

Biking in Copenhagen: Bold, Brash and Anarchistic

Examining the bike culture to support the institutionalisation of bikesharing

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1. Introduction

The study of the sharing economy is inter- and trans-disciplinary. As such, researchers draw on a toolbox of qualitative and quantitative methods to study the phenomenon from numerous fields of study: environmental science, law, economics, and various social science disciplines. Similarly, the study of sustainability also seeks to integrate disciplines, theories, and methods.

As sustainability science is inter- and trans-disciplinary, there exists some tensions when integrating disciplines, theories, and methods. For example, sustainability science may measure the absolute environmental impact (e.g. carbon dioxide emissions) of consumption based on the stated behaviour of consumers. At the same time, consumer behaviour is very much influenced by an individual's unique contexts. Therefore, each researcher needs to reflect on their ontological and epistemological position, which may evolve given the research question or context.

Of particular interest to me is examining the sustainability potential of the sharing economy. In contrast to the majority of fields and researchers in the social sciences, I adopt a critical realist ontology, which accepts that there exists some reality only probabilistically apprehendable (Guba & Lincoln, 1994). As such, my research is less interested in questions of place, self, identity, sociality, etc. Instead, my research focuses on the organisational models present within the sharing economy, their indicative impact on consumption, and the strategies to institutionalise sharing as a mode of consumption. Nonetheless, I recognise that my experiences, education, gender, race, age, and socio-economic status influence my perceptions and observations. Therefore, I see the added value of integrating approaches and methods from sociology, anthropology, and psychology in order to examine sharing as a consumption practice for sustainability.

The sharing economy positions itself as a new economic paradigm defined as a system based on sharing of underutilised goods or services among people. The emergence of the sharing economy is predicated on the advancement in information and communication technologies (ICT) to connect people digitally and is seen as challenging our notions of access and ownership.

Quite broadly, the sharing economy as described by literature includes a variety of consumption practices and organisational models. This umbrella term may capture “economic-technological systems” (Bálint & Trócsányi, 2016, p. 392), “...nonownership forms of consumption activities such as swapping, bartering, trading, renting, sharing, and exchanging” (Habibi et al., 2017, p. 113), and “...individuals exchanging, redistributing, renting, sharing, and donating information, goods, and talent...” (Heinrichs, 2013).

With this broad definition in mind, thus far, the development of the sharing economy at scale has predominantly been in the sectors of accommodation (e.g. Airbnb, Couchsurfing, VRBO, BeWelcome) and mobility (e.g. Uber, DriveNow, Car2Go). In particular, we are seeing growth in carsharing and bikesharing in cities as these practices are being utilised to reach ‘the last mile’.

With increasing urbanisation and the looming threat of climate change, radical transformation in our cities' transportation infrastructure is needed. Transitioning away from cars and towards bikes and other forms of public transit will be necessary. One such approach to facilitate this transition is the growth of bikesharing in many urban centres.

Therefore, the aim of this mini-ethnographic project is to explore biking in Copenhagen, Denmark in order to identify current biking practices that may support the transition to bikesharing schemes in Copenhagen and elsewhere. To do so, I observed the morning commute from several different locations in Copenhagen. In doing so, I have these research questions in mind:

RQ1: How does the space, place and/or infrastructure support biking as a mode of transport?

RQ2: How do those individuals commuting by bike behave and interact with the space, place, infrastructure, each other, and themselves?

The first question seeks to understand the built environment and its implications in biking as a mode of transport, for example, considering bike lanes, traffic lights and crossings, and the general flow of people. The second question seeks to understand behaviour – wearing a helmet, carrying a bag, signalling turns, speeding and overtaking others, stopping at traffic lights – in order to support those not yet biking to feel more comfortable to do so. By asking both questions, I hope to begin to understand actions that bikesharing platforms or municipalities may do to support or institutionalise bikesharing as a mobility practice.

This paper is developed for the course *Urban Ethnography (SO761)* at the School of Social Policy, Sociology, and Social Research at the University of Kent. As such, this paper serves as the examination essay for the course, where I strive: to elaborate on a methodology I am developing using ethnographic approaches; to support my advancement in my PhD studies; and to fulfil the requirements of the course.

In the following sections, I discuss ethnography as a general research approach and provide an overview of my proposed methodology. Then, I will describe a mini- ethnographical experience including reporting of initial findings and preliminary analytical conclusions. Finally, I share some reflections on my experience with fieldnotes, multisensory ethnography, and potential limitations of my mini-ethnography. Experiences gained from this mini-ethnographic experience will help improve my research approach for future research in case cities – Amsterdam, Toronto, Melbourne, Sao Paulo, Seoul – as part of my PhD project.

2. Ethnography

Ethnography has its roots in 19th century Western anthropology, which saw ethnography as “a descriptive account of a community or culture” (Hammersley & Atkinson, 2007, p. 1). However, overtime, the approach has been influenced by many theoretical perspectives – sociological functionalism, symbolic interactionism, Marxism, phenomenology, among others – and integrated into many social science disciplines to become a multidisciplinary method (Hammersley & Atkinson, 2007).

Ethnography as a concept is “variable and contested” (O’Reilly, 2012, pp. 2–3), described by some as “becoming increasingly fragmented” based on data, disciplines, and ethnographic approaches (Postill & Pink, 2012, p. 125). Key features of ethnography are described by Hammersley & Atkinson (2007, p. 3), namely: 1) ethnography studies participants’ “actions and accounts” in everyday contexts rather than conditions constructed by the researcher; 2) ethnography draws from a range of data sources; 3) data collection using an ethnographic approach is typically unstructured with categories for interpreting data arising from analysis; 4) ethnography usually focuses on fewer cases in order to facilitate in-depth investigations; and, 5) the data analysis and output involves the “interpretation of meanings, functions, and

consequences”. As such, ethnography can be described more as an approach or philosophy on how research should be conducted rather than a set of prescribed methods to be carried out in sequence (O’Reilly, 2012, p. 10).

3. Developing a Methodology for My PhD Project

Two years into my PhD, the methodological approach for my PhD remains under development. In particular, this is a result of a change in funding, where I now research as part of a European Research Council funded project called *Urban Sharing: Sustainability and Institutionalisation Pathways*. The project employs eight people: three PhDs, two Postdocs, and three senior researchers.

The prescribed method for data collection in this project is the Mobile Research Lab (MRL). This approach builds on the Infra-Lab approach, originally conceptualised by Harriet Bulkeley (Durham University), Simon Marvin (Sheffield University) and Johannes Stripple (Lund University). An Infra-Lab brings together an interdisciplinary group of researchers to explore the development, outcome, and contestation of various infrastructure sites in an urban environment to study a certain phenomenon in a city. This usually involves a day-long study visit, which includes observations, interviews, and reflections among the group of researchers.

The MRL builds on this idea of intense data collection among a team of interdisciplinary researchers. However, instead of examining infrastructure, the focus explores complex and broader societal phenomenon manifested in activities of a variety of organisations and societal actors. The MRL is described as a collaborative process of conducting in-situ data collection with an “ethnographic touch”.

In situating the MRL as the methodological approach for data collection, I wish to integrate methods and approaches from ethnography. In particular, I was inspired by the article by Knoblauch (2005) describing the ‘focused ethnography’. He describes the focused ethnography as short-term field visits characterised by intense data collection, supported by digital technologies (Knoblauch, 2005). For example, instead of writing fieldnotes, the researcher may record spoken observations or reflections.

In his description of focused ethnography, Knoblauch (2005) also alludes to the go-along method as an innovative method to be used in conjunction. This method is described as a blending of ethnographic observations and ethnographic interviews (Jørgensen, 2016, p. 37), where the researcher observes the participant in a natural experience while also questioning the participant’s process of meaning-making (Kusenbach, 2003, p. 463).

I see this method as relevant during the mobile research lab. In particular, this method is chosen because it allows the researcher to actively analyses “the subject’s stream of experience and practice in relation to a given setting” (Jørgensen, 2016, p. 39), in this instance, participating in the sharing economy. When possible, the exchange will be recorded. Afterwards, I will conduct a semi-structured ethnographic interview of the participant.

Of course, traditional aspects of ethnography shall be included as well, including observing and participating in the sharing economy. I do see the value in fieldnotes (as opposed to only audio recording spoken observations). In considering the practice of taking fieldnotes, I am inspired by the contrasting discussion between the tourist gaze and that of the ethnographer. Urry & Larsen (2011) describe looking as a “learned ability”. They describe different objects the ethnography can gaze upon differently than the tourist: 1) seeing a unique object; 2) seeing of known signs

and symbols; 3) seeing unfamiliar aspects; 4) seeing ordinary aspects in unusual contexts; and 5) seeing extraordinary aspects, which appear not to seem so (Urry & Larsen, 2011).

I also envision the use of informal interviews, intercept interviews, and focus groups. The choice of method may depend on the location, the organisation under investigation and, in particular, any language or cultural barriers in conducting research.

I am in the process of reviewing the procedures for receiving ethical approval from the Swedish and other national ethical-review boards. In particular, because we process data in Sweden, we will need ethical approval to handle sensitive personal information, defined by law to be any identifiable information pertaining to race, ethnicity, religious affiliation, philosophical and/or political views. These aspects will be explored when considering the processes of institutionalising sharing as a practice. Therefore, I will take the necessary steps to anonymise the data and shall seek to safeguard the data in an air-gapped external hard-drive only accessible to me.

4. Mini-ethnography

In order to answer my above research questions and to test the methodological feasibility of some components of the mobile research lab, I ventured into Copenhagen, Denmark. The purpose of my mini-ethnographic experience was to observe a morning commute of bikers, in particular, examining the space, place, and infrastructure as well as bikers' behaviour. From this, I can begin to theorise necessary conditions in order to facilitate a transition towards biking as a mode of transport, supported by bikesharing platforms.

Of course, living approx. 45 minutes from Copenhagen, I am familiar enough with the city, in particular, that biking is a prevalent mode of transportation. However, I have never biked in Copenhagen and I have never observed a morning commute.

My observation took place between 7:00 – 10:30 on Thursday 27 September. I started at the Copenhagen Central Station (where my train arrived) and 'followed the bikes' from there, stopping at least five times for approximately thirty minutes each. My walking route (Figure 1) flowed against the path of the most bikes, with a general end destination in mind (a newly constructed bike & pedestrian bridge connecting Nyhavn and the eastern part of the city near Christiania).

As the space was solely open-air and in the public sphere, I did not feel this research required any ethical considerations. I was uncomfortable taking some pictures and time-lapses when peoples' faces were visible. However, I tried to minimise this and thought it acceptable as it was completely anonymous and only for the course project.

I took fieldnotes, which varied quite much thematically based on what I was observing and sensing. I sought to include the time, a description of what I was seeing as well as other senses and emotions I was experiencing. Furthermore, I took pictures, time-lapses, and audio to help capture the flows of people and to be used in supporting my recollection.

During this time, I primarily observed bikers from a distance as a pedestrian. I considered biking myself; however, I was too uncomfortable given my lack of geographic knowledge of Copenhagen and my limited biking experience. However, I wonder how my (lack of) experience with biking colours my observations and experiences compared to an avid biker or commuter.

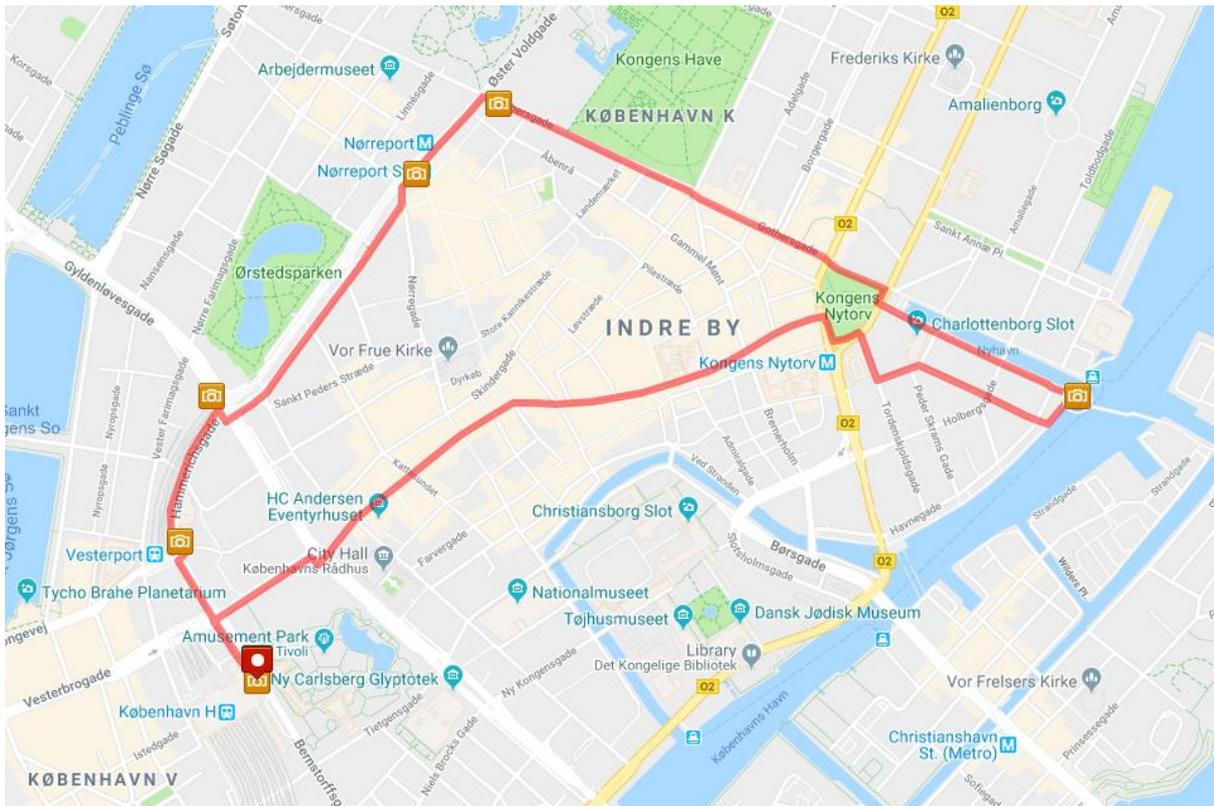


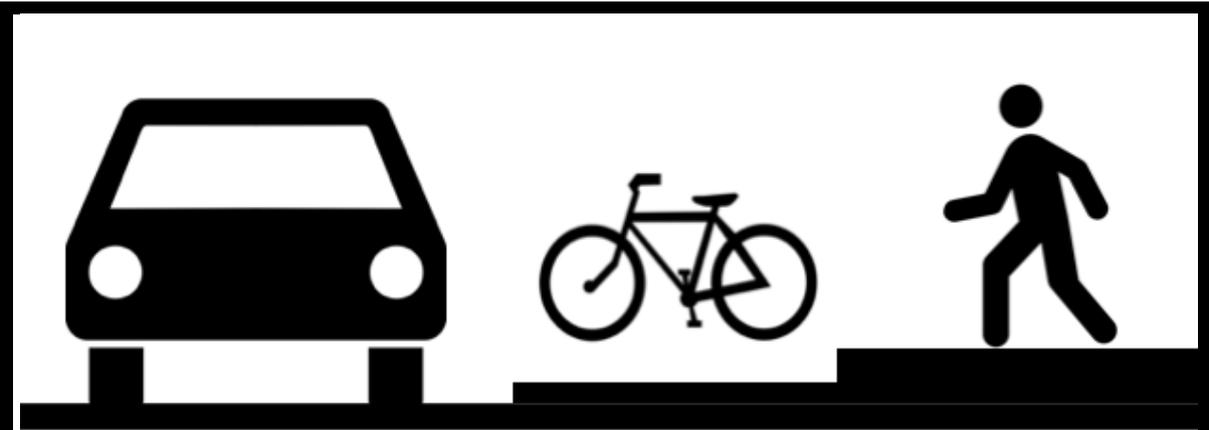
Figure 1. Map of Walking Route

Nonetheless, my fieldnotes reflect my observations and experiences during this 3.5-hour period. During my journey home, I began to reflect on themes or findings as a result of my mini-ethnographic experience. I did so by reviewing my fieldnotes and considering my research questions. You can find my fieldnotes in Appendix I.

5. Findings

In my short time in Copenhagen, the experience was overwhelming. Only to a small extent, this was due to the early hour and the intensity of the short visit. More generally, I was overcome by the sheer scale and number of people commuting by bike. The morning was brisk as the sun rose; I was cold and it appeared that those biking were also cold (I questioned some clothing choices). One quite stark observation was the sound of the city. I found myself sitting and observing from places that were very immersed in the movement of the commute, from pedestrians, vehicle traffic, and bikes. The city was noisy; people were moving. However, the predominate sound was vehicle traffic from cars, buses, delivery trucks, and garbage collectors. Only once did I hear a bike bell to signal to pedestrians to get out of the bike lane.

From my single experience during the morning commute, it appeared that biking is a systemic practice integrated into the fabric of the city. I structure the reporting of my findings around the two research questions presented above: the role of space, place and infrastructure on biking and the behaviour of those commuting by bike.



Segregation of Transportation Modes



Bike Symbol



Thick Dashed Lines



Solid Blue Bike Lane

Figure 2. Infrastructure for Bikers

5.1. Space, Place and Infrastructure

In this section, I focus my findings on the built infrastructure, in particular, bike lanes, bike crossings, traffic lights, and bike parking. In most instances, the bikes flowed with the rest of traffic. However, there were instances where bikes had special dedicated signal lights. The bike lanes that I encountered on my journey in Copenhagen are integrated into the city infrastructure. As such, the bike lanes are a part of the street. In many locations, the bike lanes are raised from the road but not to the same height as the pedestrian walkways (see Figure 2). This separates the bikers visually from the varying flows of movement, presumably, in order to increase safety and foster a sense of identity.

Instances where the bikes are level with traffic, the lines and other markings are used to indicate this to car traffic. This was done primarily through three different observed markings (see Figure 2). The first and most obvious is the bike symbol painted on the road. Secondly, to indicate bike lanes that merged with existing traffic, thick dashed lines were painted on the pavement. Finally, often, in intersections, the bike lanes were indicated with solid blue paint.

Bike parking was a prominent feature of the built environment. Along my journey, there were many and varied bike parking features. This included the pervasive bike parking at the Central Station and Nørreport (another prominent train station in Copenhagen). However, it included also small features such as small racks attached to storefronts or notches for bike tires at the base of standing signs.



Figure 3. Bike Signals and Bike Parking

5.2. Behaviour of Bikers

I think bike parking is a good place to start discussing the behaviour of bikers. On my journey, it seemed to me that bikes were encroaching on many of the spaces in the city. As a pedestrian, parked bikes took up space that was otherwise meant for pedestrians to walk. This meant that, while walking, I had to navigate the flows of people and parked bikes. Nearly all the bike parking places in and around the train stations were occupied as well as along store fronts and on street corners (Figure 4).

This observation is consistent with the overall image I had constructed of the bike culture during my walk, which saw bikers as bold, brash, disorderly and, at times, anarchic. Having said this, those biking were quite heterogenous; during my observation, there were no clear distinctions in behaviour based on sex, age, race, etc.

My description of the bike culture is also a bit bold and brash. In particular, I think it is influenced by my orderly and organised manner. Nonetheless, I find the practices I observed during my morning journey to be representative and relevant for understanding biking as a mode of transport in Copenhagen.



Figure 4. Bikes parked outside storefront

In the early morning, at my location close to the train station, I observed that many bikers did not follow the obvious traffic signals. Many judged for themselves that it was safe to proceed through red lights and into crosswalks. However, when bike traffic increased throughout the morning, there was a tendency for bikers to stop at traffic signals. It appeared that there was some peer effect; when one person had chosen to stop at a traffic signal, others followed suit. However, if there was no one stopped, many would proceed through the signal if “safe”, despite it being red.

There was a tendency, especially in heavily-trafficked areas, for bikers to meander among other lanes of traffic. I reflected on, when young, being told to colour within the lines; bikers did not adhere to this adage. Some bikers would overtake others by moving into other lanes of traffic or jumping up onto curbs and into pedestrian traffic. Furthermore, bikers would quite nimbly transition from biking to pseudo-walking. For example, in order to make a left-turn, bikers would ride up into the crosswalk, swing both legs to rest on one pedal and coast through the crosswalk before proceeding biking (Figure 5). Truly, it was a feat of physical will, which I was



Figure 5. Bikers coast through crosswalk

very impressed to have witnessed.

At one point, I did count the total number of bikers based on characteristics such as wearing a helmet, using headphones, and sex. There was no distinguishable difference among riders based on sex at one location at one time. Moreover, I observed approximately 50% of bikers to be wearing helmets. Furthermore, there were maybe roughly 30% of bikers observed to be wearing headphones. On two occasions, I overheard bikers conversing on the phone while

biking. Many had front baskets or side satchels for bags. Furthermore, I would say the majority were dressed as if commuting to work.

There was visible tension between bikers and other commuters. I observed a biker running a traffic light, proceeding through a crowded crosswalk near the train station. An older man walking in the crosswalk yells in Danish after the biker as he wags his finger in his direction. Similarly, I observed drivers frustrated with bikers; one instance, where the bike lane shared a right turn lane for vehicle traffic, I observed a man within the confines of his car yelling and gesturing at the steady stream of bikes preventing him from turning.

One final anecdote: I passed a Danish guide with a group of English-speaking students, approximately high school-aged. The group was crossing the street near Nørreport and were having to dodge heavy bike traffic. I overheard the guide say, “You know, the most dangerous traffic in Copenhagen are the bikers. They are silent killers!”. A student responded, “I know, they are so rude”.

6. Preliminary Analytical Conclusions

My observations – captured through fieldnotes, pictures, videos, and audio – illustrate a hectic morning commute punctuated by an intense biking culture. Biking seems to present a double-edged sword: on one hand, biking is a more environmentally-friendly mode of transportation, which sees commuters active and outdoors; on the other hand, bikers seem to have little regard for the rules of the road and fail to realise the impact of their behaviour on other commuters. Pedestrians have to avoid parked bikes on the sidewalks and moving bikes through crosswalks and other pedestrian walkways. Vehicle traffic has to be aware of bikers, who tend not to signal, as they meander into vehicle lanes from bike lanes.

My purpose in approaching this research was to observe current biking practices in order to illuminate practices that bikesharing platforms or municipalities may take in order to promote biking as a mode of transportation. However, I was overwhelmed by the chaotic practices I observed during this single commute. Personally, as a novice, I would not feel comfortable biking in Copenhagen as a mode of transport. Therefore, one such outcome is to examine non-riders in order to understand their apprehensions to biking.

Nonetheless, based on my limited observations during a single morning commute, I can begin to suggest some practices that bikesharing platforms may consider. Firstly, bikes may be equipped with a front basket, as many commuters had baskets for bags. Moreover, bikes may have plastic bike seat covers during times of rain. Many commuters had these stuffed under the seats of their bikes. Lastly, bikesharing platforms may consider an accompanying app, which provides some city-specific knowledge regarding practices and, potentially, bike routes. This may help people, such as myself, feel comfortable to take up biking as a mode of transport in Copenhagen.

7. Reflections

As a mini-ethnographic experience, I found the exercise to be helpful in practicing to capture the level of detail required in taking fieldnotes. It seems this is a refined skill, which takes practice. One challenge I had and have is the need to begin to analyse what I am seeing as I am seeing it. This seems like a natural process of meaning-making. Within the literature, I think Katz (2018) provides the most guidance, although limited, on the practice of ethnographic fieldnote-taking. However, he suggests that one must decide for themselves what type of researcher they wish to

be, stating that “the hallmark of ethnographic fieldwork ... is to commit to writing comprehensive fieldnotes quickly after leaving each trip to the field” (Katz, 2018, p. 11).

One aspect that I tried to practice in my observations and notetaking was to notice the sounds and smells around me. This component of the summer course was the most eye-opening, in that I need to remember to use senses beyond sight. I tried to describe the sound of the city and the emotions I was feeling in that space. Multisensory observation will be something I look to integrate into my methodology.

Once again, I wish I could have biked as part of this mini-ethnography. I wonder how my observations may be influenced by experiences and perceptions as a pedestrian. I see this as a limitation. A method I particularly liked was the time-lapse. Watching these back, I really was able to observe the flows of people and their behaviour in the space. I recorded two time-lapses during the tail-end of journey and wish I would have done so sooner.

In closing, I want to reiterate the argument made by Hammersley & Atkinson (2007): research has power. They argue that research should be emancipatory and always has political consequences. As someone studying sustainability, I must believe this in order to cope with the dire predictions made by climate scientists, oceanographers, geographers, and anthropologists. “To be of value, it is suggested, ethnographic research should be concerned not simply with understanding the world but applying its findings to bring about change” (Hammersley & Atkinson, 2007, p. 14).

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Appendix I. Photocopy of Fieldnotes

Sept 26

6:06 am

I am not simply going to P.H. to look at biking/bike sharing.

My ethnographic experience starts on my journey.

It's dark outside, slight breeze. You can hear the leaves on the trees rattle and the click-click of freshly fallen leaves tumble on the pavement.

I board the bus. A female bus driver who does not respond to my good morning. The bus is surprisingly full this early, maybe 66.1, made up of predominantly men in labour uniforms. The ride is bumpy.

6:18

Off the bus, onto the train. Many people got off the bus and joined me on the train, commuting to Malmö or CPH.

The train is going to Helsingør, passing through Malmö and CPH on its way.

The train is silent, the lights bright compared to the darkness outside.

There are some with luggage, presumably stopping at the airport. Many in work clothes, the jackets have come out for this crisp morning.

The train arrives in CPH at 7:08. I am hungry and am going to enjoy an on-the-go breakfast.

7:12

I exited the train and walked up the steps. My plan this morning is to follow the bikes, stopping 4-5 times to observe for 30 mins each.

As I arrived in the main terminal, a woman wheeled her white city bike before me. She was in a hurry. We exited the station, she hoisted her bike down some steps and onto a nearby bike path.

It is on some planters in front of the main station that I sit and observe for the 1st time. This is just adjacent to a bike lane running parallel to the train station.

It is dawn, the sun just rising. It is quite brisk. I am already uncomfortable despite layers.

There is a slow but steady flow of bikers.

Man rides through red light, with coffee in one hand while woman w/ helmet stops.

Man in wool jacket rides a cargo bike with two children eating bananas.

Man, presumably homeless based on his appearance and load, rides by with a small trailer of his belongings, disheveled.

Two bikers approach East, younger woman overtakes ^{older} man.

Woman with grey scarf, gloves and headphones stop at light. Two others stop behind her.

It seems if someone is already stopped at light, more likely others will follow.

Man de-bikes and carries it into train station.

Man stops at light only to proceed before it turns green.

7:25 - 7:35

Helmet				
Headphone				
Man				
Woman				
Total				

Some stop at crossing de-bike and then walk across the street to the train station.

Man goes through light, pedestrian (older) yells at him in Danish and wags his finger.

Based on observation, women more likely to stop at this intersection.

Bikes usually darker in colour. Some have baskets in the front or back, but more often street or city bikes.

Some wear longer socks, which are pulled up over their pants to prevent pant legs from catching in the chain.

One hears the rumble of idling cars and the roll as the accelerate. It is brisk, & I am sure bikers feel this message.

Some are dressed for the weather, many are not.

The flow of bikers is increasing. After 30 mins, I decide to follow upstream of the flow of bikers.

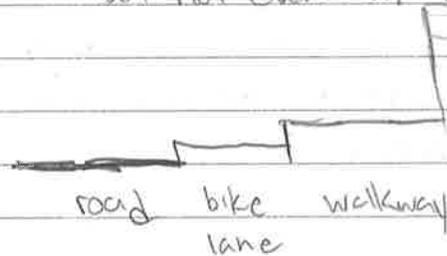
I examine the bike parking near the station. There are many bikes parked wherever there is space, many of them toppled over on top of each other.

Bikes tended to be dark or white (like CPH city bike sharing bikes). There were the occasional bright colored bikes. But, many of these were free-floating bike sharing bikes.

7:50

I have now found another place to observe. It is set just a bit removed from a road w/ bike traffic in both directions.

During my journey, I noticed that
- bike lanes are sometimes raised, but not even w/ the walkway



- in intersections, bike lanes are painted w/ blue paint, presumably to draw attention for cars.
- bikers have mastered a way to cross the street in a pedestrian crosswalk (see picture)
 - ↳ they swing legs over to one side of bike, supporting themselves on one pedal as they coast through the crosswalk

At this location, ^{just up from} a corner, there are bikers travelling in all directions.

Maybe 30-40% wearing helmets.

Approx. 30% have front baskets or side satchels for bags. While the majority do not have any bags.

Approx. 10% had baby seats in the back, although no children in the seats.

↳ there were a few children on bikes, apparently w/ their parents.

I have not seen one instance of signalling...

- bikers seem to just go where they want
- many just turn or enter pedestrian crosswalks as they please, riding up & down over curbs.

Approx 10-20% wearing headphones

Imagining myself trying to bike in this city, I feel overwhelmed and apprehensive. The lack of obvious flow or rules has me fearing I would crash or cause a crash as I am not used to biking in these situations.

Some wear sharp reflectors around pants to prevent pant legs from catching in the chain

The bikes are quiet, no bells to be heard. The sound of traffic draws out many other sounds. Sometimes, you can hear the coasting of the chain, but it is a relaxing sound compared to the traffic.

I think this sound would only add to my anxiety.

After approx. 30 mins, I decide to move on, partly b/c I'm cold...
Next time, bring gloves!

8:25

I have followed the bikes to a main thoroughfare. 100s of bikers per minute in each direction.

What I think is remarkable is the diversity and heterogeneity of bikers. One could not generalise on sex, age, race, country of origin.

- There seems to be about 50-60% helmets.
- There are more people w/ headphones, maybe 30-40%.
- I have heard a few people biking who were talking on the phone.

- It is a crisp but sunny morning. Few are wearing sunglasses.

- Some are biking quite seriously in full bike gear. The vast majority are dressed as if they are commuting to work or elsewhere.

- Some bikers are much faster than others. Passing seems to be common, usually on the left/outside.

At this location, the bike lane shares the right turn lane w/ cars. The sheer number of bikes makes it difficult for cars to merge and make their turn.

- ↳ one driver seems particularly annoyed by this, making gestures and yelling mandibly for his car.
- ↳ bikers seem unaware or oblivious to this.

A few people have signaled that they were turning, but the majority have not. Those signalling used the system I'm familiar with in the US, not like in Sweden where you point in the direction you're turning.

In some places, there is clear traffic signals for bikers. In this location, they move w/ the green light for cars.

Some bikers have plastic seat covers attached on the back of their bike to protect from rain.

While walking, I pass a tour given by an older Danish man to a bunch of young, English-speaking students.

He says, "You know, the most dangerous traffic in Copenhagen are the bikers. They are silent killers!"

A student responds,

"I know, they are rude."

8:58

I decide to again follow the bikers. This took me to Nørreport, the large northern train station in the city centre.

There, the city has installed some bike parking (see picture). The space is segregated w/ bike lanes dedicated. However, in practice, it seems much more mixed use as bikes overcome me on either side while walking in a pedestrian only space.

I choose to sit just north of the station. Bikes seem to be slowing, because of the time or location?

I decide to sit a bit longer and record a time lapse.

In pausing, I start to reflect on the clear rhythm. The stop and start of traffic with the lights (traffic).

Bike lanes have their own lanes (see picture)

9:15

I continue to walk, realising that the commuter traffic is decreasing. But, it is worthwhile to continue to explore the infrastructure.

As I walk, I pass ongoing road construction. However, they have made sure to maintain space for bikers.

I still find it remarkable how bikers have little regard for lines, curbs, and signs, let alone other traffic. I wonder how a biker or someone more used to this behaviour would observe biking in CPH.

9:35

I walk to a bridge over the canals, only for bikes and pedestrians. Bikes move slowly this time of morning at this location.

I record another time lapse.

The changing weather has me take shelter and prepare my journey home.

10:30

On the train, back to Sweden, I am reflective and overwhelmed.

I am not sure what my journey has showed me.

- There seems a bike culture that is not limited to sex, age, ethnicity
- There is infrastructure to support bikers, but sometimes infrastructure and behaviour at tension with car traffic.
- It is loud, the car traffic is the dominant sound and shape of the city street.
- Bikers behave erratically, using limited signals, hopping curbs, riding through crosswalks, and not stopping at traffic lights.
- Nonetheless, this behaviour does capture the flows and rhythm of biking in CPH.