



WHERE AM I GOING? HOW AM I GOING? WAYFINDING THROUGH PUBLIC TRANSIT

Anthony Ferri - mobil.LAB Final Event, September 2020

WHAT'S YOUR NAVIGATION STORY?

1. How do you prepare?
2. What do you pay attention to?
3. What's your preferred transit mode?
4. Why is it a preference?



WHAT'S YOUR NAVIGATION STORY?

There are similarities in how individuals navigate through public transit...

They use:

1. Signage
2. Memory
3. Sounds
4. Smartphone
5. (and many more!)



INTRODUCTION TO MY RESEARCH

- Investigating how individuals navigate transit systems;
- Investigating how individuals interact with the public transit environment;
- Investigating what emotional and/or sensorial responses they have, why, and how they manage them during navigation.



INTRODUCTION TO MY RESEARCH

- Emotional and sensorial elements are not always considered in wayfinding and station design and does not always reflect changing navigational behaviours.



RESEARCH AIM

Better understand how individuals interact with transit wayfinding and understand why they make certain navigational decisions when in transit...

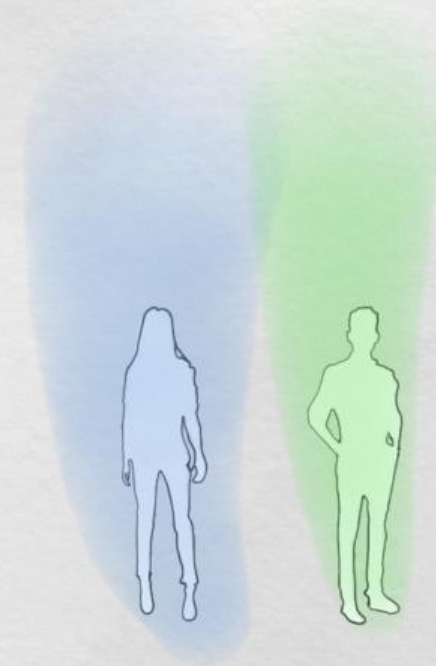
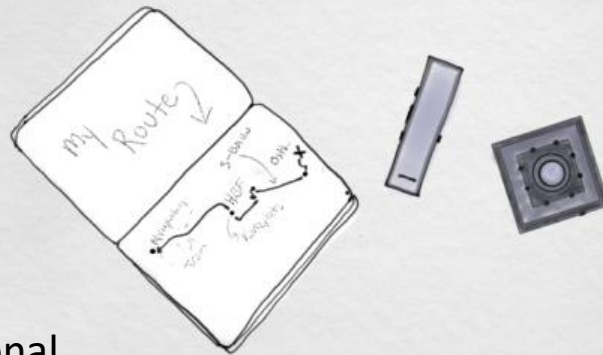
How did I approach this?

DESTINATION-TASK INVESTIGATIONS

What is a Destination-Task Investigation (DTI)?

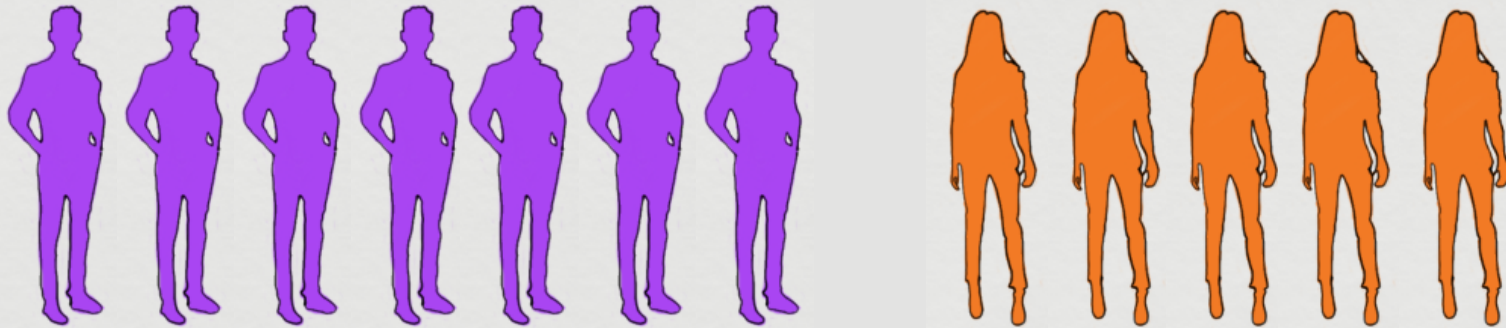
Consists of a route with an origin and destination, a participant, a recording device, a micro-camera, and a journal to mark down the chosen route (and of course, myself to do the observing).

During the DTI, I would shadow the participant, asking them questions regarding their navigational decisions. This formulated the basis of my data.



PARTICIPANTS

12 participants volunteered their time for the DTI.



- Between 25 and 45
- Munich Residents
- Familiar with transit system



THE ROUTE

THE ROUTE

All participants were given the destinations the night before the investigation.

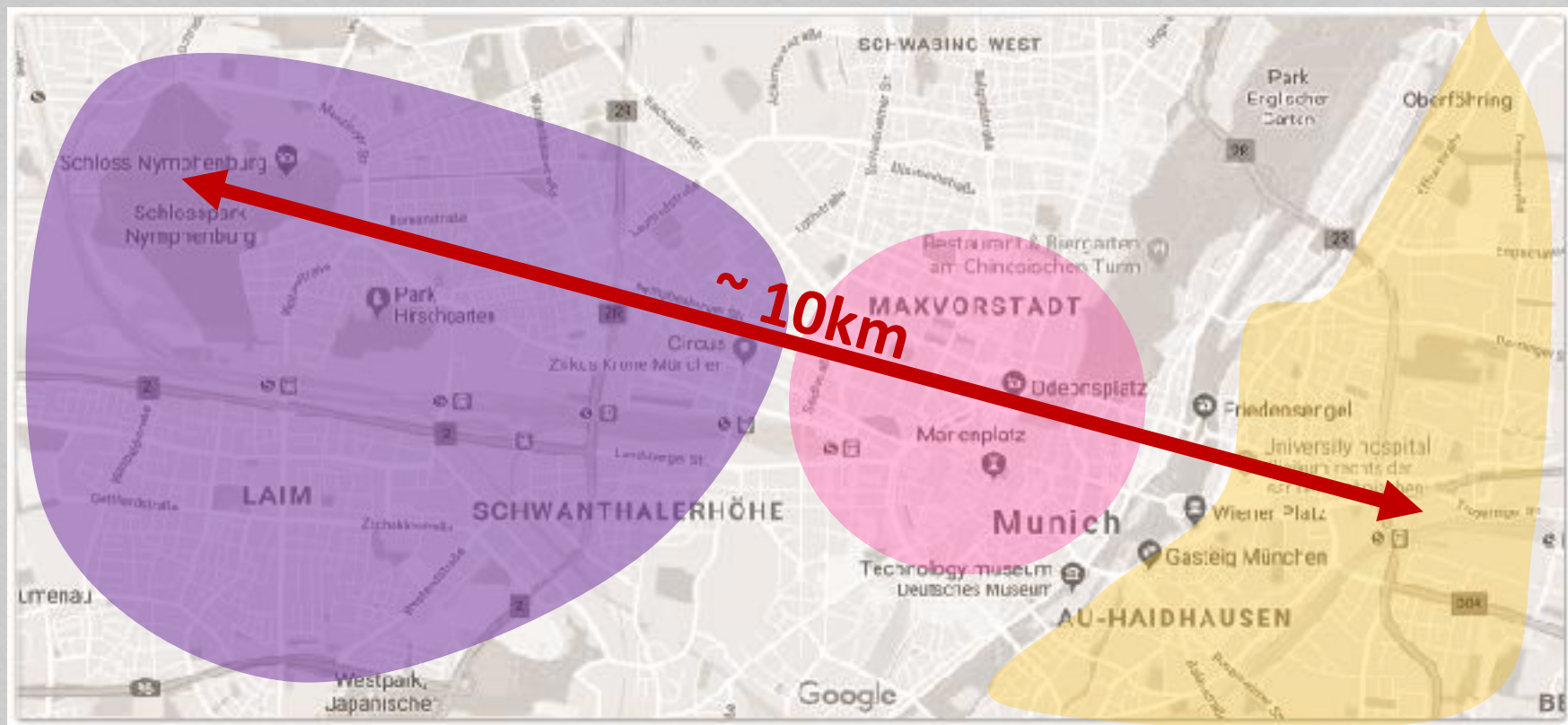
1. Café ZimtZicker (start)
2. Karlsplatz/Stachus (mid-point)
3. Schloß Nymphenburg (end)

MODE OPTIONS DURING THE DTI

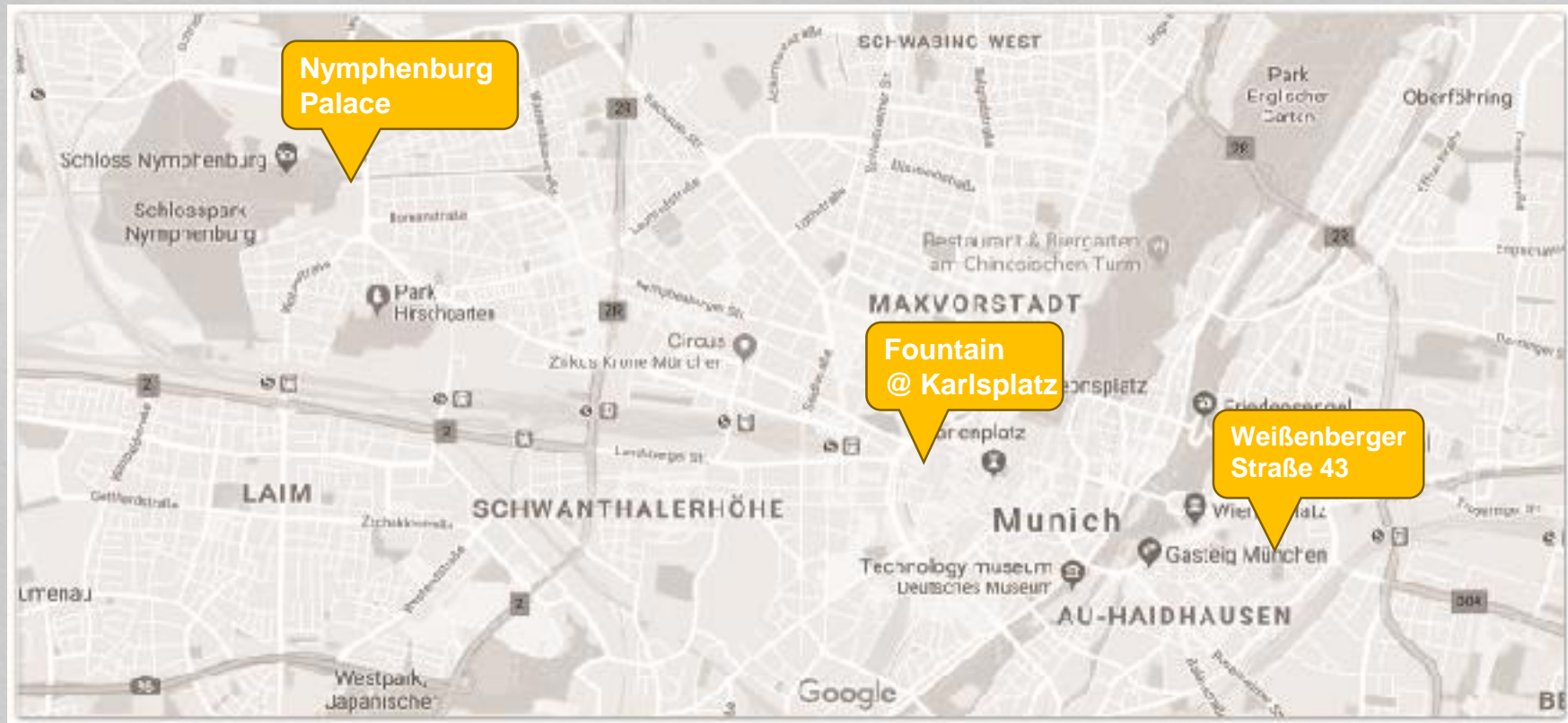
All participants were requested to take public transit on their journey. The options included:



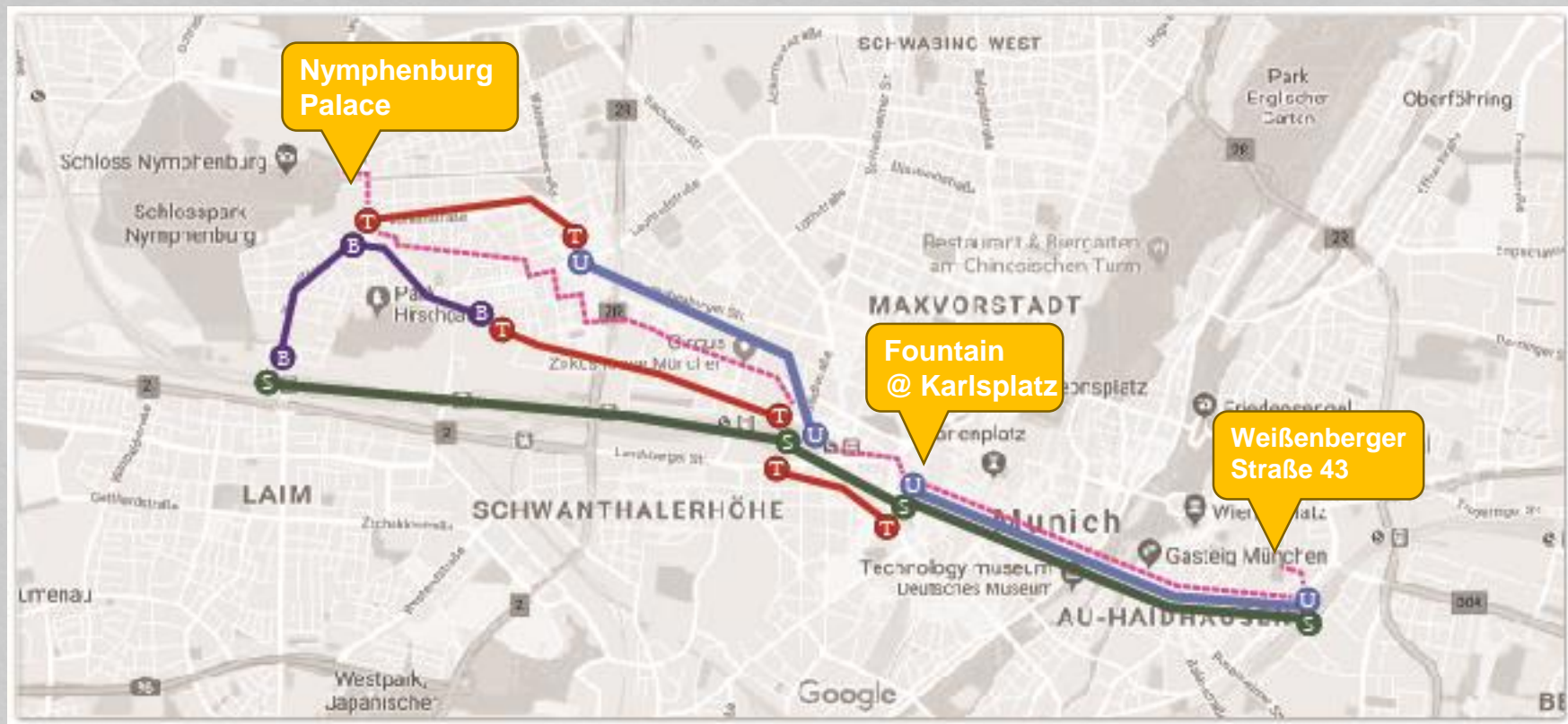
THE ROUTE



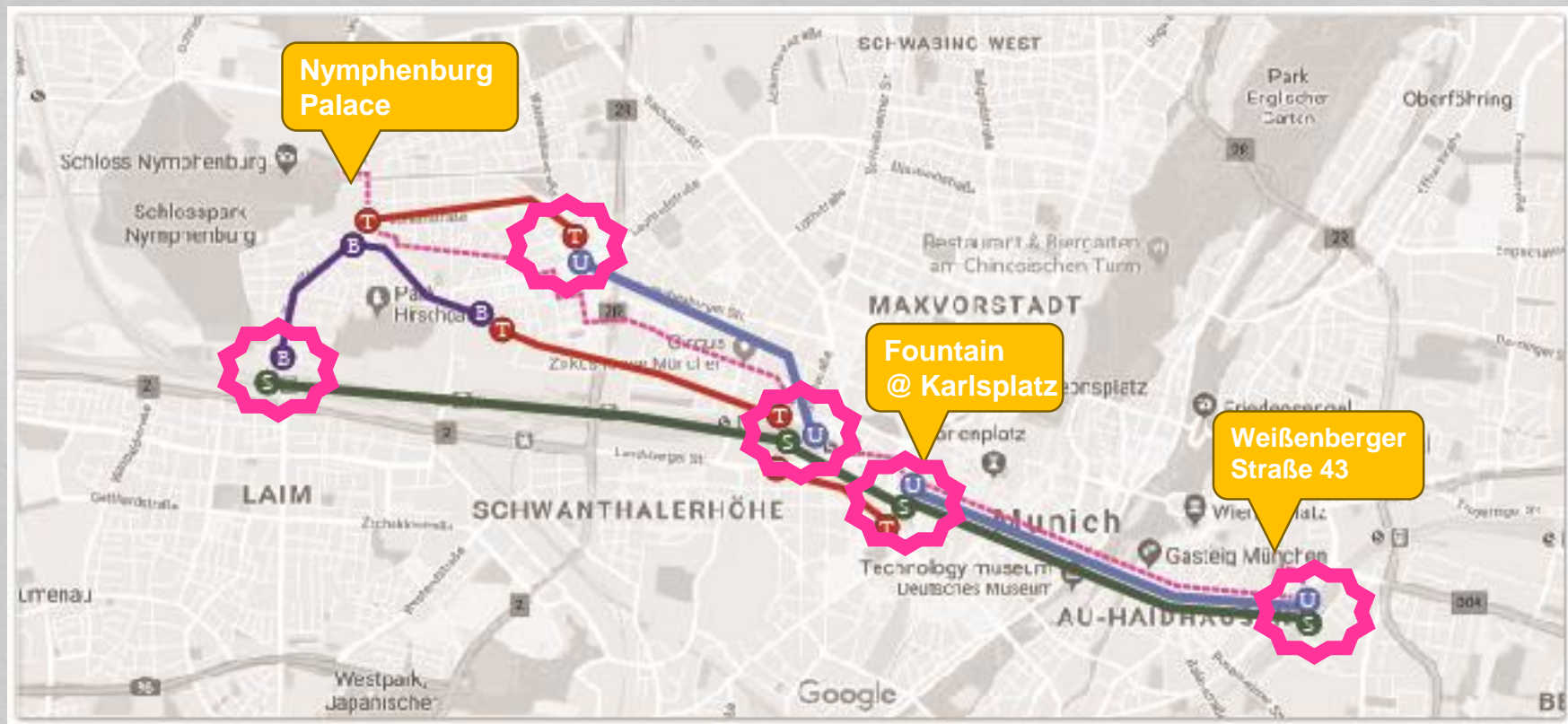
THE ROUTE



THE ROUTE



THE ROUTE



THE ROUTE

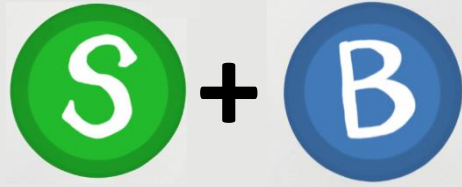
All participants started at the same intersection (a Café called ZimtZicker).

From there, participants made their way to Ostbahnhof and had the option to take either the S-Bahn or U-Bahn to Karlsplatz/Stachus and, upon arrival, head to the fountain square...



THE ROUTE












































After Karlsplatz/Stachus, participants made their way to Schloss Nymphenburg (in the west).



OR



ROUTE BREAKDOWN PER PARTICIPANT

Participant	Mode Choice 1	Mode Choice 2	Participant	Mode Choice 1	Mode Choice 2
		 			  
		 			
		 			 
		 			
					
					
					
					
					

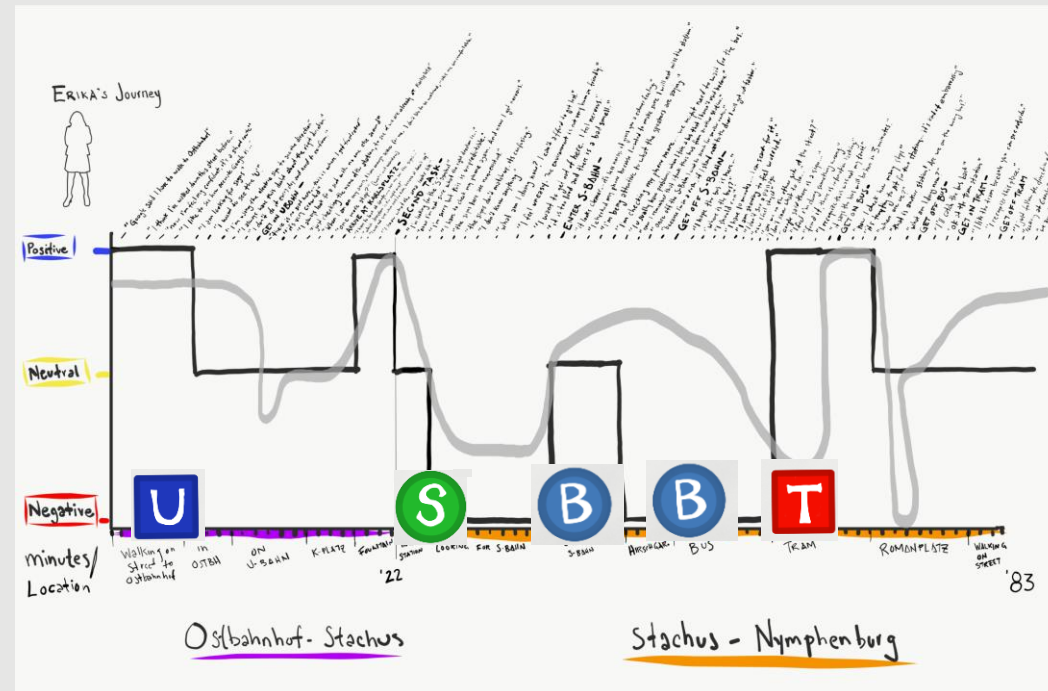
UNDERSTANDING AN EXPERIENCE

Marking each individual's journey down in chart format to help better understand where positive and negative moments occurred...

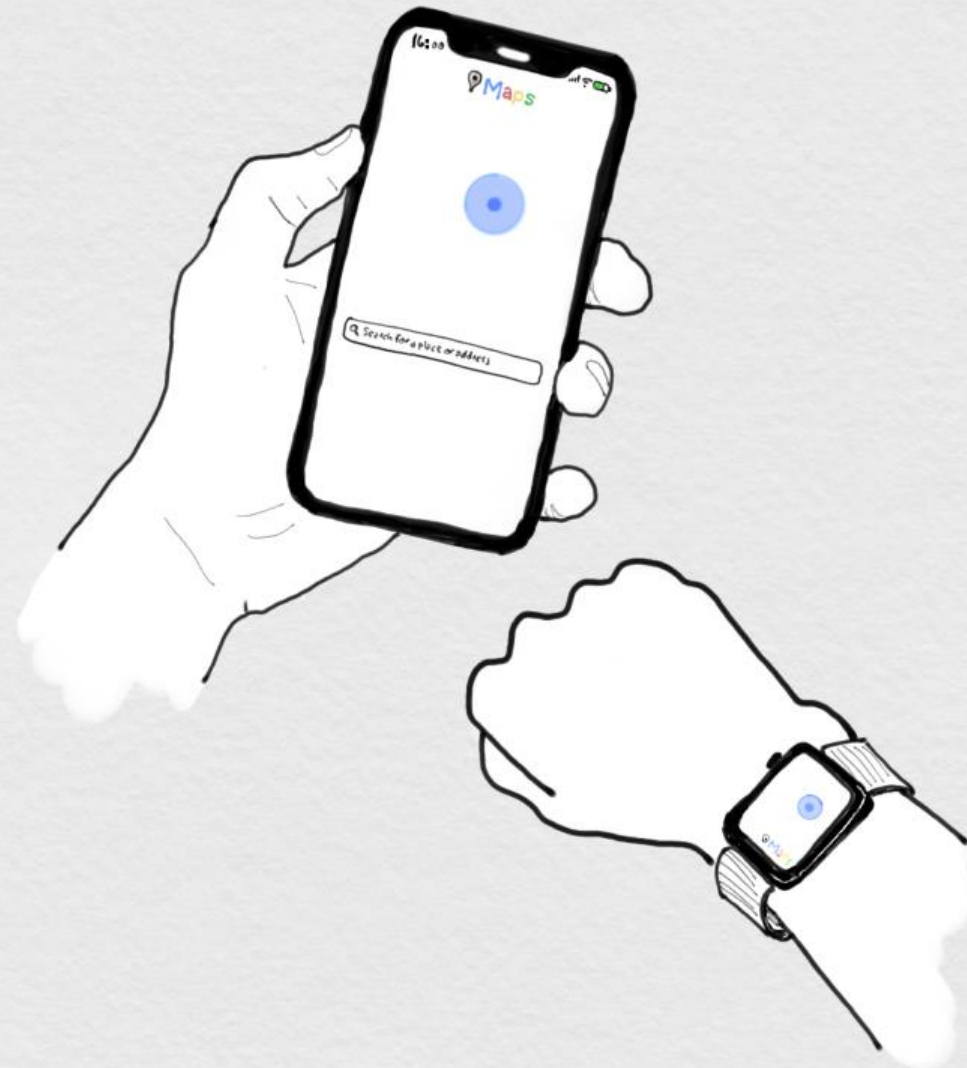


CHARTING PARTICIPANT'S EMOTIONS

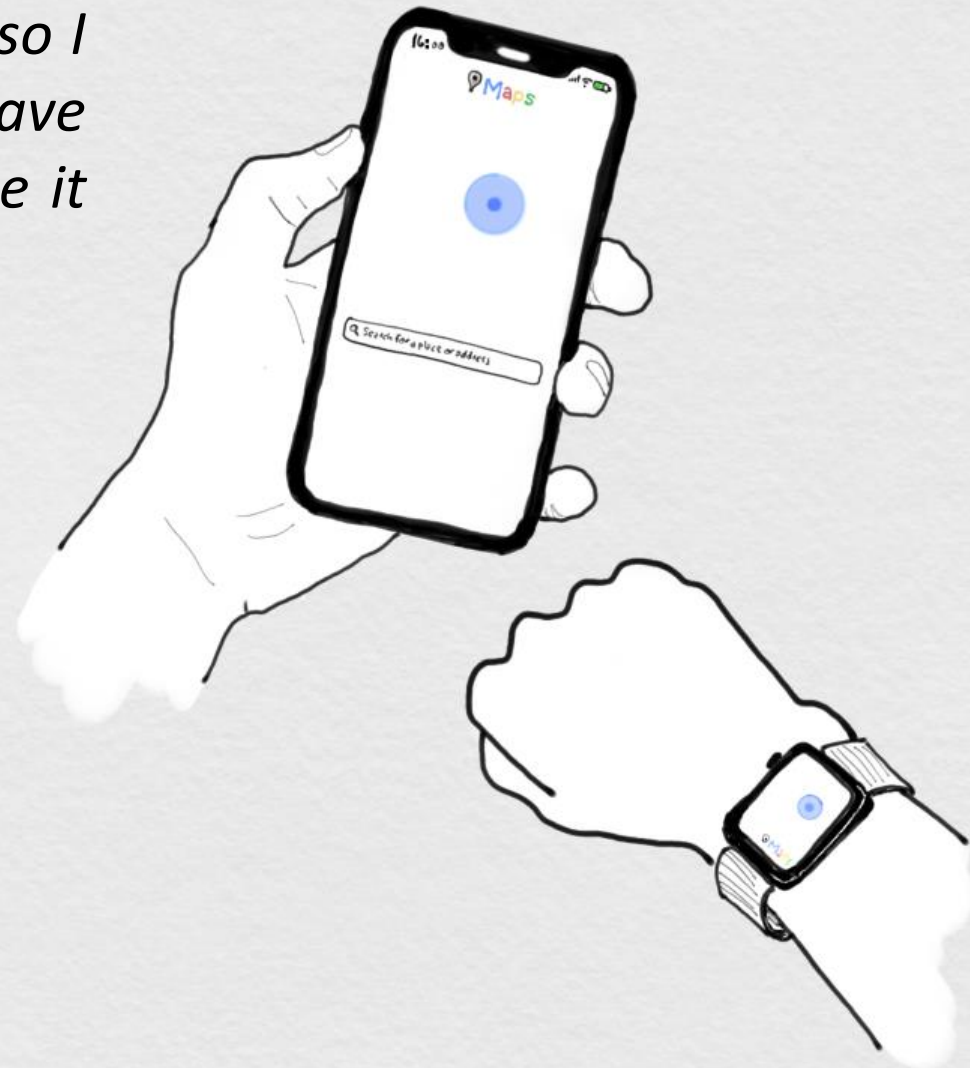
Marking each individual's journey down in chart format to help better understand where and why positive and negative moments occurred.



PHONE DEPENDENCE

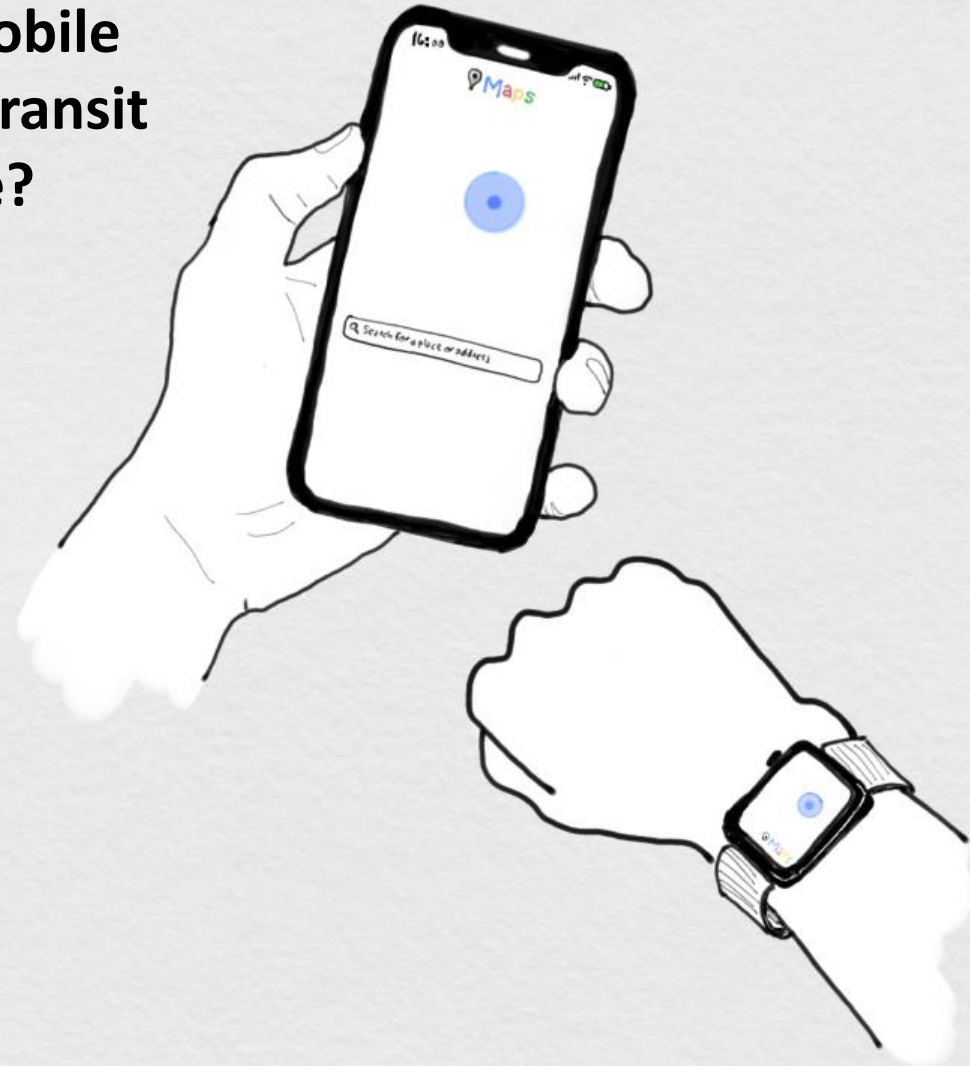


"I leave [the smartphone] out so I know where I'm going... I have the route in Google I also have it in my watch. I'm a real geek."



PHONE DEPENDENCE

How do smartphones (and mobile technologies) play a role in a transit user's navigational experience?



PHONE DEPENDENCE

FOCUS ON THE PHONE

Nearly all participants referred to using their smartphones as a form of navigational aid during the DTI.

- **Preparation**
 - Use the smartphone before beginning their journey to plot out their route
- **Orientation**
 - Use the smartphone to position themselves on a map or on the route
 - Use the smartphone to make corrections to planned route
- **Confirmation**
 - Use the smartphone to ensure they are on the right track

DIGITAL WORLD VS. REAL WORLD

Abfahrt Departure / Départ				
	Zeit / Time		Ziel / Destination	Gleis / Platform
S2	1 MIN	STAMMSTRECKE	PETERSHAUSEN	2
S1	3 MIN	STAMMSTRECKE	FREISING / 1	3
S7	4 MIN	STAMMSTRECKE	WOLFSRATSHAUSEN	3
S4	6 MIN	STAMMSTRECKE	GELTENDORF	2
S6	9 MIN	STAMMSTRECKE	TUTZING	2

The phone doesn't always equal the reality we experience...



DIGITAL WORLD VS. REAL WORLD

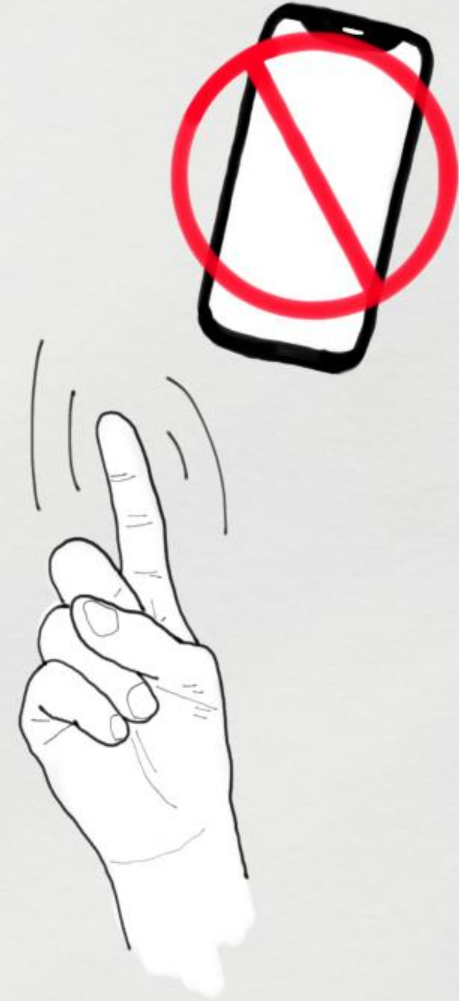
Abfahrt Departure / Départ				
	Zeit Punktzeit		Ziel Destination	Gleis Platform / Quai
S2	1 MIN	STAMMSTRECKE	PETERSHAUSEN	2
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S4	6 MIN	STAMMSTRECKE	GELTENDORF	2
S6	9 MIN	STAMMSTRECKE	TUTZING	2

"A: can I ask ... is there a reason why you decided to stand and wait and not get on the next train on the Stammstrecke?"

O: yeah..... true! I could have done that! Oh yeah.... I didn't think of it. I guess that's because of the connection [the phone] gave me. But you're right I could have taken another one... yeah. Now I feel stupid.



PHONE AVOIDANCE



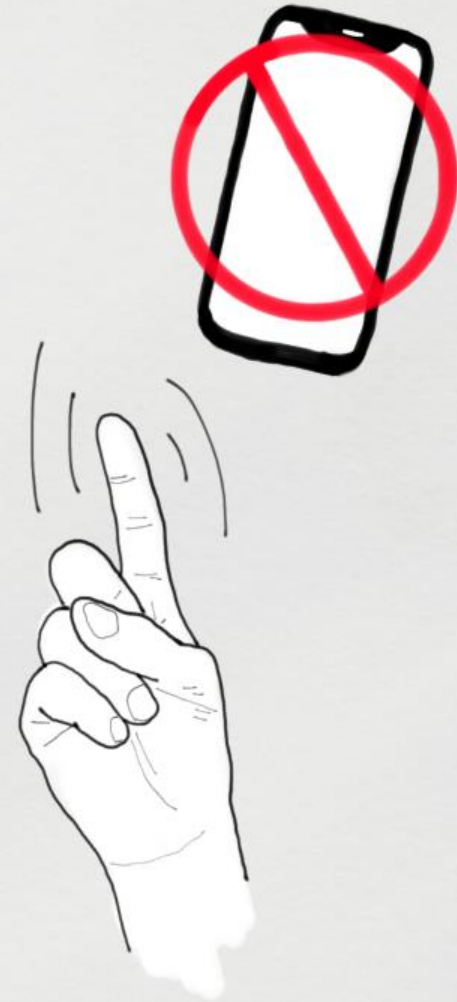
"I don't really like to use my cell phone when I am walking, because it is kind of dangerous. So, I usually try to memorize the name of the street and try to find the street by some form of intuition or asking the people."

PHONE AVOIDANCE



"I don't like to be controlled by the cell phone. Sometimes I also believe in a little bit of rerouting, or, getting lost in the city. I could get some new experiences as well."

PHONE AVOIDANCE



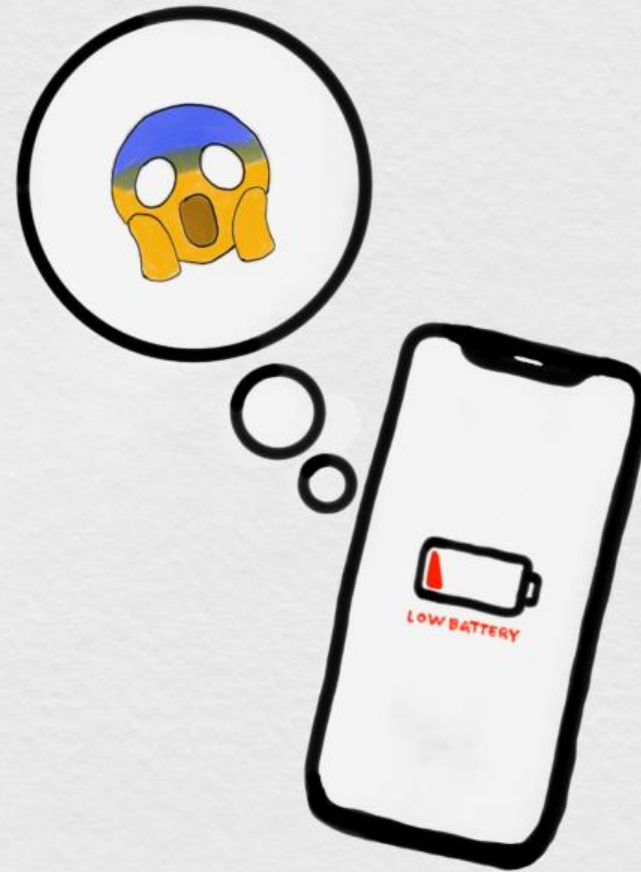


INITIAL OBSERVATIONS

- Smartphone usage has infiltrated the way individuals view the act of wayfinding in public transit spaces.
- Participants would often ignore their surrounding environment, almost as if they forgot that the space should be readable on its own.
- No longer is the user restricted to their physical surroundings to aid in their wayfinding tasks, but, given a conduit to an instantaneous data stream of navigational information that can influence their travel decisions.

WHAT NEXT?

- Looking at the interaction of mobile technologies with existing wayfinding design.
- Analysing user mental-maps to get a better understanding of user perception of both negative and positive experiences





THANK YOU