

fem*MAP BERLIN. FEMINIST SPATIAL SYSTEMS FOR A NON-SEXIST CITY.

MOVING TROUGH BERLIN A feminist traffic turn

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Moving through Berlin / A feministic traffic turn Thesis Statement

A great amount of literature is provided on mobility and gender, drawing out two disparate trends of thinking. While one focuses on how mobility shapes gender, the other examines how gender shapes mobility.

The mobility research studies that focus on the differences between genders show the simplified conclusion that women have a more vivid movement pattern with many steps, while men mostly commute, moving from home to work and back again. This pattern can certainly not unconditionally be applied to all women in every society. We believe that mobility patterns are strongly connected to personal circumstances. The unbalanced distribution of care work and therefore the social roles imposed by most societies is what defines mobility behaviour, not biological gender.

Most studies on mobility (and gender) are also not dealing with the spatial transfer of the findings. We believe that there needs to be a shift to research agendas that also take geographic, social and cultural but especially spatial contexts into account.

Simply put, how do women shape mobility spaces in Berlin and how do mobility spaces in Berlin shape women's mobility behaviour?

In our Berlin-specific research we found a set of parameters that are we felt were worth looking at in greater depth. First, how does the distribution of productive and reproductive work does play a role in mobility? The connection of this topic with the configuration of the direct living environment is very important. Second, multimodality and shared mobility are important trends that influence the mobility choices of women. Third the safety of all kinds of mobility infrastructure from bike lanes to streetlights or public transport spaces seems to have an enormous effect on how women move through Berlin.

The fem*MAP Mobility is the result of the attempt to spatialize the topics we found in various interviews on the Berlin cityscape. In addition to that, we used other ways of mapping and visualising the complex relationship of gender, space and mobility in Berlin.

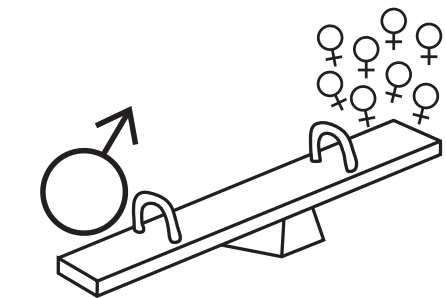
Reaching a more gender-sensitive perspective on space and mobility will help to improve existing infrastructure and help offer more equal accessibility to transport for all different groups.

Mobility Sector Imbalanced Perspec- tives

Transportation and mobility are male dominated issues. Decision-makers, urban planners and architects who shaped the cityscape in the past were nearly exclusively men. Two thirds of the car owners are men. We live in a city whose mobility infrastructure has been built and designed by men.

When you take a look at present numbers of women working in the mobility industry you will not be surprised (Eurostat report 2017). Within the whole mobility sector only 22% are women. In fact, the situation is more dire, because this percentage is mainly due to the high number of women working in aviation, mostly as flight attendants. For land transportation it is only 14%.

It is important to take into account that the provision of transportation infrastructure, especially in the city, is mainly a public responsibility and women are also more likely to use public transportation on their way to work. The fact that women are deeply underrepresented in the field raises the question of how to give a louder voice to the female perspective on mobility.



Imbalance of male and female representation

Car ownership in Berlin



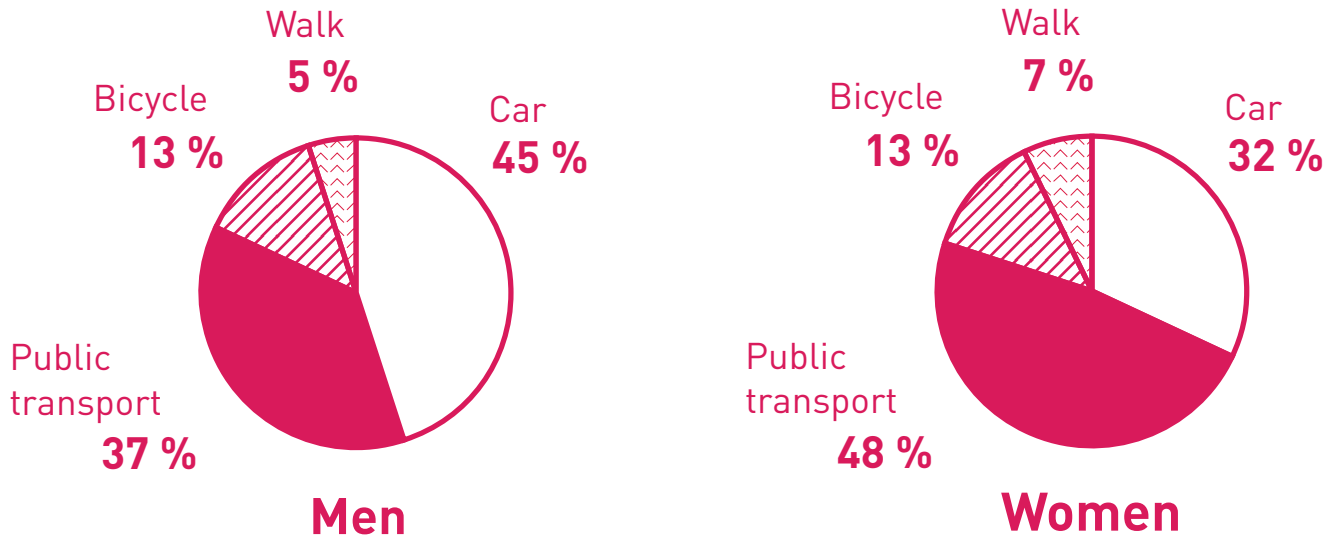
Data source: PKW Halterinnen in D. Eine Studie des ACE Auto Club Europe, 2010

Working in land transportation



Data source: Eurostat 2017

Primary transportation to work (Berlin, 2016)



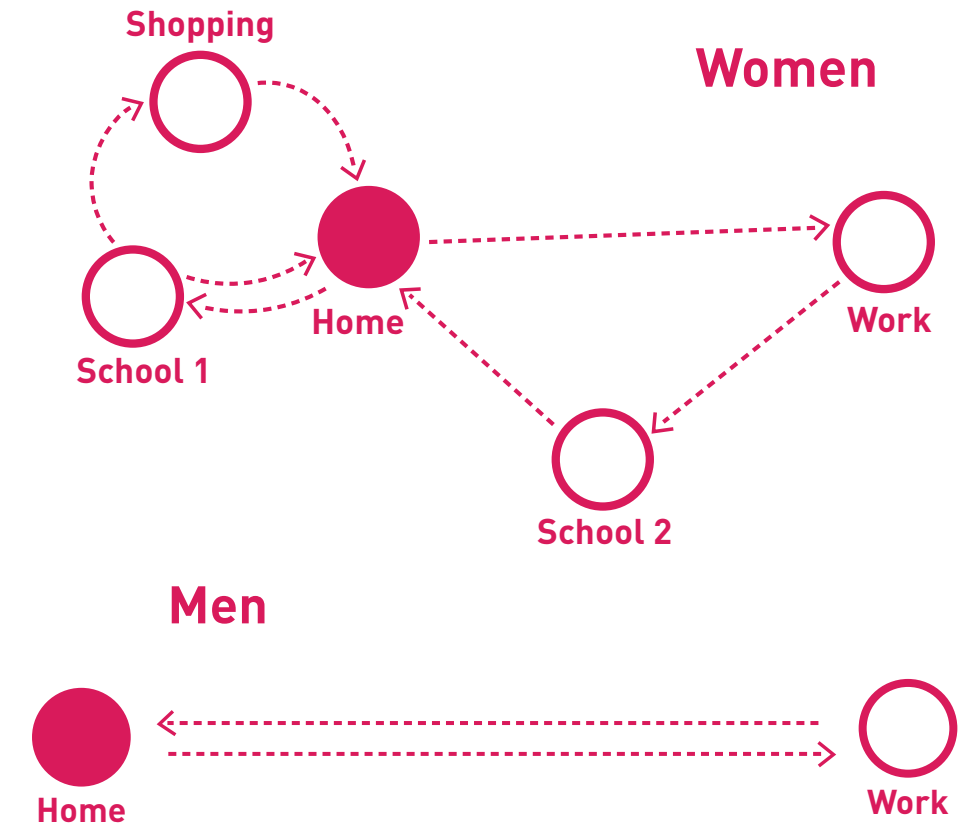
Data source: Zeitschrift für amtliche Statistik Berlin Brandenburg 2/2018

Mobility Behaviour Trip Chaining

Which parameters influence mobility behaviour and what role does gender play?

According to current surveys on gender-based mobility, women cover shorter distances while making multiple stops at different destinations. This phenomena is described as trip chaining and mostly related to the distribution of productive work and reproductive work, also referred to as care work. However, these results are not based on biological gender, but on the social role of women in our societies. Women are more likely responsible for the household, taking care of children and the elderly. In most transportation surveys these trips aren't acknowledged and transportation concepts tend to prioritize infrastructures that are based on the needs of productive work commuters.

The mobility needs of a person are based on their life situation and the corresponding everyday requirements. Women are still responsible for reproductive work to a much greater extent than men, which is also reflected in mobility patterns and transport choices. On average, men usually pursue a clear main purpose of travel - the journey to work. Women combine different destinations and reasons for being on the move. The reason for these trip chains is that in everyday life women often have to coordinate routes with different destinations and purposes (work + care work). This leads to a complex spatial mobility pattern.

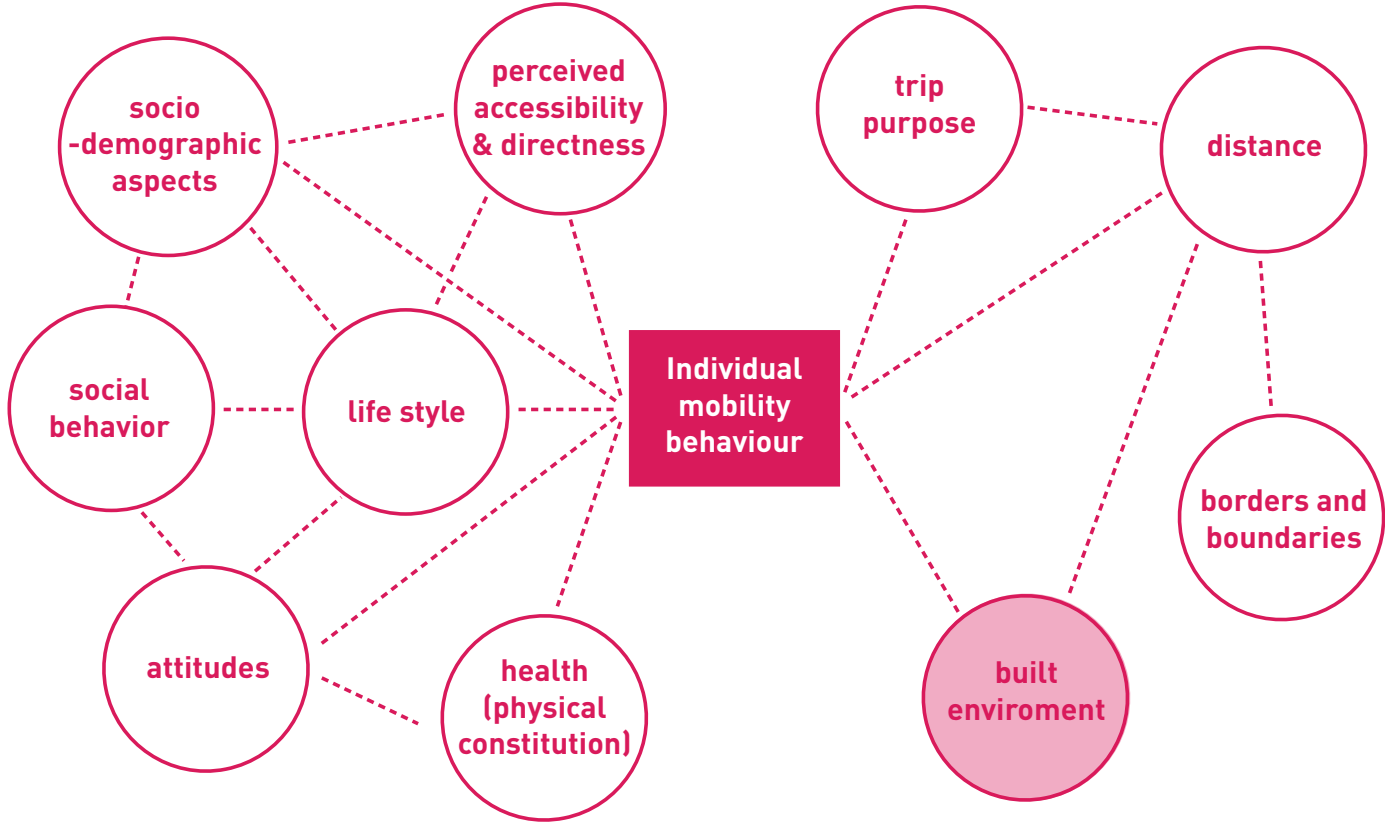


largely simplified gender-based mobility behaviour

To gain a better understanding of those complex mobility patterns and influencing parameters, we developed our own approach. Individual mobility behaviour is influenced by a variety of internal and external parameters. The individual interaction of different factors varies according to the life situation. Therefore, the base of our research are several short and in-depth interviews with women in Berlin that were questioned on their personal mobility behaviour. As a result the topics and information were gathered in a Berlin Map of female mobility.

Personal, internal factors

External factors



Factors influencing individual mobility behaviour

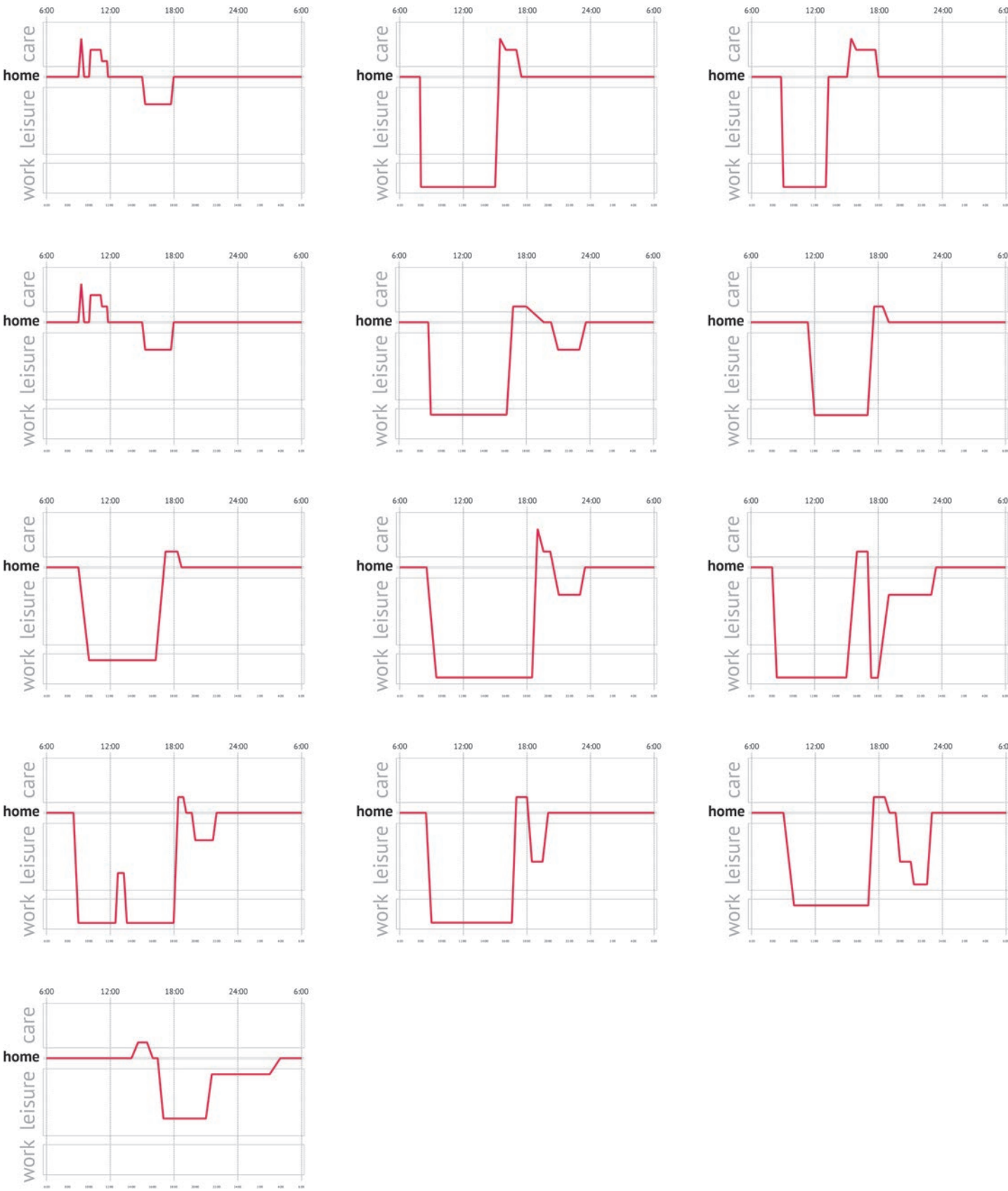
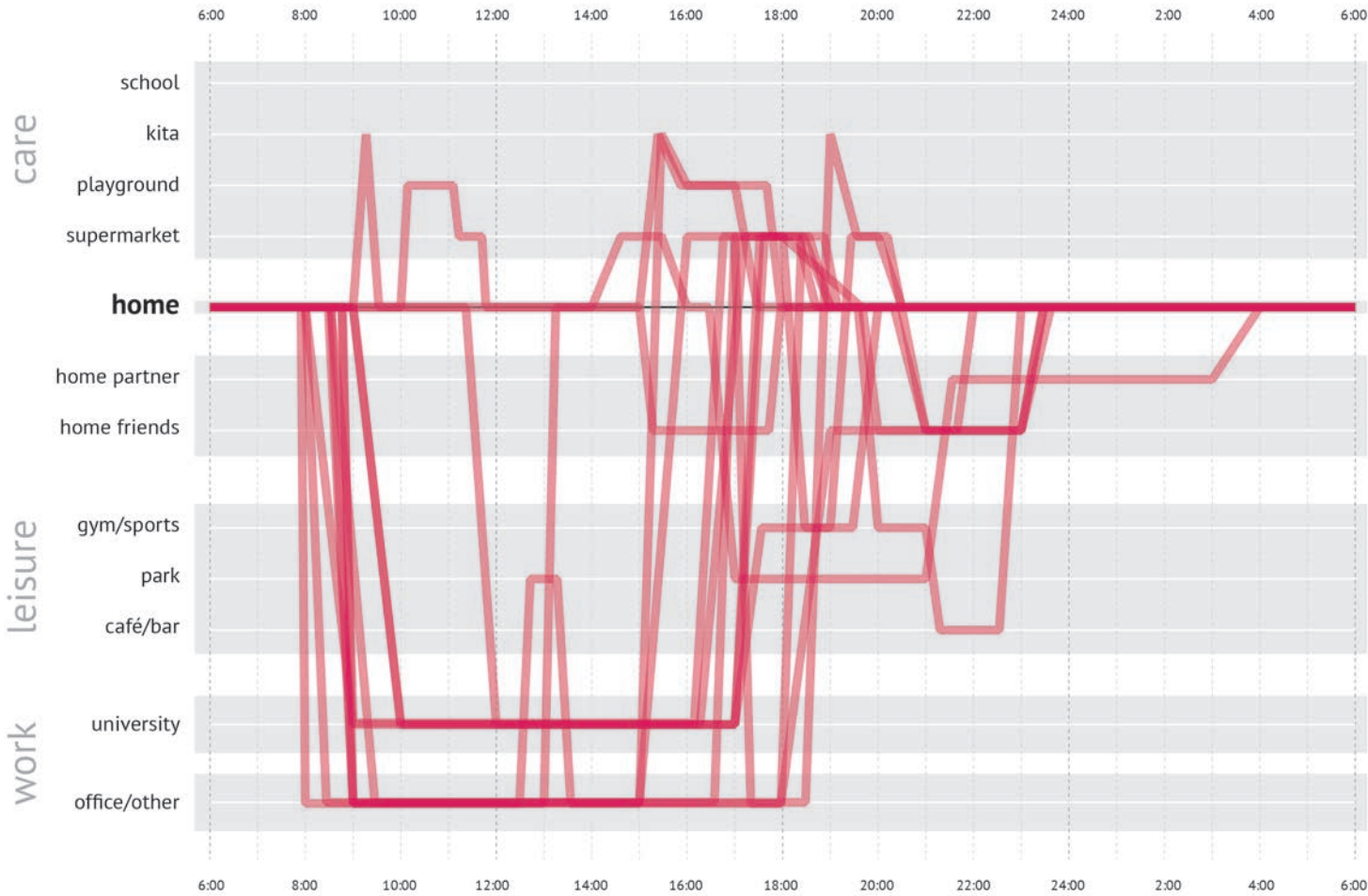
Mobility Interviews

Movement Patterns

To get a better understanding of the individual movement patterns of women in Berlin, we conducted several short interviews. One focus was on the places visited during an average weekday and the time they stay at these places.

To make the patterns comparable, we grouped similar types of places in the three categories: care, leisure and work.

The diagrams on the right show the different movement patterns, while the one at the bottom is an overlapped visualisation of all of them together.



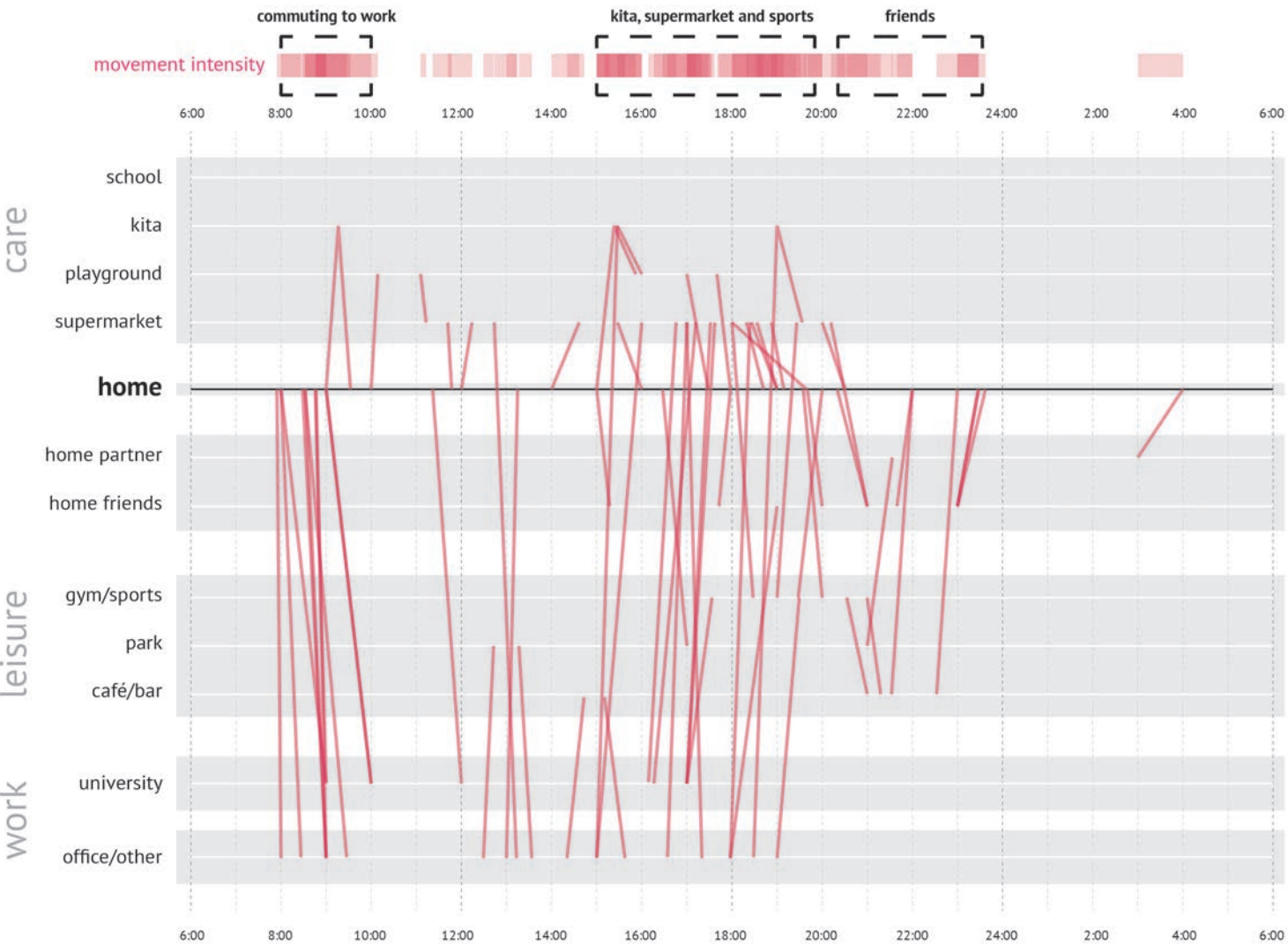
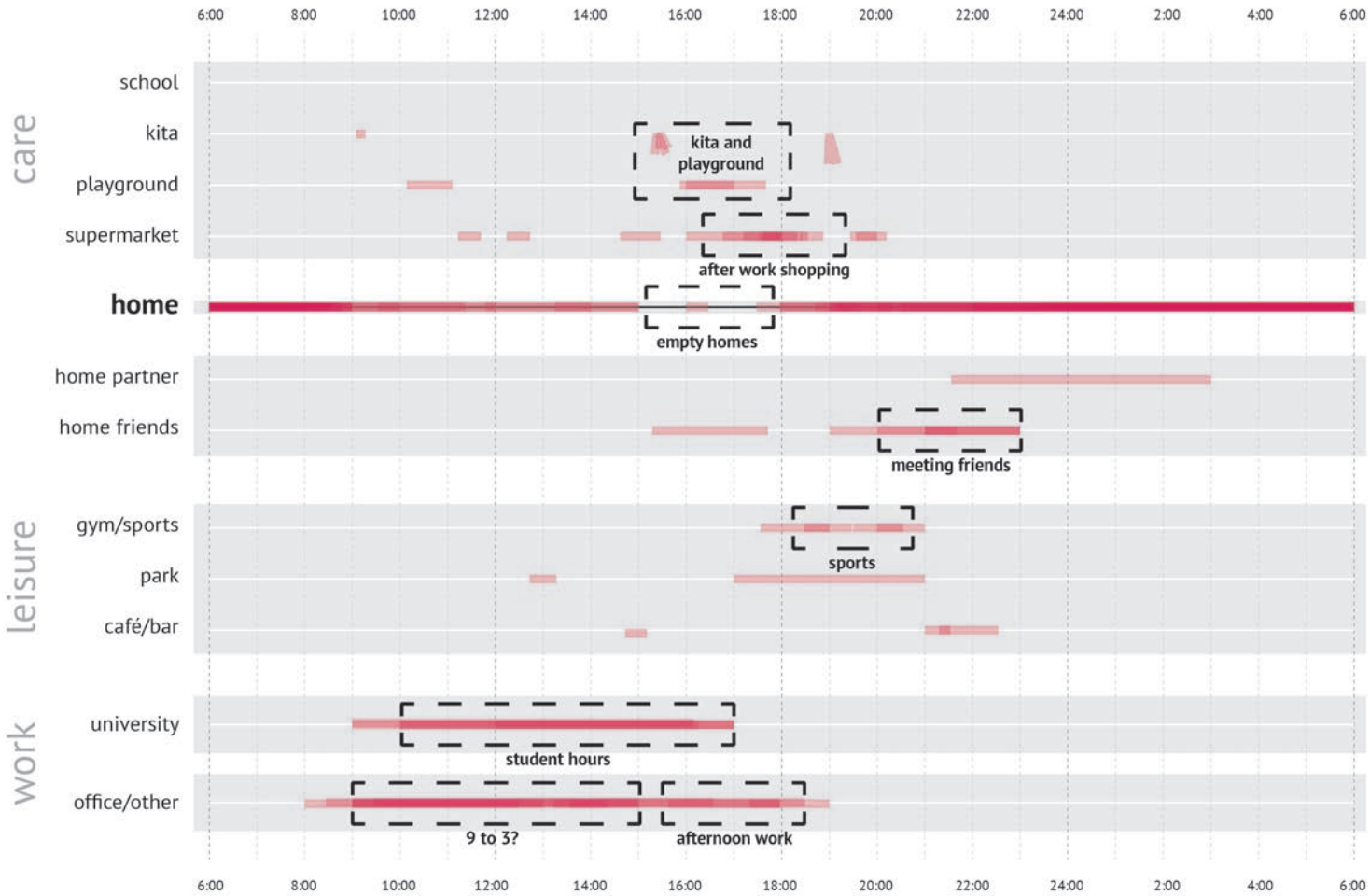
Mobility Interviews Intensity Comparison

By overlapping just the time periods that the interviewees stayed at a certain place, it is possible to detect patterns and similarities within the focus group.

In general, the results are not very unexpected. There is a big time slot where most respondents are at work or at their university. After that, different sort of errands are done followed by social events.

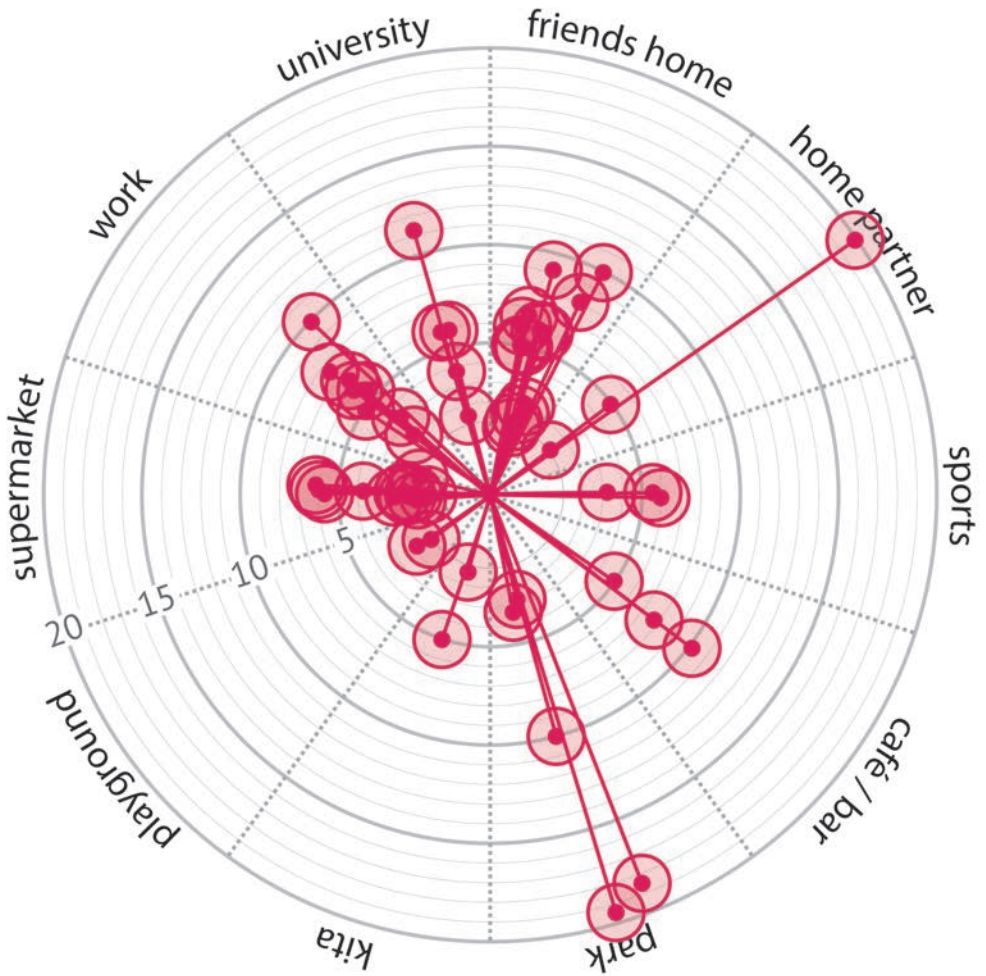
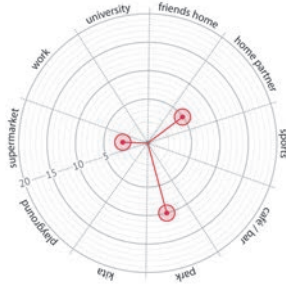
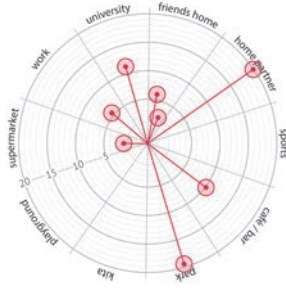
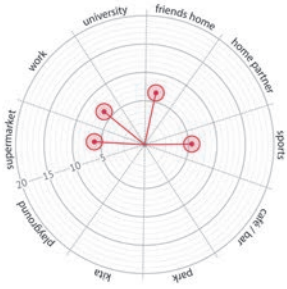
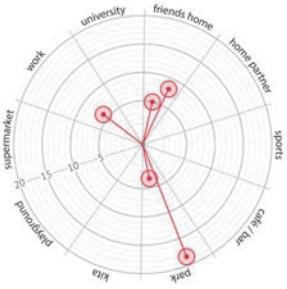
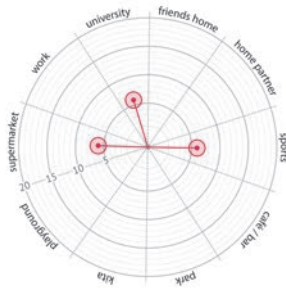
The second overlapping shows the periods of movement. Different intensities become visible, that in relation with the diagram on the left can be associated with specific activities.

The visible intensity also reflects the big time slot (work/university) at the beginning of the day and the many shorter ones at the afternoon and evening where there is much more movement.

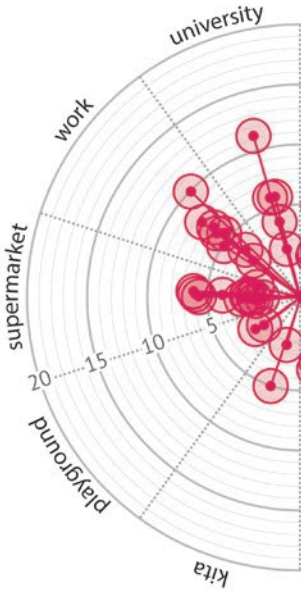


Mobility Interviews Distances

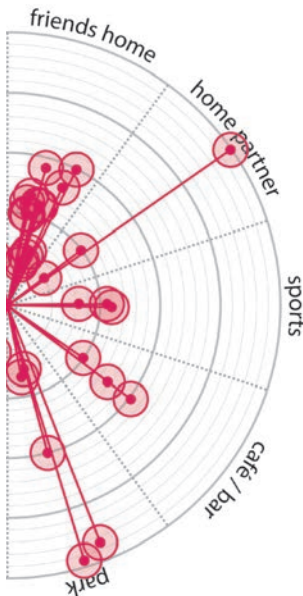
Another focus of the survey questions were the distances each of the interviewed women has to travel to reach their regularly visited places. The diagrams show the radius in kilometres.



The diagram shows that places for care work and paid work (including education) are mostly very close to home. While nearly all care work is done within a radius of 5 kilometres, the radius of workplaces or the university can reach up to 10 kilometres.



Although in general the same results can be seen for social meetings or leisure activities, there are also specific places that get visited occasionally and are much further away.



Preparation for in-depth interviews

Since living situations also have an influence on mobility behaviour it was important for us to represent these diverse life models and perspectives in detail in the processing of the data. Due to the strong influence of the parameters work and care we categorized the question diagrams into four types (table bottom page). We selected particularly complex patterns in order to conduct quantitative interviews in a further step. In the interviews we questioned personal living conditions, decision backgrounds for mobility behaviour, influencing factors, positive and negative aspects of one's own mobility and future perspectives for mobility.

type	A work	B care	C work + care	D flexible
work	X		X	
care		X	X	



Type B

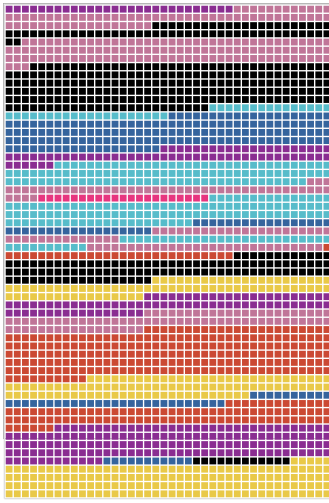


Mobility Patterns In-depth Interviews

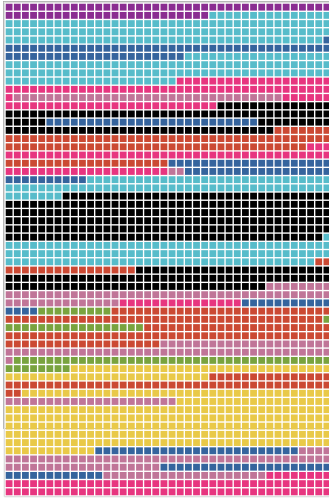
Content Analysis

Codesystem	186
infl - influencing factors on mobility behaviour	0
infl - spatial/built/infrastructural	8
infl - negativ aspekts	6
construction sites	3
connection problem	3
street lights	6
safety issues	14
infl - neighborhood	7
infl - family	3
personal perspective/needs	0
positiv aspekts	8
specific women*s perspektive	5
personal needs/wishes on mobility infrastructure	7
routes	0
change of routines	5
further distances	6
weekends	4
night time	2
after work	2
daily routine	8
modes of transportation	0
choice and reasons	17
taxi/Uber	2
bike (paths)	32
sharing (car/scooter/bike)	8
car (and motorhome)	8
walking	5
public transportation	17

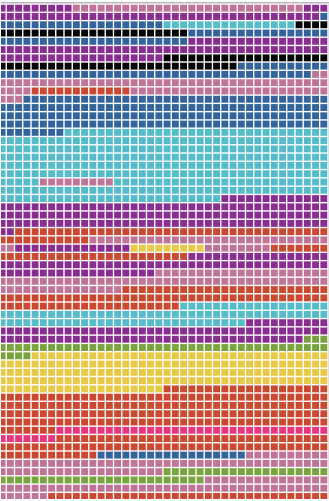
By analysing the interviews with assorted methods of qualitative content analysis we detected several important topics relevant to most of the interviewees in one way or another. The code system on the left shows the variety of sub-topics, categories and the amount of coded parts, while the code pattern on the right shows the distribution of topics throughout the whole interview.



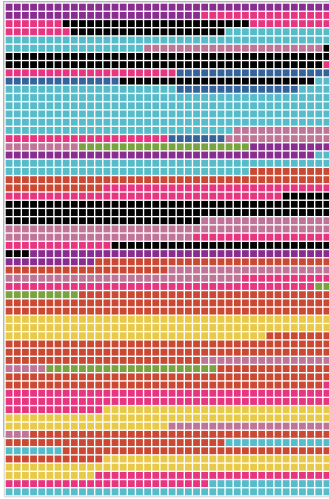
Code Pattern Type A



Code Pattern Type B



Code Pattern Type C



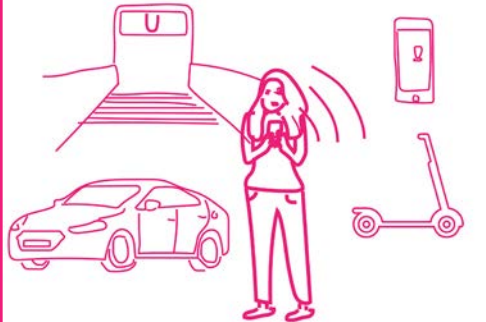
Code Pattern Type D

Type A



51-year-old foster mother with a handicapped child. The radius in which she moves is small. The reduction of her own car use also makes her cycle or walk every route in her neighbourhood. She would like a Berlin with less car traffic and wishes for a more pedestrian and bicycle friendly city - with better maintenance of paths to ensure it is to safe get around - no matter of age, gender or disability.

Type B



Young project manager in the cultural sector, who lives in Neukölln. No matter if it's sharing, biking, public transport or Uber - in her neighbourhood all mobility offers are available so she takes advantage of that. She makes her decisions depending on the situation, time pressure, weather and mood but prefers to take an Uber at night. Especially if she has to take the U8 on her way home. She wishes that the infrastructure around Berlin would be expanded and thus Brandenburg better connected to the city.

Type C



Young mother lives in Neukölln and works as a freelancer. For her everyday movements, she stays mostly in the neighbourhood, as everything she needs is available within short distance. Kita, friends, the cafe across the street for work - mostly within walking or biking distance. She takes her bike for most of the routes and has a trailer for shopping and the kids, so a car is not really necessary for the family. In general she likes the wide sidewalks of Berlin on which she can accompany her children well. While moving alone she prefers to move around in illuminated streets and wishes for the future and better lighting in the streets and more protected bike lanes

Type D



Young student who covers all distances with a mix of bicycle and public transport. She decides depending on the time-distance relation of the routes whether she uses the bike or not but always has it with her. Her transport decisions are made individually on daily basis. In the dark she changes her usual bicycle routes partly because certain sections of the route are not illuminated. She wishes for sufficient lighting, to be able to feel safe even in dark parks on the main bicycle routes. Also, she would like to see an improvement of the night bus routes, because easy routes that can be reached by S-Bahn quickly in one go turn into a transfer marathon at night.

Mobility Patterns

In-depth Interviews

Quotes

“The traffic light circuit is sometimes much too short for children or older people. I have a handicapped child and so it was partly a catastrophe to go shopping with all the children.”

“But of course I also make sure when I’m out with the kids that I choose a good bicycle path or I choose a bicycle road rather than the main road. My main focus is that the traffic flows slowly, so that I am a little safer when I am with the children.”

“Yes, that the traffic in Berlin has increased steadily. But there has also been a rethinking that the car is no longer so important and a growing environmental awareness. That’s why I changed more.”

“Paths should be better maintained. This otherwise makes it difficult for the elderly or people who can walk badly. A better traffic light system and above all I would like to have a separate traffic light system.”

“I think the sharing offers are good in principle, but the problem is that there are no sharing possibilities in our city area. But if you would live in the inner ring I could imagine using something like that.”

“In general that the infrastructure changes significantly - especially for pedestrians. I walk a lot - about 50 %.”



Type A

“Maybe because I do a baby-sitting job every now and then, so I might cycle more. Because you also cycle a lot with children. Maybe I would say that I have the feeling that maybe even more women are travelling with children.”

“I find it partly uncomfortable because I would have to change at Hermannstrasse. When I drive from Friedrichshain I have to take the U8. In the evening I want to avoid that and prefer to take the bus - it’s also the most dangerous subway in Berlin.”

“What annoys me about the infrastructure in my neighbourhood. There are no bike paths in the streets, but cobblestones, which means that it is uncomfortable with the bike. That means you have to drive on the sidewalk. “

“When I take car sharing, I just do it for the sake of convenience. Often, when I’m with my friends in Friedrichshain, I don’t feel like taking the subway.”

“One thing that also influences me when driving, especially in Berlin, where it was always 50 zones, now its 30 zones on the main roads. It’s frustrating.”



Type B

“So by starting a family, it has also become even more restricted to Neukölln. That means that new contacts to other families have been established and you spend more time with them. And, of course, the fact that you don’t have so much, indeed freedom of movement and leisure time that you could use to move further away.”

“I have noticed it more often in the past years when I choose the ways I either walk or cycle. On the one hand, when I cycle or walk, I don’t run close to the bushes, I always make sure that I keep my distance and as far as possible, and especially in the evening I walk in the middle of the street or in the middle of the sidewalk. Rather also illuminated paths, so because I had already had situations that were unpleasant, or where I was also pressed and want to avoid them.”

“I also make sure that I sit down in the S-Bahn or in the bus somewhere where maybe another woman is sitting, or where people are sitting who seem sympathetic. I don’t like to sit somewhere alone, nor do I like to get into an empty compartment.”

“So where there is more light, I prefer to move where there is more light.”

“But the kindergarten, for example, is not connected. So it’s not well connected to any public transport. So I can only go by bike or on foot.”

“Be it, for example, ___straße or yes, where the traffic is simply not well regulated, or, there are no traffic lights, no zebra crossings. Then sometimes I don’t like to be on the road by bike and I just feel safer if I can take some smaller shortcuts that are perhaps not so comfortable by bike. Because there are also no cycle paths to some extent.”



Type C

“I’m at Warschauer and there is an emergency going on and the S-Bahn doesn’t go in my direction because there’s a police or something like this. Like the police had to take somebody out and trains just stopped running. And then there’s just no other way for me to go directly to my place off of Warschauer to here, even though it’s almost so close.”

“I don’t like it when there are no escalators or elevators in some stations and they are like really deep down and it’s quite annoying with the bike sometimes.”

“At nighttime, I just want to go home and then I have to change in this smelly, dark, dirty U-bahn stations.”

“If you go into the neighbourhoods within Friedrichshain or I go around Kreuzberg or Neukölln the paths are really bad and there are no proper bike paths. And it’s really annoying, especially because my chain on the bike always pops out when the vibrations are too big. Yeah. So it just really I really tried to pick my route after that.”

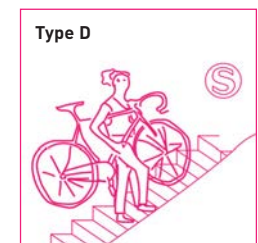
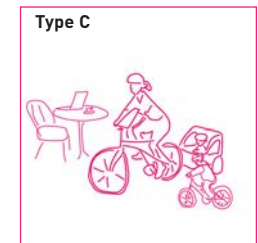
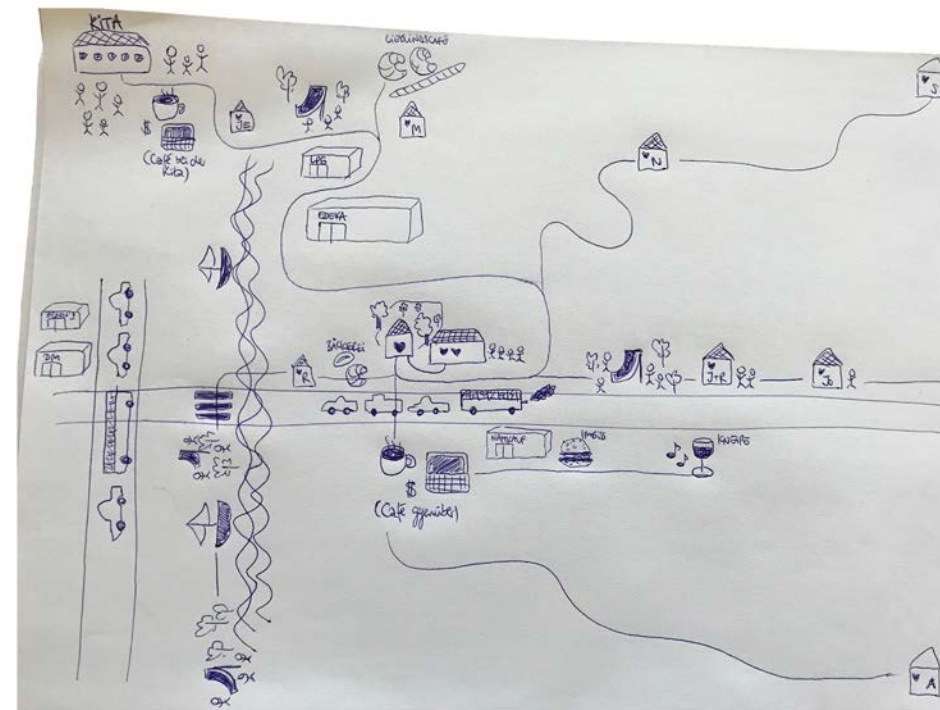
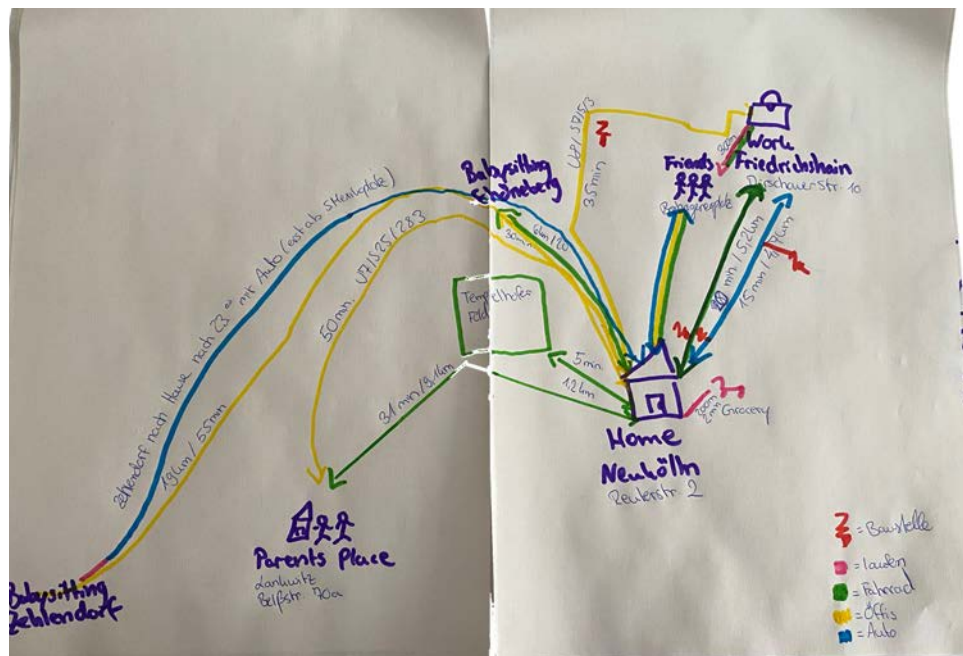
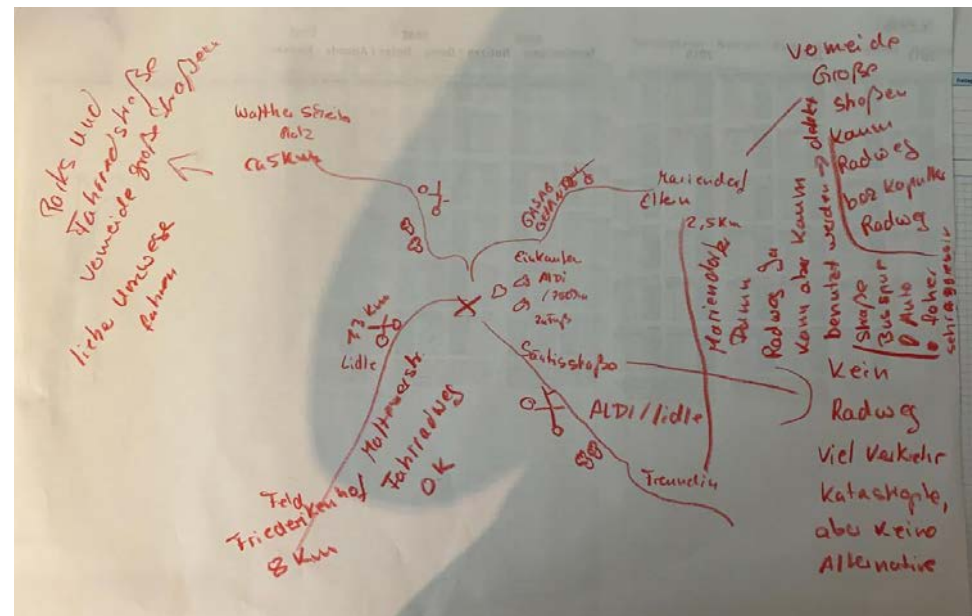
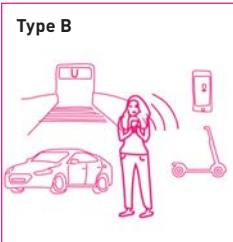
“But first of all, the lights are really bad there. I think they changed it recently and they put up some lights on the pass. But before it was super dark and there was also not a squatter camp, but kind of like a lot of tents, like a little homeless shelter village with in between more than 50 people, quite big. When this started, I think a few years ago, I didn’t go there at nighttime anymore. So one factor was the lights.”



Type D

Mental Maps

Type B, Mental map drawn by interview participant



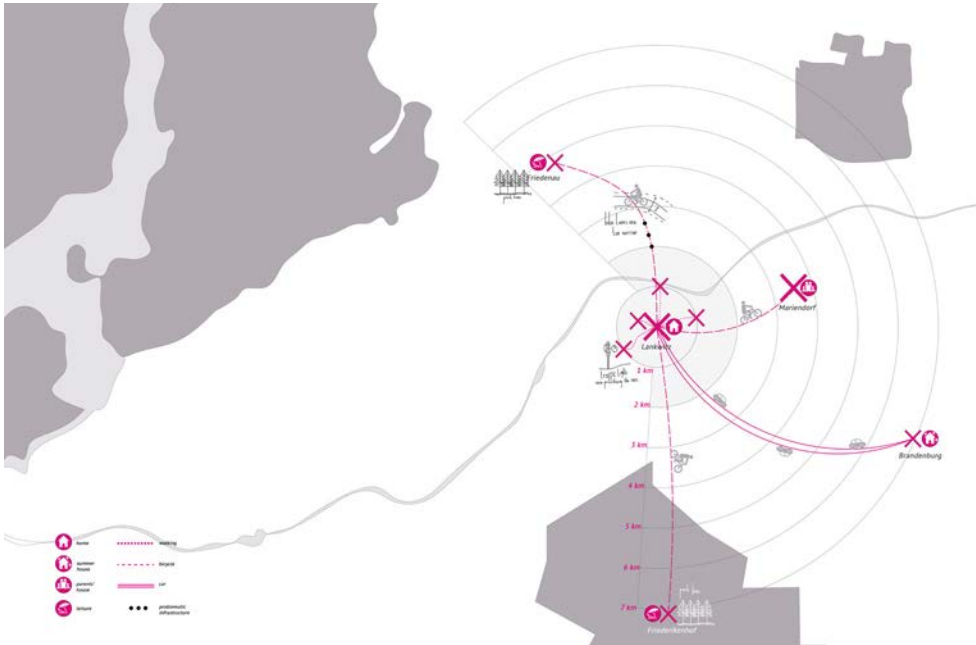
Spatial Fragments Neighbour- hood Network Diagrams

Taking the mental maps one step further in this section, the aim is to translate interviewees mobility experiences as described in the detailed interviews and mental maps. All the data is put onto a common ground in the Spatial Fragments section.

All four behavioural mobility type experiences are once again analysed, this time with a common language. They are contextualised, their angles of radius and different scales are exposed.

Vital points of mobility are marked with a larger “X”. As “X”s get smaller, it means that the point is less important. The mobility device they prefer during their daily routes are shown with different line types. Some have a single centre, and some are multi-centered.

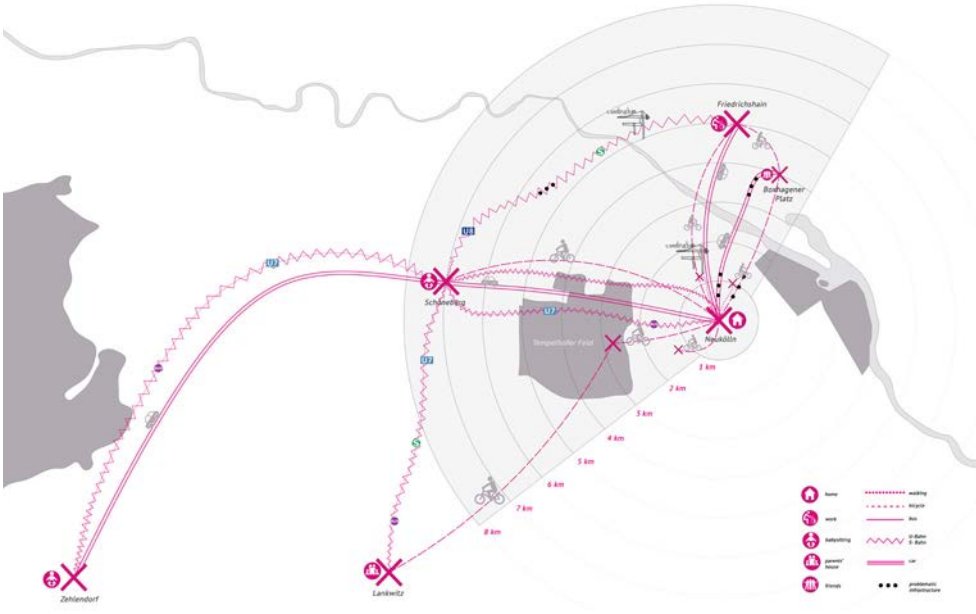
Problematic routes that are pointed out by interviewees are included in the spatial map with three black dots and sketches.



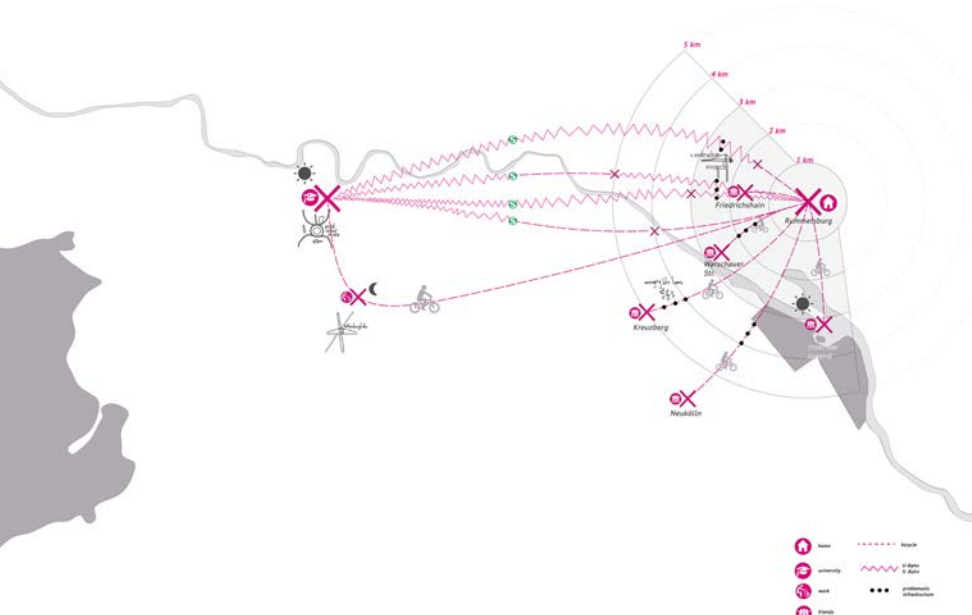
Type A, Spatial Fragment



Type C, Spatial Fragment



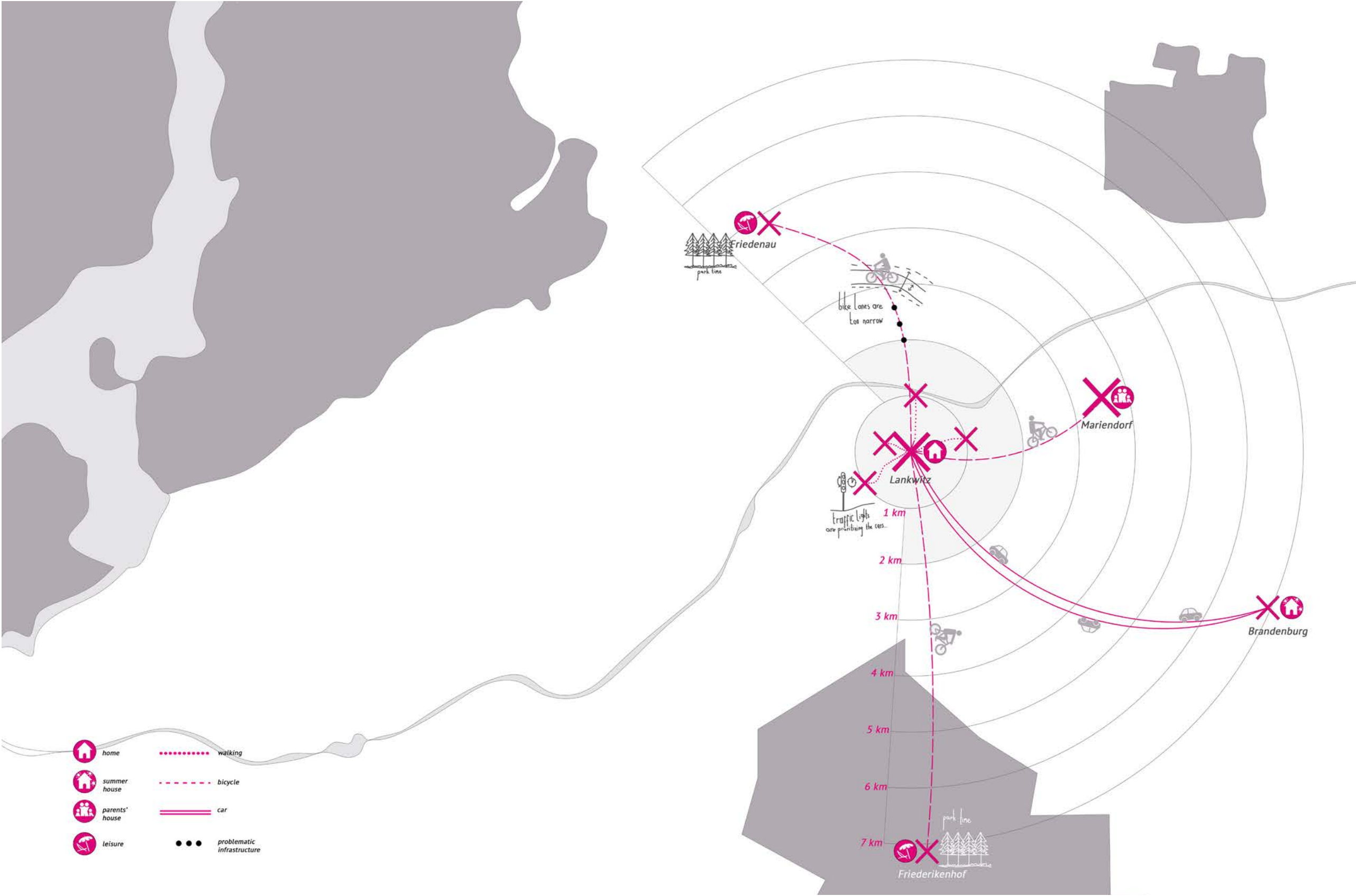
Type B, Spatial Fragment



Type D, Spatial Fragment

Spatial Fragments Neighbour- hood Network Diagrams

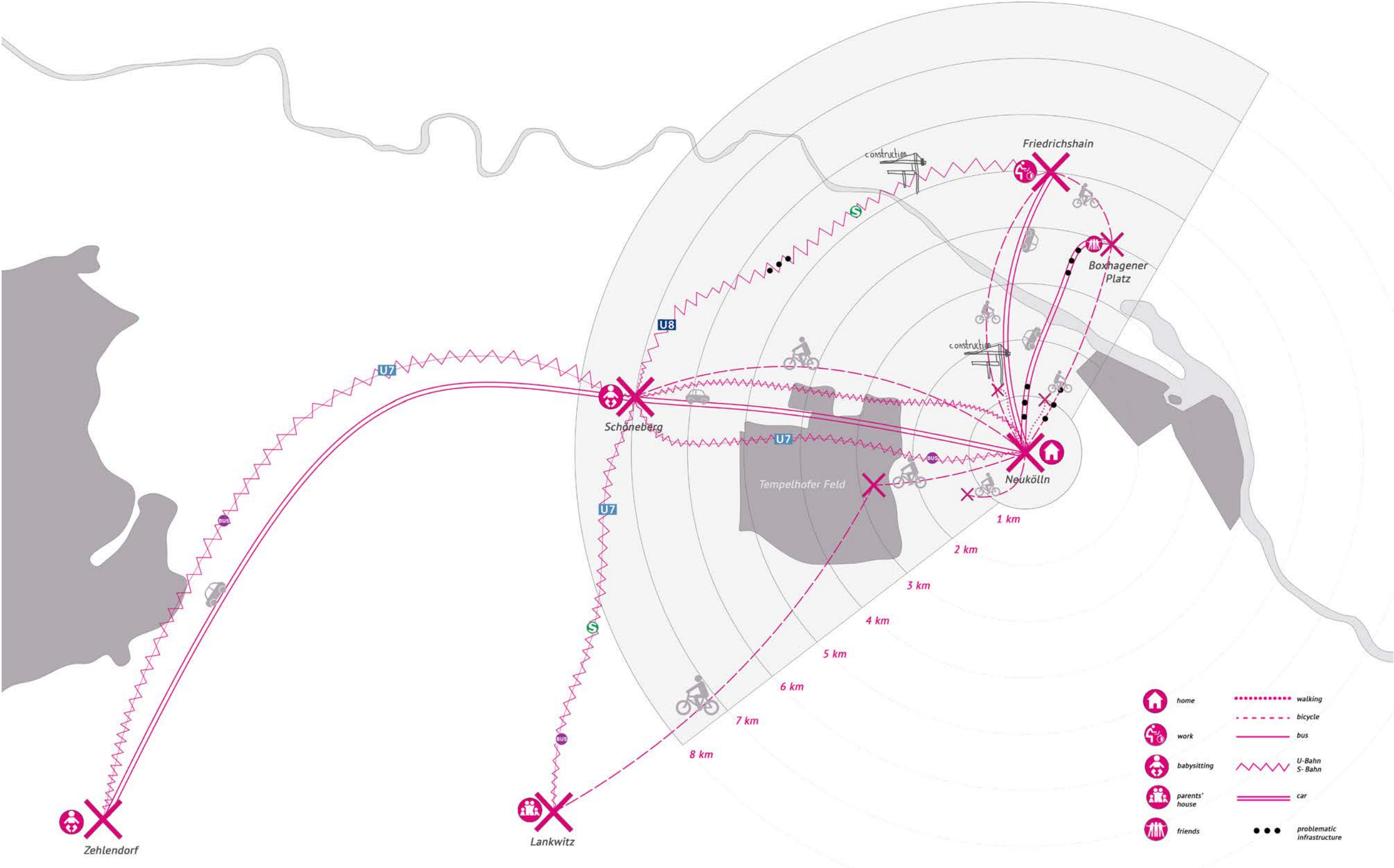
Type A



Spatial Fragment from “Behavioural Type A” indicates a centric pattern, where most routines are centred around the home. It’s uniqueness is that it is a pattern with a large radius but localised behaviour. Occasional Leisure activities are enlarging the radius. Bicycle is preferred means of mobility, followed by walking.

Spatial
Fragments
Neighbour-
hood
Network
Diagrams

Type B

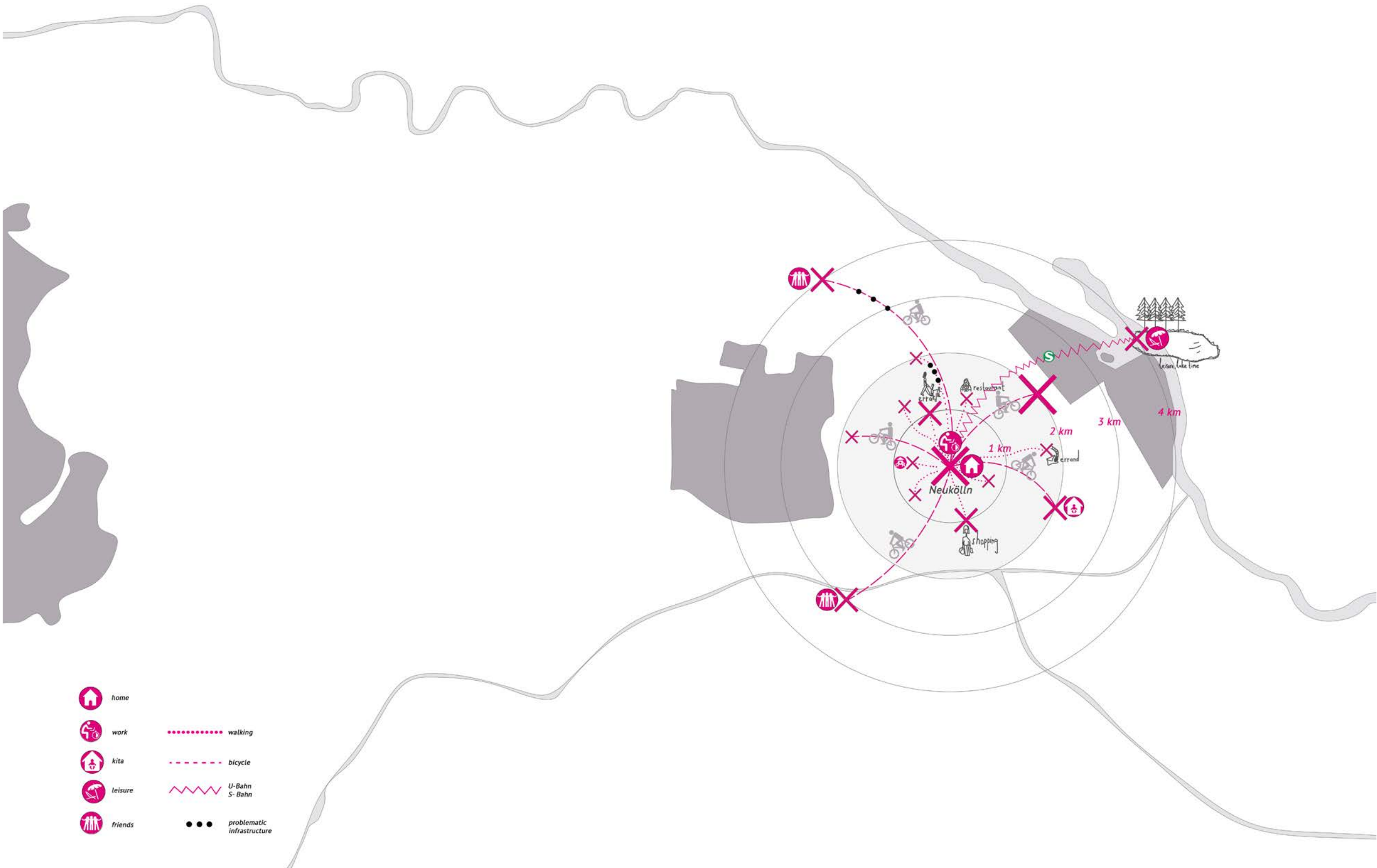


As seen on Behavioural Type B's Spatial Map, this interviewee has a multi-centric routine. Home is one of the centres, so is Baby-sitting in Schöneberg, as well as the Office. Trip chains are present. The radius of the routine is larger when compared with other maps and used actively.

Spatial Fragments Neighbour- hood Network Diagrams

Type C

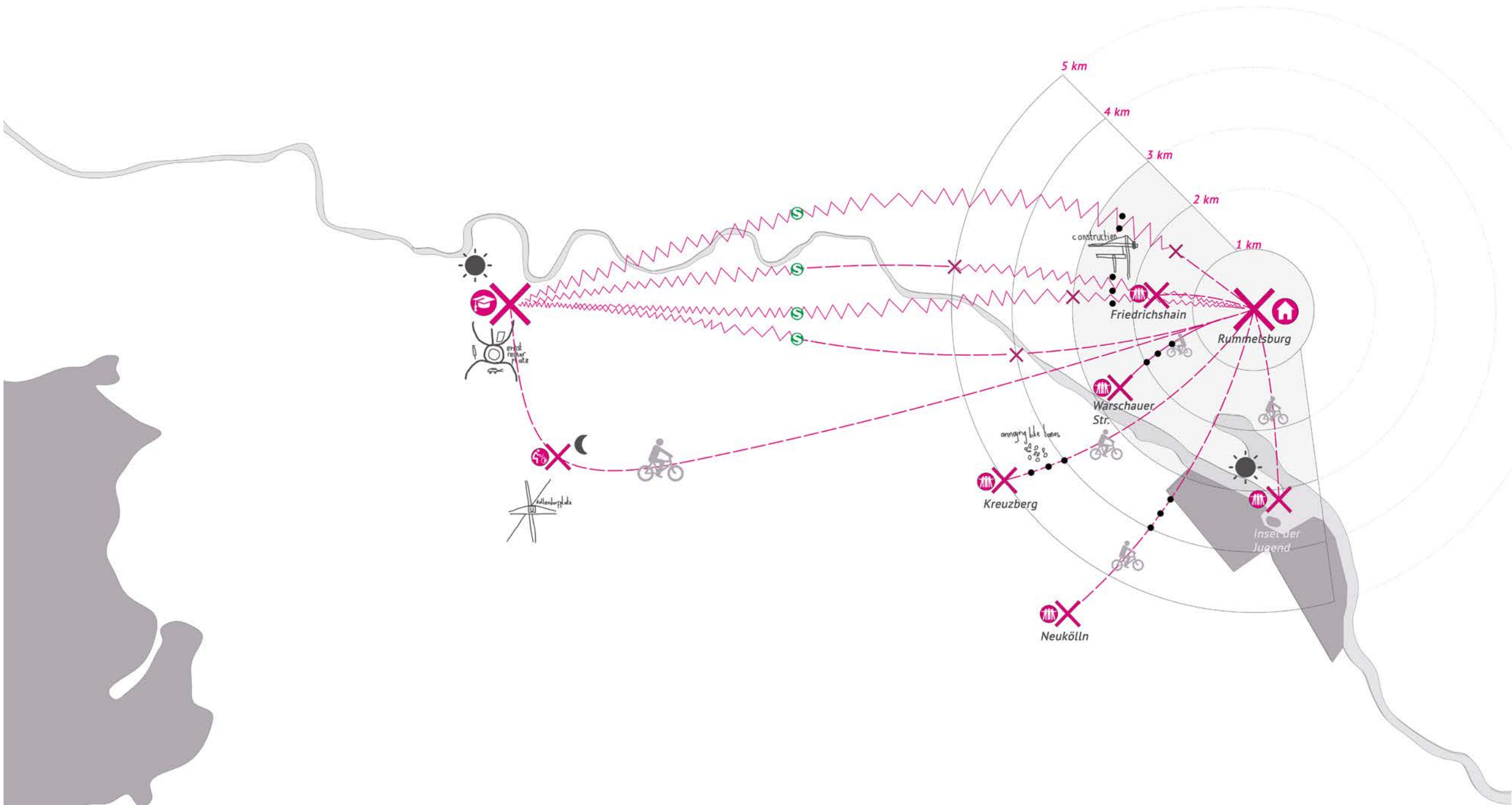
Behavioural Type C has a localised pattern. Home is the single centre. It is the pattern where we see the availability of services is the densest. Means of mobility is primarily walking or cycling. Public Transport is not preferred by the interviewee, except for occasional lake trips. Also, as reported by the interviewee, there is no good public transport connection between home and Kita, so bicycle is preferred for this route.



Behavioural Type C

Spatial Fragments Neighbour- hood Network Diagrams

Type D

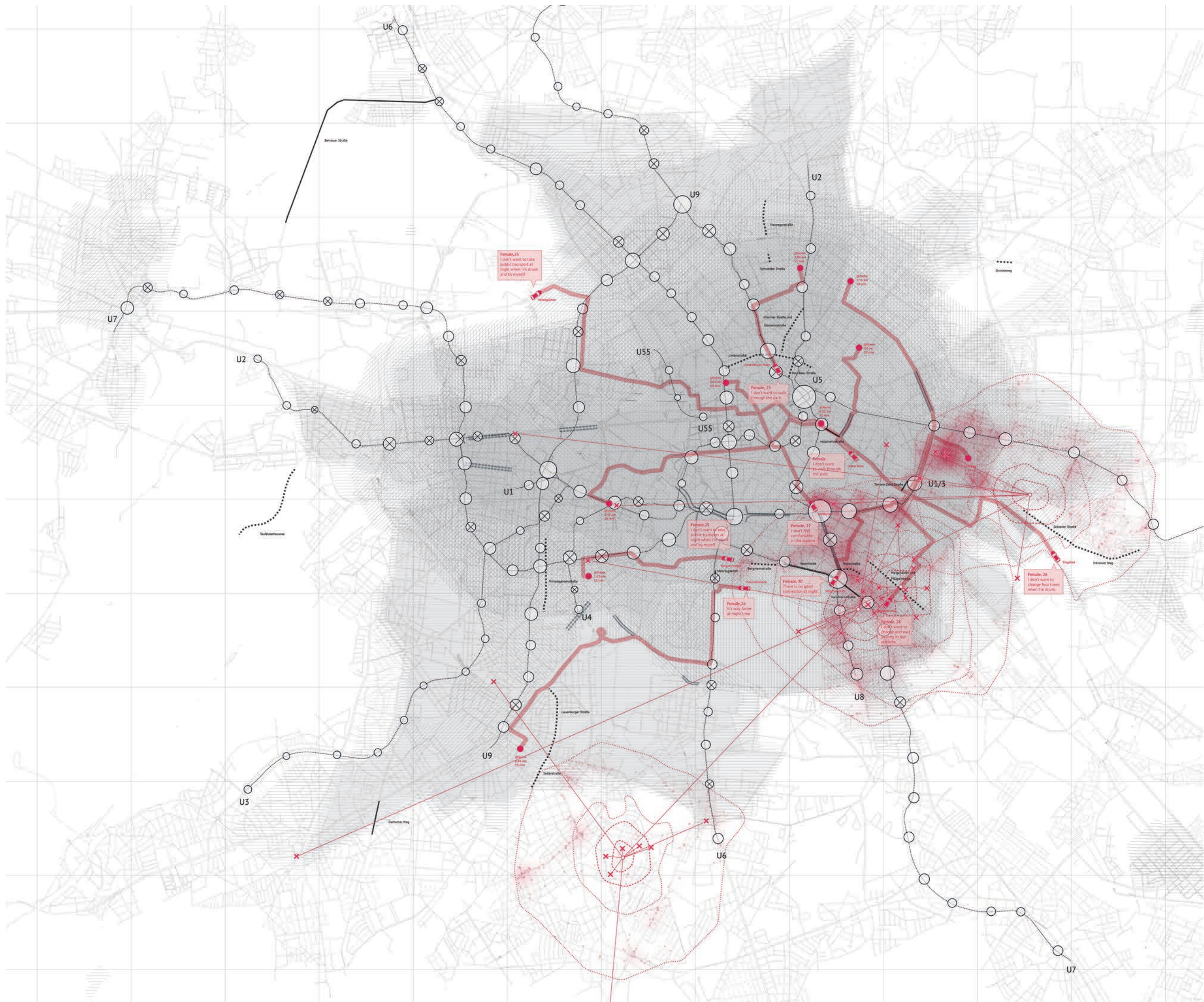


This interviewee moves mostly between home and the university. Other than that, more localised behaviour is present, mostly in a 3 km radius. It is reported that the S-Bahn through Warschauer Str. is cancelled very often and that the bus provided instead is not convenient. For this reason interviewee prefers to take her bike with her to this location.

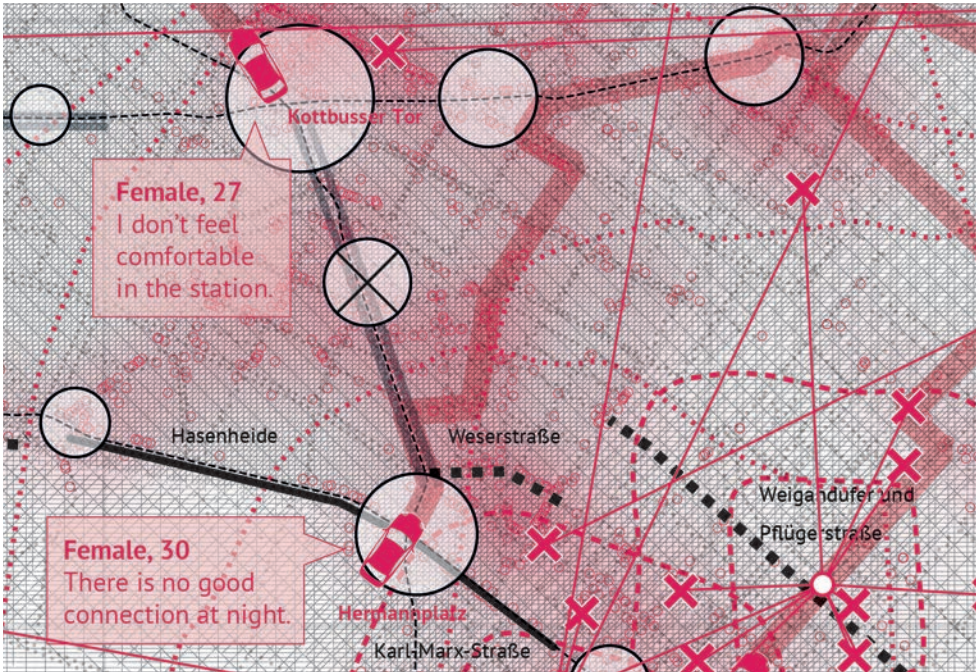
Thematic fem*MAP Mobility M 1: 75.000

*Using all the different topics that were detected during and after the interviews, the thematic fem*MAP for mobility aims to make these topics visible spatially on the city scape of Berlin.*

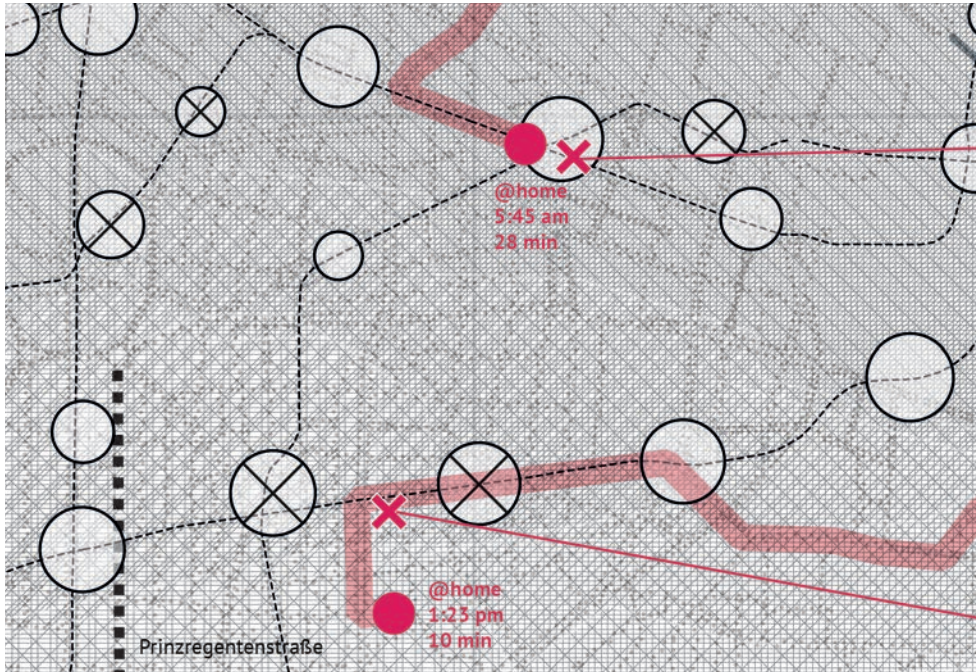
The result is an overlapping network of background information (in black and white) and data directly from the interviews (in red).



Thematic fem*MAP Mobility Zoom-Ins



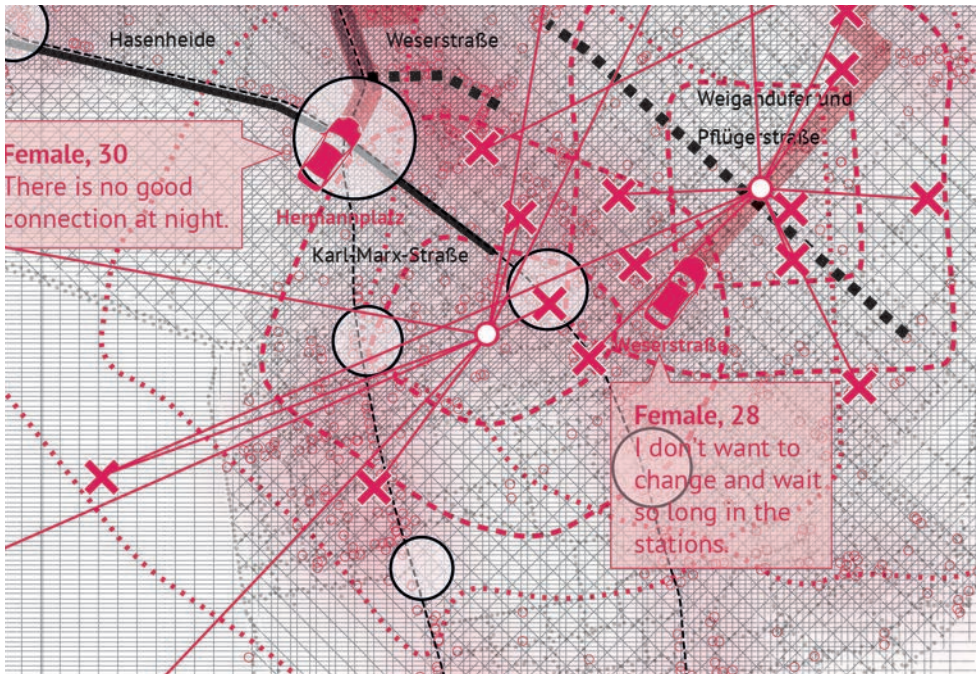
Zoom-in example Uber starting points



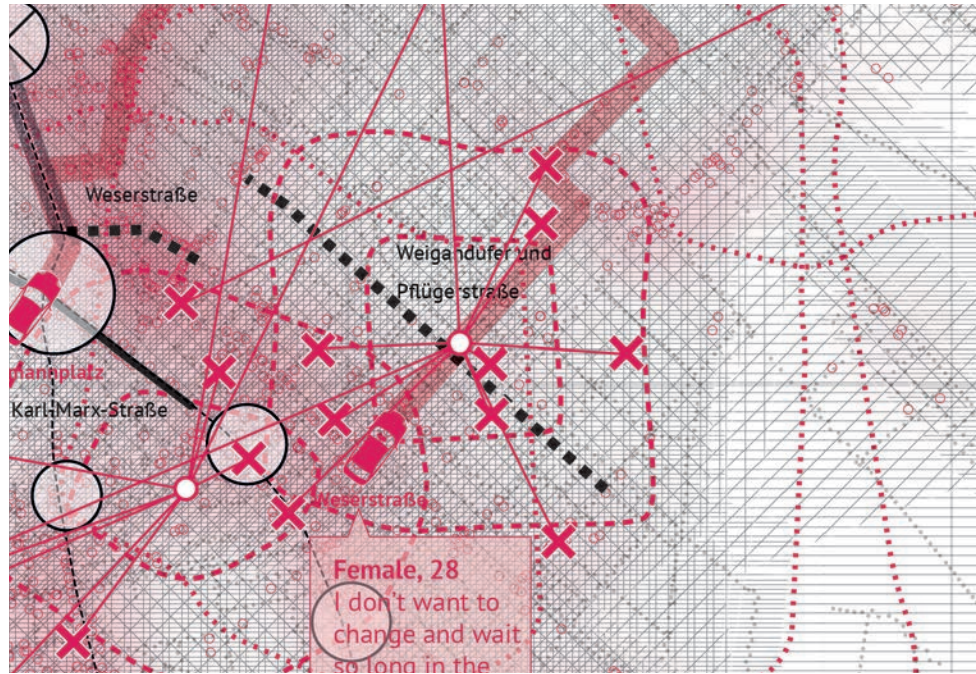
Zoom-in example Uber arrival points



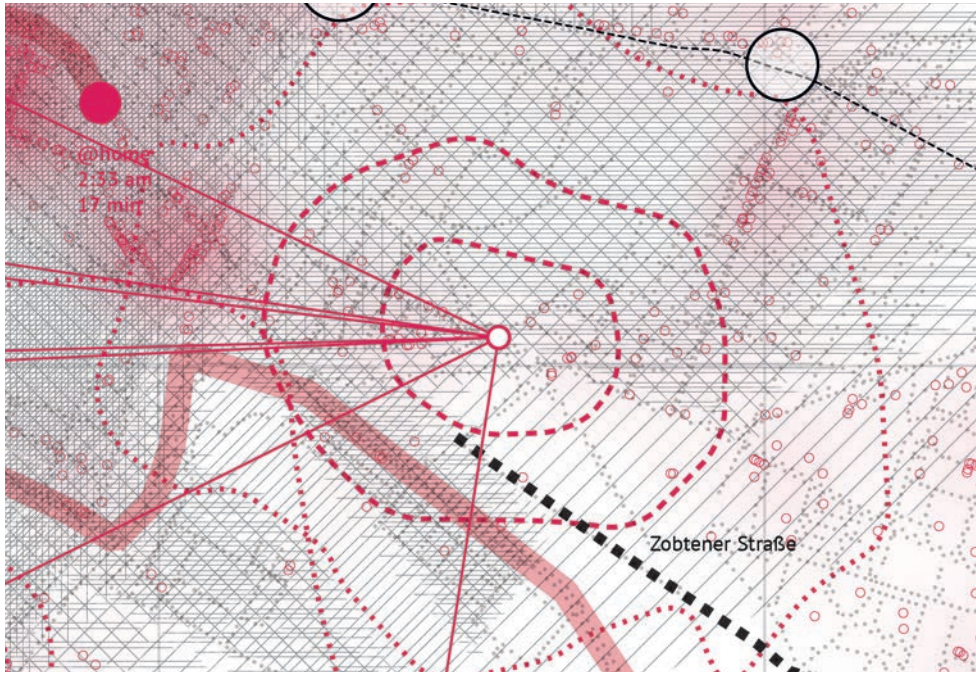
Zoom-in neighbourhood interviewee A



Zoom-in neighbourhood interviewee B



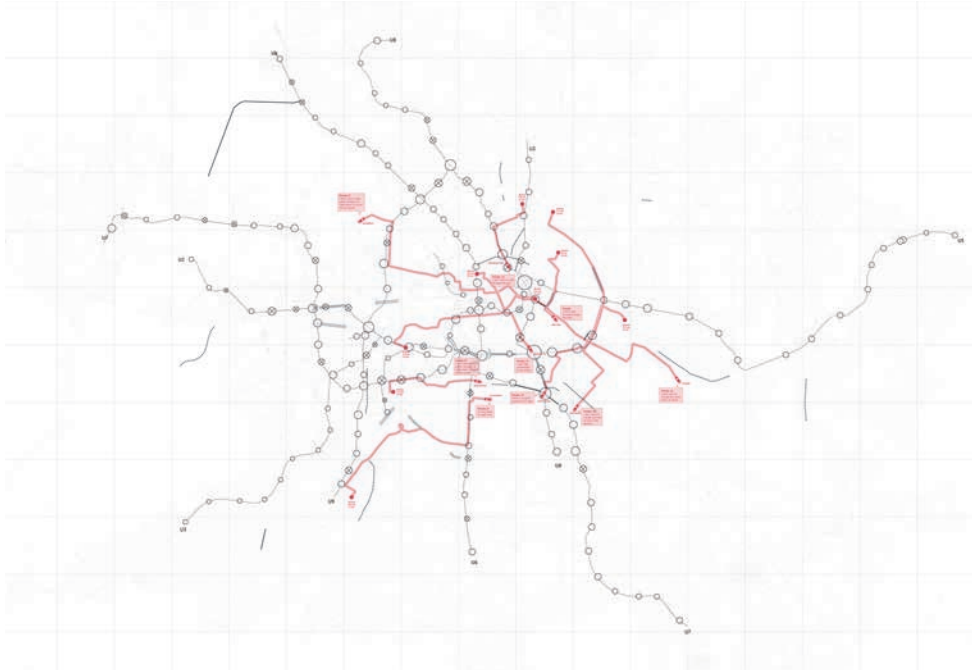
Zoom-in neighbourhood interviewee C



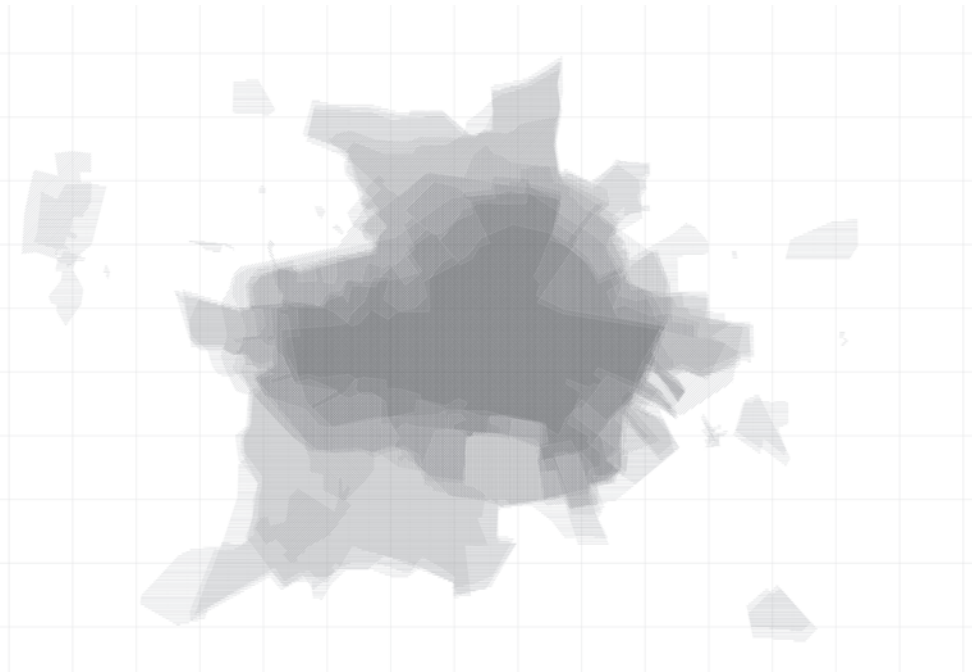
Zoom-in neighbourhood interviewee D

Thematic fem*MAP Mobility Sub- Topics and Legend

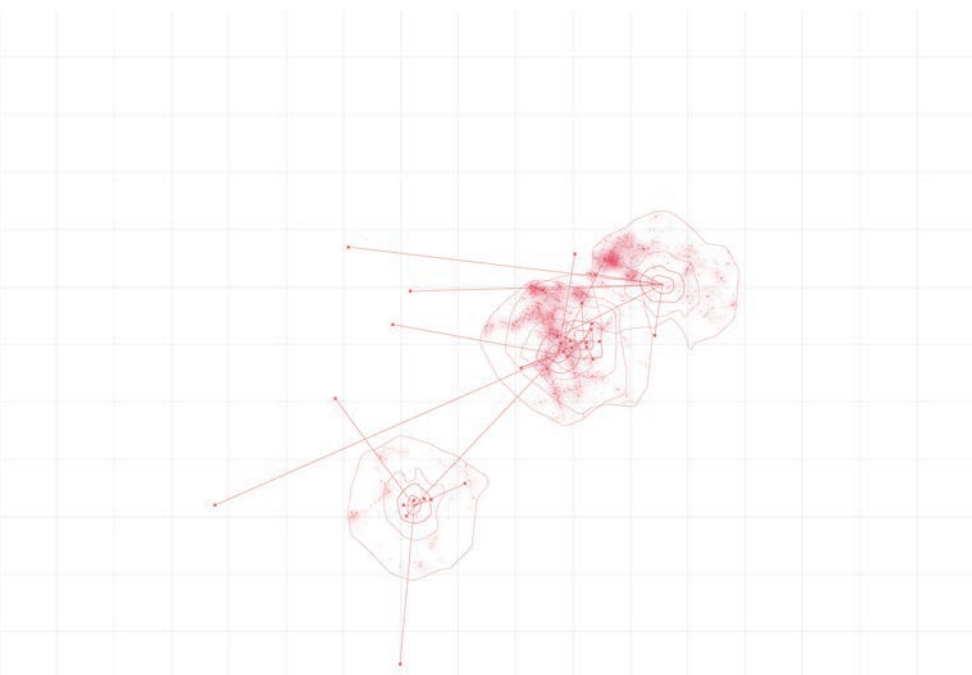
safety
shared mobility
neighbourhood



sub-topic map safety

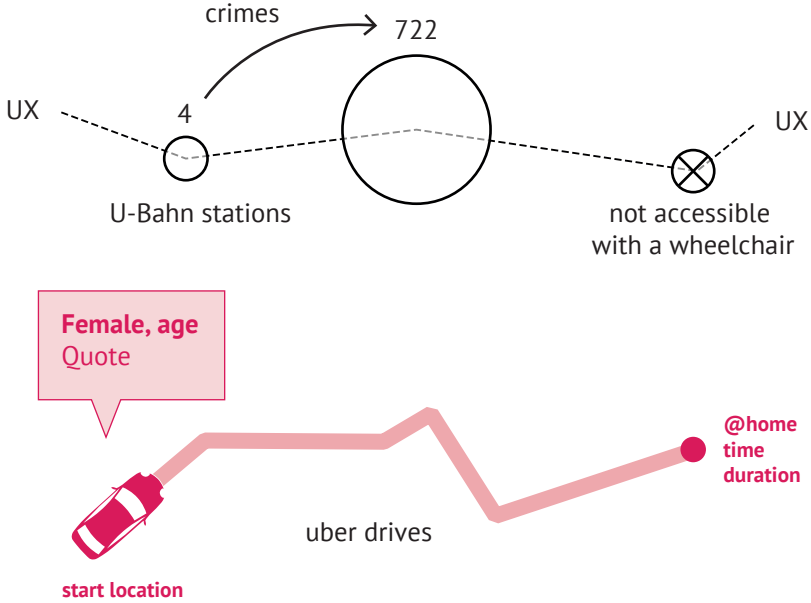
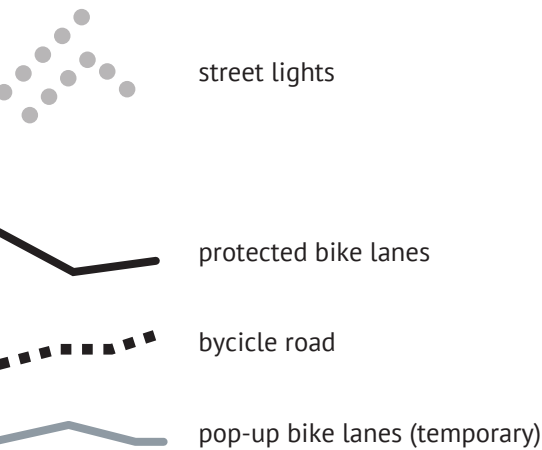


sub-topic map shared mobility

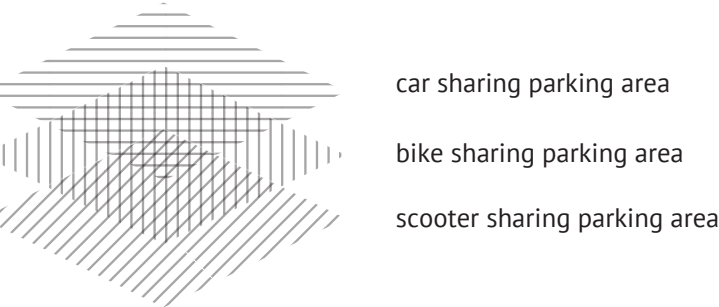


sub-topic map neighbourhood

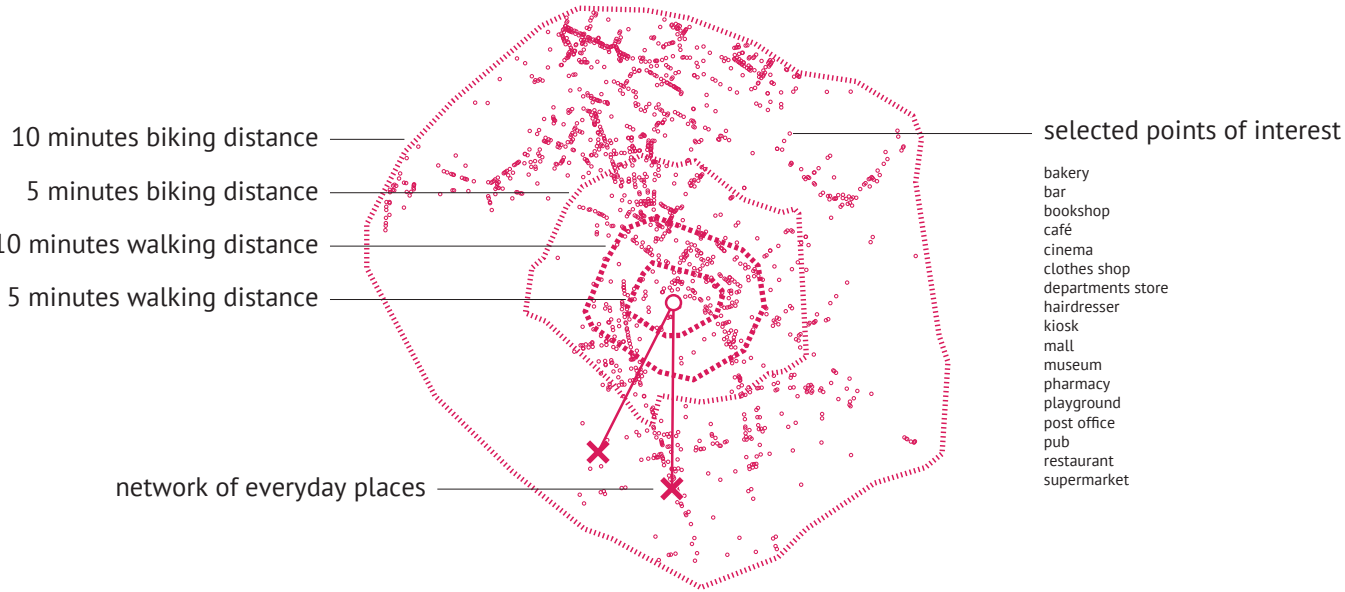
safety



shared mobility

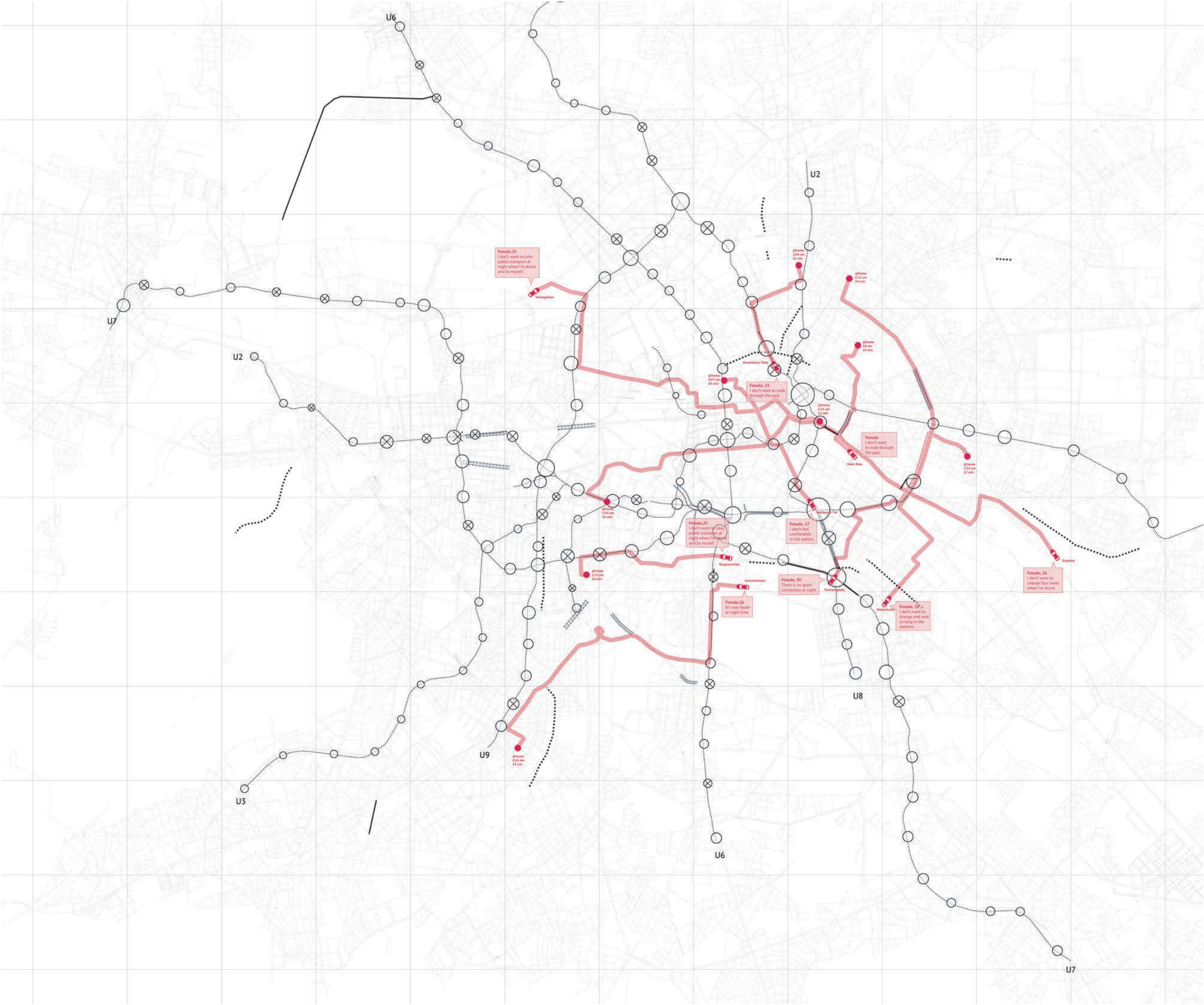


neighborhood



Thematic fem*MAP Mobility Safety

- street lights
- U-Bahn station crime rates
- protected bike lanes
- Uber rides



Thematic fem*MAP Mobility Safety

street lights

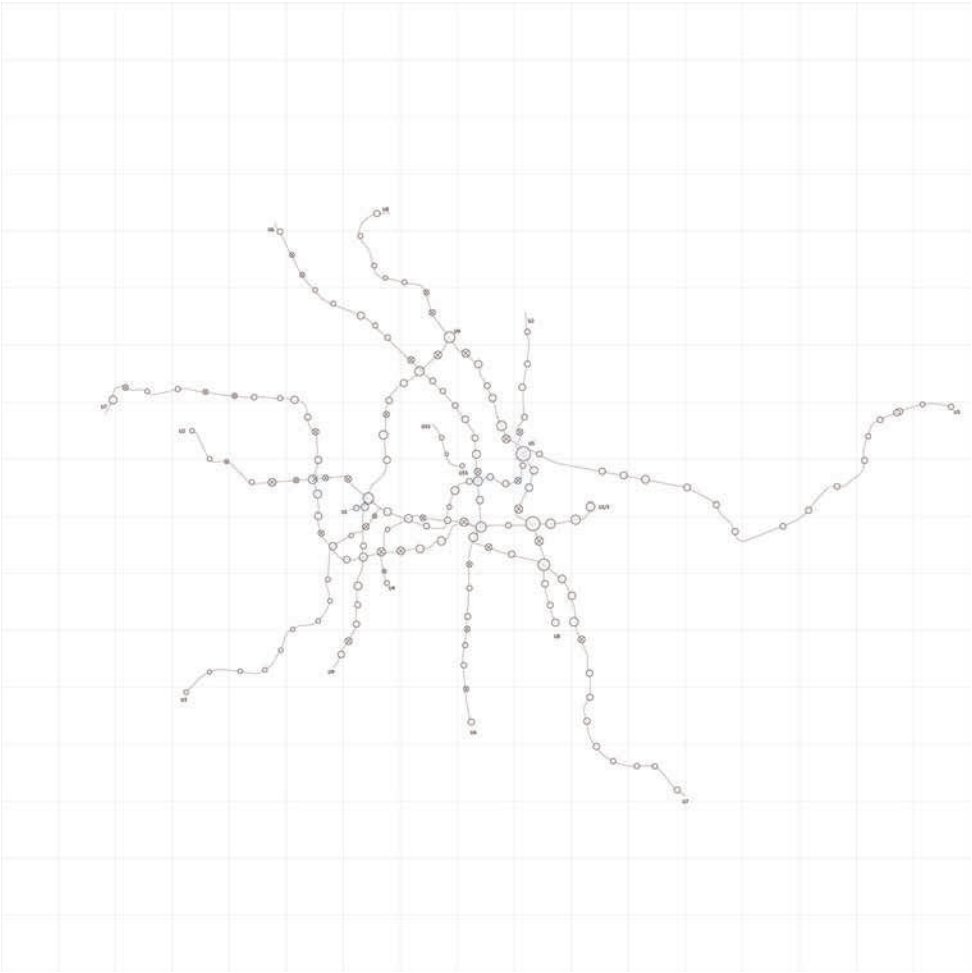
Lack of street lights appears as a problem for women from the interviews. Parks and certain street situations create an uncanny atmosphere that is perceived as unsafe. To show the overall situation, street lights are shown as a background layer of the map.



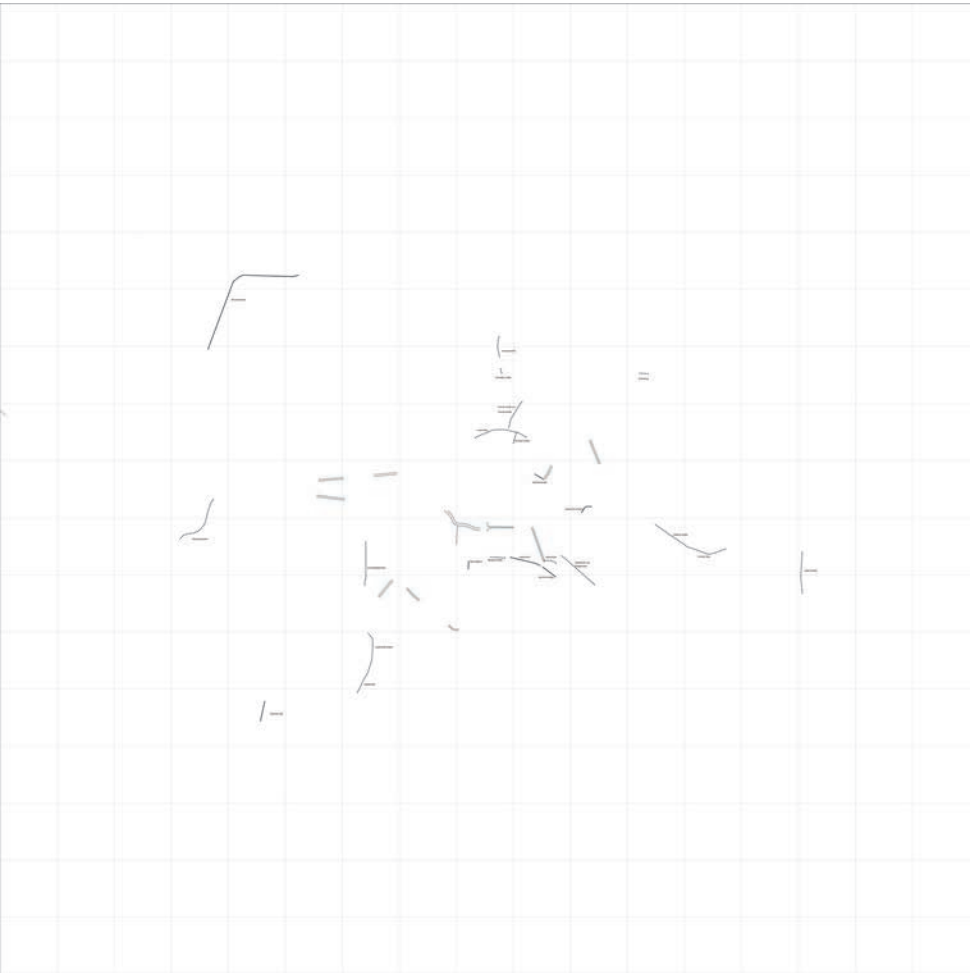
Street lights

U-Bahn station crime rate

There is a collective feeling in some of the stations that makes women uncomfortable. The data found about diverse crime rates happens at U-Bahn stations is striking. The stations with elevated crime statistics are mapped out as a part of the safety topic. Besides this, many stations have lack of elevators. This is also another layer of information on the map.



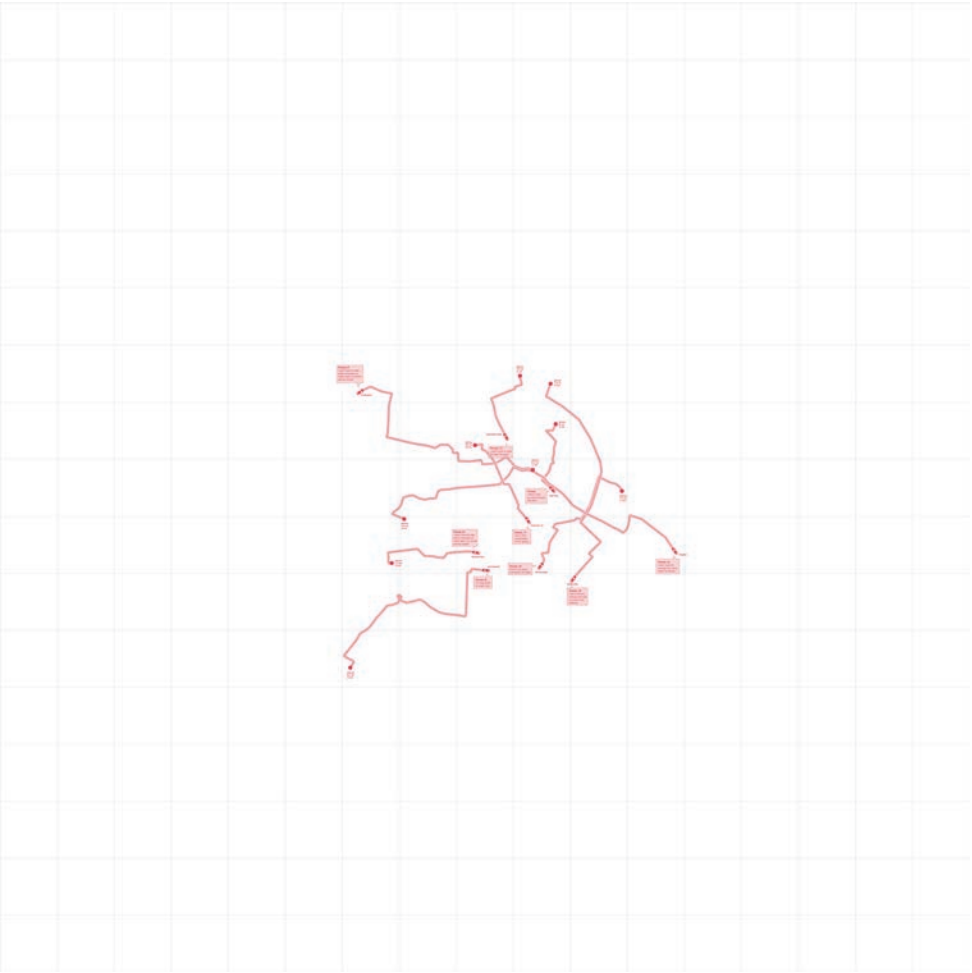
Crime at U-Bahn stations



Protected bike lanes

protected bike lanes

This topic is crucial for women who use a bike in their mobility routines, especially for neighbourhood movements. Protected bike lanes encourage women to bike more often and make it possible to accompany older children. In comparison to the whole bike path network, the protected lanes are just a handful, but most of them have been built in the last years and there are more to come.



Selected Uber rides

Uber rides

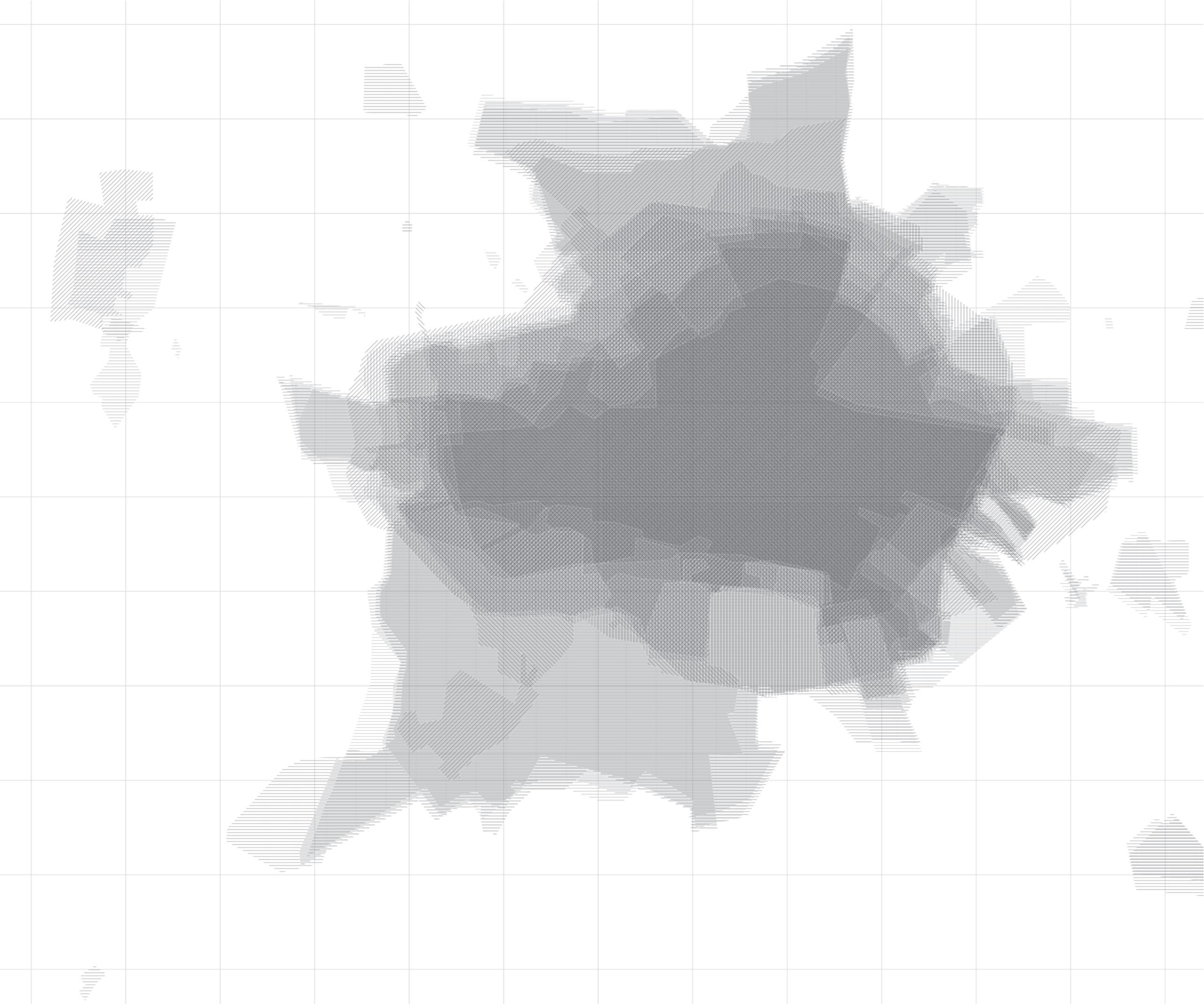
Especially at night women in Berlin often decide to take private over public transportation. Therefore selected Uber routes of interviewed women, the reason why they decided to take an Uber instead of another type of transportation, starting locations and destinations, arrival, and travel times of the rides are shown on the map.

Thematic fem*MAP Mobility Shared Mobility

- car sharing
- bike sharing
- scooter sharing

Each mobility sharing provider has its own rules about where in Berlin you can park. The overlap gives a hint on where in Berlin it is easy and comfortable to use shared mobility as part of your everyday routine.

Sharing platforms are significantly shaping how women move around the city, especially if they do not own a car. The concept helps them to change their transportation modes according to their needs and be more flexible. The main issues are time saving and accessibility to devices.



Thematic
fem*MAP
Mobility
Shared
Mobility



car share now



moped emmy



bike call a bike



scooter lime



car miles



bike mobike



scooter tier



car sixt



bike nextbike



scooter voi



car weshare



scooter jump

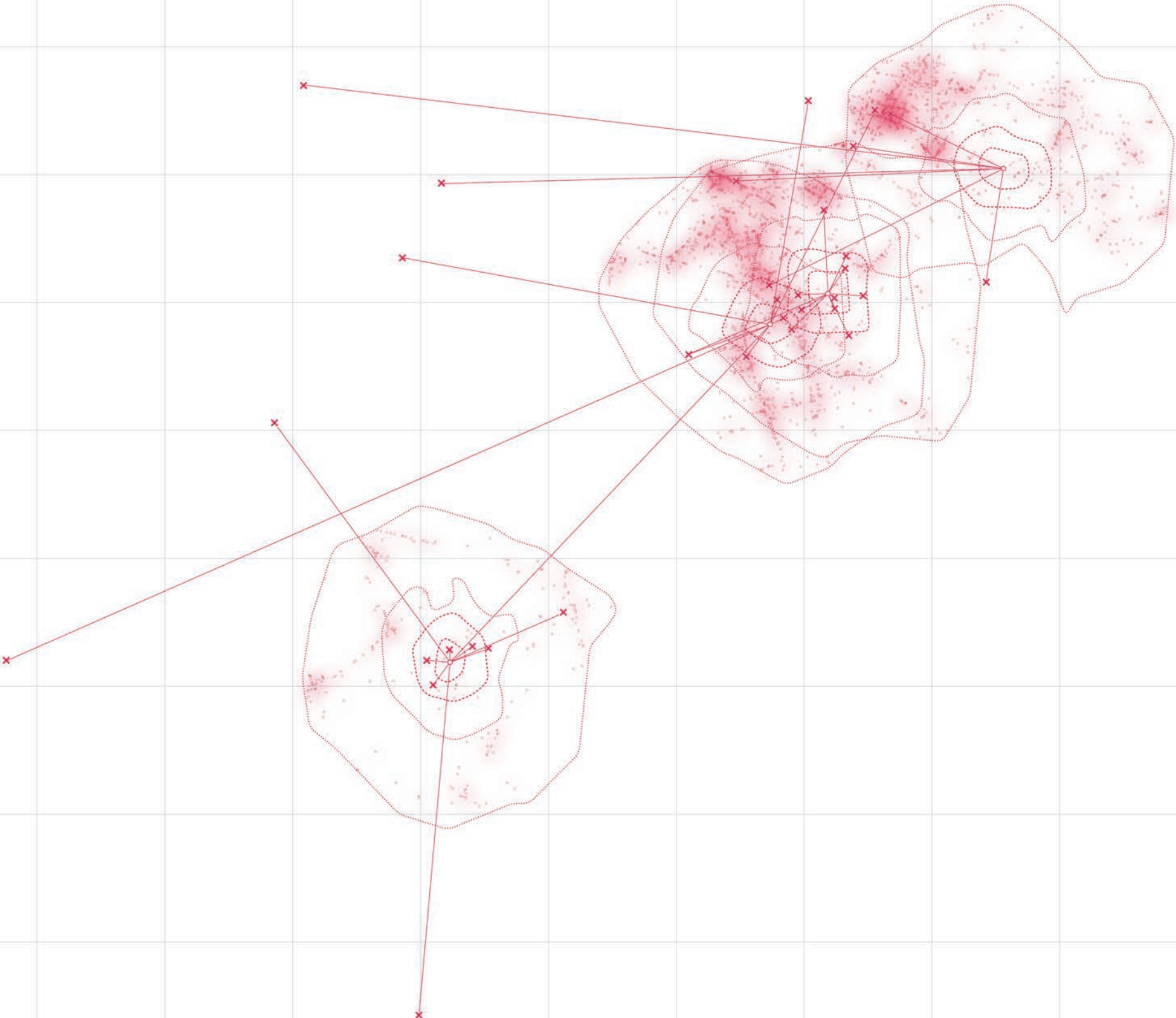


scooter circ

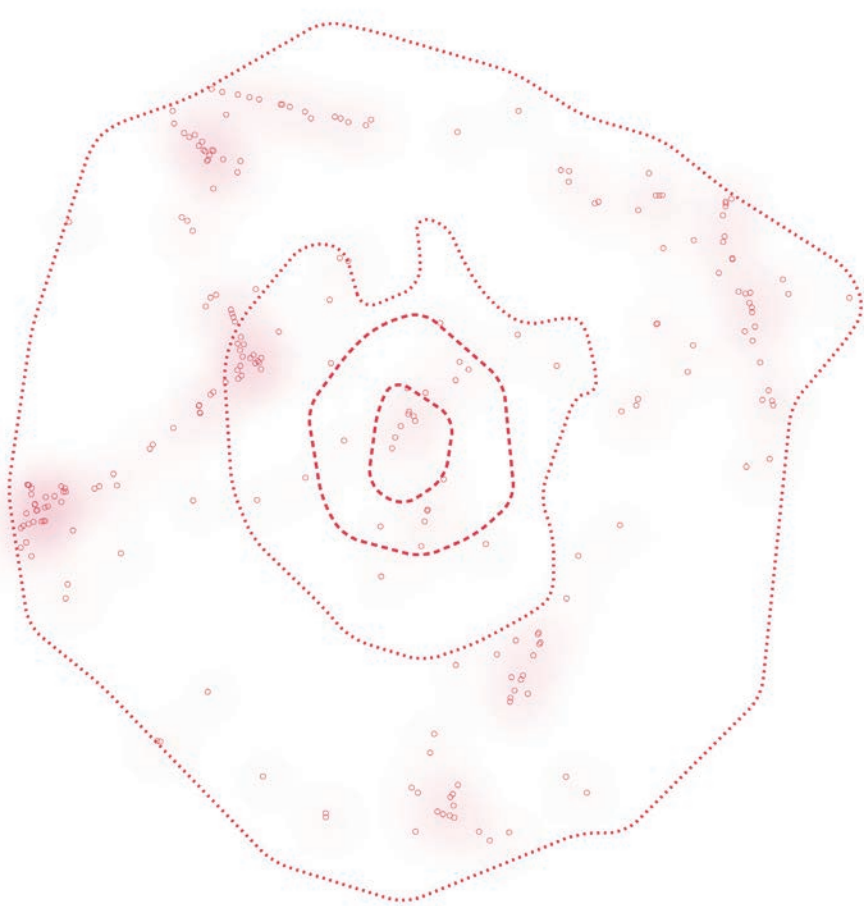
Thematic fem*MAP Mobility Neighbour- hood

5/10 minutes by foot
5/10 minutes by bike
selected points of interest
network of everyday places

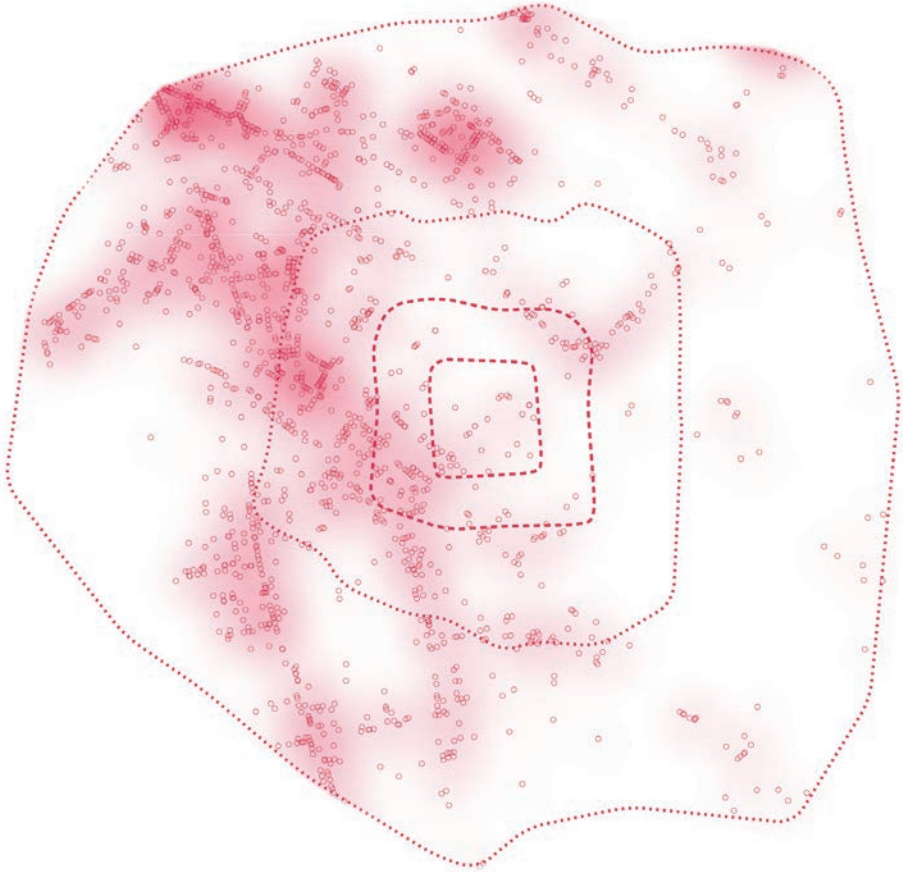
The neighbourhood scale is one of the most important issues for women's mobility in Berlin. Especially if care work is a topic, the short distances to all the everyday places make the daily routines easier and more comfortable. In Berlin, the density of the inner city and its various neighbourhoods comes along with lots of possibilities for all kinds of activities.



Thematic fem*MAP Mobility Neighbour- hood Heat Map



Interview A

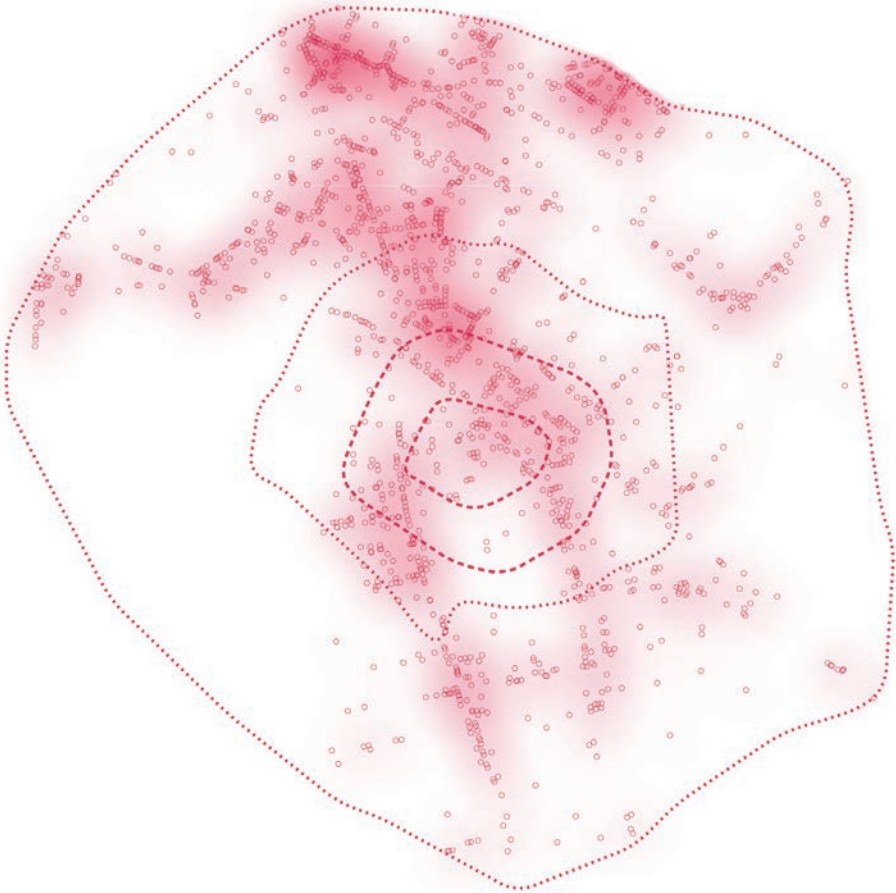


Interview C

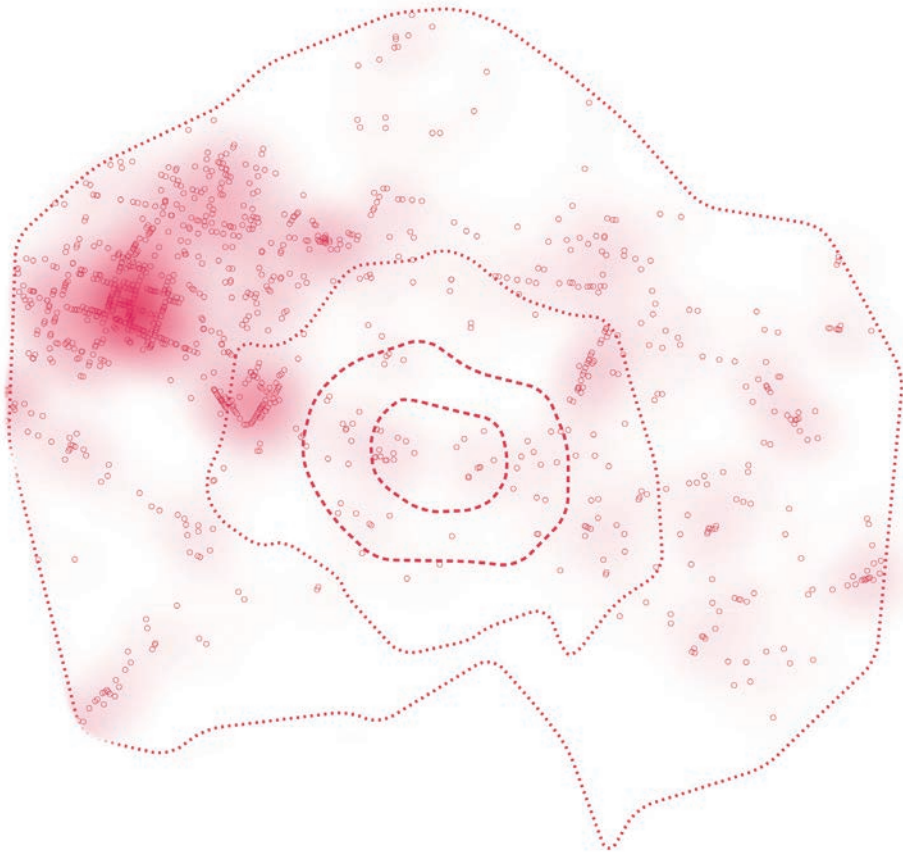
The heat maps of the four neighbourhoods, that are limited by the 10 minute bike radius around the home of the interviewees, show the densities of spaces that are relevant for personal supply and leisure activities.

selected points of interest:

- bakery
- bar
- bookshop
- café
- cinema
- clothes shop
- departments store
- hairdresser
- kiosk
- mall
- museum
- pharmacy
- playground
- post office
- pub
- restaurant
- supermarket



Interview B



Interview D

Moving Through Berlin

fem*MAP puzzle piece

Freedom of movement and mobility are the basis of everyday life in our city, so it is essential to improve the accessibility and extents of the infrastructure in a constant and sensitive way. This also means including the voices of those who are not sufficiently represented in the present.

Even if it is difficult to consider the needs of everyone individually, it is important to meet the demands of all in order to make flexible mobility possible, regardless of life situation, age, gender or disability. The focus of mobility planning should not aim at advancing one type of transportation or improve the interest of one target group, but rather evolve all equally. Even with sensitive guidelines, certain aspects remain discriminatory and create places of exclusion or disadvantage. If at first glance there is not much to improve in Berlin's infrastructure, mobility planning should never stop questioning and improving existing structures.

“It’s getting crowded here” says the wild boar, as the fox joins him in the shelter of the shade, out of breath from his escape out of the brightly lit street lamps.

Fox: “You’re saying something! There are fewer and fewer possibilities for us. Before I could scurry through the darkness of the streets, full of joy and without worry. And now? Look at it!”

He points with his paw at the brightly lit pedestrian and bicycle paths in Tiergarten.

“It is illuminated everywhere - first the side streets and alleys, now the park here looks like a fairground area! Nowhere is safe anymore! You search in vain for a quiet corner. Even at night there so much hustle and bustle.”

Wild boar: “YES! Everything is so tidy and clear, there are no bushes to hide in anymore, no more rubbish on the streets to eat. And the cracks in the sidewalks and cobblestones where all sorts of goodies used to pile up have become these

smooth concrete surfaces. All because some people can’t lift their feet properly or their kids keep tripping.”

Fox: “I kind of miss the cars too. Now I’m constantly almost being hit by all these bicycles. They’re so quiet, you have to be careful as hell. I think it has something to do with those marks on the floor. But I haven’t been able to figure it out yet. I don’t really understand these bollard fences either. I can easily get through the wide gaps. Who’s that fence going to stop? They used to have those high curbs and then I knew when to watch out.”

Wild boar: “What are you, colour-blind? The colours on the ground mark the bike lanes, so there are no real curbs anymore. They’re too lazy to lift their legs and want to make it easier on themselves. And I think the fences are there to keep them out of each other’s way.”

“During the day, when I’m holed up in the last of my hiding places watching people, I see the same faces in the streets, day after day, just wandering around their neighbourhood. It used to

Moving Through Berlin fem*MAP puzzle piece

be a lot more varied. It's totally boring now."

"Funny. They let their kids run around by themselves a lot more now. I would never do that with mine! It's a dangerous place for piglets now."

Fox: "Well, I've always liked to run through traffic lights, now they stay green forever. I think that's great. And the city looks much better with fewer cars. But I have to admit..." – He stops shamefully for a second. – "I would like to find a way to take advantage of all the public transportation on offer. Somehow hide in the public transport vehicles or something, to be able to explore the parks on the other side of the city. At night it is not so busy. But I have the feeling I need one of these smartphones to get in. I probably can't operate it with my paws." – he says downheartedly. "What would you wish for, Boar?"

Wild boar: "I would love it if the ground wasn't so sealed and hard everywhere. Then my hooves wouldn't clatter so much whilst walking down the street.

Before the big protests and all these changes, there were far fewer people walking or riding their bikes. I wish it was like before when I could take my piglets through the pedestrian streets at night. And you Fox?"

Fox: "More bushes and greenery in town to hide in. The city's becoming too unsafe for me. We must do something about it! Or move to Brandenburg, if there is no more room for us here."

Moving Through Berlin

Appendix Methodology

Our own definition and understanding of the term feminism changed in the process of our research. While in the beginning we were focused on studies that separated genders, we learned to question this perspective. In hindsight, the research on mobility from a feminist perspective showed how difficult it is to grasp this term. Through this project we have made the concept of feminism tangible for ourselves.

Overlay mapping

This resulted in a picture of mobility behaviour that was solely based on the parameter of gender the resulting unequal distribution of care work.

Which parameters influence female mobility behaviour in Berlin?

We tried to review our research questions and studies. The differing mobility behaviour of women and men is not gendered but socialized. Therefore we tried to look into the parameters that influence mobility behaviour.

Quantitative and qualitative data

To visualize the complexity of mobility issues relevant to women we collected quantitate and qualitative data from studies and interviews to create layers for our mapping.

Diagram questionnaire

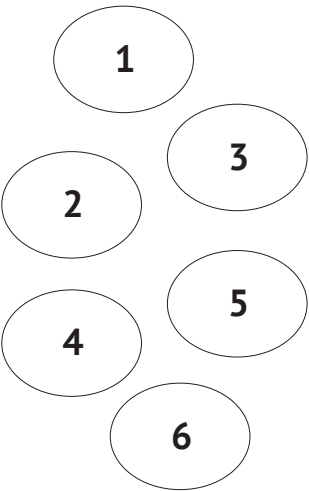
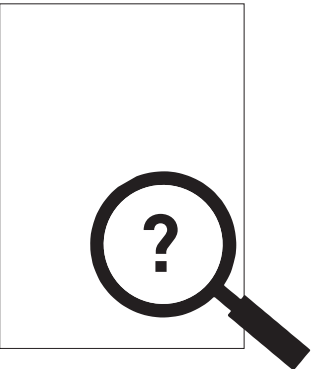
We questioned 20 women about their typical movement patterns. Collected general mobility topics that were mentioned in the interviews and first impressions of what relating topics on a Berlin scale were mentioned.

Quantitative research

Research of existing studies and theories on gender-specific mobility behaviour was the start to our approach of collecting mobility issues relevant to women.

Mobility topics

As mobility is a complex concept with many aspects we found a wide range of relevant topics and researched them in depth.



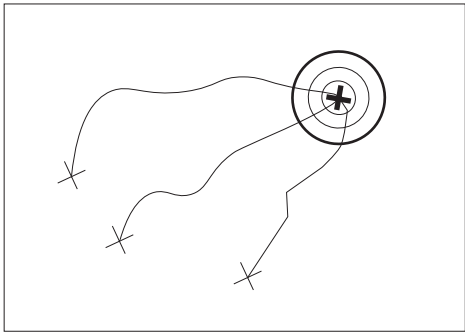
Moving Through Berlin

Appendix Methodology

Type	A	B	C	D	
Work	X		X		
Care		X	X		

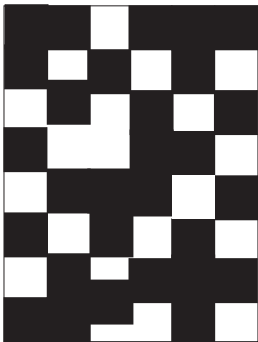
Mobility behaviour types

We identified different mobility behaviour types with the data from the questionnaire diagrams and picked four diverse types to analyse in depth.



Spatial fragments

From the interviews and one of the mental maps we created abstract diagrams to make the interviews visually comparable.

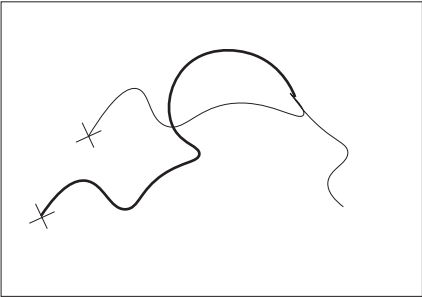
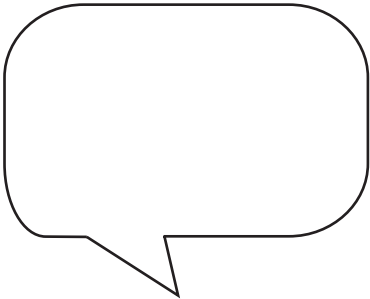


Detecting parameters with qualitative data analysis

With maxdqa we analyzed the interviews and their codesystem with the goal of detecting parameters, influencing factors of the built environment and social aspects that influence mobility behaviour.

4x qualitative interviews + Mental maps

In the qualitative interviews the respondents also created mental maps of their individual mobility patterns.



FEM*Map mobility

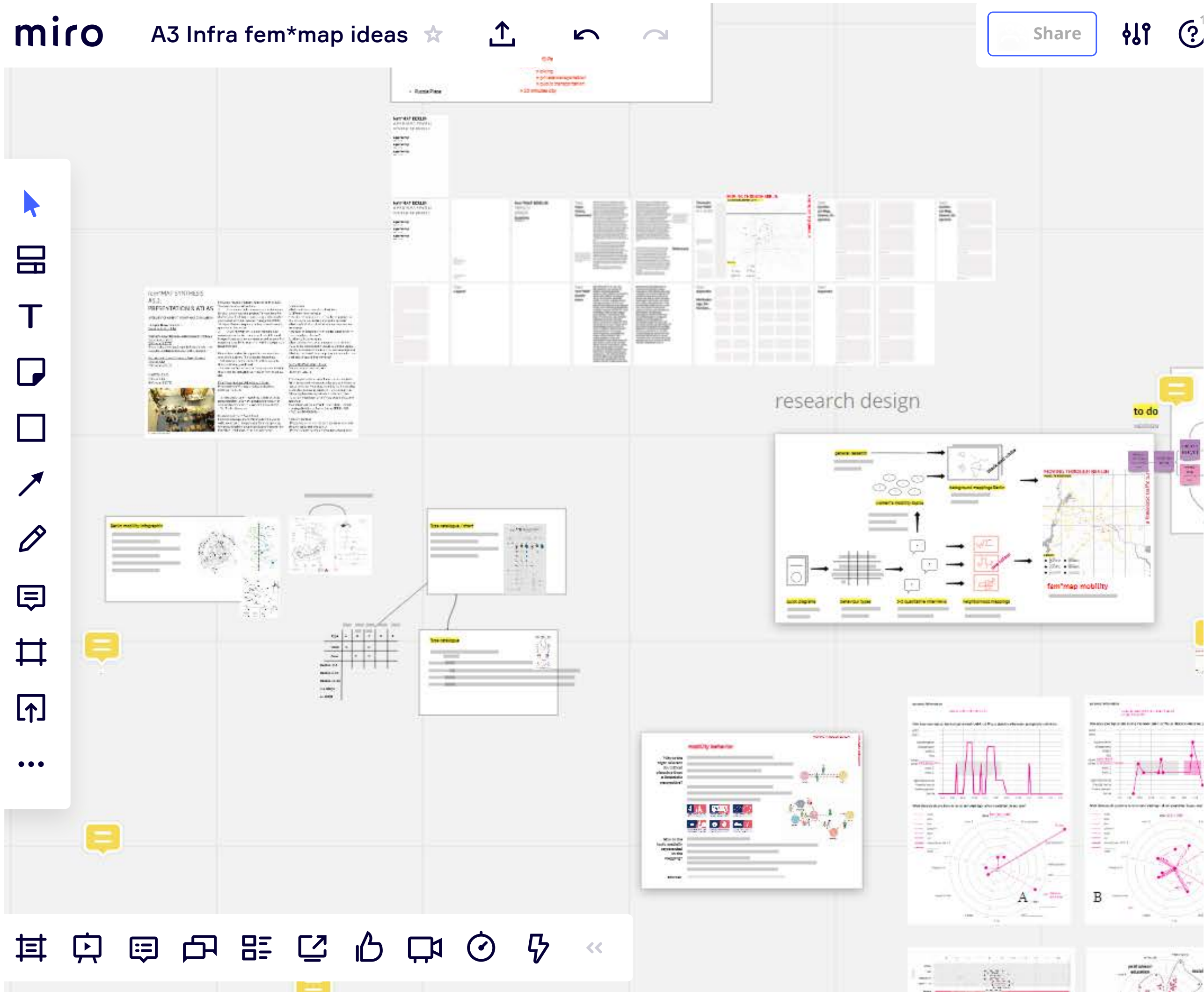
Mapping of collected data in Berlin Fem*Map and explanations of the Zoom Ins with sub topics.

Moving Through Berlin

Appendix Methodology

This research project was realised during a COVID-19 related quarantine. As we could not meet in person, we used Miro as a digital white-board tool for collaboration. While being its own sort of idea map, it also sets a base for collaborative spatial mapping and sketching.

<https://miro.com/>



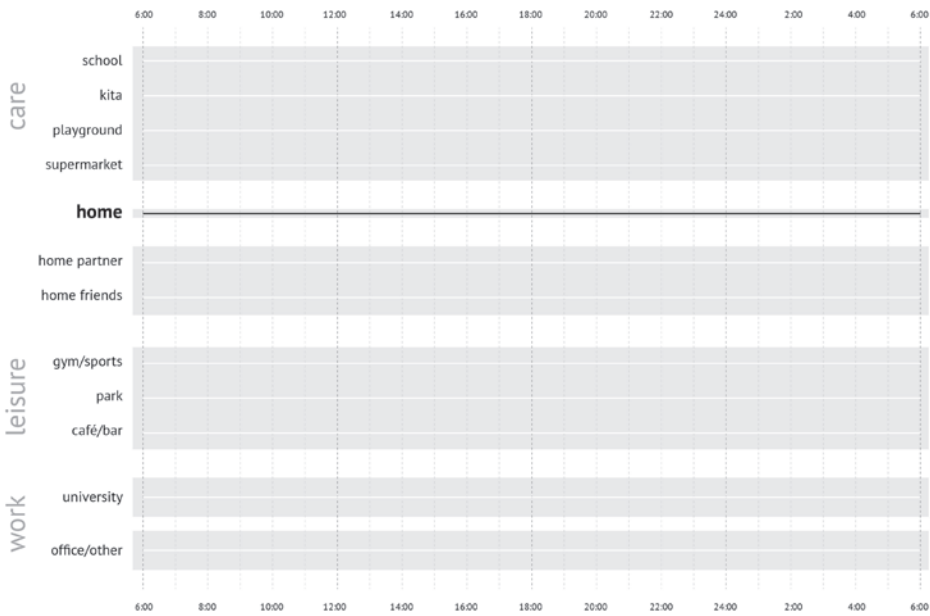
Moving Through Berlin

Appendix Data Collection

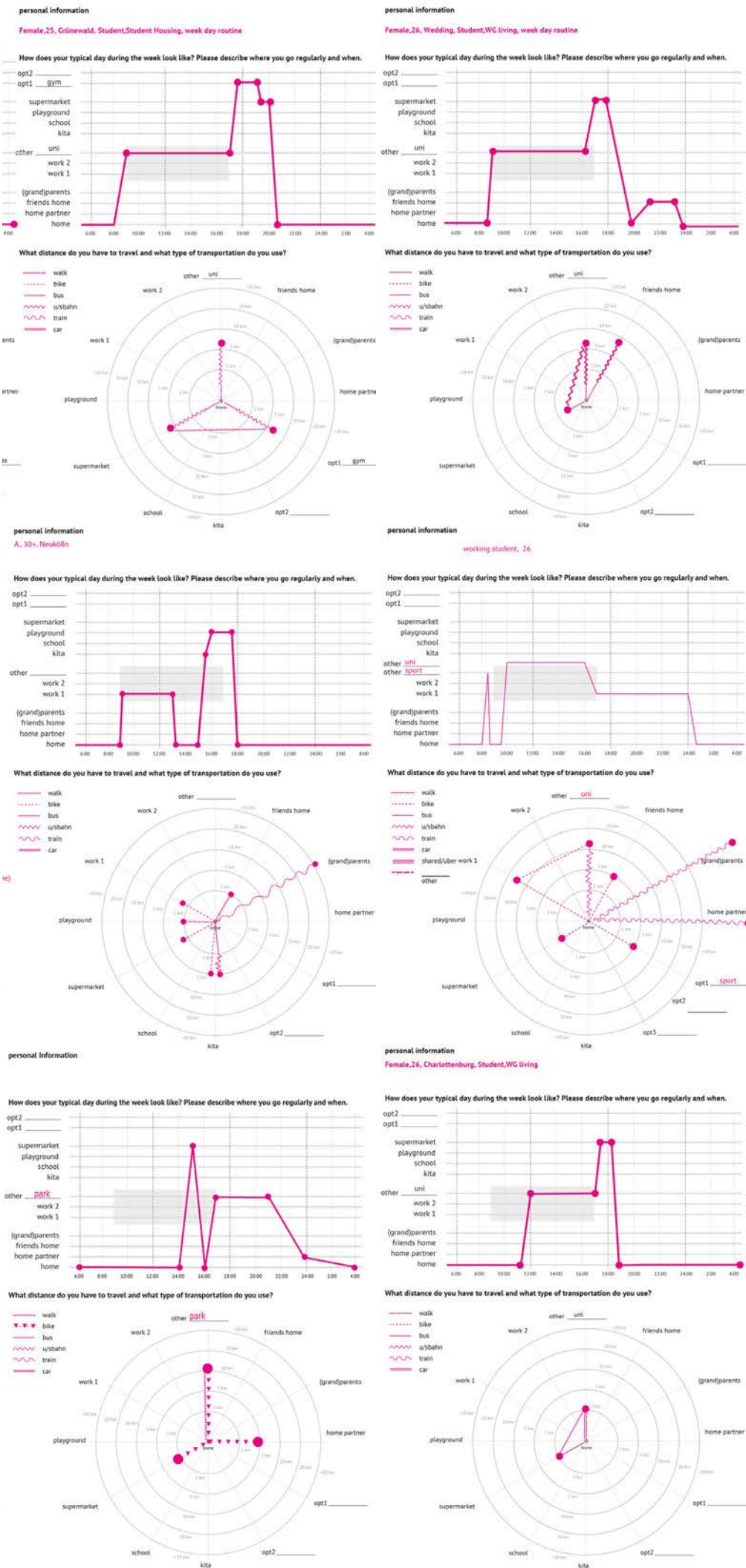
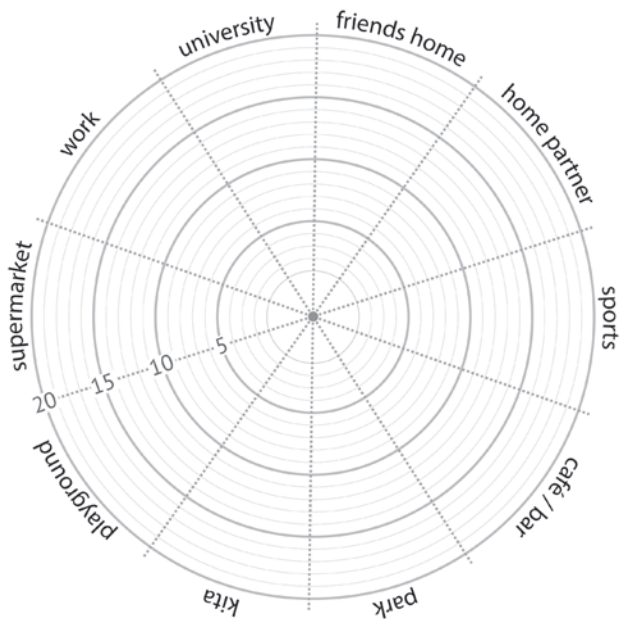
These diagrammatic interviews were used in the process to get a first notion for the research topic. We asked eighteen interview partners to fill out the diagram and tell us about their movement patterns in a very quick way.

Afterwards, we conducted in-depth interviews with four of the participants.

What does your mobility behaviour pattern look like?



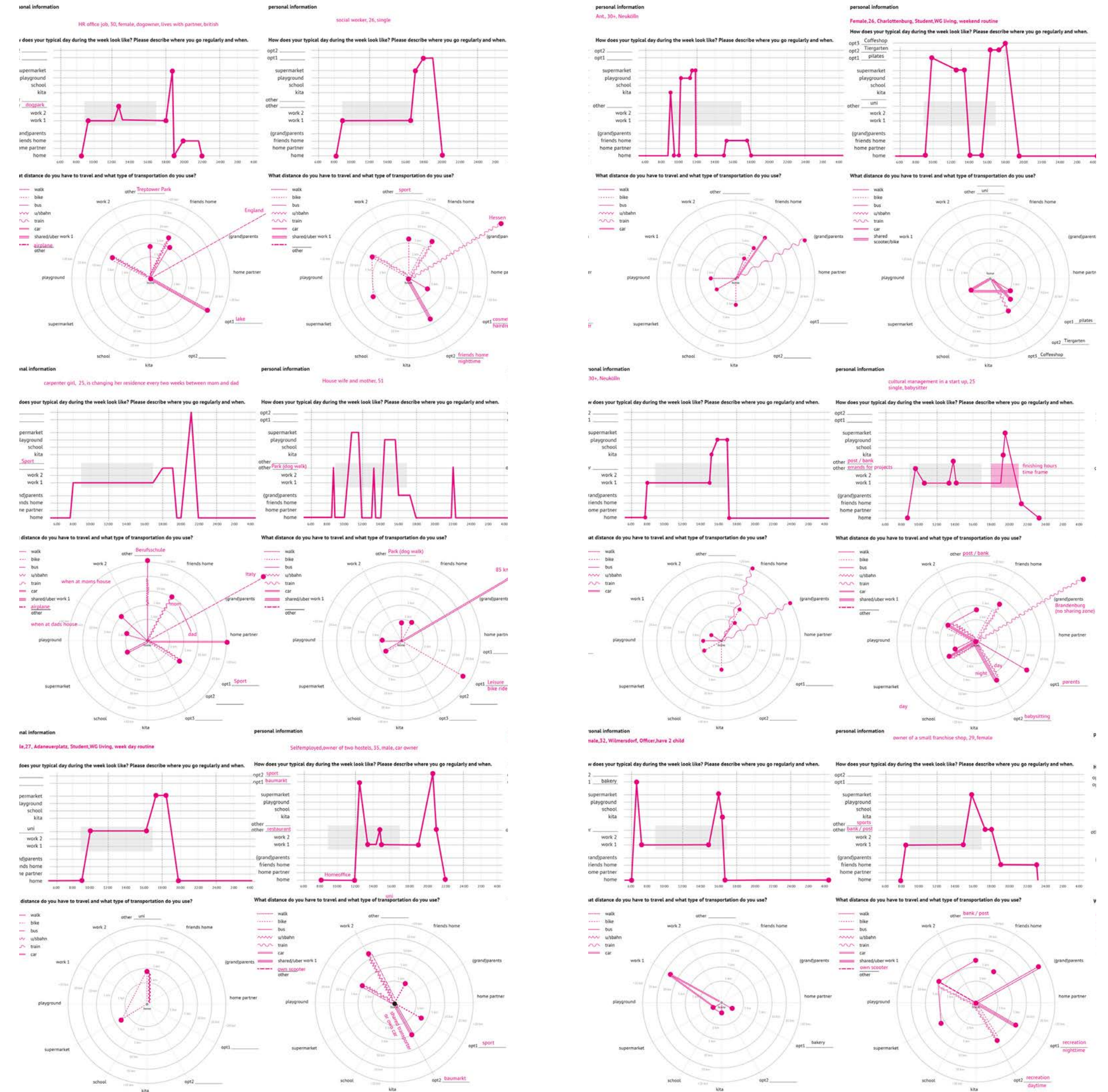
How far away are your everyday destinations and how do you get there?



Filled diagrammatic interviews

Moving Through Berlin

Appendix Data Collection



Moving Through Berlin

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In-depth interviews with four women

Short interviews with eighteen women

Used Software

Adobe Indesign, Illustrator and Photoshop (<https://www.adobe.com/>)

MaxQDA (<https://www.maxqda.de/>)

Miro (<https://miro.com/>)

Trint (<https://trint.com/>)

QGIS (<https://www.qgis.org>)

CUD WORK REPORTS N° 1

FEM*MAP BERLIN - FEMINIST SPATIAL SYSTEMS FOR A NON-SEXIST CITY

Chair for Urban Design and Urbanisation

TU Berlin 2021

www.cud.tu-berlin.de

Concept and Studio Organization

Research and Mapping Seminar

Julia Köpper (WM), Martha Wegewitz (LA), Dagmar Pelger (Guest Lecturer), Prof. Jörg Stollmann

In cooperation with Katharina Koch and Sylvia Sadzinski, alpha nova & galerie futura

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