The walkable city post-covid – Making sense of the urban walking experience during the Covid-19 pandemic through the eyes of urban planning.

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Preface

This master thesis was conducted as part of the 10th (4th) semester of the Master of Urban Planning and Managements in the time period of the 1st of February to the 4th of June 2021.

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The work is structured in chronological order, leading the reader through the work.

The references follow the APA method, and all used literature and sources can be found in the bibliography of this work. Together with the interviews conducted for this study which can be found in the appendix.

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Introduction – walking during the pandemic

The concept of walkable cities has been pursued by planners for a variety of reasons which are beneficial to the life in cities. In early 2020, when the Covid-19 pandemic arrived, our everyday mobile lives came to an abrupt stop as governments asked citizens to stay home and a sizeable amount if not all of social activities involving physical distance were to be suppressed for the time being. The mobile society on the rise over the past decade have rapidly halted to a stop, forcing everyone to approach their daily lives differently. Which in part has led many to take up ‘going for a walk’ as an activity during the lockdown periods. Possibly as it was one of the only and readably accessible things to do besides sheltering at home. In general, the impact on mobilities has been nothing short of dramatic. Especially in the first lockdown, due to the novelty of the situation, the impact was felt most drastically. Nearly no flights connecting cities and countries, public transport became feared as a source of super spreader events and cars were simply not needed to commute from bed to the home office. However, cycling and walking maybe saw their biggest increase recorded yet to keep essential workers mobile (Bryant, 2021) and allowed city dwellers to observe and experience their surroundings with a lessened impact of noise pollution, traffic congestion and the limitations typically framing the mobility experience. This observed change of reduced car usage and high amounts of walking and cycling were welcomed by city advocates and planners alike, it allowed to place through a window of opportunity for what our cities could be, if we decide to turn away from the car. It allowed to observe the change towards a more environmentally and socially friendly transportation system (Docherty, 2021). But the impact of the lockdowns did not last long and through went back to normal or often even exceeding prior heights of car usage as the now safe “air” bubble was ironically provided by the car. However, if we take on the idea that we shall aim at stepping out of the crisis stronger than we went into it, then we must reflect and make sense of the changes seen during the pandemic. Making sense of how cities were perceived during the pandemic can provide insights into good and bad design practices deployed in cities. Therefore, this work will focus on walking as the form of mobility since the pursuit of walkable cities represents a key goal for planners, certainly since the publication of “Walkable Cities” (Speck, 2013).

This work is focused on the danish context and is carried out in the neighborhood of Nørrebro in Copenhagen. Throughout the spring of 2021, observations and qualitative interviews were conducted in the neighborhood to gather empirical data for this research. The aim of the work is to give a broad introduction to the experiences lived by dwellers in the neighborhood and is not specifically targeting nor excluding certain communities, however it is unlikely to represent everyone active in the neighborhood. This thesis will explore the notion of walking mobility experiences in relation to the ongoing Covid-19 pandemic and establish a framework for future research to use hands-on research in urban planning to use upsetting events to reflect on the usage of space in the urban. Further, to explore how city dwellers experienced the city during the pandemic to highlight positive perceived changes.

Learning from citizens is not a new concept in urban planning in the likes of communicative planning, the insights provided by citizen input is already highlighted. This work through aims at capturing the citizen experience to collect input for further development helping to prepare for the next uncertain impact on cities, possibly another pandemic. In other words, if “the aim is to show...
that urban planning principles are closely aligned with the Healthy Cities approach to urban management and to refocus urban planning on health and the quality of life” (Barton, 2013), then not only the ‘how’ but also the ‘why’ a certain urban space is used specifically must be understood. While there has been a lot of research on the topic of connecting social aspects with urban planning there is little knowledge on how the citizen experience could benefit planners as a resource of citizen involvement. Capturing the experiences during abnormal events such as the current Covid-19 pandemic could help with the involvement of citizens otherwise not present in citizen involvement.

Research Question

Based on this argumentation this work will answer the question: What learnings for urban planning can be taken from the pandemic walking experience?

The first sub-question is posed to investigate how walking experience can be analyzed. Therefore, the first question is:

1. How can the urban walking experience be analyzed?

Once an understanding of analyzing walking experience has been established, the second question is set up to establish an analysis of the terminology of ‘mobilities in situ’ and follow up with making sense of the walking experience and the impact on social capital during the pandemic:

2. How can we make sense of the walking experience during the pandemic?

The questions will be developed following the objectives outlined below.

- Conduct observations to collect data on citizens behavior of urban walking during the pandemic.
- Determine whether reported experiences can add helpful insights to the process of city development.
- Conduct interviews to conduct qualitative insights into citizens’ perspectives and experiences in relation to their daily urban walking practice.

To develop the questions along the posed objectives, this work will be structured in the following way. The first chapter (problem analysis) will give a deeper insight into current and past research relevant for this work. The second chapter introduces the use of observations and VoxPops as methods of data collection. Along with the decision to include walk-along interviews. In the third chapter, the theoretical framework is introduced covering the theories and concepts of the mobilities turn, staging mobilities, social capital and sensemaking. The fourth chapter covers the analytical framework which is used to explain the path of analysis taken in this work. In the last and fifth chapter the discussion and conclusion of the analysis are covered.
Problem Analysis - Walking as a solution to urban problems

Behind the idea of understanding experiences of situational mobilities lies the concept of walkable cities which especially in an Anglo-American focus represents a paradigm shift but also in Europe and many other places the car dominance is the leading cause of suffering city life (Pucher & Lefevre, 1996) and through alternatives are in seaming need to be explained to gain political support. Walkable cities aim at relieving a number of issues from the urban fabric such as pollution (noise in particular), space concerns and negative social impacts. Due to this holistic nature, it also provides the source of interest for a variety of researchers from transportation planners, sustainability advocates, sociologists, urban designers and others from the fields of health and biology (Talen & Koschinsky, 2013). Walkable spaces are to be designed to provide an urban area for human interplay by making use of the massive public space of public streets currently (possibly) underutilized by only using it for vehicle through traffic. In other words, under the concept of walkable cities, streets are seen as community infrastructure accessible to all citizens. At the moment however this space is not necessarily divided equally, as road space is mainly devoted to transport functions, especially for the automobile. Continuing on this notion there is an underlying thought, that there is more value to be gained from urban space than just transport use and if we redistribute the road space than we can satisfy transportation needs in balance with economic, environmental and social aspects.

The need for a redistribution of space is strongly connected to the physical use allowance of urban space. However, once research connected the link between the build environment and the impact on active mobility choices, health and social implications the point for the “walkable city” had been made. As of this the concept of the walkable city is very inclusive and stands for much more than just walking and rather referring to an inclusive human scale of city building (Kashef, 2011).

In her review of the term "walkability" (Forsyth, 2015) identified how it referred to (1) means and conditions enabling walking, (2) outcomes and performances created by walkable spaces and (3) provide a proxy for better urban places. Further, noting that some research leans on measurability and multidimensionality of these space and others refer to the holistically of walking to problems created by living in the urban.

Due to the high interest in the field, a plethora of research has been conducted by a multitude of research fields in connection to walkability in cities and the effect on their respective fields of research however, they have done so mostly by relying on quantitative measurements (Evans & Kowanko, 2000); (Callahan, 2014)). Unsurprisingly the research on walking is dominated by the fields of transportation, health and economics (Talen & Koschinsky, 2013).

However, in the light of conducting research during the Covid-19 pandemic the question arises if a continuation of this research path is of any significant help, as the change in traffic volumes is surely interesting to transportation departments. Contemporary research should build on the opportunities provided to broaden the view on the concept of walkable cities. As another comparative study highlighting the benefits of walking seams rather useless in the grand scheme of things but, on the other hand the introduction of a quantitative approach picking up the current knowledge and best practices by combining them with the renewed freshly impacted view of urban dwellers seams rather
indulging, interesting to act upon the opportunities arisen from the Covid-19 disruption in the transportation sector to bolster the implementation of walkable spaces.

The pandemic highlighted well, just how important quality public spaces are for urban dwellers. Having access to an “outdoor living room” in the neighborhood allows them to live in denser, smaller apartments while conducting variety of social interactions in public space. It is well known that living in a more sub-urban living arrangement in a house with a garage and garden decreases the social interactions of the residents (Katz, 1994). On the other hand, in Copenhagen, a city which regularly ranks among the top 10 livable cities (The Economist, 2019), the liveliness of the city never really left.

Other cities had a different experience spearheaded by many US-American cities, with New York City being the prime example of people leaving the city. They left in search for opportunities elsewhere due to the new possibilities brought along by a world in which working from home allows these workers to flee the housing crisis and reposition themselves (Haag, 2020). The radical break of the everyday life which continued to develop over the past decades experienced its most dramatic break yet and highlighted dysfunctional city designs. Without commuters the normally busy city streets turned into a vast asphalt wasteland leaving behind the feeling of a ghost town. In Lynchs’ (Good city form, 1984, S. 118) five “performance dimensions” of good city form ... the degree to which the form of the settlement supports the vital functions, the biological requirements and capabilities of human beings—above all, how it protects the survival of the species.” (Banai, 2020) noted that the function and or disfunction of the settlement form is best observed through the city’s public spaces and the pandemic intensifies the dysfunctions of bad public space.

Researchers in the past have come up with some creative ideas to measure the function or disfunction of a city neighborhood in relation to walking through such as the ‘popsicle test’ – can an eight-year-old go out on his own and buy one and return home before it melts or the similar ‘Halloween test’ considering how good the neighborhood is for trick-or-treating (Benfield, 2012) Lately, a more precise concept arrived to frame the development of walkable vital cities through the “15 minute” city concept, something Paris is trying to achieve through building neighborhoods where all necessary everyday functions can be reached within 15 or 20 minutes on foot or by bike (the number varies from one place to another but captures the same essence) (Moreno, Allam, Chabaud, Gall, & Pratlong, 2021). This approach also allows for easy comparability between places due to the possibility to use such quantitative measurement point to create guides such as walkscore.com a website listing US American cities based on their walkability based on distances to points of interest (Walk Score, 2021).

All of these approaches make use of the notion that pedestrian movement is connected to the spatial configuration more than it is to land use (Peponis, Ross, & Mahbub, 1997). Which is why (Hanson & Hillier, 1987) expressed in their work of “the virtual community” that a pervasive social effect of space exists besides the actively managed and maintained communities. (Appleyard, Gerson, & Lintell, 1981) further, identified that the presence of people and their activities affect the livability of the city. Gehl (2010) & Turel et al. (2007), divided these outdoor public space activities into three categories of necessary activities (going to school or work, waiting for a bus or a person, shopping, etc.), optional activities (taking a walk, standing around, enjoying life, or sitting) and social
activities (children at play, greeting and conversation, seeing and hearing other people). In a walkable location where these activities overlap timewise, locally and or socially then we can observe the urban vitally attracting locals and tourists creating a vibrant social fabric on the build environment. At this point it becomes visible that the focus on the physical environment for mobility research has its limits and fails to explain why a certain area is more vital than others, as it only delivers on a quantitative number highlighting their higher usage. And this is what we have seen during the Covid-19 crisis as soon as lockdowns began, and car usage and public transport saw record lows in ridership the amount of people walking and cycling exploded. This phenomenon cannot be explained using traditional quantitative research methods since they simply show a dramatic drop or increase in usage. Here qualitative mobility research seems to have an edge to provide crucial insights into this dramatic shift as the underlying experience of mobilities must have an influence on their usage and how they play out in real city contexts. Under the assumption of a walkable city to be beneficial it is crucial to learn from the current experience in the pandemic to maintain the benefits afterwards and not let the opportunity go to waste.

To overcome the limitations of quantitative approaches to mobility research a series of publications have been published over the last two decades. It is important, to understand neither is superior but rather that both should be used in conjunction to understand research on mobilities. However, qualitative mobility research is built around the notion to understand interconnections of social research and mobility.

On a broader view the pandemic gave rise to new research approaches to connect with citizens and learn about the usage of urban space. Gehl People for example used social media in connection to selected urban sites to research their usage through hashtags connotated by the photograph when capturing the moment at sight (Gehl People, 2021). Others liked the impact Covid to environmental factors in the city where citizens for example got experience cleaner air quality to a decrease in traffic and manufacturing (Sharifi & Khavarian-Garmsir, 2020). Research in the field of urban planning is found necessary to form integrative approaches which include knowledge of human activities and practices (Barouki, et al., 2021).

Concluding, due to the very nature of walking to be practiced and experience in multiple contexts, any generalization in themselves are problematic. However, the impact of the pandemic on the use of mobilities and the sudden take-up of walking and cycling highlight the point that mobilities are situational and the underlying change allowed for a surge in active mobilities. While the origin might simply lie in the fact, that there was simply nothing else to do during lockdown periods, the question arises how a changed mobile city was experienced during the pandemic. And if the change is perceived as positive by citizens, then it poses the question how planners can pick-up on this aspect and use it to their benefit to extent the long-lasting wish to build modern, walkable cities. At this point the research question is repeated before introducing the methods used in this study’s primary data collection. Research question: What learnings for urban planning can be taken from the pandemic walking experience?

Methodology
To help answer the research question, two sub-questions have been developed to provide a suitable answer to the main research question. For this the following structure has been used as detailed below in Figure 1.

Figure 1 Research design

The aim of this work is to shed some light on the perceived changes in the urban pedestrian experience. For this purpose, a qualitative approach has been selected to gain deep insights into people’s walking experience. To uncover these insights, vox pop interviews have been conducted in the neighborhood of Nørrebro in Copenhagen, Denmark based on a semi-structured approach.

A qualitative approach has been selected due to the ability to get fine-grained, detailed insights from a variety of people present in the neighborhood, which could not have been gathered through a quantitative approach. The methodological choice is based on the ‘mobilities turn’ outlining the need for such research.

To lay the foundation of the field of interest at hand and pose questions of interest and relevancy to the participants of the interviews a series of unstructured observational walks have been conducted to get a feel for the walking situation in the neighborhood and include possible questions arising from the observations into the interview questions. The observations were conducted after a certain behavior caught the interest for further research and through were followed up by a more focused
follow up walk to confirm the actions observed. These observational walks typically lasted between 90 min to 4 hours covering 5-15 km of urban walking. The observer’s role here was totally passive only interacting with other pedestrians and others using the street in a ‘normal’ way. Data was recorded in a notebook highlighting certain behaviors.

The vox pop and walk-along interviews were conducted in the neighborhood of Nørrebro in Copenhagen. Participants were randomly selected by approaching them on the sidewalk or in the park and asking if they would be interested to participate in sharing their walk experience of the recent months. In total 7 people took part in answering the vox pop interviews, but some were walking together and though sometimes complemented each other’s answers, something welcomed in the interview process since it invoked a deeper discussion unveiling more details and stopped the participants urge to continue right away. Later on, the existing vox pops were added upon by conducting 5 more in depth walk-alongs.

The interviews in both cases were of semi-structured nature to allow for a more natural conversational and reflective flow of the past experiences. This was necessary as the participants were not prepared to talk about their experiences and sometimes needed a moment to gather their thoughts and express them in the right way. The interviews were conducted in English with mainly Danish speakers as a limitation of the researcher’s ability to conduct them in Danish. The length of the interviews varied between 4-20 minutes. They were either videotaped or in case of walk-along interviews, notes were taken to be less disruptive of the conversational flow and to overcome the limitation of not having access to a microphone useable in windy conditions often found in Copenhagen making the phone recordings hard to understand. Here paper was a more solid well proven alternative. The video recorded interviews were transcribed as did the paper notes transcribed to a digital medium afterwards a content analysis was conducted. The analysis included the coding of the answers to group them together and identify broader themes in the expressed walking experience. This helped to answer positive and negative feelings experienced when walking during the pandemic.

Semi-structured interviews were chosen to guide the participants through the interview process of the admissible difficult topic of their walking experience. The difficulty lies in walking itself as it often goes unnoticed as it represents a necessity to do whatever one aims to do. By making use of semi-structured interviews, in depth results could be generated which while not generalizable beyond the sample group due to their personal nature can deliver important insights into the process of walking in the pandemic.

Observations

In addition to the vox pop and walk-along interviews, a number of observational walks have been conducted in the neighborhood. To capture the “naturally” occurring social settings, conduct and events (Kusenbach, 2003) and through better emerge in the topic and expose oneself with an open mind to the experiences of walking, trying to spot what participants might live through to later better grasp their expressed experiences of walking. For this purpose, the role of the “complete observer” according to Bryman (2016) was taken on, where the researcher does not interact with surrounding people. The choice for this outside view was taken on to capture the ‘natural’ interaction of people and their expressions of walking in public. Further, any abnormalities in personal behavior which
can be related to walking but might not be touched upon in the interviews are of interest in the observations.

Observations are specifically useful to add context to the study which is either hard to grasp in interviews or is not considered of interest by the interview participants. Further, they lay a foundation for the interviews and what can be expected as possible answers. In general, the observations were not thought of being a major part of the empirical data collection but rather an aid of putting the interviews in context and fill potential gaps in the ability to explain the experiences.

Concluding the observations alone only unveil limited information in respect to the walking experience and possibly have an emphasis to reflect the observers view and through are limited to the view of the observer, limiting the usefulness without the addition of additional methods. (Kusenbach, 2003)

Vox pops

Vox pops are casual interviews with people on the street to represent a range of public opinions. The word originates from the Latin “vox populi”, meaning “the voice of the people”. (Couriousworks, 2010) The majority of research deals with vox pop in the context of news due to their commonplace in everyday news coverage to include the public opinion (Beckers, 2019). The best argument for the use of vox pops in planning is their closeness to the users of the space. Vox pops were used in projects funded by the European union to gather user feedback of innovative city ideas, e.g. to improve the mobility system (European Commission, 2019). “The best advocates for any region are the people themselves” (Proctor, 2002). Typically, the answers in vox pops can take on one of two forms, the first being a personal testimony (e.g., “I walk in the park every day”, the second being the statement of explicit opinions (e.g., I think everyone should walk in the park because it is good for them”) (Wessels, et al., 2020). The later one should be taken with caution in respect of generalization but when taken as insight into an individual’s experiences and impressions then vox pops are useful in urban planning. In this sense vox pops are great to getting deep insights without requiring an “expert” or otherwise having to set-up long interview processes but provides the opportunity to access a wide variety of respondents by coming to the respondent instead of asking participants to come in for an interview. They can also provide access to citizen populations otherwise hard to reach (Dekker, 2018).

For this work the vox pops were designed to capture the experience and reflectiveness of walking during the pandemic from people who happened to be present in the sample locations at the time. Their general perception, positive and negative experiences as well as wishes connected to the use of public space for walking were grasped by the vox pops. Each interview session was conducted right on site in the respective area, taking the participants to the side of the walking path or sidewalk to not obstruct them but also to jump into the vox pop right away. They started with a general question about the experiences of walking during the past pandemic year to get some first unbiased responses led by the respondent rather than the research agenda. The further questions got more specific to include the respective concepts of the ‘mobilities in situ’ and social capital within the questioning and were designed to guide the participants through the vox pop or walk-along respectively.
In total 4 short street vox pops were conducted with members of the general public present in Nørrebro. The sampling was significantly dependent on the people walking by in the times of the researcher’s presence to conduct the fieldwork. The opportunistic sampling allowed to work to speak to a variety of people such as students, young families and empty nesters, all of whom were of danish nationality. This however proved to be a significant limitation to the data collection as the sampling in English did possibly not allow for a clear enough introduction to the thematic to convince more people to participate. Furthermore, most participants were found to struggle with word findings to express their feelings and experiences. This is likely to explain the limited response rate by possible participants.

Walk-alongs

The inclusion or change to the usage of walk-along interviews instead of the continued reliance on the before proposed vox pops was introduced as it proved ineffective in generating vox pops interviews after the initial test phase. Conducting the questioning in English with non-native speakers proved to be a significant limitation to the data collection as the sampling in English did possibly not allow for a clear enough introduction to the thematic to convince more people to participate. Furthermore, most participants were found to struggle with word findings to express their feelings and experiences. This is likely to explain the limited response rate by possible participants.

In comparison to the use of the stationary-vox-pops, the walk-along method allowed for a more natural experience of capturing the walking experience and allowed participants to point out certain aspects along the route (Carpiano, 2009). Further, it the interviewing experience was found to be less interrupting of the participants day as they were not hold in place for a few minutes. This is in line within social research as it has been used more and more to explore the connection between self and place. Walk-along interviews can also help ease the conversation flow and through yield better results. (Kinney, 2017) The response rate did not increase dramatically however the quality of the interviews improved.

Application of semi-structured interview-guide

Both methods made use of a semi-structured interview-guide. The questions can be referenced in the appendix of this work on page 46. The choice of the semi-structured interview lies in its strength of combining the breath of closed-question interviews and the depth of focus groups (Newcomer, Hatry, & Wholey, 2015). As such the choice allowed to gain access to a wide variety of people without sacrificing the required depth to research a delicate topic such as human impressions and experiences. Further, the approach allows for follow up why and how questions to receive more detailed answers. As some of their limitations the time-consuming process and interviewer-sophistication are to be taken into consideration. On the other hand, the approach expels when probing individuals and as in the case of this work examining unchartered territory. (Newcomer, Hatry, & Wholey, 2015) Summarizing, the aim to gain deep insights into the use and perception of public space in relation to the physical setting, social presence and the personal embedded practices could best be answered through the deployment of semi-structured interviews in the form of vox pops and walk-alongs in public open-air places due to the nature of the pandemic.

The role of the researcher
Conducting interviews in public without any prior introduction the possible participants were approached through a simple “May I talk to you”, “Hi, Guys” or similar easy to understand approach implying to talk in English continuing with a short introduction of the topic and proposing the interview together with a time-estimation. Once the participants agreed to take part a listener’s position was taken on to demonstrate the participant to freely talk about his/her experience only adding in short follow up questions to extend the talk and gain deeper insights into the lived experiences.

Reflections and limitation of the data collection

After a test which only lasted about one hour of seeking interview partners in Nørrebro the viability of the methods was promising. The test yielded 4 vox pops with 7 participants and the answers indicated significance to the work. The researcher was supported through another person assisting with the filming of the vox pop.

Later, when the fully worked out question were to be applied in vox pops however there were no persons interested in participating on a filmed bases, through the change towards adapting walk-alongs as an alternative methodology. This change yielded more answers however, not in a timeframe viable for further interview collections. Over three-weekends including walking through the neighborhood approaching single people and couples did not yield a significant number of answers. A possible reason for this could be the nature of the topic, spending time with a stranger (researcher) during Covid or English as a language barrier when expressing feelings and experiences in a foreign language.

Theoretical framework

In the following chapter the theoretical framework of this study is laid out. The framework is divided into four main concepts and frameworks. At first, the ‘mobilities turn’ is presented as developed by John Urry. The work of Urry is included for its significance in the field, through his thought process of linking sociology to mobilities to gain a holistic understanding of the contemporary mobile society he introduced a rethinking in the approach of both sociology and mobilities respectively. The mobilities turn is followed up by the framework of ‘Staging Mobilities’ as described by Ole B. Jensen which introduces the concept of situational staged mobilities which are staged ‘from above’ through the presence of physical settings, material spaces and design and ‘from below’ through social interactions and embodied performances. The Staging Mobilities framework has been chosen for its application of three dimensions and that an interplay of those dimensions is needed to understand situational mobilities (mobilities in situ) by providing valuable vocabulary and concepts for the analysis. As a third concept, Social Capital is taken up due to its regular use case in comparing and measuring different urban settings and reflect on the quality of the urban fabric and how it is perceived by its daily users, the urban dwellers of the neighborhood. Lastly, (Weick, 1995) sensemaking framework is introduced, sensemaking combines the concepts of the previous frameworks and allows for the formulation of a plausible answer to how the walking experience has changed in the pandemic.
**Mobilities Turn**

The mobilities turn lays the foundation for a change in mobility research away from a quantitative approach focusing on the end points of mobility, supporting the inclusion of quantitative research which focuses on the mobilities themselves through including the path between A and B. It also provides the foundation for Jensen’s Staging Mobilities framework.

The mobilities turn also known under the names 'new mobility paradigm' and "critical mobilities research (Sheller, 2016), describes a break from or addition to the traditional point of departure of mobility studies. Urry developed the mobilities turn as a critique of traditional mobility studies as they were found to only focus on the end points of mobility.

In the words of Cresswell “transport studies have too often thought of time in transit as ‘dead time’ in which nothing happens - a problem that can be solved technically. Mobility studies have begun to take the actual fact of movement seriously.” (Cresswell, Mobilities I: catching up, 2010, S. 18) By breaking away from this focus of technical problem-solving approach practiced by the traditional, rational planning of mobilities which described mobilities as instrumental practices taking part between destinations (Urry et al., 2006) (Spinney, Cycling the city: Movement, meaning and method, 2009) A new agenda was able to be developed, one which was relying less on the notion of traffic flows, efficiency and how to move people from A to B in the fastest way possible. Urry through the mobilities turn was instead able to introduce a new starting point spearheading an agenda-setting new approach to mobility studies. First in his book 'Sociology beyond Societies (2000) and later in his article 'Mobile Sociology’ which together led the way to include the meaning of the actual movement as a key point in building the new way of understanding mobilities (Urry, 2000).

In 'Sociology Beyond Societies', Urry first explained what this mobilities turn would entail exactly: He argued that mobility is much more than just mobility (travel) but rather that it is linked to identity, culture and societal norms. Through breaking away from viewing travel time as dead time, giving it a deeper meaning but also more societal relevance (Urry, 2000) (Jensen, 2013). His aim was to move sociology towards a focus on the "diverse mobilities of people, objects, images, information and wastes; and of the complex interdependencies between, and social consequences of, these diverse mobilities. (Urry, 2000) The 'Mobilities Turn' brings together some of the more purely "social" concerns of sociology (Sheller, 2013 in (Adey P., Bissell, Hannam, & Sheller, 2014).

New, innovative research methods evolved under the "Mobilities Turn” such as being "mobile with" and now offer important insights into the accomplishments of various mobilities (Adey, Bissell, Hannam, Merriman, & Sheller, Abingdon) (Sheller, 2013 in (Adey P., Bissell, Hannam, & Sheller, 2014). One important example of this being Spinney who emphasized "the sensory, emotional, kinaesthetic and symbolic aspects of cycling‘ which helped to build and understanding of "those fleeting, ephemeral and often embodied and sensory aspects of movement" which are vital to understand for how we move (Spinney, 2011, S. 164). This new understanding led to a growing interest in cultures of "alternative mobility” (Vannini, 2009) such as walking and biking. The temporality of places which provide an in-between-ness is becoming something to be appreciated (Urry et al., 2006) (Urry, 2007) and might be best exemplified through the popular works by Gehl such as “Life between buildings” (Gehl, 2011).
As such "Mobilities research re-casts some of the classical concerns of social stratification theory and urban ecology, expanding the notion of social mobility to wide-ranging socio-temporal contexts and multiple scales" (Sheller, 2013 in (Adey P., Bissell, Hannam, & Sheller, 2014)). This becomes apparent through the argumentation from Büscher, Urry and Witchger: "Through investigations of movement, blocked movement, potential movement and immobility, dwelling and place-making, social scientists are showing how various kinds of 'moves' makes social and material realities" (Büscher, Urry, & Witchger, 2011, S. 2) These in-depth investigations allow for a holistic understanding of mobilities (Cresswell, 2010).

To close on the topic of the mobilities turn it is crucial to remind oneself that mobilities refer to more than human transport and rather include: "the large-scale movements of people, objects, capital and information across the world, as well as the more local processes of daily transportation, movement through public space and the travel of material things within everyday life" (Urry et al., 2006, S. 1). On this notion, mobilities can be divided into two societal levels on macro and micro levels. The former, referring to global streams of capital, communication and policies. The later, referring to everyday movements and communication which is performed by individuals. These come together under the "Mobile Society" (Urry et al., 2006) and showcase through proved why this change of thought is so influential to the field of sociology but also to all its touch points with other research areas. This work will use the understanding, which the mobilities turn brought to everyday urban transportation to link the experience of walking during the pandemic to the holistic understanding of contemporary cities.

**Staging Mobilities and Studying mobilities in Situ**

The foundation built by the “Mobilities Turn” is taken up by (Jensen, 2013) to construct the staging mobilities framework. It sets the stage for the initial thought provided by Urry to be critical of the traditional, rationale understanding of mobilities based on simplification and numerical data to comprehend flows of movement between A and B. However, this also means that the understanding is filtered through the lens of numerical rational data. Jensen’s approach on the other hand makes use of unreflective, true to origin data to highlight issues and possibilities otherwise remaining in the hidden. It is a focus on everyday mobilities acted out by individuals on the canvas of the urban city. Taking part in a physical setting exposed to social rules and habits. Through the concept of “Mobilities in Situ” developed under the Staging Mobilities framework is taken as the basis to answer the posed research question of this study as it allows to capture the situational origin of the walking experience during the Covid-19 pandemic. The following part will introduce the Staging Mobilities framework to the reader to provide an understanding of the theory behind this works analytical framework.

The framework of Staging Mobilities turn around the simple notion of: “mobilities do not 'just happen' or simply 'take place'” (Jensen O., 2013). This is important as it stresses the fact that they are designed and planned ‘from above’. And individuals live and perform them ‘from below’. Based on this understanding, “mobilities are staged and people performing mobilities are engaged in social interactions of staging mobilities” (Jensen O., 2013). In this quote the split running down the middle of Staging Mobilities becomes visible as it splits into material preconditions (forming a
physical space) and individuals creating a lived mobility practice. Jensen termed this setup a “socio-spatio-temporal process designing mobile life scapes ‘from above’ and performed mobile engagements and interactions ‘from below’”. While there is a division between the space and the actors performing within it, neither can be seen as dominating and further Jensen calls the current knowledge of this dynamic as insufficient through reinforcing the notion why frameworks line “Staging Mobilities” are of need for research in the urban sphere.

Through the understanding of the Staging Mobilities framework the mobility situation can be documented and understood. Its’ very focus however remains on the urban environment through making it ideal for this kind of research. The very use of the theory is manifested in the growing urbanization of the global population (Jensen O., 2013), which is in turn increasing a need for a solid understanding of mobilities in the urban sphere. Jensen points at the dynamic captured in lived mobilities. And according to him are existent in relation to three key themes: the physical
settings, material spaces and design; the social interactions; and the embodied performances. A visualization of this understanding can be viewed in Figure 2.

Jensen (2013) describes the staging from above as a kind of ‘scenography’ showcasing that a more outside view is playing part in their development such as city or transport planning intents to do. Staging from below is grasped by a more actor-based understanding of ‘choreography’, this term is potentially misleading and even criticized by Jensen (2013) himself and should much rather be a representation of a ‘stand up performance’ where actors follow underlying rules to not come into the crossfire of any other actor, this performance is termed ‘mobilities in situ’.

These terms from screen play are no accident, the Canadian sociologist Erving Goffman used for example the terms ‘front stage and back stage’ to differentiate between public and private live e.g. (Madanipour, 2003) but in a much more distinct way than ‘your own house’ and the ‘public street’ but also in a way of reading in a newspaper public as such displaying which newspaper is being read.

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**Figure 2 Mobilities in Situ, Jensen 2013**

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but not which article is of interest or having thoughts in mind and showing a certain body behavior visible to outsiders. The use of front stage and backstage (public/private) hint at the sociality of mobilities. Rather than seeing social interaction as something which happens outside of mobilities they take a key stage in Jensen’s work as he introduces the question of not only who stages mobilities but also “how, why, where which technologies, artefacts and design principles does ‘staging’ takes place?” (Jensen, 2013) Staging Mobilities is an “investigation of concrete and ordinary mobile situations”. Under this umbrella it builds a way to comprehend our daily lives embedded in a communication net termed “city” (Lynch & Hack, Site Planning, 1984, S. 193) and where individuals constantly need to engage in social interactions as they move through the city (Goffman, 1972).

The theory puts its focus point on the social part of mobilities rather than the ‘neutral’ technical view of mobilities. Something best expressed by Cedric Price: ‘it is interaction, not place, that is the essence of the city and city life’ (Price, quoted in Sadler, 2005, S. 128). Aim is to represent the wonderfully complex actual mobility practices to gain a deep understanding “of their complexity of real-life interaction and mobile situations” (Jensen, 2013). But this also means that it is not a holistic view on mobilities but one which just focuses on the human-human and human-technology interactions of everyday mobility from the point of view of the mobile body.

Concluding the Staging mobilities framework breaks away from the dualistic thinking of traditional mobility studies and instead positions the need of mobility research to see mobilities as the result of the three dimensions of ‘physical settings, material spaces and design’, ‘social interactions’ and ‘the embodied performances’ as part of the “mobilities in Situ” conceptualization. To further understand the three dimensions of ‘mobilities in situ’ laid out as a tangible concept within Staging Mobilities an introduction to each dimension will be given in detail the following section. As they will be used later on in the analysis of this work and a solid understanding of the concept is required.

Physical settings, material spaces and design

The first dimension of the framework is termed “material space, physical settings and design”. Jensen’s goal with this dimension is to bring the notion of urban design and architecture to mobility studies and enrich them by doing so. The dimension is heavily influenced by the works of Kevin Lynch as he focused on practices and situations taking place in cities. All while supporting the concept of Staging Mobilities recognizing added value to movements between A and B. Lynch gave his work a sensitivity to sociological perspectives of urban life. The role of space becomes apparent in this quote from Lawson “The space that surrounds us and the objects enclosing that space may determine how far we can move, how warm or cold we are, how much we can see and hear, and with whom we can interact” (Lawson, 2001, S. 15). Space in this work is however seen much more fluid, breaking from passive static environments to something seen in relation to and shaped by mobilities and immobilities (Jensen, 2013). For example, a car rolling to far forward onto the pedestrian crossing would alter the path of the pedestrian stream for a few seconds until the light turns green and the driver would be returning the space to the pedestrians by leaving it.

Nonetheless, not all spaces are equally attractive. Were so called “sociofugal” places keep people away, “sociopetal” spaces draw them in and through perform better in attracting people to visit
certain sites and unfold their activities (Jensen, 2013). Places can be either or, different depending on time or both simultaneously. I can also be dependent on the user group itself. This will be taken up later in the analysis as a sociopetal space should theoretically allow for a better pedestrian experience it is assumed, that it is beneficial for the perception of the walking experience during the pandemic.

When living in cities then we are surrounded by a totally human-made environment. Jensen calls this a “mobile biotope”, they describe an environment where “mobile practices not only sustain the livability of the sites and places but are also the outcomes of these environments” (Jensen, 2013). Or in other words “mobile biotopes” provide the locality for situated and staged mobilities. It is those mobile biotopes which represent the life of the city. Or in other words ‘a City must be experienced through movement to come alive in its most unique sense. As an environment for choreography, many dimensions must be considered in the city. First is the dimension of speed’ (Hall, The Hidden Dimension, 1966, S. 193).

In the first dimension of Staging Mobilities Jensen makes the point that there is no isolated mobile subject but rather everyone and everything has meet and mingle with systems, designs and other individuals at all times.

To conclude on the material environment, Jensen introduces the notion of “mobility affordances” which helps to explain how the relation between a moving person and the surrounding material environment is mediated and through allow different speeds, trajectories and use cases (Jensen, 2013). A common example for this is the access permission in certain areas or limitation to those which through allow different affordances to different mobilities in a set area. This allows mobilities to be played out differently in different areas, roads are fast (and loud) a narrow side street is rather quiet allowing for temporary change in use such as kids playing soccer on the street and a park is maybe only accessible by foot forcing other mobile units to adapt such as a person skating their bike to fluidly change between “cycling” and walking.

Facework - social interactions of mobility

The second dimension of ‘mobilities in situ’ is introducing the notion of the “social facework” of mobilities in which Jensen reflects on the works of Georg Simmel and Erving Goffman in relation to social aspects or (urban) mobility and how the understanding of social interactions is crucial for the understanding of mobilities as already indicated by the ‘mobilities turn’. The connection between facework (seeing people) and mobilities is quickly taken up by the aspect of us (as in humans) leaving the house to perform a certain interaction with others to progress our daily lives. As for this purpose social interaction represents the center piece of the Staging Mobilities framework to gain an understanding of mobilities in situ. Life is full of everyday social interactions, possibly this mundane origin has led to the oversight of their importance in traditional planning. This can be grasped well by the thought of Jane Jacobs (1961) as she saw the street as a host of social interactions and transport circulation.

Based on the works of Simmel, Jensen lays the foundation of the second dimension on the understanding of how the urban dweller perceives its environment and the inter-human struggle of living in a (system) city but remain independent. Further, including Simmels notion highlighting that
the urban environment has a profound impact on the senses of the urban citizen and how he/she perceives the surroundings.

However, the core learnings expressed in the second dimension come from Goffman and his work on establishing a vocabulary useful for the urban mobility analysis such as the term ‘facework’. He points out the “little practices” of urban mobilities are produced and reproduced by cultural and societal norms (Goffman 1949). Goffman expressed his findings through metaphors to understand everyday mobilities, the “dramaturgical metaphor” sets the basis of the Staging Mobilities framework as noted earlier. Much more importantly for a later analysis is the introduction of the “mobile unit” or the “individual as a unit” providing a sense to grasp different mobile actors. The simplest “unit” would be a pedestrian which is just “covered or protected” by its cloth. But it is the interplay, communication and application of techniques between these units which are of interest here. This lays the foundation for a working street interaction as otherwise they would collide. (Goffman 1972).

For this work the application of the “mobile with” is of interest, it describes how mobile dynamics and situations change based on the quantity and quality of who is mobile. Being mobile together with others makes a difference. For example, a parent walking alongside a spouse will express and play out their mobility differently compared to being on the go alone as a child or as a male/female adult respectively.

The ‘mobile with’ is deeply intertwined with the personal embodied experience and through the “mobile self” (individual) and “mobile with” are an important analytical category (Jensen, 2013). Further, the “mobile with” becomes especially interesting when taken into a tempo-spatial context which according to Jensen for example appears when multiple pedestrians (mobile self) arrive at a single waiting point such as street crossing, lights, narrow through pass and through become a “mobile with” in the process but just until they break apart again as the situation is over.

The mobile embodied performances

The last dimension of ‘mobilities in situ’ describes the personal actions embedded in our human mobility themselves. They extend the connection of social interactions in mobility by focusing on the individual. Mobile embodied performances are crucial to understand the relationship between humans and material spaces because they help study the “cultural significance and social practices” (Jensen, 2013) Practicing mobilities (to walk, bike, drive) comes along in a “complex relationship between the moving, sensing body and the material and built environment of infrastructures and mobility modes” reasoning the research into “what norms, meanings and everyday-life cultures are being produced and re-produced in this process” (Jensen, 2013, p. 92). In other words, once mobility practices become embedded, they are performed unreflect and real. According to Jensen the meanings become embedded not only in the physical surrounding but also in the body itself (body-language) and through extend the meaning, Jensen applies the term of ‘mobile body semiotics’ to this practice. (Jensen, 2013) In the case of walking which mainly appears on slow speeds the very movement of the pedestrian becomes a sign to others around. A quick check over the shoulder might indicate that the pedestrian will change direction or step onto the street. These mobile embedded signages are of course harder to control both for the indicator and the observer, making them easier to misunderstand (Jensen, 2013). As such the embodied performances allow
particular normative and social interactions to construct and merge into a culture of mobility, linked to the ‘staging from above’ (traffic rules) but also embedded in the body as tacit mobility cultures.

Social Capital

Social capital has been numerously employed by sociologists to link the study connections within and between social networks (Oztok, Zingaro, Makos, Brett, & Hewitt, 2015). And has been applied to projects related to urban studies through various approaches. The application of social capital is of interest, as it provides the ability to be useful in achieving communitarian goals (Emery & Cornelia, 2006).

However, most social capital research is built on the works of Pierre Bourdieu, James Coleman and Robert Putnam, the latter being most famous for his work of Bowling alone. Generally, Social capital can be described in three conditions for diffusion: “(a) level of trust, as evidenced by [social] obligations and expectations, (b) information channels, and (c) norms and sanctions that promote the common good over self-interest” (Dika & Singh, 2002, S. 33).

As most works take origin in Putnam’s work, it will be included here too. According to Putnam, social capital is a “function of network qualities, norms of reciprocity and trust” (Pigg & Crank, 2004, S. 60). In the light of conducting qualitative research and in general this is however critiqued by (Svendsen, 2006) therefore this work will follow his differentiation of social capital: “First, that social capital is unequally distributed among social groups in specific power contexts; second, that various types of social capital exist”.

Portes (1998) for example described a distinction between positive and negative social capital which can further help to explain the development of social capital. This is further expanded on in more detail through Putnams influential work of Bowling alone (2000) where he introduces the bridging/bonding typology to differentiate between human networks which are “outward looking and encompass people across diverse social cleavages” (p. 22) compared to ‘bonding’ which presents “inward looking [networks that] tend to reinforce exclusive identities and homogeneous groups”. Through Portes argument the notion of social capital to be able to express positive and negative development shines through, most other works, however, make use of quantitative methodology with a connotated positive attitude of analysis. Through the application of qualitative approach both the positive and negative aspects can be represented equally. (Svendsen, 2006)

For research in planning, it is important to know that the concept has been applied in the context before, mainly due to the connection of quality-of-life indicators and social benefits (Rogers, Halstead, Gardner, & Carlson, 2011). According to Nussbaum and Sen these quality-of-life factors can be measured by assessing the gap between what is hoped for by humanity and what is experienced by humanity (Nussbaum & Sen, 1993). Based on findings from (Rogers, Halstead, Gardner, & Carlson, 2011) it is expected that also during the pandemic societal places have a positive effect on people and effect the walking experience in a positive manner.
Sensemaking

Sensemaking is concerned with the process of assigning meaning to experiences (Kramer, 2017). Or collectively agree on an understanding about a shared experience. In this sensemaking is the creation of reality in everyday life (Weick, 1995). Weick theorized sensemaking in an organizational context however the usage has since been extended, also into the field of planning (Tornberg, 2011). As such sensemaking is conducted by individuals to collectively develop plausible explanations to explain their experiences. “Sensemaking is necessary because most events are equivocal, which is to say that the experiences can be interpreted in multiple ways.” (Kramer, 2017) By managing this equivocality of experiences which are different than expected we can select one out of man possible interpretations. And through influence future action by making sense in retrospective.

“Sensemaking is associated with an interpretive perspective of communication. An interpretive perspective focuses on how meaning is socially constructed through communication. In particular, an interpretive perspective explores how individuals create a shared understanding of their experiences. Although the shared understanding does not require that there be any objective truth to it, it does create a reality that represents the lived experiences of individuals.” (Kramer, 2017)

To get a detailed overview of what sensemaking entails it is best to take a look at (Weick, 1995) seven proposed principals highlighting the conceptualization.

1. Sensemaking is grounded in identity construction. When individuals collectively select a certain interpretation of some experience, they are at the same time selecting a particular identity for themselves.

2. Sensemaking is retrospective. Although individuals may consider possible interpretations of anticipated events, it is not until the event occurs that individuals collectively make sense or commit to a particular interpretation of the event.

3. Sensemaking is enactive of sensible environments. The context or environment is created through the give and take between individuals’ abilities to enact the environment they face through their actions and interpretations and the constraints that the environment places on them.

4. Sensemaking is social. Through communication individuals collectively come to agree on a meaning for understanding experiences.

5. Sensemaking is ongoing. Because individuals constantly have new experiences, they must constantly make sense of them; even repetitious experiences need interpretation concerning their consistency.

6. Sensemaking is focused on and by extracted cues. Because of the impracticality of considering all the information about an experience, individual focus on particular aspects of it (extracted cues) to make generalizations about the whole experience.

7. Sensemaking is driven by plausibility rather than accuracy. The meaning assigned to an experience has to seem reasonable, but it does not have to meet some objective sense of truth to be accepted. (Kramer, 2017)
While sensemaking has its origin and majority in research in an individual and organizational context it can be helpful to apply it in a context of planning. Sensemaking can help with an understanding of the conditions for meaning to be created and the emergence of perspectives (Tornberg, 2011).

In the following, a deeper insight into sensemaking is given to grasp its significance and how it can be applied in research.

**Reasons for equivocality and sensemaking:** The ever-changing experiences lead to a need of sensemaking. We can differentiate into internal and external changes. In a planning context an internal change would be represented through the political agenda or application of a new/different planning theory. An external change can be initiated through societal pressure and activism or through natural occurrences like climate change requiring for an adaption of the planning process which in turn requires sensemaking. (Kramer, 2017)

**Basis for sensemaking:** In the light of equivocality, individuals are motivated to make sense of their experiences. This process however does not start every time from a start but rather an individual builds on prior knowledge and experiences. Individuals take on new cues which are already selected based on prior sensemaking process. “In this way, sensemaking at times has a self-fulfilling nature to it in which individuals’ previous experiences and expectations cause them to extract cues that support their previous sensemaking efforts and often lead to reinforcement of previous sensemaking.” (Kramer, 2017) A person already involved in the situation, trying to make sense of the actions of the new individual entering the situation is posed to be reflected on prior knowledge and as such can be seen as manipulative if the new entry is impacted.

**Sensemaking as a complex social process:** It is important to understand that sensemaking does not generally reach a shared consensus. Meanings and understandings are simply close enough aligned to cause an issue. “Individuals within the social system may have common understandings of certain aspects of their experiences but have differences of interpretations in other areas – differences either not apparent or unimportant for coordinated action.” (Kramer, 2017) Further, individuals might or might not be aware of their differing understandings and still would be able to coordinate their actions. This gap in understanding provides crucial of understanding the plurality of possible understandings and interpretations.

**Outcomes of sensemaking:** Besides making sense of experiences (retrospective), sensemaking leads to four crucial outcomes. First, commitment and identification which lead to actions consistent with the interpretation of the experience. The actual commitment to these actions however remains low. Second, justifications for past and future actions, once an individual is committed, he/she starts with a continuous process of providing an explanation to a particular interpretation. Justifying past actions and future course of action. Thirdly, sensemaking influences action and creates new experiences. Through individuals need to interpret (make sense of) these new actions (experiences) which results in repetition of the process, especially if discrepancies in the experience exist. Fourth, sensemaking can be the development of cognitive short cuts, habits which allow for an increase in quick decision making. (Kramer, 2017)
The general process of sensemaking: The general process of sensemaking involves ecological change, enactment, selection, and retention (Weick, Sutcliffe, & Obstfeld, 2005). Ecological changes are necessary to the beginning of the sensemaking process yet are insufficient for it. Enactment is crucial for sensemaking as it allows for bracketing and labeling of the cues, the selection process of the ‘plausible’ interpretation of the experience. (Kramer, 2017)

The communicative process of sensemaking: Communication is an important part as “the sensemaking process often involves both sense-breaking communication and sensegiving communication.” (Kramer, 2017) Sensebreaking is the process of convincing or persuading others of the implausibility of their current understanding. And through undermines and destabilizes prior sensemaking efforts. (Pratt, 2000) Through sensebreaking the need for sensegiving arises which occurs as “either as a result of experiences that create equivocality or specific sensebreaking communication, various individuals will provide sensegiving communication to help others create meaning in the situation (Gioia & Chittipeddi, 1991); (Sharma & Good, 2013).”

Concluding sensemaking is a valuable tool to research (organizational) communication. With the ability of utilizing, it in the larger frames other than that of organizations to further explore assumptions of rationality in assigning meaning. (Eisenberg, 2006). Through Covid-19 we encounter a surprising and confusing event, leading to an engagement “in sensemaking to answer the questions, ‘what’s the story?’ and ‘now what?’” (Weick et al., 2005) Sensemaking provides way to make use of noticing aspects, make meaning of them and act upon the newly created meaning. This interrelatedness provides a powerful way to make sense of the current situation.

In the table below the application of the theories is laid out.

<table>
<thead>
<tr>
<th>Theory</th>
<th>Application</th>
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<tbody>
<tr>
<td>Mobilities Turn</td>
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<tr>
<td>Sensemaking</td>
<td>Applied theory</td>
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<tr>
<td>Mobilities in situ &amp; Social Capital</td>
<td>Analyzed concepts</td>
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Figure 3 Theory Application

Analyzing walking during the pandemic

In this chapter the analytical framework is presented. Based on the concept of sensemaking the empirical data set is approached by using the vocabulary presented in the concept of ‘mobilities in situ and social capital respectively, which were previously introduced in detail in the theoretical framework. To start off, the structure of the analysis is provided, followed by how the case will be analyzed. This includes a discussion of the limitations of the analytical-framework and the expected
outcome. Through the framework an answer for the first sub-question: “How can mobility experiences be analyzed?” can be given.

Introduction to the analysis

To be able to investigate the walking experience during the pandemic in Nørrebro for urban planning, the analysis is taking foot hold in the sensemaking approach. Since sensemaking traditionally happens on an individual or organizational level, the view taken when making sense of the situation at hand will be based on the concepts of ‘mobilities in situ’ and social capital. Through the framework of sensemaking the terminology and important aspects expressed through ‘mobilities in situ’ and social capital can be applied to the empirical data collected under this work, to make sense of the collected experiences.

As such, this work differs from traditional sensemaking as the researcher takes on an outside view of the initial process, all in all, due to the holistically of the pandemic the researcher himself is involved in the sphere of sensemaking. To make sense of the walking experience at first the frame of reference before the disruption has to be identified (Paull, Boudville, & Sitlington, 2013). For this the understanding of the ‘mobile society’ as expressed by Urry is best used since it highlights the necessity of society to be mobile. The extracted cue indicating the start of the changed experience is the start and the brought along implications of the Covid-19 pandemic which in the likes of Denmark is March 2020. Within lies the starting point of the analysis as the interruption prompts the individual to ask, “What is going on here?” and “What action is needed?” (Paull, Boudville, & Sitlington, 2013). Under these premises the analysis can be placed to include the vocabulary known by planners and at the same time make sense of the individual’s experience.

This approach allowed to focus the data collection solely on the participants experiences made when walking the urban realm while later through this analysis applying a view in line with recent urban planning in order to support the development of the planning space through the learnings uncovered by this work.

Analysis Design

The following analysis design visualizes the analysis process of how the individual sensemaking is grasped through the interviews. These interviews are analyzed through ‘mobilities in situ’ and social capital and afterwards sensemaking will be applied by the researcher through a view of urban planning.
To analyze “walking in situ” during the pandemic, five of the concepts presented in Jensen’s three dimensions of ‘mobilities in situ’ are applied to the analysis. The following section will lay out each aspect and how it will be analyzed in relation to the work.

**Sociopetal places (Staging from above):** To analyze sociopetal places in respect to walking in Nørrebro the observation of the spaces themselves as well as expressions of positive or negative connotations towards the area made by participants will be used to evaluate the impact of walk-attracting places in the pandemic.

**Mobility affordances:** To analyze mobility affordances in regard to walking, e.g. if walking was perceived to be easier or more inviting in the urban areas during the pandemic. Expressions which will be looked out in the interview answers are mentions of ease of use, change of mobility choice, increase in walking.

**Mingling – The little practices of mobility:** To analyze the mingling of everyday walking during the pandemic special notice will be given to expressions of unwell or excitement when interacting in public. Further, reflections in a perceived change of actions, mentioning of ‘awkward’ behavior of surrounding pedestrians as a response of dealing with the pandemic.
**Mobile With:** To analyze the ‘mobile with’ special attention is given to answers by participants who traveled together, parents, and mentions of situations involving other people when explicitly walking together or experiencing situations of ‘sharing’ space when walking.

**Mobile Embodiments – staging from below:** To analyze social interactions tied to the act of walking, answers given in respect of meetings and other “social” activities are analyzed to get a picture of their connection to the walking experience and if they led to an adaption of the act of walking. Further, if the inclusion of social activities had an effect on how walking was perceived (as safe) and through impacted the choice of where to walk.

**Analyzing social capital**
To analyze social capital indicators the same approach as applied to ‘mobilities in situ’ is applied.

**Social Capital– web of public trust:** To analyze the Social Capital or in other words the web of public trust, focus will be given to participants response in regard to acknowledge each other’s presence as expresses trough nodding (nod line), waving and saying hello or smiling at each other. Such actions are found to be important indicators of the existence of social capital. Since they indicate the presence of networks, boding and bridging actions during walking when walking in the pandemic.

**How to use sensemaking in the analysis**
This work will use sensemaking more as a diagnostic tool (Paull, Boudville, & Sitlington, 2013) to lead through the qualitative analysis of the terminology rather than applying a ridged framework. Sensemaking helps with the interpretation of the data in a still unfolding, constantly developing process of the covid-19 pandemic. As such sensemaking is applied to make sense of insights given by participants of the interviews.

Sensemaking is a complex process and is applied to in this work due to the still unfolding pandemic and the uncertainty it brings with it. It is certain that the outbreak of the pandemic sets the cue for the initial need to make sense of the situation at hand. It is important to understand that the mobility impact and the niche of walking under this notion is to be understood as a one of multiple cues. Expecting participants which might have developed an attention fatigues to reflect and make sense of the walking situation specifically might be asking too much however the answers given through the interviews can possibly indicate areas of interest for further research. As such the aim is to uncover plausible worth to re-examine indications for urban planning. Just like many other works making use of sensemaking an evolutionary perspective is taken on, assuming that it becomes more plausible as it ‘becomes more comprehensive, incorporates more of the observed data, and is more resilient in the face of criticism’ (Weick et al., 2005, p. 415). The goal of applying sensemaking is to untangle the issues arisen in context of walking in the urban realm.

The impact of the pandemic allowed people to explore new mobilities or the mobile split of their use case. As” the general maxim in sensemaking is that people act their way into knowing “ (Christianson & Barton, 2021). Did the pandemic-disruption for sensebreaking of the car-usage freeing up mental capacity to explore other mobilities with open eyes? Taking up the input of possible sensebreaking as identified by the participants the question arises if through the view of
urban planning a certainty can be developed to provide sensegiving to the collective impressions collected on a differently perceived mobile world. To analyze sensebraking and sensemaking of walking during the pandemic three facets of sense making will be explored through the vocabulary provided by the ‘mobilities in situ’ and social capital concepts. Those are noticing, meaning, making and action respectively. While these are often seen intertwined (Maitlis and Christianson, 2014) for the purpose of discussing the implication of the walking experience they are considered separately.

The following three facets are explored through the vocabulary as presented in the figure 6 below.

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<th>3 Facets of Sense Making</th>
<th>Correspondent elements of analysis</th>
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<td>Action</td>
<td>- Learnings for urban planning</td>
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Figure 5 Application of concepts within sense making

Summary

The analytical framework explained in this chapter provides the answer to the first sub-question: “How can the urban walking experience be analyzed?”. By making use of ‘mobilities in situ’ to identify crucial notions of urban mobilities, in this case walking, it can provide an understanding of how walking as a staged mobility is expressed during the pandemic. To further grasp, if the possible changes of walking have had a measurable impact on the citizens the concept of social capital as expressed in general trust is applied. Through the experience can be further understood as being positively or negatively impacted. The expressed experiences will not only be coded and understood by the vocabulary provided by the concepts of ‘mobilities in situ’ and social capital but also clustered under the three chosen facets of sensemaking, to build a plausible understanding of the walking experience during the covid-19 pandemic in Nørrebro and Copenhagen.

Walking experience in Nørrebro during the pandemic

This chapter contains the empirical analysis of the case, which follows the approach presented in the previous analytical framework. The analysis will investigate all elements (vocabulary) laid out in the analytical framework. The analysis will go through the core process of sensemaking through the three facets by applying the vocabulary of the ‘mobilities in situ’ and social capital to the responses given in the interviews of the empirical data collection. In the end of the analysis an answer can be given to the second sub-question: “How can we make sense of the walking experience during the pandemic?”
Results

In the results section the observations and interviews are presented. For the later only excerpts will be presented of the total transcriptions. For clarification they are presented under the “vocabulary” introduced through ‘mobilities in situ’ and social capital.

Observations

The observations started in the beginning of March 2021 in the neighborhood of Nørrebro, Denmark. At the time, the city was still in a total lockdown with everything, except for supermarkets, being closed. Back then it was still winter and the weather was cold, so people did not use the public space yet to conduct picknicks and other times of hangout. Rarely did one see groups of people along the street or parks instead there were mostly individuals or groups of two walking along most which happened to be couples, indicating that people mostly sticked to the (social-) physical-distancing rules. However, the so called “coffee walks” with friends were a common sight.

People wearing masks has been a constant reminder of the pandemic, especially in areas where mask are not mandatory like in the park or when riding a bike. This practice has not changed since the lifting of the restrictions in April of 2021.

When taking a deeper look at how people were restricted in their walking, in times where people encountered a group of people to wait to go into a supermarket or at a narrowing of the sidewalk for example at construction sites. This is noteworthy in a culturally way as Danes are normally quite traffic rule conform and through wait at red lights and use the sidewalk, however people regularly spilled onto the bike path or street when the sidewalk was busy and to maintain a ‘corona safe’ distance. Nevertheless, since the lifting of the restrictions this seems to revert back to normal.

In the beginning of the research the question towards observations of people’s use of beg-buttons in the area came up as of being of possible interest, this however, proved rather difficult as they are not used on busy intersection and in general are rather rare in the street scape. But waiting at the street light lead to less clustering or forming of ‘mobile withs’ as people formed groups of their own maximizing the distance to each other.

The biggest recent change came along recently when in April of 2021 society was allowed to open up again, over the course of three to four weeks the appearance of who walked together slowly changed, the were more groups walking along on sunny days, often it was grown up kids and their parents with the occasional group of teenagers. But with the arrival of the sunny days the parks got populated by anyone seeking to meet friends and other people with common appearances of BBQs, birthday parties or groups of students partying.

Additionally, people greeting strangers has also been perceived slightly more times after the restrictions were lifted, however this might be due to the people observed.
Interviews
When asked about their experience when walking during the pandemic, respondents had a wide variety of answer from barely noticing it or finding it insignificant others found it to be quite different because they changed their location or payed extra attention to their surroundings due to personal health implications.

For most, walking remained connected with a passive connotation since it was used to free the head or meet friends and family in a safe environment.

Walking was not perceived as being impacted much but people paid more attention to their surroundings to keep a safe distance. One respondent explained the little difference in the danish culture itself as it practices a rather large “personal space bubble” of around 1 meter minimum already before the pandemic.

Interviewees had little to say about the location they walked in but in general walking in Nørrebro was found as pleasing and through attracted them to go to Nørrebro instead of any other place in the city.

In spite of that, many, noted that the city was quieter especially during the first Lockdown of March-April 2020.

Unplanned encounters highlighted the social impact of the pandemic with many feeling a sense of joy when seeing people they have not been in contact with for sometimes month.

Strangers on the other hand were perceive as a possible source of infection and through any close pass or squeeze by always left a strange feeling with participants. But strangers also contributed to an uplifting feeling of being reminded that one is not alone in the situation and everyone goes through the struggle of experiencing the Corona-pandemic.

Little came to mind in the spontaneous interviews of how the city scape could be improved but notion of pedestrians to be second class compared to cars popped up multiple times.

The full transcriptions of the interviews can be found in the appendix.

Discussion
The discussions of the walking experience are split up in the analysis of ‘mobilities in situ’ and sensemaking to cover the aspect of social capital and how through sensemaking we can get a better feel of how it has been developed throughout the pandemic in relation to walking. In the first part a ridged analysis of the terms provided by Jensen’s framework will be analyzed. In the second part sensemaking will be applied to both the terms provided by Jensen to develop the sensemaking approach and conclude on how social capital is developed or diminished in relation to walking throughout the pandemic.
Walking in situ during the pandemic

For Jensen mobilities start with the notion of place embedded in the dynamic actions of humans, and there is a distinct reciprocity between space and movement, which is why Osmond’s sociofugal and sociopetal spaces are so intriguing to grasp how walkable places can look like (Hall, 1966). The pandemic showcases that popular spaces can be both sociofugal and sociopetal simultaneously and this is highlighted in some of the experiences grasped in the interviews. The otherwise popular shopping streets which always invited for a stroll were suddenly uninteresting hosts of pedestrian activities, but they carried a certain “nostalgia”, a wish of what once were.

Shopping streets appear to be inviting or attractive beyond the actual purpose of visiting shops and buying articles. Luckily, the design of places which invite people to go there, hang out, meet and go about their live do not end in shopping streets. Going back to Forsyth saying that spaces in a walkable city are “simply better” implying a multi-faciality to them (Forsyth, 2015).

For this work, the question is explored if these sites and setting had an impact on how people would go along their day. Looking at the responses, this probably depends, some went to Nørrebro from the other side of the city just because they liked walking more in the neighborhood (vox pop 1), others did not seem to pay too much attention to it (vox pop 4). The fact that that the interviews were conducted in a place perceived as beautiful and walkable could nevertheless strengthen the point that sociopetal places were key to hosting free time walking during the pandemic. But sociopetal spaces are much more complex and also depend on the individual’s perception of what is attractive and how it fits into the broader picture of the individual’s mobility, here the complex negotiation of mobility cultures and norms as described by Jensen come to mind (Jensen O , 2013). No specific clashes between mobility choices have been mentioned by the participants except for the notion, that streetlights for pedestrians at times seem arbitrary and favoring the car disproportionally (Walk-along 3).

This leads us over into the topic of mobility affordances, importantly this is more to Jensen than just access to certain mobilities but “the creation of cultural significance and social practices” (Jensen O. , 2013). In context of the pandemic the “locomotion and behavior are continually controlled by the activities of seeing, smelling, and hearing, together with touching” (Gibson, 2014). Participants have expressed this through “people are sometimes too close” (Walk-along 2) and in general having adapted the motion of shying away by turning their head or stepping out of their path of direction to flee the oncoming person and “stay safe” (vox pop 1). How will these newly embedded practice evolve and influence the experience of walking urban areas is to be observed in future. Possibly interesting is the notion of people who left the city during the first lockdown (many Danes who own a summer house in the family went to the countryside) and experienced their surroundings and in turn mobilities differently and how this new viewpoint is expressed or leading to expectations not present beforehand (walk-along 1). The same holds true to noise levels and pollution, people now have experienced how a quieter city feels like (Walk-along 1,3,4,5). A quieter city allowed to experience active mobilities differently, for some living next to typically noisy streets these perceptions might be even more present. If enough urban dwellers remember this experience and
set it as a new expectation for future city planning, then this can hold large implications for how planning for cars is to be done from a citizen point of view.

Mobility affordances lead us into the next area of interest, mingling which might be the aspect easiest grasped by the participants and about walking in general as it is so commonplace. There clearly has been a change in mingling, it still happened but more distanced, waiting has stretched the action of mingling over a larger distance much like a new choreography has been adapted by the pedestrians. It is still a dance, just a different one. The introduction of mask certainly influenced trust as measure of safety but also as a reminder of possible harm. As such these “street encounters’ are expressions of cultural normativity, they are also venues of investment and building of trust, as they facilitate engagements among unacquainted” (Jensen, 2013). In the interviews this definitely shines through in expressions such as: “I am acting differently. I am going around people in another way than I am used to” (vox pop 4). But also, in more stationary situations “I think the danish culture was quite prepared for the pandemic we always hold large distances when waiting in line and people generally don’t talk to each other.” In this sense mingling is conceptionally very close to the mobility affordances discussed before but instead of enabling the action it represents the action itself.

The ‘mobile with’ is highly emphasized by Jensen as covering an “under-theorized dimension in understanding how mobility with others makes an equally important feature of urban everyday life.” (Jensen, 2013) Analyzing the mobile with when walking during the pandemic has shown some significant differences compared to the ‘normal’ experience. Especially during lockdown periods, the way people moved together with others was strongly impacted. Rarely did one see a group of friends just walking along, making jokes and entertaining themselves, now with the lifted restriction this is a much more common sight. The ‘temporary mobile with’ or ‘temporary congregations’ as described by Jensen in maybe the most observable in the pandemic, people are stretching out the distances to each other actively preventing the formation of a ‘mobile with’ with strangers to avoid awkward feeling and possibly getting into trouble of some kind. But of course, people do and did also purposeful decided on a ‘mobile with’, who and when to walk with.

However, it seems like the ‘planned mobile with’ has been very selected in times of lockdowns, multiple interviewees reported that they felt a strong joy when running into someone they have not seen and talked to in a while (walk-along 3). A possible explanation could be found in and if we take the concept of the ‘mobile with’ further and introduce a ‘stationary with’. One example which comes to mind are work colleagues or fellow students or possibly friends from the sports club, those regular appearances in our lives which we consider friends but are not friend enough to invite over to dinner or keep up with outside of this particular activity, but this needs to be explored further.

In a more relaxed setting, in a park such notions as “I always liked to observe what other people were doing in the park, it felt more social being around people, it was a good feeling after only being at home” (walk-along 4). Here the ‘mobile with’ seems to be at play in relation to mental health or at least the recognition of the social human being a notion important later on under social capital.

In general, the ‘mobile with’ has many different appearances and this also is mirrored in the interviews. Being mobile with others even appeared to have an underlying pressure as one
respondent said “what else are you gonna’ do on your Saturdays and Sundays other than taking a walk” (vox pop 3) but this also seemed to have its positive sides like the young-father in walk-along 1 who used his parental leave to walk the stroller hours on end and explore different areas of the city. Also mentions such as “We liked going out for a walk with friends” (vox pop 2) indicate that the mobile with has had a strong presence during walking in the pandemic. Phone calls during walking also highlight the digital extension of the mobile-with concept first pointed out as relevant by (Scollon & Scollon, 2003). Further, the mobile with is expressed in the difference of the conversations “It was not really relevant with who I walked but it was nice to change as different people meant different conversations.” (walk-along 3)

Studying the mobile embodiments takes departure “of walking is seen as a very basic dimension of mobile relationship to the material world” (Jensen, 2013). The struggle also observed in the interviews is the fact that walking is a ‘mode of being’ (Lorimer, 2011, S. 27). In the discussion of the walkable city the debate of walking to be more ‘authentic’ in comparison of other modes of transport. Also tying back in with the notion of the sociopetal place being “simply better” (Forsyth, 2015). As laid out in the light of the previous aspects and concepts the expressions were much more minimal. But at the same time, they were very “present” behavioral actions. People taking an extra step to go out of someone’s way in the park or on the sidewalk. Interesting is also the notion of waiting and how the otherwise quick actions following one after another were ‘interrupted’ by adjusting the mobile embodiments to suit the pandemic. The change in mobile embodiments was noticed by the participants but not described in more detail, this is likely due to the appearance of being normal and uninteresting. Nevertheless, there is something to be taken from statements like “I am going around people in another way than I am used to.” (vox pop 4) Or implied as I was more anxious compared to “the people in the city seemed to be more relaxed in relation to the Coronavirus” (walk-along 1). Understanding the mobile embodiments also implies a deep understanding of how mobilities happen and why someone chose to walk in a certain way. These are important knowledge points not included in general data collection of traditional mobility studies.

Making sense of the walking experience and the impact on social capital

Sensemaking is applied in this work to get a grasp on social capital and to act as the discussion of this study. To apply sensemaking to the walking experience during the pandemic, three facets of the sensemaking: noticing, meaning making and action are explored. Through sensemaking an answer to the research question of this work can be given: What learnings for urban planning can be taken from the pandemic walking experience?

Noticing

The disruption the mobility system during the pandemic gave people a reason to make sense of these new information. Since the pandemic holistically impacts all aspects of people’s lives, this is however is not the only area flooded with new information requiring sensemaking, with mobility likely varying on the scale of how important it is to individuals on a daily basis in the pandemic. Therefore, it has to be admitted in the scope of this work that sensemaking of the walking experience cannot be taken for granted by all citizens. Yet, the approach of vox pops and walk-alongs allows us to glance into the noticing of changes in the pandemic.
Starting with sociopetal places, it is no surprise that sociopetal places attract people, yet, the mentioning’s of deserted shopping streets paint a picture of normally sociopetal places becoming sociofugal place keeping people away. On the other side parks remained crowded and well used except for days with a lot of rain and cold temperatures. This opens the first box of possible interest points for urban planners, what happens if stores close or change due to more online shopping or possibly sustainability? Are shopping streets attractive or just used out of necessity and therefore found to be nice? Are more urban green spaces the answer? For the latter we can take a look at the Sankt Kjelds Plads in Copenhagen an experimental urban development using a lot of urban greenery for water management as a method of climate adaptation with some coffees and restaurants in its periphery, but the use case of the area for public gatherings and going for a walk is rather underutilized in comparison to Nørrebro which even attracts people going for a walk coming from the other side of the city. Possibly also to the size and different scenery to host a variety of actions which allows to go for a longer walk through the neighborhood. The Langelinie invites pedestrians to just follow along, leading them through the neighborhood. This ties in with previous works on social capital (Leyden, 2003) in connection to the build environment, therefore the availability of sociopetal place is considered to have upheld or grown the levels of positive social capital,

Secondly, Mobility affordances describe how and if individuals can engage in mobilities on a broad scape this is not too big of an issue in Copenhagen, however examples exist. On a more fine-grained understanding, looking at how Covid-19 impacted people going for a walk then it can be observed that what once could have been afforded in relation to walking has been suppressed in favor of caution.

This is expressed through more waiting, distance keeping and avoiding to touching foreigners when walking by. Actions like these created a new sidewalk etiquette for the time which could be here to stay. The question is if these behaviors become the new norm, then, are sidewalks to narrow?

This is directly interrelated with the action of mingling. People have reported in serval instances that they felt uncomfortable being too close to strangers and actions such as turning the head are results of a change in “mingling-culture”. Making any guesses if and when this behavior is returning back to the old normal is unlikely to yield any helpful results but could indicate a field of action to pay attention to especially once the dust has settled of shops reopening and cities seeking a new normal. Do the health-oriented origins of urban-planning need to be brought back into focus? If yes under which premise? The pandemic has highlighted many possible shortcomings which have not been research under the scope of this work but could be identified as important by citizens to be answered by urban planning. While it was not expressed specifically in the interviews, the observed behavior together with the indications given by participants then the impact of mobility affordances has been positive by allowing more active mobilities and give space for public live but also negative in respect to trust when engaging in mingling on the street. An underlying fear of strangers has a negative impact on social capital (Villalonga-Olives & Kawachi, 2017).
Meaning Making

After a year of living in the pandemic it still is novel and emergent and we have to create meaning from often incomplete data which is fragmented and or contradictory challenging any framing and interpretation of the issues. Through sensemaking theory, the construction of such information into sensible accounts is led by plausibility. The evolutionary perspective used in this work assumes that sensemaking becomes more plausible as it ‘becomes more comprehensive, incorporates more of the observed data, and is more resilient in the face of criticism’ (Weick et al., 2005, p. 415).

When looking at how people lived out the ‘mobile with’ than the normally very diverse field of people, we are mobile with has been limited to mainly close family or even just the people living in the same household. Creating an underlying meaning of importance, self-care and respect to others in order to stay safe collectively. The mobile with in this sense has been more hostile and uninviting on a broad sense as it kept anybody of whom the individual is not comfortable with to be in an individual’s close circle on distance. Sociopetal green spaces counteracted this notion by providing ample of space to host more people and on a sunny day in lockdown one could say that the park visitors were mobile with each other by practicing going on a walk collectively. Giving meaning to the importance to enjoy green space but also of hosting friends for a coffee walk through publicly announcing the importance of friendship.

This analysis has touched upon the mobile embodiments before, specifically in the context of ‘how walking is acted out by individuals during the pandemic’. The behavioral changes are hard to change once adapted and it will be interesting to see what their long-term impact is on the expression of city life and how it should be reflected upon by physical spaces.

Social capital is always difficult to measure and grasp out of a research point of view, but through the conversations a few insights were able to be grasped. Walking provided among the only chance to meet safely in the pandemic and allow for conversations, highlighting the importance to have access to spaces which are attractive to walk in also for a continued period of time. Any mention of public trust has been positive and unchanged according to the interviewees. Possibly implying that there has been little change at least compared to their experience. Due to the limited number of replies this is however speculative. For this purpose, it is beneficial to take a look outside of Copenhagen, as it has a lot of good and very good societial places attracting public life, as is the case in Nørrebro. Walking and cycling are a common sight and through meaning only had to be made of subtle changes without requiring any sensebreaking in order to understand the changes of the mobility sheer. Other cities experienced much larger impacts as New York allowed street side dining, Berlin built out their cycle tracks and Paris opened up the Seine riverbanks up to pedestrians. Such changes require a larger amount on sensebreaking and sensegiving. Coming back to Copenhagen it is these fine detailed changes city-planers need to make sense of, if they don’t revert after the pandemic or even if they should be addressed anyway. Due to the little impact felt by citizens no change positive or negative in social capital is noted for meaning making of the new walking situation.
Action

An individual making sense of new clues, giving them meaning would lastly formulate actions based on this new understanding. In the scope of this work the actual implementation of actions is not viable, but instead sensegiving out of an urban planning point of view will be conducted, formulating the possibility to implement actions based on the answers given in the interviews.

The first major, learning and required reflection we can take from the pandemic is the notion of distance. It feels like the need of distance and safe air catapulted us back to the beginnings of urban planning, just that we a different knowledge set and economic surroundings which allow us to adapt our cities in a different way. Sidewalks are the home of pedestrian movement and yet they always appear to be too small in busy areas. (Karsten, 2008) has already shown how the use of the sidewalk is becoming more social again and possibly the pandemic provides us with one more reason to rethink the role of sidewalks in cities.

Secondly, the city should provide interest to its citizens but also in respect to tourism. In a world where many people walked more streets of their neighborhood than they knew existed the question arises what is of interest to pedestrians and how can a discussion between the private and public realm help make cities more exciting to explore and draw people out of their dwellings into the street and public life?

Thirdly, green space this aspect is not new, and cities are hard at work of implementing green spaces for general appearance and climate change effects but also to just make urban spaces more welcoming and break away from the concrete jungle notion we have been connecting cities with. The new love for walking in the pandemic simply highlighted areas and possibly a greener city center could make it more interesting when the shops are closed.

Fourth, the connection between neighborhoods. Neighborhoods are loved for their uniqueness and different flairs but a physical connection between them can help link not only the physical appearance but the people living in them. Providing new opportunities to run into somebody and foster the diversity of the city for future innovations.

Walking is good for mental health and millennials are already more open about it than previous generations (Kelly, et al., 2018). Urban planning should take up this important aspect and provide safe city scapes which not only protect from pollution to curb climate change and improve physical health but respect the psychological condition of citizens. Especially if future crises are on the horizon, citizens need an easy coping mechanism, which could be found in walking.

Lastly, the car dependency has been in the center of the pandemic mobility disruption. It remains a difficult topic to approach but more citizens realizing the impact of the car provided an important sensebreaking point for many. The walkable city could be a sensegiving future focused approach to build better cities.

Concluding, there were some interesting points highlighted by the interviews for urban planning. And the learning that social capital has not been significantly impacted in a sociopetal place like Nørrebro strengthen prior research that walkable neighborhoods are beneficial.
Conclusion

This work aimed to make sense of the walking experience during the Covid-19 pandemic in the urban neighborhood of Nørrebro in Copenhagen. This was explored through the following research-question: What learnings for urban planning can be taken from the pandemic walking experience?

An answer to this question was developed through the help of two sub-questions. The first: How can the urban walking experience be analyzed?

This first sub-question was answered by the introduction of the analytical-framework based on the ‘mobilities turn’ as the grounding theory, sensemaking as the applied theory of interest to answer the main-RQ and the concepts/frameworks of ‘mobilities in situ’ and social capital to develop the analysis.

The second sub-question: How can we make sense of the walking experience during the pandemic?

Based on a qualitative analysis of vox pop and walk along interviews the walking experience was analyzed along the concepts of ‘Mobilities in situ’ and ‘social capital’ and based on this assessment, sensemaking with social capital in mind was conducted. Through the analysis it can be concluded that the experience of walking has been impacted the introduction of space in the behavior of pedestrians. Further, no significant decline or improvement in social capital was found to be resulting from the change in walking in Nørrebro due to its sociopedal like design.

Through the answers developed under sub-question two the required knowledge was gathered to conclude on the main-RQ. The work concludes with learnings for urban planning identified through the interviews and by applying sense making through a view of urban-planning which led to the identification of six ley-takeaways for urban planning from the walking experience. Those are distance in public space, interest space provides to pedestrians, the greenery of space, the connection between designated neighborhood areas, the promotion of walking in relation to (mental-) health and the clash between pedestrian and car-oriented usage of space.

The application of the ‘mobilities in situ’ concept has proven to be a powerful tool to analyze the experience of walking and to identify where and how they happen while not forgetting to ask why. The application of social capital as a more abstract layer to grasp the notions of sensemaking has been working well in the light of the struggle associated with capturing social capital, the implementation needs to be compared however to ore traditional use-cases. The application of sensemaking helped with grasping the subtle changes observed and project them on a more long-term timeline to evaluate their impact. Further research is needed to apply the concept on a bigger scale and prove its relevance in other subject areas.

As such this work has successfully applied a solely qualitative approach to the ‘mobilities in situ’-framework and has tied the results to the identification of possible changes in social capital to indicate their impacts as positive or negative. Further, the introduction of sensemaking in the field of planning can provide planners with a sense of direction of current developments and help steer planning efforts with more certainty into a preferred direction. Through the combination of concepts and frameworks regularly used in planning research a distinct view for sensemaking can be applied to the subject.

Through this approach a contribution to the lack of experience research in the urban context of walking could be provided by exploring new approaches of data interpretation in the field.
Limitations:
The following limitations have been encountered when conducting this study. The empirical data collection of this work has only gotten a few responses from possible participants and through cannot provide a significant insight into the walking experience during the pandemic, but it did otherwise work as expected to gain various degrees of deep insight into the experiences of walking.

It is assumed that the language barrier is of issue here as the researcher did not speak danish to a sufficient degree, but all participants were danish speaking, but this cannot be confirmed at the time of writing. Further, sensemaking is still relatively new as a concept especially in the field of planning with only one significant application of the concept through the application needs to be tested more rigorously in future. Further, making sense of (external) experiences is challenging as one makes sense through the research terminology on top of individual sensemaking, but this rather reflected in a filtered view than a unreliability of the application, more in depth observations along with the individual sensemaking could possibly overcome this limitation.
References


inclusion projects:


Appendix

Vox pop Interview Questions

1. How do you feel about walking in your neighborhood?
2. How do you experience walking in busy streets?
3. Do you experience walking differently since the pandemic?
4. Did your attitude of walking in crowded spaces change?
5. Did you switch the mode of transport since the pandemic started?
6. How many times a week do you go shopping?
7. How many times do you walk for leisure per week?
8. Do you trust people in general on a scale from 1-7?
9. Is going for walks important for how you experience your neighborhood

Walk-along Interview Questions

1. What was your experience when walking during the pandemic?
2. Was it a positive experience?
3. Is it different than before?
4. Is it different now where the restrictions are taken back?
5. Was it important where you walked? Did you change locations?
6. Did you walk together with others? Was it important who you walked with? Was the experience different?
7. What can you experience in public areas (streets, parks) what you cannot experience anywhere else?
8. When walking during the pandemic did you feel it to be different (smell, noises, visual, touch)?
9. What feelings do unplanned encounters invoke during walks in the pandemic? (running into somebody)
10. What did you feel when you met someone you know on the street?
11. Were there moments where other people invoqued a feeling of unwell or happyness in you when walking close by?
12. Did seeing people have an effect on you?
13. Did walking in areas with other people have an effect on you?
14. What would you like to see to make the experience better?
Interview transcriptions

Vox Pop 1 | Young Couple mid-twenties

We really love it, we live in Amager and we want to move to Nørrebro, we are going to buy our own apartment here. It is our favourite neighborhood in Copenhagen. And I grew up right down here, so it is really familiar, good vibes.

Yes, I think so. Very much so especially in the beginning. We were avoiding other people, going outside on the Main Street, (instead of staying on the sidewalk). After some time people got more comfortable, more loose again, but now after the second lockdown it kind of is the same again that you try to avoid people. And move your head or something. (Turn head away from people)

Did your own attitude change, did you adjust your behavior? I think we did, yeah. I am also diabetic so taking that into consideration we were a bit more careful (keeping more distance to people) And trying to go less to the supermarket.

We try to do shopping for 3 days.

How often do you go out for leisure walks? Almost every day. Yeah, but then just the two of us. Without others or friends.

Do you trust people in general walking around? I don’t think my trust changed, just more careful when walking around.

Vox pop 2 | Two female friends

P1: It’s fine. I only live here since the pandemic, so I cannot say something about that.

P2: It almost feels like there are more people walking as there is nothing else to do.

Q2: Wait a little more for people

How often do you go for social walks 2-3 a week

Grocery shopping: daily

General trust level: no change

Vox pop 3 | Woman 50-60 years

Q1: It makes me happy. I like it. I like my neighborhood that is so full of life and that you can walk a bit further and then it is more quiet, depending on what kind of mood you are in. You can always get some good coffee.
If you want to explore it is always good to walk. I don't come from Copenhagen so its a very good way to explore the city and get to know the little streets. You don't need a map you can just walk and you will always find your way back.

Did the experience

I think a lot of people are walking a lot more, I know we are, what else are you gonna do on your Saturdays and Sundays other than taking a walk. Any you can see it as well in the streets and if you take the train to the forest there is also a lot more people out there.

Social walks: a couple times a week

Scale from 1-7 general trust? I trust them a lot. When you walk at night, you don't get stupid but I don't think twice when going for a walk.

Attitude change. Yes it did, I think about that.

Vox pop 4 | Young people (2) mid 20s

P1: It is fine, I don't take so many walks so I am maybe not the greatest subject. Especially when the weather is good it means a lot to be outside.

What does it mean for you to go for a walk?

P1: relaxing, good time for self reflexion

P2: And using the city

P1: The experience changed especially during the pandemic. Also me moving closer to the city where it is a lot less green compared to outside of the city. I don't know which part has a greater influence. A lot of walks during the pandemic compared to before.

P2: You cannot see there is a pandemic right now.

People are acting differently?

P2: I am acting differently. I am going around people in another way than I am used to.

P1: You also follow the signs where it says one way only. I don't know if I would have done that before. But now I do.

P2: I also used to use the city and the green areas a lot more than I do now in this time?

Groceries shopping: daily

Social walks: P1: once a week P2: two times a week.
General trust: P2. I think that is a tricky question, It depends the people. But in some areas of Nørrebro I am a bit more careful.

P1: I think I am fortunate to not think about it a lot.

Walk-along 1 | young father in parental leave with stroller & child

In the first lockdown we left Copenhagen for my wife’s families’ summer house. It was a different experience as I am only used to live in the city.

The people in the city seemed to be more relaxed in relation to the Coronavirus after coming back from the summer house in the countryside.

Nevertheless, the city felt quite deserted without much life going on.

The walking experience for me in the pandemic was quite positive and I would say I love it. I am currently walking through the city hours on end.

I think the danish culture was quite prepared for the pandemic we always hold large distances when waiting in line and people generally don’t talk to each other. It it quite strange to be honest, it feels strange to me to wait in line and not connect with the people surrounding me.

I find conversations to be different when walking, more focused and freer flowing and longer as you are not constrained to a room of a certain mood.

I experienced the city to be quieter than normal, quite pleasant. But as said the first lockdown we were in the summer house and it provided me with an experience of spring, like I have never experienced before. It normally goes by so quickly jet this time I got to observe it each day in my walks before and after work.

When I ran into friend or met them on purpose it was often just a “How are you”, many especially friends without family living alone had a really rough time. And in general, when we were meeting people, we did it outside, just to be safe.

I think due to the pandemic everyone me included falsely assumed that stranger might have the virus and there was a fear of strangers. And on the other hand, people I know were assumed to be safe around, probably it should have been the other way round.

But in general, we tried to avoid crowded areas to stay safe.

The conversations of the people around were nice sometimes you just want to hear more of what these people say. (hint of conversational snippets) “Uh I love snippets” snippets are great, sometimes I speed up or slow down, just to hear a bit more of the conversation. Sometimes it follows you around all day “In which context does this snippet make sense” But on the other hand
when you talk with someone about private matters then this feels weird, like taking about a harsh break-up. I think those conversations are better to have together in a private room.

Especially when going for a run it is important to not see the end of where you are going, like at the (Copenhagen) lakes. Like a band running through the neighborhoods, inviting you to go further. We need more green and open spaces and greenery everywhere.

Walk-along 2 | young couple

The city felt like a ghost town. We liked going out for a walk with friends. And it feels more inviting when people are in the area as otherwise it feels deserted, it is cozier with people around.

I think stranger often come to close when walking.

We like walking here I think nothing needs to be changed.

Walk-along 3 | Male Student early 20ties

I felt the people were more distanced and did not greet as often. It felt like saying hello would transmit Covid. There really was a minimum of contact between people but in a way which was really social not physical as in social incompetence.

I did longer walks and didn’t care about the weather unlike before. This also allowed for longer conversations, in person or on the phone.

Walking helped me to go through and understand the pandemic.

I think I often decided to just walk through the neighborhood, instead of the pedestrian zones in the city there was nothing to look at and experience, the shop windows were empty or boring.

It was not really relevant with who I walked but it was nice to change as different people meant different conversations.

Going to the park allowed meeting more people this is not possible on the street.

I actually found I use my ears more due to online lectures but on the other hand the city became quieter.

Running into somebody always sparked some joy as these are people important to oneself but maybe we did not hold contact otherwise.
Being too close to someone in the street or supermarket definitely involved strange feelings at times.

I think now people start again at to smile when you walk along. I notice that when going for a run, but they don’t say hello yet.

Seeing people is nice but when it is crowded you ask yourself if these people didn’t get the memo.

I found waiting time at streetlights for pedestrians to be too long and arbitrary. They really only favor the car even in areas where it is mainly designed for pedestrians.

**Walk-along 4 | Male Student 20ties**

I normally like going for walks but in the pandemic, I went for way more since everything was closed. I would then call with my family or listen to music and podcasts. I definitely saw places in Copenhagen, I didn’t know before and I think normally I would never go there because I would have been too busy.

I think it was positive but sometimes it was a bit lonely.

The walking itself was not too different but I often had to wait for people before the supermarket or in construction zones to keep a safe distance. Maybe unnecessary but it felt like the right thing to do.

I think the parks got emptier on sunny days compared to when everything was closed. Now people are back in cafes and restaurants before it felt like everyone was in the park on a sunny day.

I liked walking to different places, here in Nørrebro I always liked to observe what other people were doing in the park, it felt more social being around people, it was a good feeling after only being at home.

I think here people like meeting in the park for a beer or generally to catch up, it is a freer feeling than doing the same at home or at a friend’s apartment.

I think in the beginning it was more relaxed, I live next to a loud street and it was quieter for a while but now it is back too normal.

It is always a joy to run into friends, just the other day I met some friend I haven’t seen in weeks in the subway. We had two stops to catch up on life and agreed to meet soon again.

As said, I waited a lot in narrow areas to let people pass where there was more space, before I would have just squeezed through.

It was fun going to the park and see people do fun things, it extended my ideas of what you can do in a park, I am definitely used to think this is something for a private garden behind the house, because that’s how I grew up.
Yes, walking with friends and family was different than just calling them. It was more real. When calling with my iPad I would then start scrolling the internet or want to watch a movie but in person I would dive deep into a conversation or ask questions I would do otherwise.

I think I now know how nice a city is when it is quiet, when I go for a walk now, I am looking to go to a quiet area also I hear that loud street in my apartment. Also, the streetlight is close to my house is way too short to actually pass it even when you walk quickly.

Walk-along 5 | Female young-professional mid 20ies

I found walking as a way to get away from home, when being home all the time. It was a time to think and see something other than your own apartment.

I didn’t find a normal street to be any different, but the city center was kind of deserted.

I think it was nice to go for walks in general, but I hated to be in crowded places. In general, it was mainly the same.

I enjoyed going for a walk with my boyfriend or other friends in general, it was the way to meet and talk.

Streets and parks are definitely different somehow, more transparent but still the same. You get to observe others and enjoy what they do. It is quite fun to watch other people.

I think you notice the five-senses more as in paying more attention to keep your distance and sometimes you stay away from others but still smell their perfume, an interesting feeling. Also touching others was no problem before but now it is like an absolute no-go.

I didn’t run into too many people, but it was always nice to see people you didn’t for a while. Also, people smiling at you knowing they also go through the same corona-situation and everyone has to deal with it. Seeing others reminded me that there is still a world with more people out there.

I think I definitely noticed things when walking around which I would want to get changed but none come to mind right now.