin.It is interesting to observe that a lot of cooperatives have started to emerge from the squatter scene that were living in abandoned buildings after the "Mauerfall". These unused spaces have immediately started to form a community that was dependent on affordable housing and that has later in cooperation with the city founded cooperatives that still make up a large part of some neighbourhoods in Berlin.

What we really like about this story is that if there's space that has to be talked about and that in a sense belongs to everybody, communities can form and that there's a more personal and resilient process going on. It's also always important to talk about ownership and the longevity that this factor can have. This means that people are much more likely to get active and be involved if they know that they are responsible and can also make decisions for a designated area. (Ring, 2013)

2.2.3 Stadionbrache

The Stadionbrache is a project that aims to create an accessible, inclusive space for culture, gardening and dwelling on a brownfield that was previously a stadium. These interim uses are a rare sight in Zürich, as plots of land like that usually belong to holding firms that quickly work towards construction projects with mere commercial goals. The Stadionbrache is managed by a small association of locals that have an open ear for any creative project imagined by someone in need of uncommercial space. The Zurich climate festival took place there in 2019, and it occasionally houses nomadic communities. A forest playgroup provides affordable daycare for children, there is a small skatepark, and in the centre of the permaculture or community gardens is a small pavilion that accommodates pizza ovens and can be used to host events. We see this project as a prime example of repurposing unproductive spaces through occupation towards a collective meeting point and purposeful existence. Unfortunately, the ruling property dynamics in Zurich threaten to extinguish the wandering and existence of these spaces in Zürich. (Verein Stadionbrache, 2011)

2.2.4 BeeHome

This is a project implementing the concept of non-human-centred-design into a product. It aims to provide living space for solitary bees through gamifying the process for us humans. With their online-tool, one can create a completely customised digital model of a beehome and then print out the construction plans for it or contact a local makerspace for its production. We incorporated this product as an example for public infrastructure. Even when it is not providing a direct, consumable good of exchange, it strengthens biodiversity in our city and contributes to an ecosystem around our living space. It could be the answer to our searching for more productive, innovative uses of inactive public spaces. (SPACE10, 2021)

2.2.5 WikiHouse

The WikiHouse is a project where different building blocks can be composed into a small liveable house that enables it to be stable, tested and easily buildable. The notion of offering tools and not products and having an open source mentality really appeals to us because it always has an empowering factor too. In a way of DIY Democracy the skills one acquires from building and being involved in the process of a small infrastructure makes an installation or an infrastructure more resilient to changes. If one understands the process of building infrastructure, repairing it should be straightforward. This leads to less resources being wasted and a longer life span. On the other hand it is also interesting how identity can be expressed with something that has been composed by oneself. Having an active part in painting or the goal of usage makes the responsibility issues of common goods less worse. Another design principle this project embraces is the one of decentralised manufacturing and management. This leads to less transportation ways and a better distribution of both power and manufacturing. (Open Systems Lab, 2022)

2.2.6 Decidim

Decidim is a tool for democratic processes and is heavily used in Barcelona and other cities. The goal is to let as many people be a part of public decisions as possible and thus make every process more democratic. It is an easy to use tool and is a good example of how digital applications can help make decisions in a bigger community. Trying out mini projects with Decidim can also help gain a feeling of what's needed and wanted in a community. (Decidim Free Software Association,

2.2.7 Quartieridee Wipkingen

The Quartieridee Wipkingen is a project that was situated in Zurich in the district of Wipkingen. The project was realised in 2020/2021 and was a collaboration between the Urban Equipe, the Quartierverein Wipkingen, and the city of Zurich. The idea was to have a participative budget to realise ideas that have been submitted by residents. After the submission phase, each resident could vote on their favourite ideas on a digital platform. It was the first attempt at realising a participative budget in Zurich and the main goals were: to find out how valuable the submitted ideas are, and which methods include the most people. Interestingly, the focus of this project is the exchange of ideas in a neighbourhood and their acceptance; not budget allocation. The main focus we observed when talking with the "Urban Equipe" and reading their reports was that there was a very big work input from the side of the project initiators. and that the processes behind submitting and voting to then later being realised took a very long time. Another thing we observed was that it was very important to have an offline presence in the neighbourhood which allowed people to exchange and discuss at the created meeting point. The long term effect is something we couldn't really measure within this project. As also described during our research, meeting points that include activities such as skateparks, Pétanque fields or book coffees really help facilitate exchange and provide better possibilities to connect than simple parks or infrastructure. The infrastructure that has been provided though, may not always act as a long term social place. Another positive aspect was how the discussions revolved mainly around ideas - simply having an idea enables people to have a common goal that can maybe also be achieved without the funding. (Urban Equipe, 2022)

2.2.8 Bikeable

Bikeable is an online platform that allows registered users to post issues and discuss possible solutions regarding bike infrastructure in public space. Users must register and can use a map with needles or a feed to explore problematic or fixed streets that others have documented. They can up- or downvote the posts to express approval or dissatisfaction with a spot or issue. In the comment section, an active discussion about possible solutions for the spots is taking place, with the Zurich civil engineering office seemingly taking part in the discussions and commenting on their awareness of and progress in tackling the issues. Bikeable is included here as an example for a project that connects physical space with a digital representation Additionally it enables a discussion about its form and organises a community around an activity to which it serves as a strong voice and mediating platform to other, more influential players in the system to be improved. (Moveable, 2019)

2.3 Field Research

With our working strategy consisting mainly of "researching through prototyping", our concept is subject to iteration, influenced by needs and knowledge that we discover through our journey.

By prototyping together with actors in the field of street development, such as The "Tiefbauamt" as official institution, the "Urban Equipe" as Activists for self-empowered Initiatives, and residents as main users, we aim to gain practical knowledge on their decision-making, processes and visions. As described in our current concept, we have several questions that need to be investigated through further prototyping. The most pressing question probably being: Is there a need for intervention? / Do people reaffirm or relate to the issues we want to tackle with our project? (Odom et al., 2016)

2.3.1 Concept Validation

To answer that question, we developed a prototype to gather opinions from people on the street. Embedded into our first prototype of the "Idea Café" was a framework that aimed at discussing and validating our concept through confrontation with people of diverse age, origin, life circumstances and modes of mobility. Passing people were offered one coffee in exchange for one idea of possible change for the street we were located in. Through these ideas, we aimed to create a discourse with one other. Explaining this exchange of values(coffee vs. idea) always led to the same question: "But what do we pay with?" And: "Really, just an idea? But for what exactly?" As soon as they had our idea-card in their hands, the participants began to realise that ideation and this kind of "creativity on demand" is more difficult than initially imagined. We, on the other hand, did not yet have a "streamlined" answer to their last question. "Ideas for a more liveable street", "Imagine a street without cars, what would you do?", "Ideas for a more public street" were a few of our

answers. The usual dialogue unfolded around our vision for a more liveable street with less space for car parking and more space to meet. We consciously avoided the ban/necessity discussion with respect to cars, instead trying to bring people to contemplate a "what if-scenario", where the logistical problem of parking spaces for cars has been solved in another way than occupying half of our streets.

One phenomena we quickly discovered was the "hyper-locality" of the ideas. All ideas were strongly connected to the street our "cafe" was located on. Ranging from little proposed interventions to improved safety for pedestrians, to a more green street with more plants and less "sealed surfaces". In some instances, the ideas reflected the starting point of our thought process — Occupying space that was strictly destined for cars with self-empowered interventions for more personal space. Having a like-for-like character, that contrasts the unproductive occupation with a productive occupation for more room to live. The need for a truly public space, one with the affordance to dwell and therefore participate in a public realm was voiced. Plants, comfortable seating, shielding from traffic and cars, a fountain and generally a more "public" character were listed as the most essential elements to afford the imagined roadside dwelling space.

Inevitably, the discussion of ideas gravitated to the underlying issue of car politics in cities. During our iterations we did not encounter any car owner whose only concern was parking their vehicle, although some critical arguments were brought up. These critical voices argued that the need for cars is and always will be there — whether for reasons of convenience such as transport in bad weather, transporting personal goods, insufficient public transport offerings, or for reasons of necessity, such as limited mobility or transport of commercial goods. "You can't just take away people's cars, they are just too comfortable, and everybody is used to them" was one concern. Also outlined was the effect of parking-induced traffic, a scenario that emerges from people searching for parking spaces when the offered spaces are not sufficient.

The opponent of said opinion was found in a person stating that nobody in a city needs a car. As the Public Transport in Zürich is at such a high level of development, the solution would be to make car traffic in a city as unattractive as possible, through measures in traffic planning and taxing car use with more expensive parking spaces and road taxes.

A common ground was the agreement with our vision / assumption that streets could serve a more productive use as a true public space instead of being occupied by unproductive infrastructure, and that traffic shouldn't be prioritised within neighbourhood streets.

2.3.2 Collecting Data (from residents and passers)

In the first iteration of the "Park-Kafi" (more detailed description in the prototype chapter), we used the Idea-Card 1 (fig 777) to document the participants' ideas for action on the street. We gave these ideas a physical form to afford some value to the effort that the participants exchanged for the coffee. The card asked specifically for the description of an imagined "Re-utilisation" for an existing parking space, be it by writing or sketching. The ideacards worked great for documenting the ideas, but seemed to intimidate some people, as writing and sketching about ideas did not feel as easy for them. After assessing the content and systematic of these idea cards, we had several learnings for the next iteration. Along with the aforementioned fixation on sole ideas being decremental in initialising a time-independent discussion, the fixation of the ideas on the parking space itself seemed restricting, as the discussions usually began to include the whole street.

For the second iteration of the "Park-Kafi", We kept the concept of our Idea-card, but widened the scope to include more surroundings. Furthermore, we wanted to expand the discussion taking place by giving people the ability to react to other people's ideas, and perhaps initiate thinking with Questions (see fig 777). In hindsight, the questions asked were too suggestive, and would have profited from inviting more nuanced opinions. Moreover we tried to prototype a non-time based exchange of the ideas but also the answered questions. For this we had a board, to post answers or ideas. The people who would then later add a card could either react with a glue dot to either like or dislike the idea or with a short answer dot that was limited in space. The main reason for testing this method was to ascertain how exchange can also happen on a digital platform. The collection of ideas seemed to spark curiosity and enjoyment.. The reactions (especially the answers) were difficult to provoke and only worked if we encouraged the participants to do so. Apparently the simpler application of the "like/dislike glue dots" was favoured over the more difficult "answer dots". We can incorporate these findings in a digital platform but we aren't quite sure yet how to deal with the visibility of the upvotes because it may also create a certain bias of the best ideas and does not treat them objectively.

2.3.3 Learning from existing Projects

We will examine what in our opinion made certain projects successful and how we can profit from them. The focus point will be on the interviews we conducted and how we profited from the answers.. Furthermore we will have a look at how the

methodology used in the projects added to an acceptance of the project and if so, how.

When looking at existing projects in the realm of reshaping streets, many of the co-design processes were poorly documented . This was especially the case with projects in cooperation or initiation by institutions. For example we contacted the "Tiefbauamt Stadt Zürich" with questions that are not answered on their Website; they were simply unwilling to allocate resources for B.A.-thesis inquiries. After more searching, we were able to find the contact details of a person in charge of the "Brings ufd Strass" Project. We sent them a catalogue of questions regarding our project, and to our surprise, we received complete answers to all of them. The questions we asked were mainly regarding their process and how they choose and work with a community. We focussed on these steps due to the lacking documentation of this process. The answers we got were not very specific. We were surprised however how flexible they seemed for the location that was chosen. The locations were based on proposals from the residents and the only criteria they needed to fulfil was that they don't have a high traffic volume or were part of a rescue or public transportation axis. We could not find out whether these proposals had been gathered digitally or on site. Other elements that interested us were the co-creation part of the design and the feedback they got. Again, the answers were somewhat vague and we were thus a bit disappointed because we didn't know how the participatory events were organised nor what they included. The feedback they got was with a polling device that was on site and asked whether the residents like the street and if they want it repeated. The usage of the street was mainly done by spatial observations. All of these approaches were very hard to assess for us because we didn't really know what they actually included. We got the feeling that the data they collected was either done in a very quantitative or a very observational way. We think it is great to see that the city of Zurich shows the readiness to support these projects. We could also observe how the topic was discussed in the media and how different residents reacted. The different images we could find also provided us with more ideas on how to change a street and what infrastructure this could include. We did not notice a community that formed around the project, and the usage of the street seemed only passive and not very event-based. We hope to find out more about this aspect in our project and it was also a part we missed.

A similar project was the Quartieridee Wipkingen. We also sent them a multitude of questions which they offered us to answer in conjunction with their documentation website. We were impressed by their detailed and extensive documentation. It was great to see how different methods they used had differ-

ent outcomes. They also worked with a digital tool and the knowledge they gained, provided great insights. Our main learnings from their process was how they documented and described their physical presence during the project. They had a multitude of events that have had a great response and helped to advertise their project. They also had a mobile bike trailer that informed about their project. This was not very successful however and it also made us realise that activities, even if small, are very beneficial to communicate and interact with people involved. The digital tool to submit ideas that they have developed also showed that there is always a discrepancy between high and low-effort submissions. On one hand it can't be too detailed because then a lot of people don't even start to submit ideas. On the other hand it can also be hindering if the ideas don't have to be concrete at all. We think that they managed to hit a sweet spot by having a sketch or a photo and a small description with a proposition about the realisation.

What we really liked about both approaches is the direct feasibility and solutions they provide. A point of criticism is the high level of financial resources and logistics to achieve a functioning street project. Furthermore, it is very interesting to note how many voices were raised against the project. With the scale and the financial resources it poses a big target for criticism. The municipal character also plays a role as it is tax money that is being used to fund the project. Another interesting observation in this context is that there was almost no media representation of the residents` opinions. On the contrary, the opinions of non-resident politicians have been portrayed. When looking at other decentralised projects such as Bikeable or Decidim we see that there is an ongoing discussion going on. This is also mainly due to the specific framework and technical challenges they pose. The distribution of responsibility is also clear. We hope to incorporate both aspects and thus have a more self-initiated and resource-friendly approach to get a broader possibility of action .

2.3.4 Findings and next steps

This section aims to answer some questions and outline our Heading and Vision for our proceedings.

Within our research and also our user studies we realised that a lot of the projects that have been realised have been approached from a very big scope. Often there were whole neighbourhoods being rebuilt and trafficways have been directed. Even when looking at neighbourhood specific projects we think that the actions that have been taken were often too big to understand. The topics that were discussed were often on a very abstract level and have been thought of as

finished projects once they were being built. We realised that discussions were always best, when we started with a specific idea that people could imagine. Later the discussions often revolved around different "bigger" topics such as traffic dynamics and ownership debates of the street. To dive into this discussion directly however has never really worked. With always providing an action whilst intervening in the streets this helps us to also always generate an idea and a "thing" to talk about.

A lot of projects that we found interesting have been built in a collaborative way. The collaboration though only happened in the first phase of the projects, where the topic of what to build has been discussed. This led to a different building process than one that was purely handled by the civil engineering office. When finished it lacked the possibility for residents to interact and change the space. This led to an impersonal space that was provided by the city and was not thought of as personal or communal space. Generally speaking we think that identity and accountability are big factors regarding resilient neighbourhoods. We often see this in cooperatives where decision making and building go hand in hand. The way that a lot of the people see streets today however are from a very numb and inactive way. This is also caused by the fact that streets are designated to traffic and not humans. We hope to contribute to this discussion by looking more on the aspect of how public spaces can be changed in a self-initiated way. This way we hope to not only make a neighbourhood more resilient but also to connect people in a manner that is of interest for everyone. We also realised that people have a different feeling of ownership when it comes to the space that is right in front of their house. This active involvement is something we also hope to incorporate in later prototypes.

The idea revolves around a meeting space and its necessary Infrastructure. When looking at existing GZs, they are always bound to knowledge and connection to some people that are already involved in the group. Their location in conventional housing, gives them a non-inviting appearance, and all action connected to them will be associated with and depending on their identity.

When looking at existing projects to reshape streets, they lack the possibility of spontaneous interaction and creation, because their character is, through the long and bureaucratic planning and realisation process, inflexible. The more they are realised, the more static they become. They do not inspire participation in creation and empowered action.

We aim to solve these problems by providing a toolkit as a platform for flexible, independent and motivating action on the street. Through providing expandable shelter, this toolkit allows for weather-independent dwelling. By providing flexible furni-

ture and infrastructure it enables the temporary reuse of the road surface for communal activities. To initialise, open, use, and create a community around the "toolbox" start the project with several different events on regular bases that aim to connect people from the neighbourhood and inspire them to participate with their own ideas for events.

What do we prototype next? / next steps? There are three fields to prototype / evaluate:

3. Project Development

How can we convey the feeling of belonging, of having a right in a space and the security of being active ourselves? Throughout the project we were aware that many of our questions could only be tried out in the field. The creation of a concept, the value of detail and the direct feedback from different participants were the most valuable experiences that contributed to the development. We realised that public spaces are very sensitive ecosystems. Small factors often determine the success or failure of an action. Because basically, public space is a place that is highly regulated. In the Swiss system, we are not accustomed to finding non-institutionalised structures and even less so in places like car parks, which are generally understood to have been designated for one purpose only. Our main task was to transform the emerging scepticism that accompanies unexpected events into curiosity.

As already mentioned, any manifestation of infrastructure in public space is characterised by a political sphere. We, i.e. politicians and the civil engineering office, make decisions that influence the entire urban design world. This public discussion about bicycle routes, the expansion of more green spaces and the abstract talk in the media is often beyond our imagination and leaves us no option to act. Our ambition has been to make policy with things, to start discussions with direct proposals. This contributes to our vision to not only discuss the design of our streets, but also to show the possibility of taking action ourselves and to achieve a mini-democracy through the shared responsibility of a space.

3.1 Experiments

3.1.1 Walks

The first step in being active started with us "being in space". On various walks we examined our surroundings in the sense of Lucius' Burckhardts Spaziergangswissenschaften (Burckhardt, 2006). In the process, the discrepancy between the different neighbourhoods became increasingly noticeable. With the thought in mind that there is a fundamental lack of space in Zurich and that neighbourhood streets are often blocked up with parking spaces, we noticed that more wealthy neighbourhoods do not have this problem. The greenery of various gardens, for example on the Zürichberg or in Hottingen, led to neighbourhood streets that provide a lot of shade and, through the design of each garden, also acquire a personality that invites people to take a walk. The basic problem is

that only a privileged upper class can enjoy enough design space. The clear allocation of the respective plot also leads to the fact that hardly any exchange takes place and thus hardly any meeting places can be found. Places to linger or live on the street were hardly to be found, as everyone already had enough space in their own garden.

As we continued our tour of Zurich, we came more and more into the well frequented commercial spaces like the "Niederdorf" and the vicinity of the Bahnhofsstrasse in general. These spaces were very busy, but had hardly any personal components, as the entire infrastructure was managed by the city and living space was nowhere to be found.

An interesting place to observe how nomadic objects in a public space change its character to the better is the Sechseläutenplatz in Zurich. In 2014 the city decided to place a contingent of 100 chairs there, being bound together in pairs. After a year-long testing phase, they placed another 100 of them. During the first two years of the project only 9 chairs were stolen, with their paired arrangement and the heavy weight listed as the main factors for theft prevention. (Niedermann & Scharrer, 2016) As their intended use targets groups, these chairs group themselves in random arrangements, seemingly reminiscing about the groups that have been dwelling there for some time. Passing them in the early morning, one is reminded in their imagination of the social gathering that happened in the arrangement a few hours before. These chairs contribute a great deal towards the public and bustling character of the square. Whenever one passes the square there is at least one group of people taking advantage of the seating opportunities, except for maybe the severest of weather conditions. Apart from its proximity to the opera house, the lake and a train station, the square lacks inviting character. These chairs seem to have tackled that issue in a very effective way. A difference we have witnessed however is that this square isn't personal and there are no residents around. Thus, there is also no infrastructure that aims to include local residents and the square is targeted towards short-term interaction.

During walks through the Oberstrass, Unterstrass and Wipkingen districts, we began to wonder whether we could find the traces of people who live there? We found hardly any, no signs, no self-initiated infrastructures or even self-planted green spaces. One reason we observed was that many houses had inaccessible courtyards and therefore not visible, but also that the street as a traffic element does not invite people to linger, since it stands for traffic, i.e. for the temporary stay as a transit zone to get to another place. Basically, the more traffic elements a space contains, the fewer people will linger there. This can also be observed in a square like the Hardplatz, which is located in the middle of various traffic axes. In another neighbourhood, Wiedikon, we also noticed how

many streets were blocked. It was exciting to observe the concentration of meeting places on individual squares. The streets between Hardplatz and Lochergut are hardly used and also blocked, but Bullinger-, Ida- or Bruppacherplatz were full of life and people every day. One reason for this is that there is reduced traffic flow and many cafés also offer outdoor seating, but another is that the density of single-family homes is extremely low. The many apartment buildings, missing or desolate courtyards and small flats lead to much more interaction on the street and also to its use. Another discrepancy we saw in the streets was mainly in cooperative housing estates. Rotachstrasse, for example, is in our opinion a prime example of neighbourhood design. The many green spaces, reduced traffic, the component that residents of a cooperative flat stay on site much longer, and networking within the cooperative, lead to more personal components, such as garden beds or signs painted by children. Finally, in this exploration, we did not find a single "public" street in Zurich that was car-free or residents-only. The blue zones were all occupied, except for the more upscale neighbourhoods, and where there were gaps, we could see them closing within minutes. Furthermore, we see more life and interaction on the street in neighbourhoods that had many cooperative buildings or housing developments. As there is more shared space at hand than with everyone having their private garden, meeting points often concentrated on a few squares. Apart from signs calling on people to drive slowly however, we did not observe any intervening activity in the public space.

We were able to observe more neighbourhood interaction and attest a public character to several particular "Genossenschaftssied-lungen" where the somewhat private access streets were car free because of big underground car park-garages specially designated for residents' cars and not serving as traffic axes. The residential blocks at Rautistrasse / Freilagerstrasse are a good example of this. Car access is only allowed for emergency services, goods handling, and exceptional circumstances. These streets form courtyards that incorporate green space, trees and non-sealed surfaces. When observing the street for some moments, one sees children at play with each other, riding their bicycles and scooters, their parents talking to each other, some old people sitting on the benches, young people meeting in small groups to play Pingpong and people walking their dogs. These residential streets convey a livelihood and public character that is missing from every other street we observed in our walks.

3.2 Prototypes

This chapter will outline the different prototypes in a chronological way. We are explaining why we started with a game and have then evolved to ever more physical prototypes that act within the street.

We have already examined the dynamics of traffic and urban planning in our research. On the one hand, we were able to observe that insufficient transport connections, but also the displacement from the city centre to the agglomeration, causes a recurring vicious circle of commuting, congestion and lack of parking spaces. Another observation in our research was that many of the cars parked in car parks are not used 95% of the time. (Source) With these thoughts in mind, we wanted to explore the dynamics of a street. The fact that blue zones are a suboptimal solution for residents who regularly need a car (as there is no guarantee of a space and long search times are included), as well as a solution that promotes traffic. We ventured to develop a tool that was equipped with game dynamics and also provided the different actors in this ecosystem with corresponding capabilities. The core question we wanted to find out was how residents would design a street and whether the number of parking spaces would be more, less or the same.

3.2.1 The Game

In the first prototype of said tool, we developed a small game to model and examine roles, players politics and interactions of street planning. We used the Calandastrasse as an example street located in Altstetten to draw a game board that could be played on. It was outfitted with a snapping grid system that could be used to place tiles (fig. 777). We created a big variety of these tiles to represent different surfaces, elements and use requirements. To reflect different entities and interests in the street planning discourse, we created role cards that the players should try to embody in their playing behaviour. On each of these cards was a goal, an ability and the number of action points available per round. These points could be spent for different moves in a round. In a first playtest the goal for the players was to co-create a street with the tiles available. After discussions, arguments about matters, relocating and replacing each other's tiles and many compromises, a somewhat satisfying result was reached. It quickly became apparent that a lot of communication was needed to achieve the individual players' goals together, as single players only have limited freedom of action to shape the whole street.

The strict rules of the first version, were unnecessary in this setting and were replaced by a looser set of rules in a second version.

Other aspects that struck us were the lack of location and the realistic representation of the individual elements. We did not assign a specific place of residence to the individual residents. However, the participants wanted to know very quickly where they live in order to build their own targets in front of their house and, in the best case, to have, for example, the required parking space in front of their own home. The effective size also became a problem in the definition of different walkways, because it was not clear, for example, whether one could still walk past a bench or block the path with it. Another element that led to ambiguities was the insufficient visual differentiation between drivable and non-drivable surfaces, which are particularly important for fire protection regulations. Finally, it has to be said that hardly anyone had a claim to a parking space directly in front of their flat. The other options seemed much more attractive to all participants. The possibility of having a private parking space, which remains free but is more expensive, was welcomed by all. We could also observe the same assumption in later surveys. We could directly witness how different the outcomes became if the residents had different needs and have been given more power than the civil engineering office. The more restrictive we became with the possibilities given, the more similar the streets became. Interestingly, nobody wanted a completely car-free street. One aspect that was missing for us personally was that of activity. Since this component has a very strong social as well as democratic side, it is just as important for the design and resilience of a neighbourhood.*

3.2.1 The Idea-Café

As already briefly discussed in the research Chapter, our second prototype presented itself as the so-called "Idea-Café". The concept behind it was simple: Setting up a coffee machine, as well as various chairs and tables in a car park and inviting people to coffee in exchange for an idea to improve the neighbourhood. The preparation started with many logistical issues. Where is electricity sourced? How is the coffee machine and furniture transported to the site? How many seats are provided? We were able to solve these problems by choosing a location close to our place of residence. The power problem was solved with 150 metres of electrical cable. We developed a strategy for interacting with the public and consolidating their input. Initially, we assumed a capitalist attitude where more elaborate coffees required more ideas to be redeemed, but we quickly dismissed this approach, because many people were content to enter discussion for no coffee at all. The next step was to design the idea cards on which the ideas could be sketched and described. The description

was very loosely formulated and allowed for any format. In addition, we made a display wall showing information about us and our project. The display wall offered us the chance to display the slogan for this action: "Ein Kafi für dini Idee". By creating a meeting point and offering free coffee we have satisfied a fundamental goal of our organisation - we have added value to the neighbourhood. Furthermore, we did not only want to discuss the abstract dynamics of urban planning, but to immediately evoke a proposal with our own ideas that would serve as a basis for the discussion. This personal input of one's own idea worked very well. We could see this in the different discussions: on the one hand with people who offered an idea, and on the other hand with people who just stopped and discussed briefly. The former discussions were often very varied, as the suggestions were also very different. These ranged from an ice rink to a Tiny House in a car park and inspired the vision of the participant, so that often several ideas were submitted. The discussions we had with passers-by, however, often revolved around the necessity of parking spaces or the general mismanagement of bicycle traffic in Zurich. We could observe that many people had ideas, but few of them really knew where to start with the implementation. However, the aspect that we could observe best was that a thought process was started through their own involvement with the topic, which was not necessarily guided by us and thus also enabled a freer approach to the topic. The feedback we received was actually exclusively positive. However, we noticed that our argumentation for the project was not as constrained as we would have needed to communicate our concept effectively. "What will your action develop into?" was a frequently asked question that was difficult for us to answer. Usually we would describe our areas of interest and our planned methodology. We realised that confronting the public with ideas is always a good "reality check" to clarify how the topic is framed and whether the concept pitch applies to non-experts. The organisation of the whole action was very time-consuming and took us at least a week, as we also had to evaluate and discuss everything.

The next step in this process was a first validation and comparison of different actions in different settings. This also helped us to analyse where there is still room for improvement and on which factors this depends. The first "Idea Café" took place on a beautiful Monday afternoon during the school holidays. The people we encountered most frequently were pensioners or parents who were out with their children. The second iteration of the "Idea Café" took place on a Tuesday afternoon in a cloudy and cold atmosphere. There were hardly any people out and about and the climate was not conducive to sitting outside for any length of time. Other changes we made were the introduction of questions and a board on

which ideas could be posted. The aim of this was to try out a first form of time-independent interaction, as in a democratic discussion process not all participants can always take part at the same time. The basic idea of making this visible worked well and triggered a certain curiosity. The questions we had formulated (What do we still need the car for today? And Where can we still find space in Zurich?) were answered many times. However, the wording was very suggestive and even if many answers were good, the opinions went in the same direction and therefore didn't really provide an explanation or serve as a basis for discussion. Another important discussion component is the location and the walk-in audience that we can address over the course of an afternoon, as otherwise we would not reach a critical size to generate an exchange. On the other hand, new participants were schoolchildren who were delighted by the absurdity of the installation on their way to school. Unfortunately, serving coffee was not a big attraction for this target group. The ideas we received were nevertheless enriching and appealing in their simplicity, as they were easy to implement. The two actions were certainly a good starting point to get a feeling for the needs and dynamics of a neighbourhood. However, there was often a lack of perspective and the prospect of effective change or demand. This was partly due to the timing of our process, but also because we were not yet able to offer many "realistic" implementations, apart from the "Idea Café". We were also aware that we had not yet built a proper contact point or public platform where interested people could find out about the next action or our vision. The creation of a website and a social media channel was therefore the next concern we tackled.

3.2.2 The "Pop-Up" Repair-Workshop

The second Experiment we conducted originated from the "Idea Café". After much talking about improving the streets, we felt that action was needed. One Saturday, we went out to repair peoples bicycles. For this iteration, we decided to not place the experiment on a parking space, but in proximity to a well-frequented bike route through the city, as none of the close parking spaces had the attributes we felt necessary for the success of our experiment. The only unoccupied parking spaces were flanked with two big lorries that restricted our visibility to passing people, and in close proximity to a driveway that we did not want to block with our expanding action. We brought common consumables, two repair stands and a toolbox. A few metres from our work area, we set up our information board with a description of who we are and

what our goals are. When approached by someone with their bike, we offered them a basic check and the necessary repairs. Generally we would not perform all the repairs for them, but guide the participants through our checklist and help them with performing the repairs themselves. We charged them only for the price of the consumables, but most of them insisted on giving us a gratuity. Once again, the exchange deal for our work was the filling out of a questionnaire we prepared (reference image / research chapter) with the goal to get them to reflect on the use of public spaces and gather data on their perceived comfort in said spaces. When passing by, People would usually stop by our infoboard to read it, and then come to us to show their bike or just talk to us. In general the feedback was of a positive nature. (... write down some of the feedback) The main rush came after lunchtime and both of us were busy fixing bikes and talking to people all afternoon. In that situation of us being busy and more and more people dropping in, some of the people that had just repaired their bikes started to engage with people that were waiting. In some cases they were able to solve their bicycleproblems without consulting us. This shows one of the dynamics that we aim to create with our work: not only providing the service itself, but generally a platform where people, who otherwise never would have met, can connect and help each other. Another observation of importance was the arrival of a group of our friends. After getting their bike fixed, they decided to spend some time playing card games and engaging us. Almost immediately, the nature of our action went from public to exclusive, as passing people felt the connection of our group and assumed that we were busy with them, not wanting to disturb our more intimate group dynamic. This is something that we need to manage better in future iterations, as it lessens the interactions with people we want to reach with our actions.

In the end the action was very successful. We felt like we reached a lot of people and could create a meeting space within a community. The recurring issues were the regularity and the infrastructure. This is something that can be easily improved if needed. We were also surprised with the difference of people that wanted to spend time there in comparison to the actions on parking spaces. It was the first time we really had enough space and weren't confined to a parking space. We tried to improve this aspect by creating additional shielding from the street and an extension on to the sideway.

3.2.3 Designing "Public" Furniture

A conclusion from all our observation walks, actions and interactions with people on the street was the need to create a meeting

point. Not only in its social form but in a physical form that would invite people to stop, reconsider their urgent transportation behaviour and dwell - even if only for a moment or the time an interaction with others takes. Being one of the three crucial factors that afford life on a street, it seemed worth investigating through some prototypes. Although a big variation of public furniture exists and many elements of public or private architecture can be used to rest, dwell and meet, the proximity to streets seems to devalue them or even prohibit their installation. After considering what already exists, we had several goals for our own prototype: Our furniture should use and transform road infrastructure for a different purpose. It should invite not only passive interactions but provide flexibility and playfulness in use. It could incorporate data collection about its usage, frequentation and traffic around it. Providing flexibility in its configuration, it can be adapted to different surroundings, activities, and locations. It has nomadic character, it invites movement and migration to a new location and purpose. Through its movement, it explores different streets and their need for a living or meeting space.

The approach chosen for the observation of the furniture was the following: cycling past it several times a day to assess its use and the location we have chosen. At a location deemed fitting, we decided to eat lunch outside, in proximity to the furniture piece, and observe its use over an hour.

The first of these pieces of furniture was a swing, designed to be hung from traffic signs. Built from a wooden board, some steel wire and some hardware, it embodies all the attributes that we aimed to fulfil with our furniture piece. For its testing, we decided to hang it in different locations that seemed suitable. Our aim was to understand and observe how playful infrastructure differentiates itself from static infrastructure like benches, that can be found at several places. Once set up we noticed that when walking by the infrastructure certainly grabbed people's attention. Almost everybody paused for a brief moment but almost nobody interacted and actually got on the swing. The few examples we had were from children and 2 adults only. We realised that a big part of its purpose and the reaction it provoked was the absurdity of the object itself. The urge to come back and actually use the object would have to happen with another purpose and another timeframe however. We were confirmed in our assumption that a certain infrastructure always proposes a purpose and that depending on its purpose people can act within a space. For our actions this means that the infrastructure provided also always has the perception of purpose and because it is temporary, the time-factor is ever more important. This said we realised that whenever provided, infrastructure will rarely, if ever, be used. The absurd character it has will there-

fore disappear, and it will lose validity. A nomadic infrastructure would help with that aspect. Furthermore the aspect of community is very hard to achieve solely by infrastructure and would not suffice to reach our goal. That's why we decided to prototype an infrastructure that would have more responsibility involved.

3.2.4 Public Infrastructure with Hydroponics

Public infrastructure as we know it with benches, public toilets or bike pumps are very consistent in their appearance and often serve a purely practical purpose. Consisting mostly of low-maintenance, solid objects, almost immune to vandalism and passive in their nature. Nevertheless they are, in many cases, used more frequently and for longer durations than the average car standing in a parking space. (add source?) When considering different options for a more productive use of space in streets they quickly spring to mind. But is not, at some time, a saturation in the demand for these passive infrastructure elements reached? What if the benefit the shared infrastructure provided was not of passive but of active nature? Through mutual benefits, public infrastructure can transcend the indifference that passive elements face. This was the basic principle for selecting action ideas, and led to the development of a prototype concept for shared public infrastructure that invites care and the building of a relationship to the piece of infrastructure. The first iteration we chose as fitting for the set criteria was a hydroponic plant system (Scarponi, 2016) to easily reproduce and grow plants for distribution in a neighbourhood. This system was built in a workshop format on a parking space, together with interested residents. We installed it on a traffic sign guarding a parking space and observed its use for several weeks. To explain its purpose and our set rules for participation, we attached laminated instructions on the backside. We didn't really know if someone was taking care of the saplings because the hydroponic system is very self-sufficient. However the saplings got taken away from time to time and this had a benefit for some people. After the harvest they haven't been replaced and we faced the problem of responsibility again. This led us again to the question of purpose and how the saplings should be available for everybody or only for the people that installed them. We found the answer somehow again in the semi-public space such as right in front of a house or on a fence where it would serve as an enrichment to the street but would still be taken care of by a group of people.

3.2.5 The Mobile Platform

With several actions organised and issues in the logistics presenting themselves each time, thinking about better solutions began. Together with the learning about the "meeting points" and how furniture/infrastructure influences them we began to work on a concept for a more mobile and flexible solution that would provide the modularity and transportation capability to organise action on the street in an easier fashion. After some consideration the idea of a mobile meeting point as a metaphorical toolbox to reuse a parking space for a short time frame emerged. Research for suitable bike trailers pointed to the swiss company "Polyroly" and the german variant called "Hinterher". The first visualisation created incorporated the Polyroly trailer, it seemed to provide the most flexibility for adding structures and we knew one of the founders personally. In further inquiries about this, the opportunity presented itself to collaborate with a GZ (Affoltern) for the creation of a customised trailer, as they were looking for a solution for the same problems we encountered. They had already decided on a Hinterher trailer and bought a big transportation box with it, but quickly realised, that this simple box was not suitable for their intended use. During the process, this trailer and its amenities were reimagined several times, adapting to the shift of priorities in the concept. Central elements to fulfil its mission are, at this point, the following:

A sheltering element, to protect participants from weather influences and separate the space from the street and passing cars. However, this sheltering element must not impede the public character of its hosted event. A working surface, as hosted events tend to be of productive nature, having ample table space proved to be an important necessity. Secure and flexible storage compartments to transport all materials and utilities needed and imaginable. Furniture, as it serves as a meeting space, should be able to provide seating and placement possibilities to accommodate several people, and whatever activity they are occupied with. This furniture should be dismountable (for transportation reasons), sturdy (to accommodate many use scenarios) and weather resistant. Size and weight, as its intended staging area are parking spaces, it should comfortably match the shorter side of a parking space to avoid restriction of traffic and the creation of dangerous situations. The whole system has to be as light as possible to allow for easy and hassle-free logistics.

Before building a solution from scratch, validation of the need for this product was deemed necessary. As one of our mentors had worked on a similar project, the opportunity presented itself to loan and test a cargobike from her providing a setup that checked at least some of the set criteria for the trailer. It had a solution for shelter in the form of fold-out elements that were covered with tarp, ample storage space and fitted onto a parking space. We used this vessel as the basis for our "Velowerk 2.0" (fig 777) in combination with a self-built table system (fig 777) that can be expanded and adapted to a seating solution as well. In comparison to the solution we used before, a large-sized cargobike with minimal organisation system, this vessel allowed us to prepare our action in a more efficient way, be more organised during our action and had a more organised and purposeful appearance. It balanced against its stage, the usual street filled with a row of parked cars. One possible point of critique that can be made is the use of the usual blue tarp used for all lorries and car trailers, that did not have a remarkable character in a street setting. Another thing was the missing work surface that we had to use our collapsible table for, which led to us having to eat, drink and write on the road surface / between greasy bike tools.

The first test with our trailer has been done in the same neighbourhood and was a neighbourhood dinner in a parking space. We quickly realised that it was much easier to transport the infrastructure and we could approach the action with a calmer mindset. Another shift we could also observe was how the discussions we had with residents evolved as it was the first "designated" infrastructure we have especially built for this. The first question we were asked was: "Do we really need another Trailer?". This, firstly critical mindset changed quickly after we explained our concept and what we want to achieve with the trailer. The added effort we made with the effort gave the project a more serious nature. This can have its benefits as it is being looked at as a permanent project and an infrastructure to recognise. It also raises more critical voices through this permanency though. Another dynamic we could observe is how an identification has taken place during the dinner. We were confronted with an angry car owner who was looking for a parking space and argued that there are not enough parking spaces and he needs to find one after work every day. He walked away quickly though and wasn't open for a talk. However the participants of the dinner immediately started to discuss if he was right or not and concluded that as we are 8 people and none of us owns a car we should also have a right to this space and that if we would have just parked a car that isn't serving anybody's needs he would have surprisingly not been angry. Furthermore the topic of commuting to work by car arose and there were immediately other solutions proposed such

as commerce-only parking spaces and more possibilities to park long-term. We were very pleased to see this and again saw the potential and starting points these little conflicts offer. This negativity was an aspect we didn't really have in the last actions and we don't know if it was only because of the trailer but it certainly helped and strengthens the statement.

3.2.6 Aesthetics of Invitation

When trying to convey a message or a statement in public spaces, one thing that receives very little active consideration seems to be the aesthetics of appearance. They play an essential role in the invitational attributes of any object, action or concept. When done wrong they might repel visitors and interactions, but when done right they integrate seamlessly into the positive subconscious impression a passing or interacting person might take with them. Through varying the appearance of our project, we gained some insight into what factors influence what behaviours and reactions. To reflect that, we tried to gather some of the questioning and reflection behind the different elements of our actions.

I. "Appearance of location" How do passing people act? Is a considered location well frequented? What activity are passing people carrying out? Is there vegetation around? Are there many cars passing? What weather and time of day is it? Are there recreational spaces in close proximity? Are there commercial players closeby?

II. "Appearance of dwelling objects" After seeing an activity taking place and assessing their interest in it, people may start to consider the objects in its surrounding and reflect their use and invitational character. Is there seating provided? Does it look comfortable? Is there some kind of separation element to communicate spatial separation from the street and cars? Is there no shadow to be seen in the entire street?

III. "Appearance of concept" When interest persists, how is the concept communicated? Does it happen solely through spoken word, or can interested people read some more? Is argumentation consistent? Is the communication happening through examples, questions, or refined argumentation? Does the written communication represent the action? Do you pose questions for passing readers? Is the argumentation for a point suggestive, rational, or even speculative?

IV. "Appearance of performance" After the furnishing and in conjunction with the dialogue around an action, a central element of consideration should be the appearance of interactions in the parking space as staging ground. What interactions are considered normal in the vicinity of your action?

How do you approach people? What do you offer them for their partaking? Do you start with Questions or let them consider your static communication first? How many people do you want to interact with simultaneously? Is appearing as an individual, a group of interest or an institution the right choice? How is legitimacy communicated and do you pretend or disclose your affiliations?

As the project progressed, its communication of strategy and visual appearance was reworked several times. At some point it became evident that our concept was transcending the small frame a parking-space provided, we repositioned our identity away from the "Parkwerk" with the "WerkStadt"-name and a more open, inviting and less parking-space focussed visual appearance. This was a point at which we reconsidered the whole communication. We replaced the blue with more colours, to represent several aspects of our concept. We kept the arrow as a graphic element but added some more that were related to our topic. The typeface "Univers" with a very serious and official attitude was swapped for a more neutral and slightly playful "Cinetype" that had a more individual character. In combination with these elements, the concept was to use slightly provocative questions as claims to bring the readers' attention towards the content.

3.3 Results (incl. user tests if applicable)

The following chapter will go into more detail of the data we collected during the prototypes and how we processed it. We will outline the different learnings we had regarding outside communication and understandability. This will be further explained within the chapter of the manual. Our main focus lies on how to share and point our project in a way that makes it accessible for participants.

3.3.1 Structure of information

Whilst organising the actions we always had an information board, some postcards and a flyer on hand. Their aim was to serve as a physical memory and further information without always having to talk directly to us. We realised that the wording within these small information paragraphs is very important and that if there is a small uncertainty we got directly asked about it. During our process we have changed these descriptions a few times and have encountered different reactions to them. We could observe that in a latter phase of the project where we were already quite sure of what our final project will look like, we had fewer discussions about the overall concept

and improvements that it could benefit from as it was already seen as a finished project and thus no changes would be possible. Most reactions were just a heads-up or a sign of agreement, although we struggled to start the lively discussions that we had experienced at the beginning of the project. This said, we realised that it is always important to set a goal of what we want to achieve within an action and what should be discussed and how we can frame our information accordingly. We have stated that the information that is on our website for example should be quite concrete and already offers a vision and a concept that can be applicable. This decision has been mainly made because we have realised that there is a very big difference between having people that are representative of the project to being alone with only information. Uncertainties will thus, if not clarified, mostly lead to a negative experience and remembrance of the project as its only circling around the "talking about it" but not really doing anything about it. Regarding our information material we could also observe how people interacted and cared about the material we provided. We could especially see this when we were asked about further actions and the next time we plan to do something. Often we told them that they can take a flyer with them to see our website and to inform themselves about the next action but hardly anyone wanted to take a flyer with a lot of information. Even though we designed the flyer in a way that it can also serve as a poster we had much more success with the postcards. We realised that the aesthetics and the corporate identity of our project is also very important as people are more likely to take the postcards with them if they like the design. In a project that's also circling around identity, visuals always play a key role. Furthermore we realised that instagram isn't necessarily the best communication platform for such personal actions. Most people we have encountered and who took part were either pedestrians or people that we have told about the action. In this sense our digital tools didn't really work as an advertisement but more as an information platform and the advertisement happened more on a word of mouth basis.

3.3.2 Manual/Fibel

As we aim to have our "WerkStadt" accessible for all the residents we necessarily need a manual to accompany it. Within it there is a step by step explanation for self-initiated actions as well as examples which can be used as a guide.

The aspects of empowerment, scalability and also reproducibility are an important part of decentralised systems. The ability to act independently from infrastructure and technological or specific knowledge is crucial when wanting to achieve

this dynamic. However, we are aware that only by providing the knowledge and the steps to achieve a certain product won't necessarily suffice. We are thus careful when talking about accessibility and inclusivity because one still needs the social and temporal conditions to actually act. It also doesn't ask the question if the product is actually valuable and well designed; it just provides the ability of realisation. People who follow our manual thus become the manufacturer of an idea. Once set up as a manual it isn't a product that either works or doesn't, it is a concept that is constantly evolving and thus needs to be adaptable to change for different circumstances. Our project is evolving around people and a system that's constantly changing. We can't look at it in a way of a perfect solution or even a finished working product. The way of interacting within a city is never set in stone. That's why the manual we created is seen as an additional tool to enable our concept to get tested by different people and by getting criticised, praised or discussed evolves in its nature.

Our manual consists of different steps and focuses on acting in a small and enjoyable way within one's street or parking space. The framework it provides is described later in this chapter. We knew quite early that a manual will be necessary if we want to have other people involved. Due to a feeling of security but also as a point to start it should provide the possibility to have a part within the process and also enlarges the community and the statement of the project. In the beginning we asked ourselves how extensive this manual should be and how far into the reshaping process it would intervene. Because we worked locally within our street we thought that it should almost include every step as we realised that a certain connection to a space really helps with engagement. We have then realised though, that our project does not revolve around planning a whole street from ground up, but activating spaces and generating discussions and testing out ideas to see how and why certain actions work and others maybe don't. This is best done with a multitude of different actions and an assessment framework that can categorise the different aspects and also show its strengths and respectively its weaknesses. We have thus decided on two different parts within our manual: the organisation of an action, and the reconditioning it accompanies.

We start off the manual with the definition of a goal that one wants to achieve within their neighbourhood. We framed this goal in a way that it doesn't necessarily point to a direct solution but is more about what soft goals (more interaction, more green, more repairing) are important. We encourage the reader to stroll through their neighbourhood and focus on how people move, where they meet and at what time which place is coming alive or would have the potential. We made the decision to start off with this method as we have experienced

that the time and location of an action can completely shift the dynamics that arise. During our iterations we did some actions multiple times, once at a different location and once at a different time. The success and the number of people we have reached has differed a lot, so has the group of people that approached us. We realised for example that during school holidays there are much less people around and a lot of the kids are away. On the other hand, if one is organising an action during a weekday the people that are taking part normally have more time as they are often retired or have a day off. On a weekend the diversity of people is much broader but people normally have less time and the action is more crowded. After this first evaluation we continue with the action part. Within this chapter we also provide examples and actions that can be done simply and are thus quick and easily doable. However we believe that different circumstances also need different solutions. That's why we start with an analysis of components that these actions include. The first one is the aspect of outside-participation. It is important to evaluate the needed requirements to take part within the activation and based on these factors. It also determines how inclusive, successful or crowd-intense it is. Furthermore one can take precautions and for more time-intensive workshops a registration may be needed. The factors we determined were:

Time; how much time do I need to spare to take part? This also determines the weekday, the framing and the announcement one can prepare. Infrastructure: What do I physically need to participate? This can be a bike to fix or a garden to set up a small herb patch that can be created. When being very infrastructure specific as e.g. the "Pop-Up" Repair station, one can also combine the different actions and offer a "Pop-Up" Repair Café to counterbalance this specificity. Skills: What do I need to be in control of to take part? Skills are a very big part of the different actions and are the ones that vary the most from person to person. It can be a language that must be known, a basic physical requirement or also the ability to use digital devices. These skills range especially within different neighbourhoods and it is always best to provide an additional explanation if uncertain or if one wants to reach the largest diversity of people to choose a skill needed that isn't specific. Within the idea Café e.g. we chose sketching as a tool that has the most common denominator.

The aforementioned aspects are a guideline that determines whether or not someone can even take part in an action or an infrastructure provided. However they don't cover the means of motivation. Within this section we go more into detail about aspects of invitation, preparation and certification. These factors determine whether or not an action has the potential to be repeated but also how eager people are to participate.

It's always best to try to concentrate on these components to get as many people as possible to participate. The only thing to keep in mind are one's resources. This can become problematic if there is a certain skill or infrastructure, such as coffee making, bike-repair stands or chairs and tables needed. When such an action arises it is best to plan a longer time-span as it allows for more flexibility for people to also come back at a time less busy. The elements we determined within this scope are:

Invitation; We have realised that it is very important to always have a component of invitation. This can either be a coffee, an offered service or a component that one can interact with. Its purpose is to serve as an easy entry point and to make it easy to start an approach and a conversation. Another part that is nice to keep in mind is the aspect of absurdity as it offers a direct topic to talk about and also catches people's attention. When doing an action on a parking space normally that's absurd enough.

Added value; Being active within a street for an action is always also an occupation of space. This occupation should somewhat be legitimised. In an earlier chapter, we criticised the occupation of public space for an individual need and thus it's important to keep in mind that the solution we strive for should be accessible and not turn into a simple protest or undiscussable event.

Play; A question we have asked ourselves a lot was what benefit it would bring the people that, apart from us, organise the events. The easiest way to bring people together is a time- and location based activity. This activity doesn't necessarily have to be a game, but a playful character helps to get people involved. This can be a small part such as a dice as a tool of randomness or a board with model figures. This can especially be useful when working with ideas or a questionnaire.

Longevity; This quite obvious but in our early stages often forgotten component circles around a simple question; How does anyone know that we have been there and what remains after we're gone? The longevity is something that got ever more important in the latter phase of our project where we have asked the question how to collect and distill the actions that have been organised in a way that the documentation can be guided into a somewhat target-oriented direction. It is also important though that the people that have participated are always able to take something with them that also serves as a manifestation. We have solved this problem on one hand with a website where every action and the conclusion one draws from it are being documented and noted. On the other hand we leave small plaques wherever an action has taken place that also leads to our website and serves as a memory for the action. At least we tag every action on google Maps and ask people to give recensions for more visibility.

The last chapter of the manual is primarily revolving around the documentation aspect. This will be explained more thoroughly in the chapter "Data processing". What we could rely on while writing the manual was that there were already a lot of frameworks out there. This was especially helpful regarding legal restrictions or other encounters with authorities as this is a very annoying and time-intensive process to find out. We hope to add to the discussion of creation within urban spheres and are tuned to find out how and where we can improve and learn after our first users.

3.3.3 Data collection

The most discussed aspect in our concept certainly was the notion of "longevity" and the impact our actions have on a street in a long term manner. Although we might consider the street as a public realm and take the liberty to disrupt and change that space, our research and talking to other, similar actors has shown that the civil engineering office has a different mindset in that regard. Additions to existing public infrastructure like benches and objects that occupy paths get removed rather quickly. Any modification to the existing traffic signage on a road surface is seen as an offence, and will quickly be cleaned away. The argument of safety concerns about infrastructure on a street could be seen as a reason, but it seems to guard its sovereignty about shaping public spaces rather offensively. To install any object or signage on a street with the goal of its permanent existence in that place proved to be a difficult undertaking. This led to all our ideas for leaving behind an "impression" being deemed difficult to achieve by ourselves. Be it the painting of objects and information on the road, or the installation of miniature representations of objects anywhere. Beginning to consider other, more hybrid solutions, such as maintaining a collection of digital traces seemed to be a much more feasible option and would provide a benefit in regard to networked documentation and a less physical journey of discovery for our actions on the street. Digital mapping tools include contribution-based geotagging functionalities that allow users to create tagged information entities to represent businesses and places in reality. These data points can be rated by other users, host photos of the place and allow a linking of websites. They begin to be shown to every user, depending on the reviews they receive and other factors the algorithm considers in selecting information. Using this information framework, we were able to quickly document our action in the digital realm and incorporate a collection of text data from other visitors. Adding a QR code to our info-board with a link to our actions entry was deemed the easi-

est solution for allowing people a digital contribution. These review texts could, for example, contain just that — short testimonials of people that visited us. Possibly, they could contain ideas for the locality that our action took place, or they could be used to create a more constructive and lasting discussion about the use and management of streets in the city of Zürich. They could serve as the digital equivalent to our meeting spaces on location, and develop a similar dynamic as the "bikeable" online platform that creates discourse about missing or problematic bike infrastructure. Through uploading their own action inspired by ours, an ecosystem of inspiration and reiteration could begin. To play the devil's advocate, this digital realm brings the downside of problems with inclusion. When testing this concept, many participants did not possess the devices or digital competences to access this realm. One could argue that the reason for this might have been the location we chose, but nevertheless it proved to be an essential flaw to this idea. But when considering the user behaviour of digital natives on digital mapping tools, we observed a phenomena that could be described as "digital strolling", with journeys of discovery happening in the realm of the digital map, with the goal of entertaining oneself through reading other peoples opinion on places and things in reality. This phenomena could lead to an expanded reach in the digital "public space" and weigh up the accessibility problems we face in the interfacing of both.

3.3.4 Data processing

The considerations laid out in the preceding section work as individual solutions. But when implementing them into our project, there appear some weaknesses or dead ends by the nature of the solutions we may realise them in. The digital mapping service we used to store our information allows for hosting and discovery but lacks the context of our concept, idea communication and through that the inspirational quality for possible visitors. This could be solved by linking to a digital appearance that collects all the "locations" into one list, provides a more streamlined documentation to coherently explain our ideas and thinking process, and links to the possibility to lend our vehicle and access all our gathered knowledge in the manual. Serving as one of our "final products", this platform is aimed towards players in our target audience. The main goal with this digital appearance is to serve as an information- and exchange-platform for the community that engages with our project and activism for more public streets. In a more far-reaching and speculative goal, it could be used as argu-

ment and leverage point for a constructive discourse with the civil engineering office and the city's municipalities towards a changed attitude and less lethargy in project development and change. It should mainly act as an advertisement for our "mobile", the idea of creating action on the street and our manual that allows people to easily reproduce the essential parts of our process. In a similar way to the "bikeable" online platform, we considered prototyping and implementing a user-contribution based posting solution to allow them documentation of their own action. (...)

4.Conclusion

Concluding this thesis, the following chapter summarises our most important learnings when working in public spaces. It looks at how our goal of enabling citizens to be more active within a street has been accomplished and how. At least it includes our future steps and how we plan to bring more visibility to our conceptual approach that can work independently from us.

Working in, around and across the street is a diverse and very complex matter. The many actors involved pose a great challenge and thus it is difficult to recognise the levers in an urban ecosystem. On one hand, we were fascinated by the multitude of actors and perceived areas of responsibilities and on the other hand by the almost endless possibilities to act, intervene and discuss. Since a city consists of a multitude of different individuals, it is just as difficult to find uniform problems as it is to find uniform solutions. We quickly realised that the possibility to act can only happen locally and directly. An approach that is to be applied to an entire neighbourhood or a city did not seem appropriate in such a situation. It would immediately lead to an exclusion of voices and needs, in which a decision-making group would be created for organisational and time reasons. This also led to the fact that we decided against a project that is to be located in service design and presents a "planned out solution" of hypothetical nature at the end. We want to show the diversity of ideas and present the system of a street as diverse as it actually is. This happens primarily when people meet and discuss. Achieving this was our main goal in the second part of our thesis project.

In the end we worked in a "semi-public" realm where we organised the actions but participation and self-initiation by other parties was allowed to thrive. We realised that this kind of work in the public sphere is stressful and working outside the comfort zone of known procedures inevitably leads to insecurities arising. We expect that a lot of people that will be part of the project who do not work on an institutional level will experience a similar "stage fright". With time, these insecurities will diminish but still they still influence part of the process. The reassurance a community provides can be helpful in that situation because it gives a certain legitimacy and helps to boost confidence and decrease insecurities. We also realised that when we were surrounded by familiar people, there was a big decrease in the number of pedestrians that approached us. The project seemed to lose some dynamic once the first few actions took place, even though we were trying to involve more people in the project. We realised that, working with and within a community, processes are very time consuming and that three months pass swiftly in these process cycles. When proposing change to a situation that has been unchanged for decades, working on a permanent level proves difficult. Although it was previously seen as a weakness, the aspect of working in a nomadic and temporary way turned out to be a valuable precondition as it allowed for quick testing and collecting feedback. without anyone being directly confronted with the feeling that decisions have been made without them.

The next step was to implement a functioning system of long-lasting documentation. We experimented with different possibilities such as maps, pictures and texts to record the actions that took place. The most important thing we learned was that relying solely on a digital platform automatically leads to exclusion. Another finding was that a localisation of all ideas is an important part of the discussion and that the proposals gain momentum with their concretisation. This

GZ was a lucky coincidence, as it enables the "WerkStadt" to live on beyond the timespan of our thesis project.

4.1 Contribution

"Getting into the field" and "Collecting your own data" is a common denominator in interaction-design practices. It is a way of getting into touch with different fields in a quick and efficient manner to gain an understanding of a challenge or topic one is confronted with. It is most frequently used when getting in touch with a target group and laying out a concept for a solution and the project that is being worked on. Especially during our research phase we encountered many people and were present within the ecosystem of a neighbourhood and surrounding public space. In this phase we gained important knowledge on topics that people were worried about or needs they mentioned during our dialogue. Whilst having discussions with multiple people from different neighbourhoods in Zurich we realised that these topics and needs were often circling around very specific problems such as a missing traffic mirror or small conflicts between different actors with different interests. We believe that the methods we have used and the knowledge we gained prove to be useful for the different parties involved. A civil engineering office or some other municipal institution could certainly profit from choosing an approach similar to ours. It stands to reason that every street they rebuild will come with new challenges, originating from new people with different circumstances and demographics. Around these challenges, a project has to evolve through the inclusion of surrounding influences and concerns. Circling back to the points first mentioned in this paragraph, our approach of working with user studies and cultural probes proved very successful on a small scale, and could be very beneficial for the outcome of bigger projects as it allows gathering qualitative data in a quick and applied manner. As we have realised in our research, different approaches and perspectives in studying the implementation of solutions are essential to achieve a situational overview within a city and can aid in detecting problems and prioritising different solutions in the creation of public spaces. When working with a neighbourhood and a community the personal interactions and honesty in the feedback prove to be the most effective way of collecting criteria and assessing the possible success of interventions.

In the duration of our process we have dealt with being active and producing knowledge in two ways. One is the aforementioned methods developed towards gathering data and using these methods to get an understanding of the dynamics within a street. The other path that we have explored is, of practical nature, with an active and empowering impact on residents. With this path, we have prototyped different possibilities of being active within a public space and what their impact has been. We have used these insights to create a "manual" as a framework for activism on the street. With this manual, we strive to empower residents to develop and claim ownership of space in a way that is not dependent on the authorisation of municipal institutions and their processes. This gives citizens the ability to have an active part in shaping a street — not only with their opinion and their vote but also through actions and small interventions. Within this framework we have designed a way of gathering this information

it. The Included playful components, a sense of community and helpfulness towards each other, plus the logistical challenges have to be as low as possible. In conclusion, a lot of assumed opinions and ideas have to change once an actual prototype or implementation has been proposed and manifested. This fast way of assessing the quality of an idea had two side effects. On one hand it proved whether or not an idea can be realistically implemented or has the potential to really strive. This led to some ideas being quickly discarded and them not resurfacing again in the discussion with the residents. On the other hand, once an idea had been sketched, situated and was nearing its realisation, we saw how the excitement grew rapidly in everyone and it really sparked the motivation that is necessary for our idea of an inclusive, empowered community to form and act. Manifesting this into a physical "toolbox" with our bike trailer, we tried to enhance this framework even more as it allows for even quicker testing and serves as a vessel in whose framework this can happen. By connecting the manual with an object that participants can recognise, we give them the ability to gain trust in the actions that happen and the actors behind it. The ability to rent the trailer through the GZ allows motivated participants to act independent from us and by providing the manual as open source-instructions, act completely independent from any institution.

There were a lot of people that approached us and spent quite a long time sitting by and enjoying the interactions. May it be to discuss our concept, just to stay a little while and talk about what is bothering them, or just to meet new people. Through that, we realised that we created public infrastructure that seemed to function on its own, without a necessary connection to our matter. Our action seemed approachable in nature and did not force people to talk to us about politics or participate actively in our action. They might have had the urge to talk or to enjoy a space with public character. These encounters proved very relevant on a social level and confirmed our assumption that the street as a public sphere benefits from this interaction and personality. This aspect is something we hope to get further feedback from the GZ as they are very specialised in social work.

4.2 Future Steps

Getting to know the different parties involved and also becoming familiar with the different steps involved in public space was a big part of our project. After having tested a diversity of actions we have gathered a good knowledge base of what works and what doesn't. A big problem we encountered was a failure to generate "momentum" because both we and the people didn't really know where the project was heading. In the latter phase of the projects we had a confined concept but also knew that we can't provide the regularity that we have held up in our values. Adhering to this regularity in continued work would lead to more people being involved thus forming a bigger community through word of mouth and connection through interests.

After having built our trailer we will test out how the different participants react to our manual and if motivation to proceed with action remains or increases. An aspect that we haven't really touched on is the organisation of these different events. Having a plan for specific days would be something that benefits the project as it would attract a border audience through people getting used to us and

manual might be the most challenging one because it is a quite time consuming component. We will reach out to a number of people to develop this component. In a further step, we would like to rework the structure of the collection process. Within our actions we always had the motivation to find out more and also to collect more research to support our project. When handing over our trailer or when other people begin to take self-initiated action we ask ourselves how we will achieve a manifestation of these happenings without it being too complex. This said, it would be necessary to iterate further on how big this data contribution can be when an independent action is being organised. Some proposals are: to have a couple of photos, a Google Maps location, or the possibility to leave a review on the website. In addition, the providing of different products such as flyers or a small poster that can be individualised via our Website could help easing the organisation of actions. We emphasise this point as we know that this data can be powerful and beneficial as a message for the project and the street. The collection of this data promises to be achieved easily, if it is framed as a data donation. This way everybody can participate and in coexistence with our actions it helps the discussion to develop further as more and more opinions and ideas come into place. However, this data collection issue would need some rework to give it a more playful, free and clear format. Because it being too uncertain so we can't really assess it again. A better structure of ideas and the digital reprocessing is thus needed.

During our project we have not really had the opportunity to talk to many institutions and public authorities. This was because we have not been given the opportunity to conduct a proper interview or did not get an answer at all. We managed to reach out to certain institutions by writing to the people directly, surpassing the usual filtering from efficiency and management-concerns. We never really had the opportunity to talk about our project in a conclusive way except with the GZ. By reaching out again with a more concrete concept and some parts already validated we could hope to get more access to the people responsible for urban planning in Zurich. We also strive to bring the project into a more realistic and incorporated direction. We think that talking to these authorities could really help because they are experts in knowing the requirements and the bureaucratic procedures for creating permanent solutions to our issues. This way the data collection and web platform could also be adapted in a sense that the exchange and the framing of the documentation can serve as a better voice. With this exchange the ideas and opinions that have been collected during the different actions can also be included in more elaborate concepts if a street is being redesigned.

With that in mind we would also like to test the full scope of our methodologies in a different neighbourhood to see if our assumptions can be validated and reproduced in different circumstances. During our first strollolgical research trips we encountered a big variety of neighbourhoods and thus many different dynamics. As of now we can determine that if a given neighbourhood has a high population density and small apartments these factors play a role in the street having a much more lively character, as people tend to dwell outside. Another interesting correlation we have witnessed is that this often comes with more anonymity as there are so many people that one can easily submerge. In Wipkingen, the neighbourhood we have mainly worked in, there are a lot of cooperatives and apartment houses. This leads to a lot of different projects and initiatives but to a somewhat impersonal street as everyone is already organised in more opaque

are not sure our actions will have the same acceptance as in Wipkingen as it is even more unusual to encounter the infrastructure we imagined and created in a neighbourhood on the city's borders. It is also possible that it proves to be more successful because it fulfils a need that is ever more present, compared to more urban, mixed neighbourhoods. We hope that, after we pass on our trailer to the GZ which is located in Affoltern, we can have an exchange with the people from the GZ who have a different background in sociocultural animation. With more insights gained and perhaps more parts of the project being thoroughly tested, we would like to look at the scalability of our project and what impact it could have in different neighbourhoods or the entire city.

This is why the last, remaining concern of realisation would be on how a scaling of the project could be achieved in a way that makes it adaptable to different situations and requirements without losing its qualities. This part would definitely need the biggest rethinking and has many hurdles to overcome. It would include better communication and usability of the digital tools, more collaboration and a more concrete vision so the engagement is more exciting and promising. Moreover, it would benefit from an easier and more efficient way to use our methods in projects so that the data collection and the communication would not take a long time. To be implemented within a project of the civil engineering office, the distillation of the ideas would need more iterations and a better relatability within a space so a discussion around the permanent rework of a street could take place. Last but not least the most important thing would be to network with more institutions, organisations and authorities to have a broader base to argue and discuss with as this project is only a small fish in the ocean that is urban planning and the city itself. Hopefully it doesn't get too salty.

5. Appendix

Questions for Diana Celi, "Brings uf d Strass", Project to use streets as open spaces 09.02.2023

How and according to what criteria are sites selected?
Possible streets for organising the event are selected based on proposals from the residents. The proposed locations must meet the necessary traffic and urban planning requirements, which are refined and adapted based on the experience gained. E.g. low traffic volume, no rescue axis or public transport axis, no construction sites during implementation.

How are ideas for the provided infrastructure collected?
In its first iterations a planning office proposed a furniture concept. In the following years, a design concept for the streets was developed in the course of various participatory events and based on feedback from the neighbourhood residents. The furnishing strongly depends on the location, which was also supplemented by some residents' initiative.

What data was collected? How was it collected / evaluated?
During the temporary redesign, spatial observations as well as interviews with users were conducted. These show which are the user group, which activities are most frequent and when the street was most used. Polling devices were also placed on the perimeter. Here it is asked whether the users like the redesign or whether they would like to see it repeated. This data will be automatically analysed.

What does the participation process look like? Are there future iterations planned?
Since 2022, there has been a dialogue with the dialogue group (residents, the neighbourhood and trade association) of the Ankerstrasse area for an implementation of "Brings uf d'Strass!". The inclusion of the neighbourhood population will be further promoted. The dialogue group will be expanded and the implementation will be concretized in cooperation with the residents.

Guidelines of "Play the City"

1. Define the game challenge: In our case the goal would be to create streets and spaces that are car free and offer the possibility to act within this newly resulted public space. To limit ourselves we set the Blue Zones in the city of Zurich as our playground.

2. Engage your stakeholder network: This includes people that commute by car or own a car and people that only commute by bike and use public transport systems. Furthermore there are the city planners, the neighbourhood councils, small entrepreneurs and many more that can be added or subtracted to the game. We also hope to use this step to create personas and to define the different motives of involved citizens.

3. Identify Relevant Data: Regarding the data we will have to look at two different types of data. On one hand we will incorporate the „hard" data such as location, traffic, certain statistics that prove our game dynamic and also what rules and networks already exist. Furthermore we have the „soft" data, such as philosophical thoughts about space but also points that we see as beneficial factors for living in the city as before mentioned in the background chapter.

4. Identify Available Resources: The resources generally influence the skills or possibilities the players have to act within the game. This would include several legal

have the possibility to organise cultural events and the city-players can then approve these proposals. When creating these rules we will take the Urban-Equipe handbook as a guideline.

The collective rules will apply to everyone involved and will include: sequence, respect and priority.

6. Build the Game Interface: When building the Game Interface it's again very important to define what kind of outcome we want to generate. As we don't have a lot of time within the Thesis and we aim for rapid results. This would include an easy interface that's quickly understandable and thus helps us gain fast feedback from a lot of different people. It should also be an interface that can be accessible for everyone; either in the digital or the public space.

7. Play and Record Game Sessions: When testing out the game we would like to use it as a proposal and discussion platform for people in a public space but also to have a manifestation of our ideas and have a platform that can be dynamically changed. We would also like to organise game sessions that can include different experts within the beginning of the project.

7. Figure Index

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7. Imprint