

Accessible space? Urban youths' needs and barriers in everyday life

A qualitative study in Brunnsbo, Gothenburg, Sweden

Author

Diana Ekman

Supervisor

Bertil Vilhelmson

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Department of Economy and Society
Unit for Human Geography
School of Business, Economics and Law at
University of Gothenburg



UNIVERSITY OF GOTHENBURG
SCHOOL OF BUSINESS, ECONOMICS AND LAW

Abstract

In the light of new sustainability challenges in cities brought forward by increasing urban populations, the realm of urban transportation research has gradually digressed from planning for accessibility by mobility to instead emphasise the benefits of accessibility by proximity. This shift brings with it a possibility to elucidate and expand knowledge on population groups that previously have been neglected in earlier planning processes. One of these population groups are youths; not yet adults but with greater needs on independence in terms of accessibility than children. Consequently, youths as a population group in relation to accessibility have been researched in this thesis with the aim to examine their accessibility needs, practices and barriers thereof. The thesis focuses empirically on youths living in the urban area of Brunnsbo in Gothenburg, Sweden which is done through the employment of two qualitative methods; activity diaries and semi-structured interviews. 14 youths between the ages of 12 and 16 recorded their spatial movements in activity diaries and were subsequently interviewed about their accessibility.

The thesis found that youths' accessibility practices to a great degree are characterised by proximity; many of the youths live stationary lifestyles and seldom leave their home area. These practices enabled the youths to exercise much of their accessibility through slow modes of transport such as walking. However, it was also found that the youths were routine users of public transport, even for very short distances. That proximity is central to youths' accessibility practices also means that needs and practices in relation to youth accessibility to a great degree conform; many of the most common destinations frequented by the youths were related to social needs and are located in Brunnsbo or within its vicinities. However, the youths experience a range of barriers that hinder or alter their accessibility needs and practices. They vary from being constituted by parental constraints and traffic to perceptions of fear of people and places as well as feelings of being observed by others. These barriers especially affect girls' accessibility, adding a gendered dimension to barriers of youth accessibility.

The results of the thesis demonstrate that youth accessibility needs and practices to some degrees conform to the planning for accessibility by proximity shift, in that youth accessibility is largely governed by proximity.

Keywords: *accessibility, mobility, youth, urban, time geography, proximity*

Preface

This thesis was written during the spring semester of 2018, as part of the Master's Programme in Geography given at the University of Gothenburg. Having long been interested in why and how people go about their daily lives in cities, it was clear to me that I wanted to focus this thesis project on ways to improve this practice through developed accessibility. Therefore, I would like to thank Staffan Claesson at Framtiden Förvaltning AB for valuable insights into how this is done professionally in Gothenburg through the project Accessible Cities.

I also want to thank Bertil Vilhelmson at the Department for Economy and Society at the University of Gothenburg, for always easily accessible, insightful and dedicated supervision.

Likewise, I would like to thank the staff at the youth community centre in Brunnsbo who helped me immensely by setting up contact between the respondents and myself as well as providing spaces suitable for my interviews with the youths. Of course, I would also like to direct my sincere gratitude towards the respondents who gave up their time to tell me about their everyday lives – without your help and your stories this thesis could not have been completed!

Diana Ekman
Gothenburg, May 2018

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1. Introduction

1.1 Background

More people live in cities today than ever before and the urban trend is expected to continue as estimates show that by 2050, 70% of the world's population will be urban (Världsnaturfonden WWF, 2012). As more people share cities, challenges to a sustainable urban development arise where urbanity as we know it must evolve in order to adapt to new realities. Favoured strategies to manage the needed rearrangement of the urban environment are those of densification and mixed-use development (for example, UN Habitat, 2014). It has been argued by many that the adoption of mixed-use development and increased densities bring with it aggregated societal benefits, creating economically and socially healthy cities at large (Coupland, 1997). Densification and mixed-use development strategies are additionally believed to be part of the solution to urban transportation issues brought along by the high influx of urban inhabitants (UN Habitat, 2014).

Departing from the paradigm of planning for ever-increasing mobility and the movement from A to B in transportation and urban planning, recent methods have instead placed emphasis and focus on the importance of planning for accessibility by proximity. This is a practice more concerned with the *ability to reach* everyday destinations, closely interconnected with the employment of mixed-use patterns and high densities (for example Curtis & Scheurer, 2010; Ferreira, Beukers & Brömmelstroet, 2012). Former urban transportation planning instead centred around the use of the car and ways to improve its movement through urban areas. By extension the previous models favoured those who practiced accessibility through the strategy of high-speed mobility who in turn were able to enjoy greater accessibility at the expense of those who because of various reasons were left without the option of practising movement through the means of a private vehicle (Stopher, 2016; Litman, 2017). Therefore, with this paradigm shift which instead emphasises the benefits of planning for accessibility through proximity and slow modes of travel such as walking and bicycling, comes an opportunity to improve accessibility practices of preciously excluded societal groups as cities are growing and developing.

However, of importance to remember when trying to adapt to the new urban realities and sustainability challenges in order to improve accessibility by proximity is that accessibility

needs are not homogenous in nature as different social groups exercise different accessibility practices. As found by Elldér, Larsson, Gil Solá and Vilhelmson (2017), the elderly tend to live closer to everyday services in a pursuit to minimise their needs to be mobile whereas high income workers have the financial means to still arrange their accessibility through private vehicle access. Young people too have unique requisites dictating their accessibility within the urban environment which to a high degree are depending on the adults around them (Osborne, Baldwin, Thomsen & Woolcock, 2017). Moreover, youths' accessibility needs and practices have traditionally been overlooked in urban transportation planning which has habitually neglected various dimensions of social differences (Beebeejaun, 2016; Vanderbeck & Morse Dunkley, 2004). Still, there is a research and interest gap in terms of how youths' accessibility needs and practices are viewed in urban transportation policies, plans and research (McMillan, 2013). Yet, youths belong to some of the most vulnerable road users and face certain barriers inflicting upon their accessibility based on their age, income (or lack thereof), physical size and degree of personal freedom to travel (ibid). Additionally, it is believed that youths are disproportionately excluded from opportunities to participate in the planning of their own communities, which is then allowed to evolve without considering the unique needs of its younger residents (Frank, 2006).

1.2 Research problem

Youths are in an age between childhood and adulthood where they are no longer fully dependent on parents or other caretakers to get around in the urban environment but at the same time often have not yet been presented with full decision-making authority in terms of their own accessibility within the city (Osborne et al., 2017). In other words, there are accessibility practices, needs and barriers that are unique to the experiences of underage youths, and knowledge thereof is needed to be further expanded. As urban planners are turning to mixed-use development and density measures as solutions to present-day urban transportation challenges, it becomes apparent that taking note of youth accessibility practices, needs and potential barriers offer an opportunity for a fuller perspective on non-normative accessibility is expressed within the urban landscape as it is concurrently reorganised.

1.3 Purpose and research questions

Consequently, this thesis seeks to expand current knowledge by researching urban youths' accessibility needs and practices and potential barriers thereof. In order to work with this aim,

several research questions have been formulated. They are as follows:

- How do urban youths perceive and practice accessibility?
- Which needs do urban youths have on accessibility in terms of activities and destinations?
- Which, if any, barriers do youths identify as preventing them from practising accessibility within the city?

To elaborate on and answer these research questions, a group of youths living in Gothenburg, Sweden were chosen as the thesis's respondents. This will be further explained in *Chapter 4. Methods*.

1.4. Description and motivation of study area

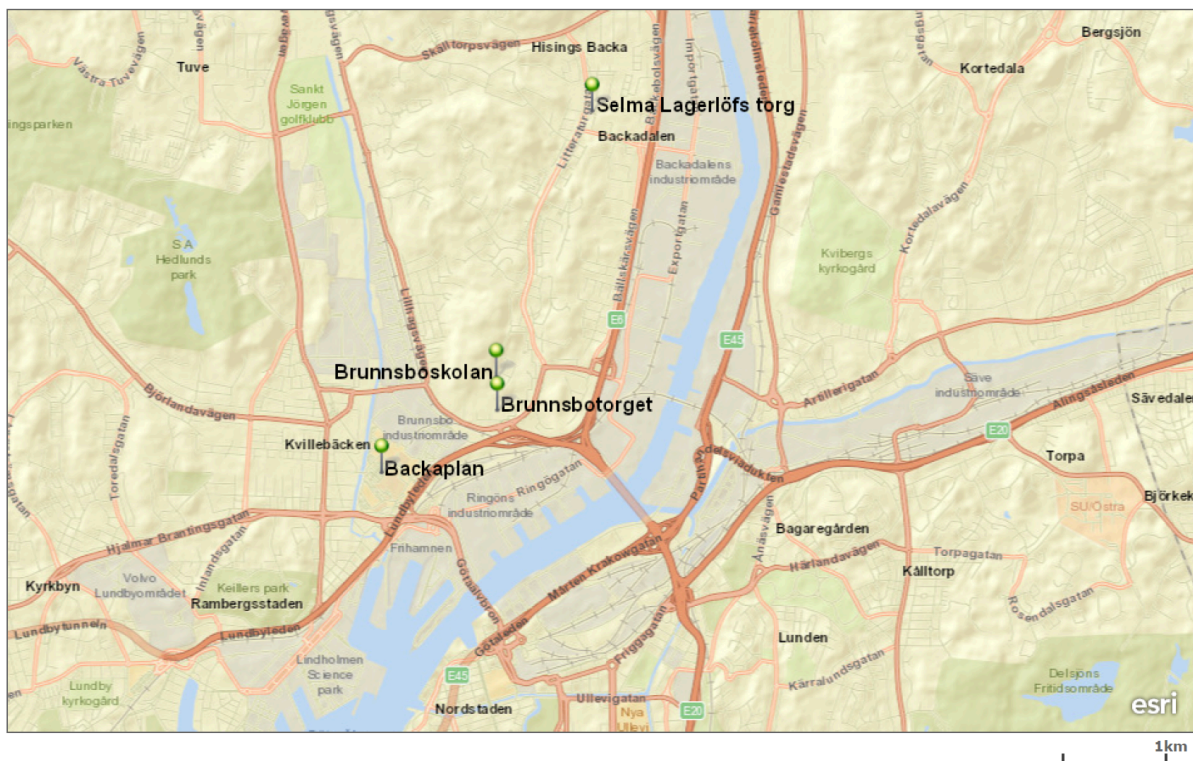
1.4.1 A brief introduction to Brunnsbo

The thesis seeks to study urban youths' accessibility practices and needs, as well as potential barriers thereof. This is studied in the context of Brunnsbo, an area about three kilometres north of central Gothenburg, Sweden (see *map 1*). It is a primary area belonging to the city district of Norra Hisingen. As of 2016, 7,364 people live in Brunnsbo distributed in 3,106 households (Göteborgsbladet, 2017).



Map 1: Brunnsbo in relation to central Gothenburg. Source: Stadsbyggnadskontoret, 2016

Currently, the area is serviced by public transport via several bus lines offering direct routes to central areas in Gothenburg as well as to Skogome, further north. Most of these bus lines go via the local square, Brunnsbotorget. The square gathers several amenities, such as a grocery store, a newsagent, a bakery, sushi and pizza restaurants and a florist (Brunnsbotorget, n. d.). Further commercial amenities located close by are those found in Backaplan and at Selma Lagerlöfs torg, located about 1,5 km and 3 km respectively from Brunnsbo, as can be seen from *map 2*.



Map 2: Brunnsbo in relation to closely located commercial facilities (Compiled through ESRI/ArcGIS.com)

1.4.2 History of Brunnsbo

Brunnsbo was predominantly rural up until the 1960s when the city of Gothenburg started to purchase and expropriate land as a first step to urbanise the area (Sveriges Hembygdsförbund, n.d.). This was done as part of the so called Million Homes Programme that came to dominate Swedish urban planning at a national level during the 1960s and 1970s. The Million Homes Programme was an ambitious public housing program which aimed to build one million new dwellings between 1965 and 1974 in order to resolve the acute housing shortage. At the time, this number constituted one new dwelling for every five households in the country (Vogel, 1992). In the Gothenburg context, most new dwellings were built in areas northeast of the city centre, with Brunnsbo being one of them (Enhörning, 2010). This was carried out in a modernist

manner, which is distinguished by the notion of spatial functional separation. This meant that the various functions in everyday life (e.g. dwellings, workplaces, commercial centres etc.) were actively separated (Söderlind, 1998).

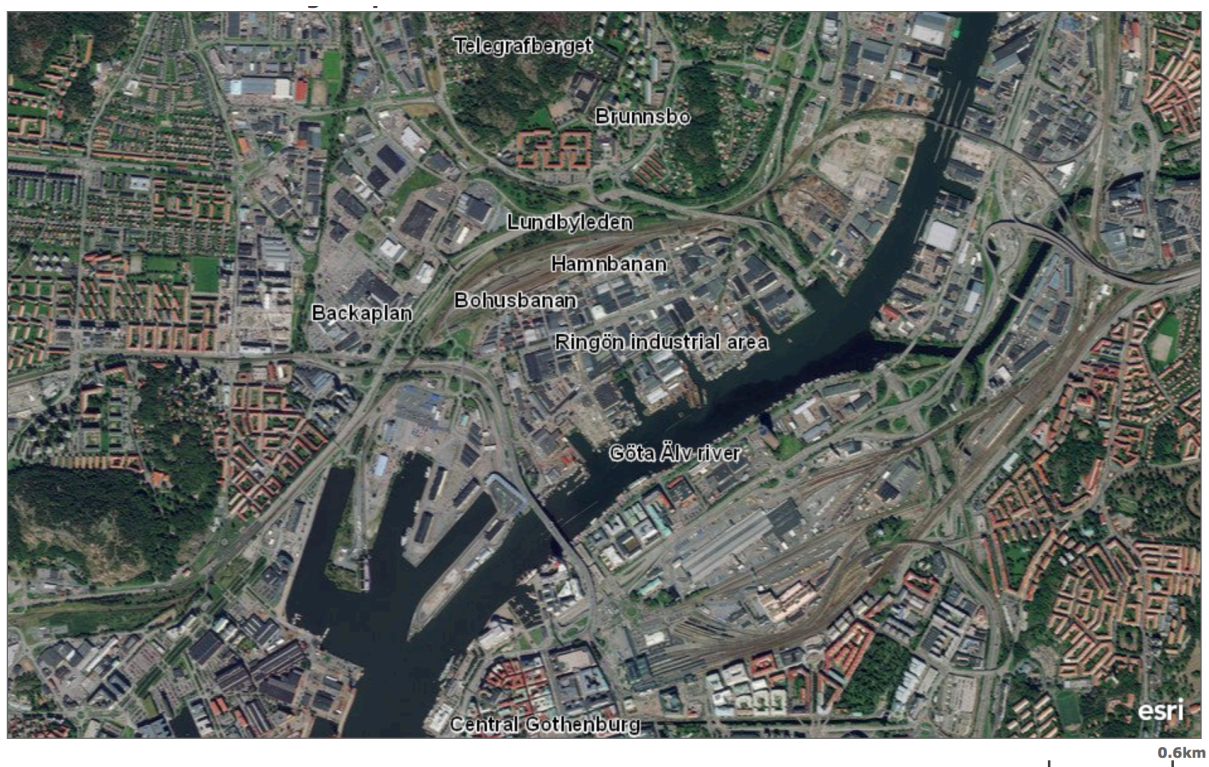
Even if the Million Homes Programme contributed to solve problems such as overcrowding and subordinate housing standards, the development programme has been criticised after its implementation. For example, it has been critiqued for creating a strong automobility dependence as the spatial separation of functions lead to locations for everyday needs being spread out over several urban areas (Söderlind, 1998). Also, the monotony of the program, its use of rough, uninviting materials and the construction of areas on an inhuman scale are all said to have contributed to segregation, isolation and passivity among the inhabitants (Enhörning, 2010). Due to this inheritance from the 1960s and the Million Homes Programme, Brunnsbo is built in a sparse, structural manner with buildings far apart, which has contributed to feelings of the public spaces in the area as generous in size but difficult to populate with life and movement (Okidoki Arkitekter AB, 2016).

1.4.3 Future development

Recently, Brunnsbo has been identified as one of the key areas in the city's development strategy. This strategy entails a focus on centre points with special potential to be further developed through densification and improvements in services and public transport. As described, Brunnsbo is sparsely built, whilst being situated strategically in relation to the city and the future development plans for it at large. Planned future measures are therefore concentrating on the construction of new dwellings and commercial and service buildings in already developed areas, so that commercial activities and services are closely located to homes, all while densifying the area (Stadsbyggnadskontoret, 2016).

Still there are a number of barriers preventing easy accessibility, both within Brunnsbo as an area, as well as from Brunnsbo to other destinations in the city, that need to be taken into account in planning for densification of the area. Some of these barriers are physical and topographical; for example Brunnsbo is framed by a mountain – Telegrafberget - that block access to closely located areas. In order to reach the city centre of Gothenburg, the river of Göta Älv must be crossed which is done via a bridge that currently serves the public transport modes of buses and trams as well as providing access for private vehicles, pedestrians and bicyclists. The route towards the city centre of Gothenburg is mainly composed by industrial areas, which

some mean constitute a mental barrier for especially pedestrians and bicyclists. Other barriers are infrastructural in the shape of highways and railways; Lundbyleden and Hamnbanan are dissecting Brunnsbo from the south-eastern direction and Bohusbanan has the same effect from the south-west, ultimately blocking easy access to the shopping centre area of Backaplan as well as contributing to mentioned mental barriers. Again, this is a predominant barrier to especially pedestrians and cyclists (Stadsbyggnadskontoret, 2016). These barriers have been marked out in *map 3*.



Map 3: Topographical and infrastructural barriers to accessibility in Brunnsbo (Compiled through ESRI/ArcGIS.com)

Planned measures developed to improve the traffic system in and around Brunnsbo place emphasis on said barriers. Planners are especially focused on minimising the hindering effects of the major traffic routes cloistering Brunnsbo from its surrounding areas by levelled crossings. A bigger transport related project is aimed at improving regional mobility and accessibility by the construction of a new commuter train station that is planned to be located next to the current square and bus stop. This new station would be part of Bohusbanan, a coastal railway connecting Gothenburg and Strömstad. By connecting Brunnsbo to this railway, planners hope to relieve some of the major transportation nodes in the central areas of Gothenburg. This as people commuting between semi-central areas within proximity of the new station and other

areas already connected to the railway no longer would have to change transport modes via the currently overladen central nodes (Göteborgs Stad – Trafikkontoret, 2013, p. 36) There are also plans to improve mobility through public transport measures at a more local level. Accessibility in terms of time is to be improved between Brunnsbo and Körkarlens gata, just north of Selma Lagerlöfs torg, by separate bus lanes (Lekholm, 2017, 20 June). Furthermore, in alignment with Gothenburg city’s transport strategy prioritising pedestrians and cyclists, Brunnsbo is to be connected to the Gothenburg commuter bicycle network on the other side of Lundbyleden by the construction of a bicycle overpass (Göteborgs Stad – Trafikkontoret, 2013, p. 32; Stadsbyggnadskontoret, 2016). The transport strategy especially highlights the importance of creating opportunities and possibilities for children and youths to participate in these kind of slow, more sustainable ways of transport as “travel habits are established at an early age” (Göteborgs Stad – Trafikkontoret, 2013, p. 37).

1.4.4 Motivation of Brunnsbo as study area

Given the presence of the many different barriers to accessibility, combined with great plans for future housing and transport development, Brunnsbo is an area well suited to serve as a study site for this thesis. Its demographic characteristics in age structure are similar to those of Gothenburg at large (Göteborgsbladet, 2017), further showing the area’s aptness as a study area.

1.5 Delimitations

This thesis defines adolescents as 12 to 16 year olds. Hence, it is their accessibility practices, needs and potential barriers thereof that will be examined. While accessibility practices, needs and potential accessibility barriers among other population groups or even the population at large are indeed of importance in terms of attaining an inclusive urban planning and accessibility framework, those aspects are not to be covered through this thesis.

1.6 Definition of concepts

Mobility and accessibility

Central to this thesis are two key concepts; accessibility and mobility. Though sometimes used more or less synonymously, their difference in meaning is profound. To add to this, their inherent respective meanings in literature and research are not always consistent, hence the need for a clarification of how they have been used and applied in this thesis.

Mobility refers to the actual physical movement and flows of people and goods in societies. Having long been a topic of research within the geographical field due to its status as a spatial process interconnecting people and places, it has been linked to the exploration of how human societies’ functions depend on human circulation. In transport planning, the mobility perspective tends to place emphasis on velocity, contributing to a heavy focus on automobiles and other high speed modes of transport which allow their users to reach greater distances in less time. However, the bias of transport solutions primarily benefitting drivers of private vehicles through increasing speed and volumes can in turn reduce and hinder others’ ability to travel, who choose to do so in other ways and by other means (Litman, 2017).

One thing that becomes affected by the focus on increasing high-speed and high-volume mobility through private vehicles is accessibility. Accessibility is often defined as the *potential* to reach locations where amenities (i.e. education, employment, services, social contacts and leisure activities) are available. This is part of the perspective that views accessibility as “the ability to reach” which can be achieved in two ways; locational accessibility (=proximity) or distance-bridging accessibility (=mobility) (Haugen, 2012). As seen described in *figure 1*, two dimensions of the accessibility concept emerge from this way of reasoning; accessibility by proximity and accessibility by mobility.

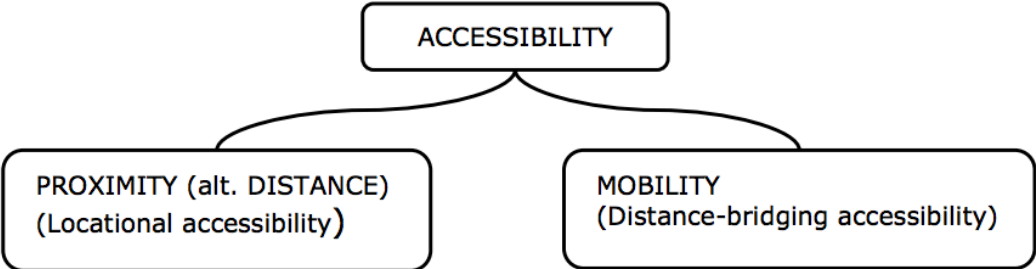


Figure 1: A simplification of the geographical dimensions of accessibility. (Source: Haugen, 2012)

Elldér et al. (2017) note a shift in regional and urban planning where the paradigm is currently moving away from the focus of ever-increasing, faster mobility towards placing the emphasis on concepts of spatial proximity and urban density. With this development, urban concepts such as spatial nearness and mixed land-use patterns have been looked at more closely also, ultimately leading to the paradigm shift in policy and planning towards accessibility by proximity - rather than by mobility - in city planning.

Hence, to completely separate accessibility and mobility is difficult if possible, and moreover probably not desirable for the sake of analysis. Most trips are undertaken with accessibility as the ultimate goal and mobility is needed for its achievement. In other words, mobility can be viewed as a mean to achieve accessibility (Litman, 2003). Another mean to suffice the need of accessibility, disregarded in Haugen's (2012) two dimensions of the accessibility concept, is that of virtual mobility. Virtual mobility offers contacts and two-way interpersonal interaction through the use of mobile phones, the Internet, computers and so on. The employment of these information and communication technology (ICT) tools may subsequently relax the spatiotemporal constraints of daily life and hence reduce the need to be mobile, as some accessibility needs will be fulfilled wherever the ICT user is located (Vilhelmson & Thulin, 2008).

In relation to this thesis, accessibility by proximity is placed in focus of research, in alignment to the thesis's purpose and research questions. However, urban youths' accessibility by mobility and virtual mobility cannot and will not be disregarded as they consequently contribute to how accessibility is achieved.

Barriers

Barriers are referred to as hindering aspects of everyday movements and range from being physical, economic, notional and authoritarian, to experiencing a lack of time resources, feelings of unsafety and distance.

Youths

The ambition of this thesis is to explore the accessibility practiced by urban youths. There is no generally accepted definition of between which ages a youth is considered a youth as described in this quote:

“Youth” is best understood as a period of transition from the dependence of childhood to adulthood's independence and awareness of our interdependence as members of a community. Youth is a more fluid category than a fixed age-group (UNESCO, 2017).

In this thesis, youth have been applied to mean persons between the ages of 12 to 16. Youth is sometimes used synonymously with 'adolescent', 'teenager' or 'young people' in this thesis.

Practice

Another central notion is that of practice which in this thesis amounts to habits and routines concerning everyday movement; the way that everyday movements are carried out and exercised, often in a habitual manner, partly understood from Oxford Dictionary (2018).

1.7 Thesis disposition

This thesis is made up by six chapters. In this first chapter, the reader has been introduced to the background of the research area as well as the thesis's aim and research questions. This was followed by a description of the study area of Brunnsbo in terms of its historical background but also the plans for the area's future developments in regards of housing and transport. The chapter was ended by a list of definitions of key concepts.

Previous research on children's and youths' mobility and accessibility practices is demonstrated in chapter two. This identifies and explains a knowledge gap of youths' accessibility practices as urban planning research has shifted toward accessibility by proximity rather than by mobility.

Chapter three guides the reader through the theoretical framework composed for this thesis. This has a foundation in time geography which aids the understanding of how youths practice accessibility and which needs they hold on it as a practice. To explain accessibility barriers among youths, the chapter is concluded by the theorisation of barriers as a concept.

In chapter four, the methods and data employed to understand youth accessibility needs, practices and barriers thereof are presented, explained and motivated. The process of selecting respondents as well as a brief description of respondent characteristics are also outlined. The chapter is additionally comprised by the motivation and description of thematic analysis which was used as the analytical method in order to process the subsequent data.

Chapter five contains the results obtained from the methods presented in the previous chapter, which are presented in themes. These themes contain graphs demonstrating the activity spaces of youths as well as quotes by the youths where they explain their everyday accessibility needs, practices and barriers thereof. To avoid repetition in building the analysis, this is performed along with the presentation of results, based on the theoretical framework outlined in chapter three and insights from previous research as presented in chapter two.

The thesis is finished with chapter six which entails a concluding discussion; the results and analysis are summarised and discussed and a conclusion presented before suggestions for further research are given.

2. Previous studies on youth, mobility, accessibility and barriers

2.1 Growing up in the city

Having long been neglected in the realm of urban planning, the needs of children in cities were brought to attention in the 1970s, by renowned urban planner Kevin Lynch in collaboration with the United Nations Educational, Scientific and Cultural Organisation is a specialized agency of the United Nations (UNESCO). Through the project *Growing up in cities*, the subjects of how children's and adolescents' perceptions and actual use of their urban neighbourhoods in turn influenced their lives and personal development were explored. The initial phase of the project between 1970 and 1975 focused mainly on children and adolescents in socio-economically deprived areas in eight different countries (Chawla, 1997). Part of the project was spent investigating children's and youths' so called 'range of action' (similar to Hägerstrand's concept of activity space, see 3.1.2 *Space-time prism*). The research concluded that the most important barriers to the range of action of children and youths were not distance, but personal fear, dangerous traffic, lack of spatial knowledge, cost of public transport and in the case of girls; parental control (Lynch, 1977).

The project was reinvigorated in the 1990s, and its work is given a conceptual background by Chawla (2002). She claims that a youth perspective on urban planning is as important as ever and cites a number of reasons. Firstly, more than half of the world's children are currently living in urban areas, and that proportion is constantly growing. Secondly, there is a world-wide increase in both single-parent households and households where both parents work outside the home, meaning that youths today to a larger extent than previous generations are expected to become more independent in their everyday missions. This development has subsequently had effects on children's and youths' urban accessibility, which they increasingly are expected to navigate independently (ibid).

Findings from the project established that a youth's satisfaction with the urban environment correlate with certain quality indicators (Passon, Levi & del Rio, 2008, p. 78). These quality indicators were often associated with aspects of accessibility. For example, youths valued varied settings where they were given access to a range of places, activities and services, occasionally without adult supervision. Youths also placed importance on the presence of freedom of movement and safe neighbourhoods where they have the ability to freely and easily reach their destinations. Some destinations particularly valued among the youths were meeting

places - functions in the community that youths can claim as their own and use as spaces to socialise with peers. These were sometimes mentioned as more formal places such as community centres and youth centres, but value was also given to informal places such as empty lots and street corners (ibid).

2.2 Underage persons' independent mobility and barriers faced

The UNESCO projects in the 1970s and 1990s contributed to the widening of urban and transportation research to include the young perspective. One example of this is Fagerholm and Broberg's (2011) study of children's independent mobility (CIM) in urban residential areas in Turku, Finland. In this, the authors explore the main characteristics of children's daily mobility and how it is practiced. They found that the children's mobility was highly characterised by proximity to the home; the majority (over 80 %) of children's mobility was performed within a kilometre from the children's homes. This as most of children's mobility was found to take place between their homes and school, locations which to a high degree were within distances that made up a small territorial range. Non-surprisingly then, much of children's mobility was found to be performed by foot or bicycle, often together with other children.

Another study, also performed on younger children living in London and closely located Hatfield by O'Brien, Jones, Sloan and Rustin (2000) found that many of the children's experiences in public spaces incite "contradictory feelings of accomplishment and fear, of self-determination and self-protection, and of control and helplessness" (p. 268). While many of the children also reported heightened risk anxieties about the public realm such as darkness or strangers, it was more often done so by girls, showcasing the dilemma as a gendered one. O'Brien et al. (2000) stress that the child's 'family habitus' is of crucial importance in order to understand children's geographies. This not only in terms of parents' ultimate control and autonomy of the underage child but also by their way of conforming their children in accordance with their emotional and cultural orientation concerning children's access to the city. Interestingly, the authors found that the restriction of adolescent mobility was often motivated by familial religious integrity but also in order to uphold the cultural reproduction of middle-class, gendered lifestyles and identities. Regardless of the reasoning behind a restricted stance of CIM, the authors argue that it must be challenged in order to provide all children just and fair access to space in the public realm in contemporary urban settings as to ensure cities made up by residents with equal chances of attaining and exercising active citizenship. Again, they stress that this must be done while simultaneously not neglecting the diversity of children's

mobility (ibid).

This notion is also central in Crawford et al. (2017) study of experiences and views of children and parents in relation to CIM carried out in the context of Victoria, Australia. The study investigates how children view the supports and barriers to CIM, what factors that are in place to govern parents' views and behaviours related to CIM, and finally how children and parents perceive the process of implementing CIM. Through semi-structured focus groups, the authors identify a multitude of interacting factors that influence when, how and to what extent the children are allowed to independently navigate about their lives. Like O'Brien et al. (2000), they find that parents are the gatekeepers in the process to CIM. However, Crawford et al. (2017) find that children are in constant negotiation with parents about this while considering a range of individual, family, social and community factors. While the children encouraged the parents to allow them more freedom, the parents were often reluctant to meet this requirement due to safety concerns such as harm from strangers and traffic. These concerns were recognised among the children too, however not completely correspondingly. Instead, children's safety concerns were more diverse and broader than the concept of 'stranger danger' alone. The children also highlighted the importance of knowing the people around them and attributed being familiar with an area to mean that one also feels (relatively) safe there. Indeed, places characterised by strong societal cohesion was also found to facilitate greater levels of CIM. When visiting unfamiliar areas, not knowing the people around them and when doing something for the first time (such as going independently to a new destination) the children instead reported to feel less safe (ibid).

Barriers experienced among children and youth have also been investigated by Johansson, Hasselberg and Laflamme (2010) who are doing so in relation to gender and socioeconomic background in Stockholm, Sweden. Much like the findings of O'Brien et al. (2000) and Crawford et al. (2017), Johansson et al. (2010) describe how adolescents' independence is stipulated by parents through so called mobility licences (i.e. what parents or other guardians allow them to do in terms of their own mobility). Furthermore, just like how O'Brien et al. (2000) demonstrate the diversity of children's and adolescents' mobility needs and practices, Johansson et al. (2010) find that barriers to adolescent mobility vary among adolescents. After having identified five clusters of adolescent mobility characteristics they point out how the clusters with youths having reported to have experienced no barriers to their mobility are predominantly male and live in a house, which in the study is described as implying a high

socioeconomic status. Other overrepresented characteristics in this cluster were also adolescents living with both parents and that both parents were born in Sweden. Harshly differing from this cluster, was cluster three which was predominantly made up by female respondents who reported fear of darkness, living in houses with both parents born in Sweden. The sets of characteristics of these two clusters indicate that the determining factor of barriers adolescence mobility is not socioeconomic status but gender. Johansson et al. (2010) also note that the study's respondents employed strategies when coping with insecurity while practising mobility within their neighbourhood and that these strategies varied according to gender. Girls, to a higher degree than boys, reported employing strategies such as asking for company, asking for a lift, taking a different route or staying at home, settling on completely disregarding from exercising mobility.

2.3 Summary of previous studies

Thanks to Lynch and his early efforts to put underage urban citizen's needs on the agenda in the realm of urban planning, related research fields, such as mobility and transport planning were also influenced and came to increasingly consider the younger perspective. There is now some established knowledge of how young people perceive and practice mobility in various geographical contexts. While there are differences attributed to aspects specific to the different geographical settings (e.g. infrastructural characteristics, societal norms and quality of public transport accessible), there are also a number of similarities. One is that children often have small ranges of action and that much of their mobility are characterised by proximity (Chawla, 1997; Lynch, 1977; Fagerholm & Broberg, 2011). Another is that children often desire greater independence in how they go about their lives and that said independence to some degree is enabled as well as controlled in relation to perceived safety barriers (Crawford et al., 2017). Another similarity is that girls, to a higher degree than their male counterparts, are experiencing authority constraints expressed by their parents – something that is constant regardless of ethnical background, social standing, age, religious belonging or geographical location (Johansson et al., 2010; O'Brien et al., 2000). A final similarity is that many of the studies have chosen to examine mobility as it is practiced by children, rather than youths. Therefore, a study outspokenly focusing on this demographic group can be motivated. In addition to having been dedicated to needs and practices of children rather than of youths, much of previous research has been placing emphasis on mobility alone, disregarding accessibility aspects of children's and youths' movements and their ability to reach their everyday destinations. That is another domain that this thesis hopes to contribute to.

3. Theoretic approaches

3.1 Introduction to the time geographic approach

This chapter provides a theoretical framework that has been customised for this study. It begins by an introduction to the time geographic approach and some associated models that have been applied as a foundation to succour the understanding of urban youths' accessibility barriers practices and needs. In order to explain barriers experienced by the youths, the chapter is concluded by the exploration of barriers as a concept.

In the 1970s, Torsten Hägerstrand developed time geography as a conceptual framework in a response to the previous lack of abilities to explain the interdependencies between human beings, nature and technology (Åquist, 2002). With this framework, individuals' everyday life activities and how they use their knowledge, objects and tools in their spatial surroundings could be explored and researched as well as the various time-space constraints experienced by individuals (Ellegård, 1999). In this part of the chapter, ideas and concepts central to time geography that are concurrently relevant to the aim of this study will be presented and explained.

3.1.1 Constraints

Central in time geography is the concept of the space-time path which represents the uninterrupted sequence of activities – moving as well as stationary in nature – carried out by the individual in space-time. Time geography views humans as goal-oriented beings, committed to pursuing projects in time and space. Time and space are in turn considered resources to be used in order to accomplish said projects, meaning that movement and the accomplishment of any project involves a trade-off between time and space resources (Miller, 2007). Moreover, these resources are influenced by constraints and opportunities offered by social, cultural, physical and institutional contexts specific to the individual. In other words, the movement of the individual is conditioned by the constraints they face (Neutens, Schwanen & Witlox, 2011).

Hägerstrand (1970) identifies three different kinds of constraints; *capacity*, *coupling* and *authority* constraints. *Capacity* constraints are made up by the limitations of the individual's abilities partly related to biological needs and partly to the movement tools in disposition of the individual. Examples of capacity constraints that affect human movement are the universal needs of sleep and food. Various degrees of accessibility to transport modes is another way in

which capacity constraints are demonstrated. *Coupling* constraints on the other hand are constituted by the need of coordination in time and space, partly between different individuals but also between individuals, materials and tools. Simply put, a coupling constraint is the need to be at the same time at the same time in order to pursue and achieve activities. One example of a coupling constraint is the need for a student to be present in school to be able to write a test. This example demonstrates how the place, the individual and the tools are used at a specific time, hence unable to be used or take place in other activities. Finally, *authority* constraints relate time geography to the notion of power; how space is controlled and how access to parts of it is managed (Åquist, 2002). Space is part of a hierarchy of domains that in turn are controlled by individuals and organisations. This could be anything from a state governing its borders, to the house owner's control of their property, to the opening times of a grocery store which demonstrates the multi-faceted reach of authority constrains (i.e. they can affect the individuals access to a space *and* how the individual must manage their time resources). Later developments of time geography have also come to include societal and institutional influences as producers of authority constraints. This means that the control is not necessarily demonstrated in 'hard' terms but can also be made up by 'softer' manifestations of power such as norms and habits that imply which areas that are accessible to who and at what times (Neutens et al., 2011).

While capacity constraints are more or less universal and present themselves in a similar manner regardless of who is faced by them they are useful to understand how the youths structure their days. As will coupling and authority constraints, which additionally will constitute important factors in explaining barriers that youths are experiencing while they practice their everyday accessibility.

3.1.2 Space-time prism

The three constraints contribute to the emergence of another central theme in time geography; that of the space-time prism. This is used to identify the possible activity space for an individual in accordance to the space-time constraints they face in their everyday life. Dominating to a great degree of this space-time prism are particularly the coupling constraints – joining the individual with other individuals, tools or material in space and time (Hägerstrand, 1970). The prism can then be described as the volume of space and length of time within which an individual's activities must be confined, as can be seen in *figure 2*, demonstrating a generic and homogenous example of the space-time prism which does not disclose the potential

accessibility barriers *within* the potential path area. The idea behind it is that its size and shape is determined by the individual's mobility which ultimately influences how quickly the individual can get to her everyday destinations. A challenge as well as a possibly facilitating factor when making the shift of focus from accessibility by mobility to accessibility by proximity, is to make the potential activity space as well as the opportunities within it as immense as possible.

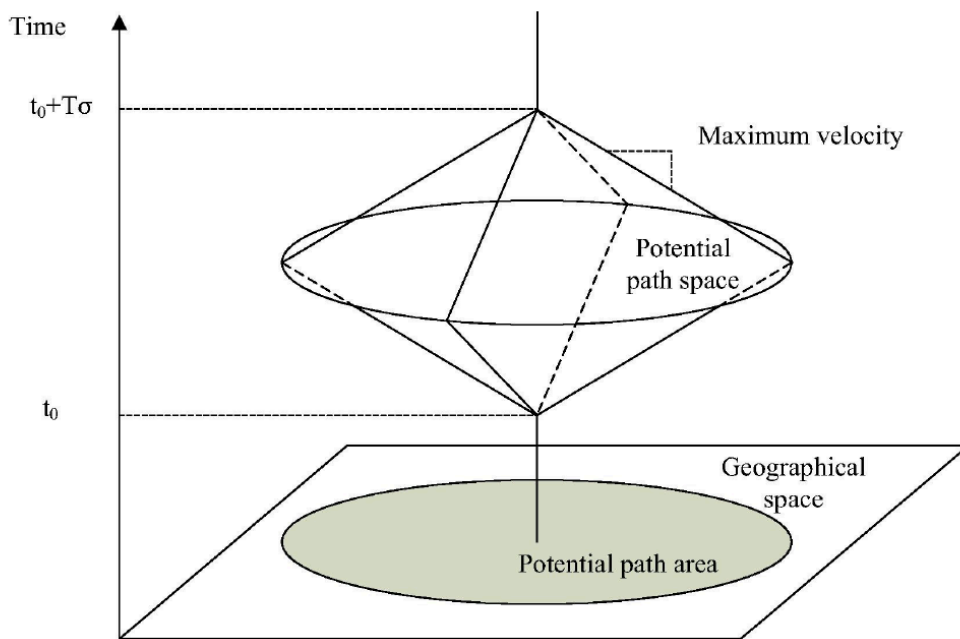


Figure 2: Example of space-time prism (Source: Miller, 2005)

When discussing everyday life, one basic assumption is that it is organised in a manner where we leave for work or education in the morning, and return back to where we live in the afternoon or evening. In time geography, this assumption is referred to as the *principle of return*. Scholten, Friberg and Sandén (2010) describe how this principle is riddled with power, ultimately offering different restrictions depending on the individual and her unique requisites. In the case of youths and their everyday accessibility, they are excluded from the use of automobiles because of their age (at least in the sense of them being the drivers and the independence that comes with it) and therefore must rely on the means of public transport, walking or cycling. Depending on the urban context, this may or may not have an effect on the potential path area as seen in *figure 2*; if the non-automobile travel modes are well-accessible to the youth and their needs on urban accessibility the space-time prism and its subsequent resulting path area must not be problematic, but instead in alignment with current needs. Though, it must be pointed out that having access to a private vehicle allows a person to reach a greater geographical distance,

resulting in a larger potential path area. This is however emblematic of the accessibility by mobility perspective.

3.1.3 Fixed vs. flexible activities

The three constraints also contribute to the forming of other central themes in time geography; those of fixed and flexible activities. Time geography traditionally employed this binary classification of activities where fixed ones are tied to specific times and specific locations and flexible activities are regarded as the ones where time and location are more easily changed or otherwise optional to influence. However, more recent works have called to attention the various degrees of rigidity that contributed to how activities came to be seen in the terms of fixity and flexibility. Depending on the degree of rigidity, some activities are more strongly tied to particular places and times than others (Vilhelmson, 1999; Schwanen, Kwan & Ren, 2008). In other words, one activity can be performed in an optional location at an optional time, while another can be performed at an optional location but at a fixed time, whereas the third must be performed at a fixed location but at an optional time, and so on. The various combinations of how fixity and flexibility may influence activities in time and space are showed in *figure 3*.

	Fixed	Flexible
Fixed	Activity required; specific place (1)	Activity required; optional place (2)
Flexible	Activity optional; specific place (3)	Activity optional; optional place (4)

Figure 3: Various degrees of fixity and flexibility. (Source: Vilhelmson, 1999)

3.1.4 Criticism against time geography

Time geography has been criticised for taking a research position that views the individual in an instrumental manner, not allowing for the diversity of mobility and accessibility practices and meanings to be acknowledged (Scholten et al., 2012). Friberg (2003, p. 91) notes how time geography has the tendency to suppress the body by treating it as a trajectory or a movement, ultimately neglecting emotions and individual experiences connected to said movement. This kind of critique is often pointed out by feminist researchers in arguments about how women

and men experience space differently but is in no way limited to gender. Passon et al. (2008, pp. 75-56) note how teenagers' activities and movement often are regarded as 'suspicious' and how their presence sometimes is unwanted in public spaces. These perceptions in turn have sometimes even led to the implementation of policies and design practices meant to discourage youth from participating in the use of public spaces (ibid). In this view, it becomes clear that moving through space never is decoupled from personal traits such as gender, age and ethnicity.

Nevertheless, the weakness of the 'non-sexed' body has been recognised in more recent developments of time geography where the previous instrumental stance has been challenged by an expansion of time geographic methods where in-depth interviews have been utilised to capture a more profound perspective (Scholten et al., 2012). This development has been taken into account in this thesis and the methods chosen in order to answer its aim and research questions (see *Chapter 4. Methods*).

Moreover, while time geography is beneficial in the quest to theoretically derive restrictions to a person's ability to exercise movement (i.e. what defines an individual's activity space), it lacks in its ability to explain how people *actually* act and how they think about and reflect upon their accessibility needs (Pred, 1977). Therefore, the theoretical framework is completed with additional models more suitable for this need. These models serve to explain how individuals structure their accessibility needs and practices in accordance with the specific prerequisites they hold as well as the barriers they face in their quest to realise their accessibility.

3.2 Travel needs, demands and desires

Why we travel has long been viewed as a question with a simple answer within the field of transportation research; we travel while on the quest to achieve other purposes in our daily lives. In this view, travel has been considered a means to an end, or simply a derived demand (Mokhtarian, Salomon & Singer, 2015). This standpoint where it has been assumed that human are rational beings driven by economic maximisation has more recently been challenged and researchers have widened the understanding of as to why we travel by also highlighting the non-rational travel motivations. Instead, travel demand is seen in a wider societal context and behaviourally based explanations to why we travel are being explored. Therefore, older models are no longer sufficient to view and explain travel demand as they often view travel in a vacuum, hence neglecting ties to societal factors that influence travel needs. Moreover, it has been too narrowly focused on the aggregated level of travel, failing to account for the individual's travel

needs and hence also neglecting meaningful explanations to travel needs to be uncovered there (Fox, 1995, pp. 105-106).

Below, two models used to explain travel demand at a disaggregated level are presented. They both adopt an actor perspective where travel is shaped by the individual's interaction with their surroundings. In this way, the models allow traveling to be examined according to the unique prerequisites of the individual. With each model, motivations for their relevance to this study will be provided, along with limitations for their functions.

3.2.1 The activity-based approach

Inspired from Hägerstrand's time geography, the activity-based approach has gained popularity within transportation research in recent years. It descends from the idea that travel is derived from the willingness to participate in activities instead of being undertaken for its own sake, which therefore results in its position that the analysis of travel should be based on the understanding of activities. As human beings, we fill our everyday lives with activities that are organised in time and space (Krantz, 1999, p. 15-16).

The development of the activity-based approach contributed to a changed perspective of everyday travel compared to older models in that the individual's everyday travel was related to a social and spatial context. With this model, the everyday travel is first and foremost seen as derived from the need to participate in the activities in time and space that we as humans are expected to take part in (i.e. in order to get to work or school, to meet friends, to get to the grocery store and so on). Everyday life is then simply a sequence of activities, participated in at different times and at various spatial locations which means that the activity-based approach predominantly views travel as a means to an end. However, this does not completely exempt that traveling sometimes is performed as an activity in itself according to the model (Krantz, 1999, pp. 15-16).

As opposed to other models that consider the characteristics of the journey per se as the deciding factors for movement, the activity-based approach merits variables related to *the individual*, the individual's *surroundings* and *activities* in the formation of movement. A group of factors related to the individual such as age, gender, education and health affect how much said individual travels and communicates with their surroundings. Likewise, an individual's attitudes, values and needs influence how they travel; some are thriving for quiet lives and other

have great needs of social interaction, and hence are traveling more. A second group of factors are related to the individual's surroundings, primarily their social environment and household formation. Important factors here are whether the individual is a parent responsible for young children or not, if they have agreements with others on performing activities and if they work or study. Apart from the social surroundings of the individual, the spatial environment also plays a big part. An individual's ability to travel is largely dependent on whether they live in an urban or rural environment, and by extension on the quality of the transport infrastructure where they live. The third group of factors are related to the activities the individual needs or wants to perform in their everyday life. These activities range between being more or less necessary, from going to work or school to spare time activities. Another important distinction to make is that some must be performed at specific times or locations (see 3.1.2 *Fixed vs. flexible activities*). Additionally, the three variables – the individual, the surroundings and activities - often interact with each other as can be seen in *figure 4* (Frändberg, Thulin & Vilhelmson, 2005, pp. 26-28).

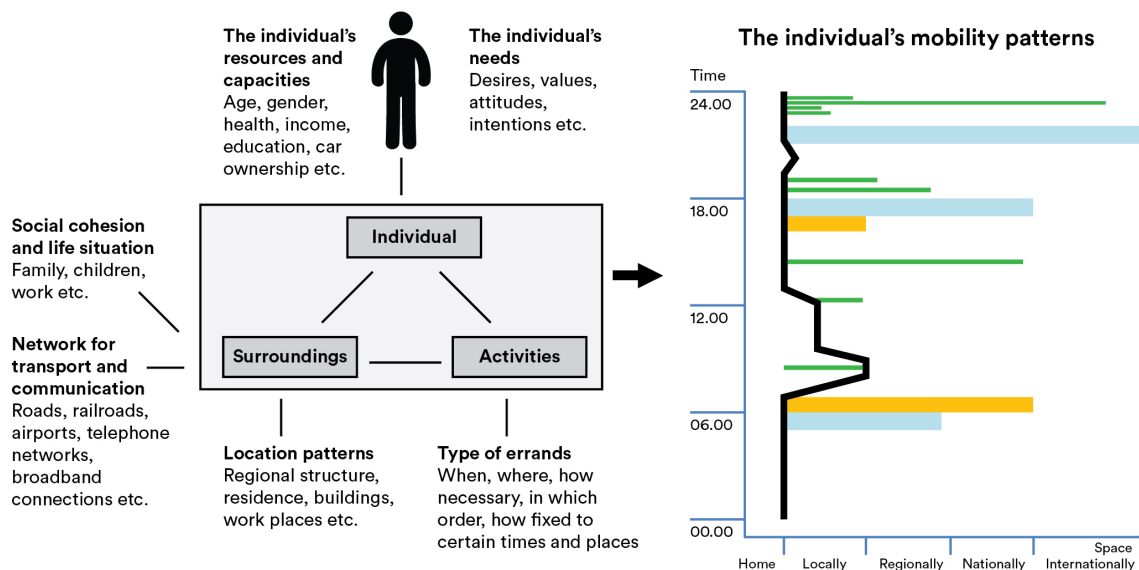


Figure 4: Modelling of the activity based approach (Source: Frändberg et al., 2005, p. 27. Translated to English by author.)

The activity-based approach also includes more recent technological developments that have come to influence our movements. Improved ICT has made some physical movement redundant, to be replaced by virtual movement such as phone calls and exchanges of messages through the internet and smartphones (Frändberg et al., 2005).

However, the activity-based approach has been criticised for failing to provide more than a general explanation of the driving forces to travel. It does not go into detail in order to explain the complex causalities between the variables provided to describe why we travel, or why some people travel more than others (Gil Solá, 2009, p. 14). Therefore, this model will be complemented by others.

3.2.2 Maslow's hierarchy of needs in relation to travel demand

Departing from the paradigm of travel being seen as a derived demand, Mokhtarian et al. (2015, pp. 250-251) instead highlight the diverse motivations for travel, some of which have not been included in previous models explaining needs for travel. Separating travel motivations as extrinsic (instrumental, utilitarian, functional) or intrinsic (autotelic, hedonic, experimental) in nature, the authors believe it crucial not to neglect the latter to as not underestimate the aggregated need to travel. When especially addressing intrinsic travel motivations, greatly differing reasons behind travel such as curiosity, variety-seeking, independence, adventure-seeking, feelings of escape, physical exercise and so on can be given attention to. Since the focus of research in this study are youths, a section of the population generally known to be navigating in life in search to establish their identities through independence, it is of great importance to provide a theoretical framework that also includes travel motivations of the intrinsic nature.

With this background, Maslow's Theory of Human Motivation in relation to what drives people to travel becomes suitable for this study as it acknowledges travel motivations beyond the mundane, habitual ones. The well-known theory laid forward by Maslow (1943; 1954) states that human beings act in order to fulfil unsatisfied needs. These needs can be prioritised into a hierarchy pyramid, where the most primary human needs (e.g. the need to sleep or eat and so on) constitute the bottom while the needs of least importance to actual survival (for example the need of self-actualisation) form the top of the pyramid. Usually, the most basic needs must be satisfied prior to attending to the higher level needs. Mokhtarian et al. (2015) have descended from this theory when compiling a table of the most common motivations for travel (see *table 1*).

Need	Derived motivations related to ...	
	... trip generation/destination choice	... mode or route choice, other decisions
(1) Physiological (food, water, shelter, sleep, sex)	Travel for grocery shopping, eating out	Preferring a travel mode that permits sleeping, or eating, while traveling; preferring a faster mode, or changing departure time to avoid congestion, so as to save more time for sleeping or eating while stationary
(2) Safety/security (physical, mental, spiritual, financial)	Travel for work, medical, exercise, banking/investments, religious services, therapy, escape	Avoiding certain mode(s), route(s), or departure time(s) out of safety considerations
(3) Social (love/belonging)	Travel for social activities, volunteer/club/religious activities, escape	Preferring a travel mode that facilitates social interaction
(4) Esteem (status, accomplishment)	Travel for status, independence, adventure seeking, spirit of conquest, escape	Preferring modes perceived to be higher status
(5) Self-actualization (achieving full potential)	Travel for curiosity, restlessness, variety-seeking, aesthetic appreciation	Experimenting with new modes or routes; choosing modes/routes suited to the trip purpose

Table 1: Maslow's hierarchy of needs, as applied to travel demand (Source: Mokhtarian et al., 2015)

In a time geographic notion, the travel needs as explained by Mokhtarian et al. (2015) may also be understood as projects which individuals take part in and organise their everyday lives according to. Important to point out is that these travel needs, or projects, are not always fulfilled in isolation of each other; while travel is carried out to fulfil a higher needs, lower travel needs may simultaneously be realised and vice versa. Another important remark concerning Maslow's hierarchy of needs in relation to travel demand is that travel can constitute a need in itself, which particularly meets the higher needs of the hierarchy pyramid (Mokhtarian et al., 2015, pp. 252-253). However, this model also has limitations. Maslow was criticised as being too innate and too based in universal predispositions neglecting the fact that human needs are diverse (Kenrick, Griskevicius, Neuberg & Schaller, 2010).

3.3 Barriers to accessibility

3.3.1 A conceptual framework for social exclusion and transport

Contesting the time geographic notion of the homogenous, restriction-free action space as described in 3.1.2 *Space-time prism*, a theoretic foundation acknowledging the presence of accessibility barriers is motivated in order to answer parts of this thesis's aim. Existing literature on barriers to accessibility and its effects is wide and sometimes confusingly diverse in terms of concepts used; accessibility poverty, socio-spatial exclusion and transport/mobility poverty are some that have been popularised and used to refer to inequalities in accessibility and

transport. They all describe the phenomenon where people who experience movement-related difficulties and friction may struggle to access essential necessities, such as health care and employment and education opportunities (Mattioli & Colleoni, 2016). From existing research literature, Church, Frost and Sullivan (2000) have compiled factors that may limit socially excluded people's ability to be mobile into seven categories.

The first accessibility barrier presented by Church et al. (2000) is related to how the very nature of the transport, people and built environment may constraint accessibility for some social groups due to physical and psychological difficulties. These physical barriers are wide-ranging and present themselves differently depending on personal characteristics and disabilities such as age, impaired mobility, vision or hearing, age, insufficient language skills and so on.

The second accessibility barrier stems from geographical exclusion affecting the individual's accessibility. Peripherality and poor transport provision are said to be contributing factors to this type of accessibility barrier. However, Church et al. (2000) note that some studies have found that geographical exclusion not necessarily has solely negative effects. Instead, it can create the development of a strong local community cohesion that benefits local commerce as well as creating a strong local identity. In this way, easier access to other parts of the city could pose a risk to said local markets as new transport initiatives would open up the area to increased labour market competition.

The third category of accessibility barriers – exclusion from facilities – relates to the phenomena of areas with lacking access to shopping, financial, leisure, health and education facilities due to either financial or time resources to access them through transport services or because of the flight of said services from the area. This lack of access is partly created by trends in land use; the popularity of large, out of town shopping centres have created fierce competition for smaller residentially located stores to stay in business. This, in combination with the fact that larger shopping centres necessitate use of a private car to get there easily, contribute to constraint accessibility to services and facilities to a higher degree for some social groups. Church et al. (2000) also point out that changes in education policies have contributed to changed accessibility to facilities through reasons such as economic abilities and/or temporal cost of travel. In Sweden, admission to schools was previously based on a subsidiarity principle where pupils were enrolled in the school closest to their home location. However, since 1992 Swedish pupils have been able to choose schools freely which some mean has changed families'

time-budgets. Nordin and Nordström (2009) claim that the change in education policy has contributed to changed behaviour when people structure their lives as it no longer is necessary to live close to the children's schools. This in turn has had effects on how much, how far and with which transport modes pupils travel in their everyday lives (ibid). Church et al. (2000) highlight that this type of development comes with reduced choice and opportunities for pupils from homes with little means and prospects to restructure their everyday lives accordingly to the child's choice of non-subsidiarity school.

Economic exclusion is explained by Church et al. (2000) as how aspects such as income and transport network constraints limit access labour markets. Access to labour markets in particular is not necessarily relevant for the aim of this study as the teenagers interviewed for it all attended comprehensive school. However, with the above mentioned right to choose school reform as well as some of the respondents' imminent applications to upper secondary schools outside of Brunnsbo, this could serve as a similar aspect of economic exclusion.

The fifth accessibility barrier is time-based exclusion which is constituted by the difficulties in organising everyday commitments due to deficient travel options between different activities. Just like Hägerstrand's (1970) idea of everyday life being made up by 'projects' (see *3.1.1 Constraints*), that are being accomplished through a trade-off between time and space, Church et al. (2000) point out how said trade-off is effected by notions of power and unequal prerequisites. They primarily describe the hardship of women who in their position as (in general) the primary caregiver to their children face difficulties in organising their everyday lives made up by projects such as drop-offs and pick-ups from childcare facilities while juggling other household chores around their work time, sometimes being facilitated by using a car and sometimes not (ibid). Even if these 'everyday puzzles' with responsibility of children not necessarily characterise the standard teenager's everyday life, similar difficulties may be faced by them too from trying to get to and from school and after school activities with the transport modes accessible to them.

The fear-based exclusion is another accessibility barrier that is heavily influenced by personal characteristics and range between feelings of concern and awareness, to fear and worry, to even a more acute feeling of terror. Church et al. (2000) especially highlight the differences in gender in experienced fear to use public spaces and transport facilities, where women and girls to a much higher degree report feelings of unsafety and fright, than do men and boys.

The final accessibility barrier presented by Church et al. (2000) is constituted by space exclusion which is expressed differently depending on the individual's prerequisites. For example, security and space management strategies put in place to control shopping centres, stores and public spaces often discourage groups of socially excluded people like homeless people or teenagers. This type of surveillance is often explained and motivated as safety measures to solve issues related to fear of participating in public spaces (ibid).

3.4 Summary of theoretical framework

This chapter has presented the theoretical framework employed in this thesis. It has put forward time geographic concepts and models that aid the understanding of travel demand and practices; simply why we travel and the more profound reasons for doing so. In addition to this, a part of the chapter have been dedicated to explore the concept of 'barrier' further as it is a central part of the thesis's purpose to establish how youths' accessibility practices and needs are constrained. How these practices, needs and barriers are investigated in this thesis is presented in the ensuing chapter.

4. Methods

In this chapter, the research methods employed in the thesis are demonstrated and discussed. The chapter starts with an overview and discussion of the approaches adopted in this study, to be followed by an introduction to and motivation of the choices of methods. Then follows a discussion of the two methods respectively; activity diaries and semi-structured interviews. Thereafter, the respondents are briefly presented along with descriptions of how they were sampled. In order to provide for transparency for how thematic results were identified among the data, the analytical method applied is also presented. The chapter is then ended by a concluding methodological discussion.

4.1 Scientific approaches

4.1.1 Abductive approach

The aim of this thesis is to survey urban youths' accessibility practices, needs and potential barriers thereof. It therefore becomes of importance to address and include those who are experiencing just this (i.e. urban youth). Accordingly, this thesis takes an abductive position. This means that the thesis does not take off based on the assumption of a pre-determined theory needed to be proven or disproven (Bryman, 2016, pp. 21-24, 394). Rather, the thesis departs from interest stemming from theoretically-driven inquiries, wanting to fill a knowledge gap of urban youths' accessibility, in a way more concerned with theory development than theory generation (Herbert, 2010, pp. 73-74; Dubois & Gadde, 2002). Emphasis will consequently be put on the understanding of the social world through the examination of its participants – urban youths (Bryman, 2016, p. 394).

4.1.2 Qualitative approach

The use of qualitative methods is in opposition to geographic tradition in general and urban transport geography in particular, as researchers of these disciplines generally have preferred quantitative methods (Røe, 2000). Røe (2000) proposes an expansion of qualitative methods within this field as interpretative measures have the ability to reveal and seek explanations to everyday urban travel experiences. The research questions asked to answer the aim of this thesis are of such nature and hence, the worldview of individuals become important objects of exploration. To investigate urban youths' accessibility needs and perceived barriers, it is crucial to access in-depth data which exposes the individuals' thought processes and ways of reasoning, something that would be hard to obtain through the means and scope of quantitative methods

such as surveys. This is the motive behind the choice of two qualitative methods in the data gathering for this thesis; activity diaries and semi-structured interviews. This combination is to be preferred when exploring everyday travel experiences according to Røe (2000, p. 103). He endorses the combination because the detailed accounts of activities during a certain period collected by activity diaries provide extensive background material which can contribute to an improved construction of the interview guide employed during the subsequent interviews (ibid)

Patel and Davidson (2011, pp. 105-109) note how the diverseness of qualitative studies makes it difficult to produce general guidelines and criteria to be applied in order to ensure validity in qualitative research. However, they do point out some techniques considered somewhat general in the quest to promote validity in qualitative studies. One of them is that of triangulation which can be described as the employment of more than one research method. This practice is generally considered to result in greater confidence in research findings (Bryman, 2016, p. 386) something that contributed to motivate two research methods in this study. Another technique to increase validity is to describe the research process so that the reader herself can gain insight to theoretical, methodological and analytical choices made by the researcher. From this, the reader can better consider the qualitative study in terms of validity (ibid). In regards to this, the work processes of the two qualitative methods used in this thesis will be greatly detailed and motivated.

4.2 Description of methods

4.2.1 Activity diary

To assess urban youths' current accessibility practices which constitutes research question 1, a methodological tool suitable to comprehend everyday accessibility activities was needed. Therefore, activity diaries were selected as an initial research method as they have the ability to seize and uncover the mundane practice of youths' everyday travel. Another reason activity diaries were chosen as a method was to create an opportunity to connect the subsequent semi-structured interviews with what is happening in the everyday life of youths, by letting the youths substantialise their own daily accessibility practices.

Because everyday travel is made up by activities that we as humans perform on a daily basis, often in a habitual manner, details of them can often be neglected, forgotten or considered non-important by the individual when being interviewed about their everyday travel (Røe, 2000, p. 102). The activity diary has the ability to document these mundane details of everyday life and

because of it, the method can come to serve as an observational method. Although it is different from other observational methods in that the individual is in charge of documenting their activities, hence placing much responsibility on the respondents. Therefore, it is crucial that the researcher facilitates the completion of the diaries by making them easy to understand and fill out (Thulin, 2004, p. 52). The activity diary was constructed with this in mind and was ultimately composed to contain five mandatory columns and one optional for the opportunity to fill out comments (see *figure 6* and *Appendix 1*). These columns were chosen on the basis of a review of activity diary research application provided by Schwanen (2009). At a minimum, according to Schwanen (2009), the ‘what’, ‘when’, ‘where’ and ‘transportation mode’ dimensions should be covered in the activity diary structure. For clarification, the ‘Where am I going’ column is representative for the ‘what’ dimension, as the focus of the activity diaries employed in this study is on movement as an activity. The ‘With who am I’ dimension is described by Schwanen (2009) as an additional dimension, was added to the activity diary as it was believed to contribute further to the understanding of youths’ accessibility practices.

What time is it	Where am I	Where am I going	How am I getting there	With who am I	Comments (optional)
08:00	At home	To school	Walk to bus stop, bus	Alone	
10:20	At school	Corner shop to buy a drink	Walk	With two friends	We have recess
15:20	At school	Football practise	Walk to bus stop, bus, walk from bus stop	With a group of friends	
17:00	At football practise	Home	Walk to bus stop, bus, walk from bus stop	Alone	I missed the bus so had to wait 20 minutes

Figure 5: Example of a filled-out activity diary

The respondents were asked to document the steps during one weekday of their choice. Of course, it would have been preferable to have the respondents providing activity diaries covering a longer period of time but given the extent of this thesis and the fact that the youths were asked to give up some portions of their spare time in excess of completing the activity diary (see also 4.2.2 *Semi-structured interviews*) without reimbursement this was difficult to realise. Ås (1978) addresses this issue and notes that although the research field cannot agree upon a specific number of days to be the ultimate when performing the method, there is

consensus that the full daily cycle should be covered as a minimum. At the same time, Ås (1978) points out that a full week coverage for every respondent is redundant and even too burdensome for respondents as well as the researcher. In fact, too great a coverage comes with practical issues, as so much information is gathered that the researcher might be forced to sample the data in order to be able to perform the analysis. As mentioned, the respondents in this study were asked to fill in the activity diary during a full day cycle and to counter the restriction of one day being too little, the data gathered was then addressed and discussed during the subsequent semi-structured interviews to assert whether the movements during the respondent's chosen diary day was representative of their everyday life or not. In this way, the activity diary could also successfully be used by the respondents as something to 'build onto' and draw examples from during the interviews as it provided them with context while talking about their daily accessibility practices.

The activity diary was handed out to 20 youths between the ages of 12 and 16. 14 of them filled in the activity diaries during one day in the period of 5th to 16th March 2018. This in alignment with Ås's (1978) recommendations on seasonal variations which states that March to April is a period which is emblematic of time-use. Though it must be mentioned that despite the recommendations by Ås (1978), the temperatures in Gothenburg occasionally dropped to negative degrees during the sample period which may have had an effect on the number of movements the youths decided to undertake during the day they filled out their activity diaries.

4.2.2 Semi-structured interviews

To gain insights to the respondents' worldviews and reasoning in terms of their everyday accessibility semi-structured interviews were chosen as a method. As all three of the research questions asked in this thesis require in-depth data to be investigated, a completely unstructured interview was considered unsuitable in order to collect the necessary data. At the same time, it was important to offer an interview situation in which the respondents were allowed to digress into what they considered important on the topic of their accessibility practices, needs and barriers. This excluded the option of structured interviews as these most likely would have presented the respondents with an inflexible way of thinking about the research topic.

A semi-structured interview has the ability to gather very full, rich data sets because of its conversational format. This not only allows the respondents to elaborate their answers but also provides the interviewer with the opportunity to be responsive to the answers received (Castree

et al., 2013). In other words, semi-structured interviews tend to be flexible, to the point where the researcher can lean onto the use of a prepared interview guide for guidance but is not required to strictly adhere to it nor the order of the questions. This is depending on the interviewee who is encouraged to speak freely on the topic raised by the researcher (Bryman, 2016).

When constructing the interview guide (see *Appendix 2*) to be used during the interviews, Bryman's (2016, pp. 469-471) tips and guidelines were employed. In these, Bryman (2016) recommends initiating the process of preparing questions for the interview guide by revisiting the general research area, as well as the specific research questions which can come to serve as themes. This thesis asks how urban youths practice accessibility, which needs urban youths have on accessibility and finally which, if any, barriers do youths identify as preventing them from practising accessibility within the city. These questions were considered suitable to serve as an initial structure of the interview guide into themes; accessibility practices, accessibility needs and accessibility barriers. From these three themes interview questions were formulated and revised several times before being finalised. A portion of the interview guide was also dedicated to the topic of the completed activity diaries. As the respondents were asked to fill out the diary during one day, the guide also included questions about this day and of its 'everydayness qualities'.

4.2.3 The respondents: selection and characteristics

In order to find suitable respondents for the study, various societal actors and agencies such as principals for local schools, local youth community centres and municipally funded grassroots groups were contacted. Eventually, a local youth community centre proposed a meeting in order to receive more information about the thesis project. During this meeting, the project was presented to a group of youths who were then given the choice of participating as respondents. Youths who expressed interest in participating as respondents were given activity diaries; 20 activity diaries were distributed and 14 were ultimately completed. The 14 youths who filled out activity diaries also agreed to be interviewed, which took place on two different occasions in a room provided by the staff at the youth community centre. Some basic information about the respondents have been compiled in *table 2*.

Gender	<ul style="list-style-type: none"> ➤ 7 girls ➤ 7 boys
Age	<ul style="list-style-type: none"> ➤ 3 respondents are 12 years old ➤ 2 respondents are 13 years old ➤ 4 respondents are 14 years old ➤ 3 respondents are 15 years old ➤ 2 respondents are 16 years old
Place of residence	<ul style="list-style-type: none"> ➤ 13 of the respondents live in Brunnsbo ➤ 1 respondent lives in the direct immediate area of Brunnsbo and spends much time in Brunnsbo
Access to car	<ul style="list-style-type: none"> ➤ 10 of the respondents live in a household with at least 1 car ➤ 1 respondent reported to having a parent with a driver's license but no car ➤ 3 respondents live in households with neither car/s or driver's license/s.
School	<ul style="list-style-type: none"> ➤ 11 respondents go to the local school ➤ 3 respondents are enrolled in schools in central Gothenburg

Table 2: Information about the respondents

4.2.4 Integrity

The youths who participated as respondents were ensured anonymity, therefore all personal details, such as names and specific place names that could serve to uncover the respondents' identities, are held confidentially and are not disclosed in this thesis. The interviews were recorded after consent was given by the respondents. These recordings were then transcribed to ensure that the respondents' testimonies about their everyday accessibility needs, practices and potential barriers thereof be completely available and accurate as they were being processed in thematic analysis (see 4.3 *Analytical method*). The interview recordings were deleted once the transcription process was completed.

4.3 Analytical method

The data collected through the semi-structured interviews has been processed according to Braun and Clark's (2006) thematic analysis. This method is appropriate given as the interviews resulted in diverse, highly expressive accounts which the thematic analysis is especially well-suited for. Theoretically independent, it works as a flexible tool easily applicable on a wide range of theoretical and epistemological approaches. Given the flexibility of the method, the authors present guidelines to demarcate thematic analysis to facilitate and ease its employment within qualitative research. These guidelines describe how thematic analysis identifies, analyses and reports patterns within the dataset so that the results can be presented in themes. These themes emerge after the dataset has been processed through six phases, which have been summarised in *table 3*.

The first phase consists of familiarising oneself with the data. This is done by first transcribing the interviews followed by repeated, active reading where meanings and patterns within the material are sought. The second phase begins when one has become familiarised with the data to the point where interesting aspects in relation to the material have been established so that initial codes can be produced. Once the dataset has been coded, the third phase begins where the various codes are collated into initial themes. The themes are broader than the codes; the codes are rather combined to create overarching themes. The relationship between codes, themes and different levels of themes (i.e. sub-themes) becomes important in this phase of the analysis. When potential themes have been identified, these are reviewed in the fourth phase. Often, it is discovered that themes are redundant (e.g. there is insufficient support within the data), possible to combine or too diverse (i.e. needed to be disjointed into two separate themes). Once the potential themes have been revised and re-revised, the fifth phase can be initiated. In this phase, themes are defined, refined and named to capture the essence of what each theme contains. Finally, the sixth phase consists of writing up the thematic analysis, including an analytic narrative which illustrates the themes (Braun & Clark, 2006).

	Description of step
Phase 1	Get familiarised with the data by transcribing and reading the data several times, note initial ideas.
Phase 2	Generate initial codes
Phase 3	Collate codes to initial themes
Phase 4	Review initial themes; combine and/or separate
Phase 5	Define, refine and name themes
Phase 6	Write up the presentation of the thematic analysis

Table 3: Summary of thematic analysis and its phases. (Compiled from Braun & Clark, 2006)

4.4 Methodological discussion

Bryman (2016) raises some of the most referred to concerns with qualitative research methods by noting that they often are criticised for failing to generalise their findings. Of course, this kind of critique is valid as people interviewed in qualitative research cannot be claimed to be representative for the whole population. However, this is not necessarily valid critique of qualitative studies' relevance as their findings "are to generalise to theory rather than to populations" (Bryman, 2016, p. 399). In other words, it is rather the quality of the theoretical interpretations from qualitative data that tells of the study's ambitions on generalisation. Applied on this thesis, its aim and chosen methods, generalisation will not be actively sought

as a goal per se but rather to increase understanding on urban youths' accessibility practices and needs as well as the barriers they face. The aim is then rather to gather understanding of said practices' complexity, variation and diversity.

Related to the subject of generalisation, this type of study which is focusing on one setting, has the ability to add to and benefit the understanding of similar cases. In this way, to arrange a research design focusing on a single case can be said to have expansionist rather than reductionist pursuits where knowledge is proliferated instead of narrowed (Stake, 1978).

5. Results and analysis

Several themes in relation to how urban youths perceive and practice accessibility, the needs urban youths identify concerning activities and destinations as well as barriers affecting their accessibility within the city were identified in the data collected for this thesis. These themes are presented in this chapter and have been obtained by the processing of the data through thematic analysis. With the aid of the theoretical framework as described in *Chapter 3* along with insights from previous research, the themes are presented, analysed and supported by quotes derived from the semi-structured interviews. To emphasise the voices of the urban youths, the quotes are presented in abundance in the hope to present and facilitate an as comprehensive understanding as possible of their practices, needs and perceived barriers in terms of accessibility. The quotes have been slightly altered in cases where personal details (e.g. locations of parents' work places and ages of siblings) were disclosed, in order to ensure the full anonymity of the respondents. Furthermore, all quotes have been translated from Swedish to English.

5.1 Youths' activity spaces

However, the results from the activity diaries are not included in the thematic analysis as described in *4.3 Analytical method*. Instead, the results obtained from the activity diaries prelude the results in this chapter in order to provide the reader with three semi-aggregated representative examples of how the urban youths organise their days in terms of physical movements. These representative cases are described and illustrated in time geographic graphs based on authentic examples of the activity diaries. These graphs visualise the youths' physical movements in everyday life.

5.1.1 Youth A: The stationary lifestyle

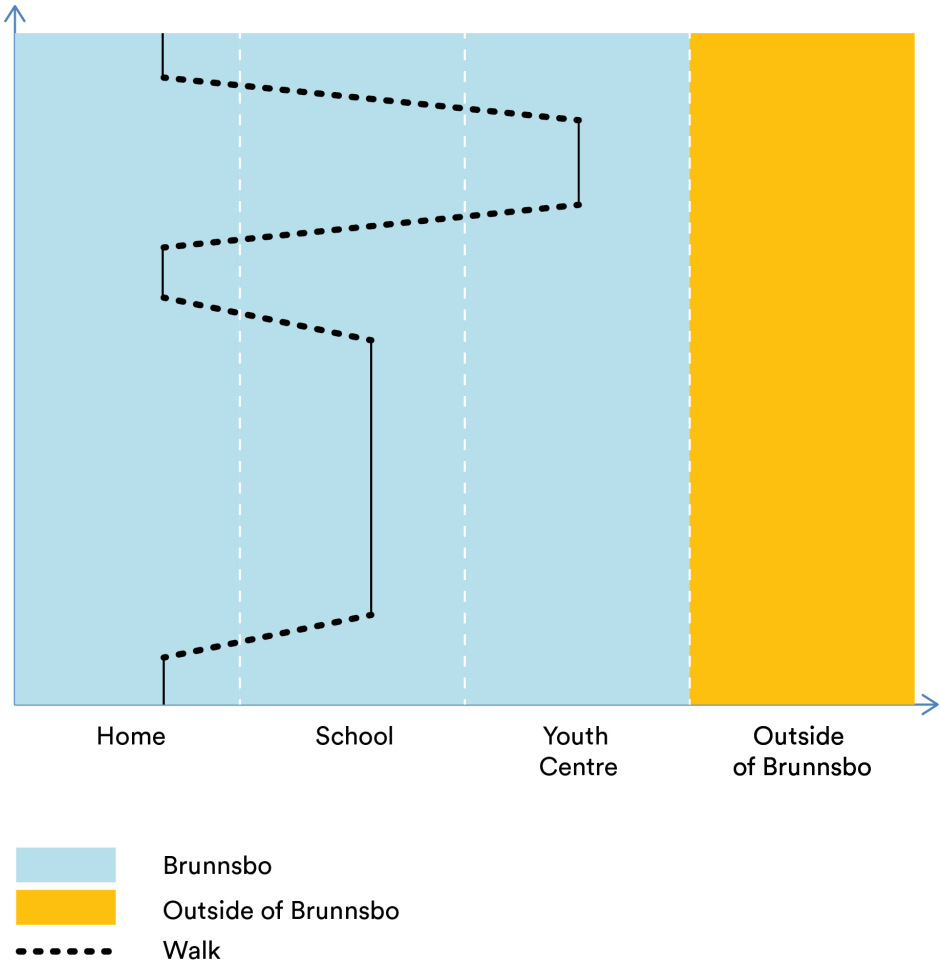
The first representative group identified by aggregating the actual time-space patterns was the urban youth who exclusively lives, in, goes to school in and mostly socialises with friends in Brunnsbo. Youth A doesn't leave Brunnsbo often and when they do it is mostly to visit adjacent areas or for trips out of necessity (e.g. medical appointments unavailable in Brunnsbo and so on).

“I don't really go to other places. Maybe I sometimes go to Backaplan, like if we are going there with school or if my parents take me shopping, but I don't really go to Backaplan or any other places with my friends. Only to Selma [Lagerlöfs torg] maybe.”

“I'm very rarely going outside of Brunnsbo and if I do it's because I have to. [...] Like if I have to go to the hospital for an appointment, or the dentist or something like that.”

Youth A lives within walking distance to school and other everyday destinations such as the youth community centre, the square and its commercial facilities, the football field (for summer) and sports gymnasium (for winter), friends and relatives. This youth rarely uses any other transport modes other than walking, as can be seen in *graph 1* which visualises the physical movements of Youth A practising the stationary lifestyle.

“I just walk everywhere. Maybe once a month or a few more times I might take the bus, but that’s only if I go to like Backaplan or maybe Selma [Lagerlöfs torg] but I don’t do that too often. I like it here [in Brunnsbo].”



Graph 1: Example of the stationary lifestyle – represented by the time-space path during one day

5.1.2 Youth B: The commuting lifestyle

Another representative case identified was the urban youth who lives in Brunnsbo but for various reasons has chosen to enrol in a school in another part of the city. This youth described an everyday life where they rely on public transport to go to and from school.

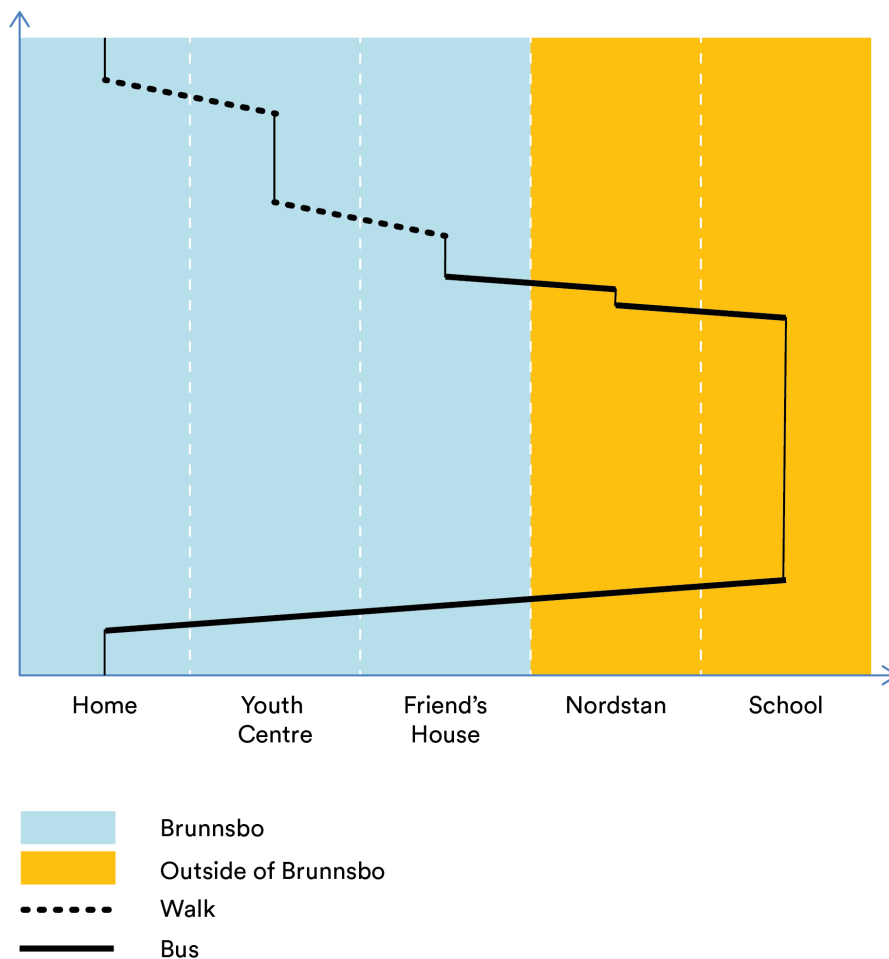
“I always take the bus. It works well. 19 or 18, it doesn't matter, except that 19 goes a stop further. [...] They go relatively often too. Maybe every three minutes, every four minutes at the times I go to and

from school. So yeah, I take the bus to school, and then I take the bus home too and that's pretty much how I use public transport so to speak."

While they went to locations outside of Brunnsbo except for school, most of these movements were in relation to going home to Brunnsbo at the end of the school day (such as stopping on the way home to visit a café or a commercial facility).

"My school is in the city, so sometimes I do things on my way home. The bus stops at Nordstan on the way so it's easy just get off there if I need to buy something or if I just feel like it."

Most of this youth's movements were however still carried out within Brunnsbo, by foot. The movements of Youth B can be studied in *graph 2* of the commuting lifestyle.



Graph 2: Example of the commuting lifestyle – represented by the time-space path during one day

5.1.3 Youth C: The leisure mobility lifestyle

The last representative case discerned from the activity diaries was that of the youth who lives in Brunnsbo and goes to the local school which is within walking distance of their home. Most of this youth's accessibility is fulfilled in Brunnsbo, such as going to friends, the square, the

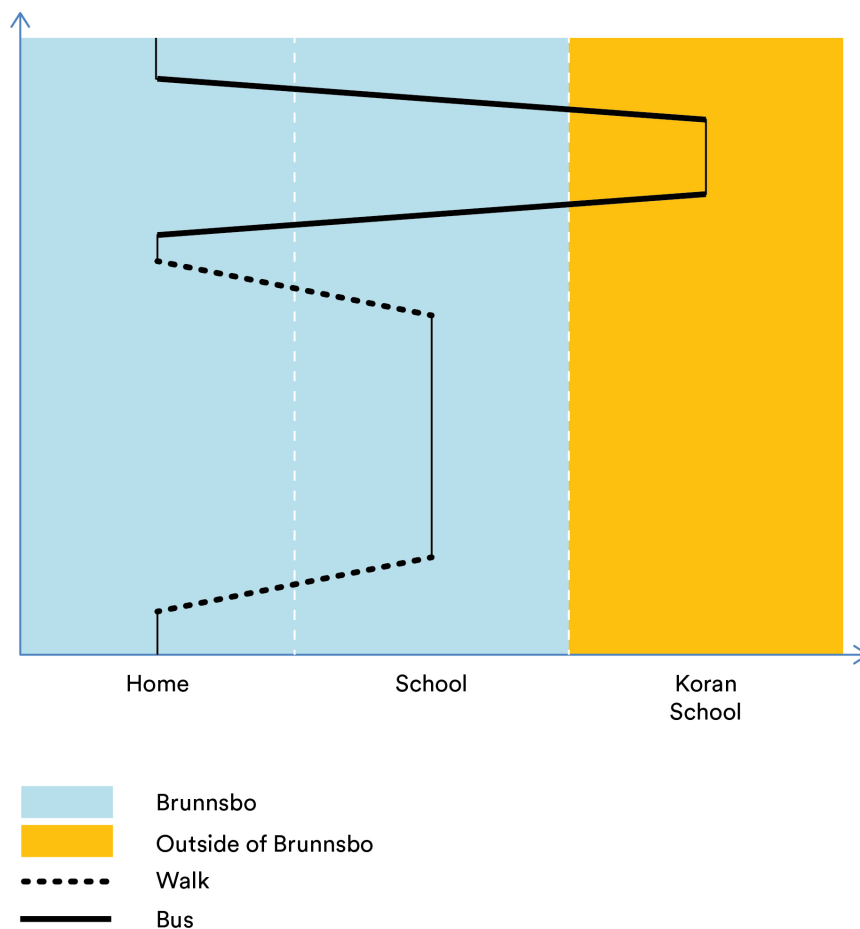
sports gymnasium and commercial facilities. However, this youth needs to leave the area in order to pursue their interest in a spare time activity that is not available in Brunnsbo (e.g. sports training, to practice their religion and so on).

“I practice a sport in an area located on the other side of the city so I go there with the bus and tram, I go a lot via Backaplan as I change to the tram there. I’ve been doing it for like five years though so I feel really used to it.”

This youth’s movements out of Brunnsbo are exclusively related to this spare time activity and is constituted by the going to and from the location where it is offered with no movements ‘on the way’ as opposed to Youth B’s accessibility practices.

“I never leave [Brunnsbo] except to go to my mosque. I go to a Koran school there. I go a few times a week, and then straight back to Brunnsbo pretty much.”

The leisure mobility lifestyle as practiced by Youth C is visualised in *graph 3*.



Graph 3: Example of the leisure mobility lifestyle – represented by the time-space path during one day

5.1.4 Evaluation of youth activity spaces

The activity based approach, as explained by Krantz (1999), describes how travel can be understood by viewing everyday travel as derived from the willingness to participate in activities. It seems, by viewing the activity spaces of youths via the activity based approach, that much of youths' movements in time and space are indeed tied to derived demand; the youth mainly travel to take part in activities such as to go to school, meet up with friends or participate in spare time activities. Furthermore, when examining the variables that make up the activity based approach model (see *figure 4*), the individual features - such as resources and capacities as well as needs and attitudes of the youths - were seemingly similar in that they belong to the same age group, live in similar household formations and spend a large part of their weekdays in school. They also shared many similarities in needs and values related to accessibility, which is further demonstrated in the subsequent results themes. Instead, what differed in the activity spaces of youths were the choices of activities the youths decided to take part in. While some were content to spend extended periods in Brunnsbo exclusively, others had chosen to engage in activities located outside of Brunnsbo, to be participated in at specific times during the week. This diverseness was also demonstrated in the surroundings variable where aspects of the youths' location patters, where some of the youths have chosen to enrol in non-local schools. These types of distant activities show that some of the youths have chosen to partake in required activities (i.e. school) fixed in place (see *figure 3*), which ultimately contributes to the divisiveness of youths' activity spaces.

5.2 Transport modes

The first theme to be identified through Braun and Clark's (2006) thematic analysis was that of transport modes and how the youths perceive and use them in their everyday lives. The youths described independent accessibility patterns in which they are rarely assisted by parents or older siblings through car usage.

“Even if my family has a car, I never really get a lift, really only if I'm going somewhere I don't usually go and if it's kind of far away and I can't take public transport there. My older siblings hate driving me.”

Although, when they did get lifts from parents, this was rather done as a part of the parents' accessibility needs or for joint family activities.

“Sometimes I can get a ride from my parents, but it's mostly those times I have to go with them to do a big grocery shop. Like... It's not like I would have done that trip if they had not decided that.”

“The only time I get a lift from my parents is when we do things together [as a family]. Like, during the weekends we sometimes go to my grandmother for dinner, and things like that.”

In relation to the youths’ accessibility needs, many of the respondents told of how they have the ability to walk to several everyday destinations. In fact, many of them live within walking distance to most of commonly mentioned everyday destinations, such as school, the youth community centre, friends and the grocery store and therefore simply walk everywhere.

“Usually I just walk everywhere, but sometimes maybe one a month I take the bus.”

“I don’t really go places that are that far away. Most places I go to are located in Brunnsbo, it’s like school, the square and the youth community centre. And to friends’ houses and all of my friends live in Brunnsbo, so yeah, I just walk everywhere.”

This was also corroborated by the results collected by the previously presented activity diaries which demonstrated the relatively small activity spaces of many of the youths. A clear majority of the movements recorded during the week that the youths filled out activity diaries were undertaken by foot. Few of the respondents had everyday commitments that required them to leave Brunnsbo; only three of the respondents went to non-local schools which they travelled to by bus. These findings corroborate with the results presented by Lynch (1977) and Fagerholm et al. (2011) about how underage persons’ mobility is being practiced within a closely limited range of action, often characterised by proximity to destinations. Just like the younger children examined by Fagerholm et al. (2011), the most common destinations reached by youths were located in a small geographical range which of course enables walking as a viable and common way to get to places.

When going to destinations that according to the youths are located too far away to be considered as within walking distance, there was a clear preference to take the bus (which perhaps is not too surprising as it is the only form of public transport servicing the area). In general, Brunnsbo is considered to be well-serviced by public transport by the youths, who raised several benefits of utilising bus services ranging from comfort, accessibility, time and cost.

“It’s so easy to just take the bus if you are going somewhere. Everyone can come with too, because everyone has a travel card. At least on the weekdays if it is not too late. Then you have to add extra to the card if you want to use it during the weekend, and not everyone does that.”

“It’s really easy to get around with the bus. And it doesn’t take long. It’s free and they go often I think. Like every five minutes or so in the mornings and in the afternoons, you never have to wait for that long.”

“On the bus, it's not like other people always sit right next to me. You get a bit more space and a little more distance than in the car.”

The teenagers described how they usually take the bus to destinations a mere one or two bus stops away from Brunnsbo, such as Selma Lagerlöfs torg and Backaplan. None of them saw cycling as a viable transport mode for these trips. In fact, cycling was rarely undertaken at all.

“It's just simply not something you do. It's not really my thing.”

A: “It's so annoying and hard to cycle. You'll just get tired after like, half the way, and then you'll have to walk, and then you won't have the energy to walk. And it feels unnecessary to cycle if you are not going that far.”

Q: “So it's mostly the distance that matters?”

A: “Yes...”

Q: “But Backaplan is not that far away from here.”

A: “No...”

Q: “But you don't ride your bike there either?”

A: “No...”

Q: “Why not?”

A: “No, but it's so easy to just take the bus.”

“No one else ever cycles. Pretty much everyone takes the bus and then you take the bus too.”

“It's so old fashioned to ride a bike... pretty much ancient. I just don't get why you would cycle when there are mopeds?”

Q: “So why does one not ride bikes?”

A: “No but I don't know really. Well, it's cold.”

Q: “So do you ride bikes in summer then?”

A: “No.”

Q: “It's just nothing that you really do?”

A: “Yeah, you don't do it in summer either. It's just not an alternative.”

Others did however cycle but viewed this as a pastime rather than a transport mode.

“I don't ride my bike very far and only maybe once or a couple of times during the summer. It's usually me and my friends. Maybe we ride our bikes to the city sometimes, in the summer maybe a few times. Or maybe ride up to Backa Kyrko[gata] or Selma [Lagerlöfs torg] and places like that. [...] I'm doing it with friends because we're bored... during Ramadan and so on. When we want to waste time, it's something you can do to pass time.”

“Sometimes I cycle close by, but I never go very far, it's not like a transport mode. It's just something to play around with.”

“No no no, I never ride bikes. Or if I do it's only in the yard outside our apartment for something to do.”

When putting the youths' various uses of transport modes in relation to the theory behind the time-space prism which identifies the possible activity space of an individual, this to a great extent seems to match the youths' needs on accessibility. Of course, as shown in *figure 2* and previously mentioned, this example of a time-space prism is somewhat generic and homogenous and does not disclose the potential accessibility barriers *within* the potential path

area. However, when reviewing the transport modes employed by the youths while satisfying their accessibility needs it is rather the aspect of velocity that becomes important. Here, the youths reported to being content with transport modes available to them and that these were sufficient in satisfying their accessibility needs.

In other words, most of the youths' everyday accessibility needs are located so that they can be sufficed within a relatively small geographical area and they are well-skilled in the modes they chose to employ to do so. Interestingly, cycling is not considered a transport mode by the youth who instead choose to travel to destinations located at a 'semi-distance' (easily reached by cycling or walking) via public transport. The quotes mentioning how "everyone has a travel card" and that the bus is "free" refers to how the municipality distributes travel cards free of charge to all school pupils during the school semesters as well as during the summer holidays. It is not far-fetched to connect the youths' almost non-existing bicycle activities to this practice. By enjoying free transport during the bigger part of the year, the youths also become routine users of public transport and choose to take the bus to places they otherwise might have walked or cycled to.

5.3 Barriers

The teenagers were able to identify several barriers to their accessibility. Oftentimes these barriers were endured - they did not prevent the youths some undertaking their trips – however, sometimes the barriers caused the respondents to adopt certain strategies. The barriers differ vastly where some concern feelings of safety and security in public spaces and others concern necessary aspects of ordinary life through still hindering youths from practising accessibility. This part of the chapter will employ sub-themes to guide through the diverseness of barriers described.

5.3.1 Parents as restrictors and enablers of accessibility

Though they are in a phase of their lives where they are gradually gaining more independence, much of how urban youths perceive and practice accessibility is still relating to their parents and the authority they hold over their children. This authority is partly displayed in that it is expected from the teenagers to inform their parents when they are going to destinations outside of Brunnsbo. This practice ranges from the youths simply letting their parents know where they are going to asking for permission to go to their intended destination, as can be studied in the following quotes.

“I can go out whenever I want to go out pretty much, I don't have to ask for permission all the time. If I'm only going to Backaplan or maybe to Selma [Lagerlöfs torg], it's cool. But if I'm going in to the city they want me to tell them before.”

“Often when I go somewhere outside of Brunnsbo, I'll just tell them [the parents] so that they know.”

“As long as I let my mum know in advance, there is usually no problem to go somewhere. Just as long as she knows where I am.”

“My mum always wants me to ask for permission. She doesn't like me going in to the city without her knowing. If I want to go somewhere kind of far away, then she can sometimes say no.”

Another way that parental authority is displayed is through the times of the day that the youths are allowed to practice their accessibility. To a great degree this is managed through phone calls and text messages.

“Like now, when I am this age [almost 15] I can usually go wherever I want but of course it depends on where I want to go. Because if I tell her [the mother] that I want to go to Stockholm she would obviously say no. But it really depends. But now with my phone she can just call me and then I can just tell her ‘OK, I'm coming, I'm coming [home]’.”

“It doesn't happen that often, that I have a specific time to be home. I have my phone in my pocket so they [the parents] can just contact me when they want me to get home.”

“I can be out in the evenings and stuff like that but when they [the parents] call me I have to go home.”

“I think you know when it's time to go home. But then of course, my mum usually calls me constantly when she wants me to get home.”

This practice of managing time spent away from home and movement between various destinations through mobile phone communication shows a lessening of the youths' coupling constraints in relation to their accessibility needs. In the negotiation between parents and youths, the possession of a mobile phone offers a tool for the youths wanting to practice their accessibility independently – and for the parents to allow their children to do so. In situations where previously, before the commonness of mobile phones was established, youths would have to accept to be expected to live rigorously by a curfew (i.e. a coupling constraint in that they had to be at a specific place at a specific time). However now, youths can utilise mobile phones and ICT to relax these constraints.

Apart from the use of mobile phones, the youths described how there are still sometimes agreements between them and their parents on what time they are expected to be home, i.e. completing their principle of return. As the youths are content users of public transport and the fact that most of their commonly frequented destinations are located within proximity, their exercising the principle of return is not effected by the lack of sufficient (fast) transport modes.

Rather, it is influenced by parents and their perceptions of the reasons for the youths' movements and activities outside of the home. For example, the agreements on suitable times to come home was often displayed as somewhat flexible where the teenagers were allowed to stay out longer if this was in relation to a special commitment (e.g. a friend's birthday party or music concert). Other times, the teenagers described that they could stay out longer if this was in connection to a formal, reoccurring activity (e.g. a scheduled workout session), rather than just roaming around in the neighbourhood.

"I usually go home at 22, or sometimes 23. But it has happened that I got home at like 12, 1, on special occasions but it doesn't happen that often."

"On Fridays, I get home at 12 at the latest, and sometimes 23 on the weekends. But during the week I get home at like 22 at the latest. [...] Sometimes it can be later too, if I go to something special, if it's like a concert or a birthday party. Then you can usually stay out longer. But yeah, during the week it's like 21 or 22. Often when the youth community centre closes, because then my mum wants me to come home straight away."

"So if I have training, then I can come home at like 12, 1 if I want to. But if I'm just at the youth community centre my mum wants me to get home at like 22 [when it closes]."

"On Fridays, I can stay out a little later. Then I can get home at 22:30. On all other days it's like 21 instead. But if I'm going to like a birthday party or out to eat with friends or the cinema and something like that, then I can stay out longer."

"Sometimes there is a curfew, to be home at this specific time and things like that but it can be different depending on what I'm doing that specific night. [...] If there is something special I can often stay out longer."

In other words, parents constitute an authority constraint, ultimately influencing the accessibility practices of youths. The youths cannot completely independently decide their accessibility in terms of destinations and when movements in space are carried out, granting the parents the position as enablers and restrictors of youths' accessibility practices. It appears that the parents are more likely to enable youths' independent movements when these have extrinsic motivations behind them as described in *table 1* of Maslow's hierarchy of needs in relation to travel demand. For example, one youth stated that they could come home past midnight if this was in relation to a scheduled sport's practice (which was located outside of Brunnsbo, in a completely different part of the city). However, if the reasons for being away from home was motivated by intrinsic reasons, such as when the same respondent reported to the situation when the youth community centre closes and her mother wants her to go straight home as opposed to roam the neighbourhood for 'no reason'.

Some of the youths also explained how the parents' authority constraints could be slightly relaxed in that they are sometimes allowed a later curfew as long as they were with their older sibling. Similarly, others described sometimes being in charge for younger siblings who, in their older sibling's company were allowed to stay out later.

“I can stay out as long as I want up until 22 as long as I'm with my sister. Otherwise I'm obviously not allowed to. [...] I'm younger than her so she gets to look after me and be responsible for me.”

“I have to look after my little sister sometimes. It's like more okay for her to stay out longer if she is with me. She gets to be out longer than I got to when I was her age, because I don't have an older sister.”

Having responsibility over younger siblings was a topic discussed by many of the respondents. In addition to this responsibility, many of them also described doing chores, such as grocery shopping, which was put in relation to their parents being out of time resources due to work or study obligations. In this way, parental time-space resources seem to have a spill-over effect on their semi-independent children.

“Well... I am the oldest in my family so it's like 100% like that, that I have to go do the grocery shopping for us. My 11 year old sister can't go shopping for us, she's too little. [...]. And every day I drop off and collect my youngest sister at pre-school. [...] I help out a lot at home because my mum doesn't work in Brunnsbo. Not even in Gothenburg. She is studying in a completely different city. It takes her a really long time to go there, she goes out the door at 6 in the morning. And my dad starts work really early, at 4. So none of them is home when me and my siblings get up to go to school. And because I am the oldest I have to do it and help them [the siblings] with everything in the mornings and take them to school and pre-school and things like that.”

“It can pretty much be once per day that I have to go buy something or help mum with something. She works kind of far away from Brunnsbo so it's easier for her if I buy things before she gets home and has to cook.”

“You can pretty much ask me how many times *per day* that I have to go and buy things for my parents. They don't always have the time to do it when they get home from work.”

This highlights how the parents' are not strictly enablers and restrictors in the sense where they simply approve or disapprove of their children's accessibility practices; the reasons behind the authority constraints issued by parents are more complex than that. Here, authority constraints are approaching coupling constraints in that parents' strategies to manage their everyday projects in time and space come to involve their children. In a way to organise these everyday projects, such as doing the grocery shopping and the dropping off and collecting younger children, parents delegate household and childrearing tasks to be done by their teenaged children. This is especially prevalent when parents' everyday accessibility needs are spread out over a larger activity space - such as the cases of the respondents with parents working or studying in cities outside of Gothenburg - effectively increasing their mobility needs as well as

the daily time spent outside of Brunnsbo. The coupling strategies then come to influence the accessibility needs and practices of youths as they have to arrange their activities and movements around chores related to the household. This especially so when being delegated the task of managing their younger siblings' movements between the home and childcare facilities as these are activities of a strong fixity in time and space (see *figure 3*); they are required activities fixed in place – the younger siblings must be dropped off and picked up, at and from, a fixed place at fixed times.

Worth noting too, is that these household related constraints were mainly experienced by the female respondents. Church et al. (2000) describe time-based exclusion and how this disproportionately affects women as the primary caretakers of households and children. From the stories told by the female respondents it seems like the effects of the time-based exclusion experienced by their mothers have a trickle-down effect on them and the way that they can plan their days in terms of accessibility. As some of the mothers of the female respondents have adopted the delegation of tasks as a strategy to come to terms with the coupling constraints they themselves experience, their daughters too come to experience their accessibility needs being constrained by time-based exclusion.

5.3.2 Restrictions on *when* accessibility can be practiced

Restrictions on when youths can practice accessibility are not exclusively exercised by parents. Large portions of the youths' weekdays are spent in school, a required activity at a fixed place at fixed times. The activity of going to school, though being necessary for the education of youths, is therefore a coupling constraint to youths' accessibility as it is an activity that needs the coordination of time and space, effectively limiting time to be spent on satisfying other accessibility needs. The respondents also described how additional school obligations, such as homework and preparing for tests, also caused them to not seek a wider range of everyday destinations. Time spent outside of school is described by the respondents as inflexible in terms of choosing activities; first school work is prioritised which leaves little time to be spent on other activities with effects on the needs youths have on accessibility.

“After a school day, maybe you go home, you have to study, you have lots of tests, maybe homework and so on. So you don't really go out. But in the weekends... there aren't that many who study and do homework in the weekends because you know, it's the weekend and that's when all young people want to go out.”

“I'm mostly home in the evenings on weekdays but I do come here [the youth community centre] on Fridays. You can't really find that many things to do on weekdays. No, most of the time during the week you just study in the evenings.”

“Every Friday my friends and I go to the youth community centre. We don't go here any other days because you're too busy with homework then.”

It appears that school related activities, such as homework and preparing for tests, are considered by the youths as fixed. In other words, even though the youths have the freedom to arrange their spare time as they please, homework is perceived as a highly prioritised, required activity, fixed in time (weekday evenings, as opposed to weekends), and at a fixed place (at home). Therefore, the youths' weekday spare time accessibility practices are restricted where required practices are tied to specific places (Schwanen et al., 2008).

5.3.3 Avoided places

One aspect of barriers perceived by the youths involves the inability to navigate through heavily trafficked areas. Especially the younger respondents told stories of experiencing danger in areas with high volumes of traffic and mixes of transport modes, such as public transport modes or commercial areas in central Gothenburg.

“Sometimes it can be a bit difficult if you want to change the bus and so on. Like at Nordstan and Brunnsparken. Because there are so many people there so it feels like you are going to be pushed in front of the bus or the tram.”

“I really don't like the trams. Like if you take the tram and then you have to get off, and you feel kind of trapped in it and where you get off. And like, when it's dark and it's crowded around you and it just gets too much. You don't even know who is walking right next to you bumping into you. And you lose your friends in the crowd.”

One respondent described refraining from visiting these kind of places by themselves and instead only went together with their mother.

“But it's hard and I usually go with my mum because I can't go by myself. Because when you get into the city, there is like a bus here and a tram there. The traffic is dangerous.”

This is similar to Lynch's (1977) early findings in *Growing up in cities*. Just like the study, the (younger) respondents in this thesis sometimes desisted from going to certain places as they perceived themselves lacking the sufficient skills in navigating through areas with 'dangerous traffic'. It is also quite telling that the older respondents did not perceive heavily trafficked areas as a barrier to them visiting such places, indicating that they have learnt to navigate these obstacles.

Another respondent theorised that the inflexibility to choose what time to travel into the city contributed to what caused her dislike to navigate through said environments.

“I really don’t like going into the city, like Nordstan and Kungsgatan and those places. Because you have to take the bus and when you get off it’s like crazy, there are buses everywhere, and trams, people, cyclists everywhere, coming from everywhere. I guess it is because I really only can go into the city on weekends, and then many other people go too because they don’t have to be in school either. Or at work.”

This again highlights the rigid fixity of attending school and its hindering effects on other accessibility needs held by urban youths.

5.3.4 Creepy places, scary people and the feelings of being observed

The respondents described how various elements of public space scared them, sometimes to the degree that it prevented or altered their participation in public space. The reasons for their feelings of uneasiness ranged between fearing other people deemed scary, ‘creepy’ places and the dark as will be demonstrated just below.

Some of the respondents pointed out that the presence of ‘scary’ people frightened them. This could be happening on transport modes as well as in central Gothenburg, but not as often within their home arena of Brunnsbo which was perceived as safer with a lesser presence of ‘scary’ people.

“There are so many drunk people and things like that, on the tram and in the city and you get scared. I usually just run straight ahead and don’t really know where I’m going.”

“The tram is actually calmer than the bus. But there are more drunk people on the tram.”

“We like it here [in Brunnsbo]. We try to hang out here most of the time. In the city, there are too many other people who keep on saying things, like weird people. At least in Nordstan.”

Others pointed to the fearfulness they held of groups of people deemed to be frightening.

“What’s scary is when I go to my dad, he lives in a different part of Hisingen. I usually go one stop further than where I should be getting off because there are guys just standing there [at the tram stop] and hang out in big groups. And then there are always guys on the way from the stop, like in big groups. Yes they are like big scary gangs so I usually always run past them or I go on a detour around them because they’re not nice and they are scary.”

Many of the female respondents agreed on this notion of ‘scary groups of men’ and told of specific situations and/or places they experience as unsafe up to the point where they sometimes try to avoid them, either altogether or at certain times of the day.

“It’s mostly the square... because there are like guys hanging out in groups there. Like at ICA. And inside [the small shopping centre], next to ICA’s entrance. So it’s not that fun to go to ICA sometimes. [...] It’s not like I think these guys would do anything to me or anything like that... I know who they are, but it feels like this, like anything could happen. [...] It’s unpleasant when you’re only two or three girls, and

they're like a big gang and all of them are looking at you. Sometimes we just don't go there, like at times when you know that they are going to be there."

"Some places can be really scary. Mostly because of how guys are... I'm probably going to sound like a feminist now or something, but that's how it is."

"Yeah well, you've heard things that have happened to other girls and things like that, so sometimes it's a bit scary to walk outside."

Similar to perceiving danger from groups, many of the girls also described the feeling of being observed by others while being out in public.

"Sometimes you can get stares and things like that, like on the bus or in the city. It's really not nice. It mostly happens in Nordstan and places like that. And when you wait for the bus and the tram too. Like at Brunnsparken, outside McDonalds."

"Sometimes it can be a little scary when you go on the bus or on the tram... you get these certain kind of looks from people. You start to feel a scary feeling, that this can end in a really bad way..."

While some of the respondents explained this barrier as something caused by strangers, some of the female respondents also described how they disliked going to certain places because they felt observed by relatives.

A: "I'm like... only hanging out in Brunnsbo. I really don't like to go somewhere else. I almost never go outside of Brunnsbo."

Q: "Okay. And why is that? Is it because you have most of your friends here?"

A: "No, I have friends outside [of Brunnsbo] too... no, it's not that. I don't like going to other areas [outside Brunnsbo]. I have a lot of cousins who live everywhere in Gothenburg so I don't like it when they see me in other places..."

People deemed dangerous were not the only cause behind female respondents' wariness in public, the physical environment in itself was sometimes described as instilling fear among the respondents too. Certain areas characterised by a high presence of nature features, such as trees and bushes, were especially pointed out. Though, the reason these places were deemed menacing was the potential sudden appearance of 'scary' people.

"It's so scary to go through the tree area, and further up in Brunnsbo. Like... there is a small trail there which is super scary. It feels like someone's going to come and kill you there."

A: "One scary place in Brunnsbo is next to the mountain just behind the school. It's so dark and like a forest with the trees. I really hate it when it's so dark and there's a lot of trees. So then you're like 'no, I don't want to go there'. And with the mountain just there, it's like a wall..."

Q: "So you feel trapped against the mountain?"

A: "Yes, it's really narrow there. Like if someone comes there it's not like you can get away from them by jumping over the mountain, as it's really high."

"Behind the school there are so many scary places... Like the part just next to the mountain. It feels like someone's going to come and hunt you. So I really try and avoid that place."

Regarding feelings of unsafety among the male respondents, this was not outspokenly articulated. Though some expressed feeling observed, this was in commercial settings where one respondent described how he sometimes felt watched when he frequented the local grocery store.

“Sometimes it's a bit weird when you go into like ICA here in Brunnsbo. Because if you're there with your friends, they [the staff] sometimes stare at you, or like look at you in a weird way. Then they also have a sign at checkout, by the tills, where it says that you have to show them [the cashier] your bag and things like that.”

Moreover, feelings of unsafety among the male respondents were rather expressed in relation to their home area of Brunnsbo and how they felt safe there.

“It's really weird over there [in Nordstan] actually. It feels a bit weird. But then when you're in Backa and Brunnsbo it feels completely different. It's a completely different thing, it feels safe. It's home. You can be out really late here in Brunnsbo and nothing happens.”

“I can walk by myself here at 3 in the night and have weird people around me but it still feels okay in a way, because I am close to home if something would happen, I know people here.”

In other words, a discrepancy between female and male perception of safety was demonstrated in the interviews. This is in alignment with previous research which has established a gendered difference in how public spaces are perceived in terms of fearfulness and safety where girls and women are experiencing said feelings to a greater extent than men and boys (for example Johansson et al., 2010 and O'Brien et al., 2000). It is clear that the expressions of fear of ‘scary’ people and ‘creepy’ places constitute an accessibility barrier as identified by Church et al. (2000). From the female respondents’ stories, it is apparent that female teenagers especially are experiencing fear-based exclusion which either alters or hinders them altogether from practising accessibility. Sometimes, the female respondents stated that just the feeling of being ‘watched’ and ‘observed’ by men and boys, was enough for them to experience uneasiness and anxiety while being out in public or on transport modes, and that said uneasiness could make them avoid certain places completely or at certain times. The male respondents however, instead raised another kind of concern; that of being observed and viewed as a likely committer of a crime. This is rather an accessibility barrier to fall under space exclusion. Church et al. (2000) depict how space exclusion can be put into effect through security and space management strategies in commercial facilities. The male respondents described how they experienced being ‘looked at’ while in the grocery store and that space management strategies, such as the demand to having bags inspected before exiting the store, was being aimed at them. This also corroborates with how Passon et al. (2008) claim that the presence of teenagers is sometimes

regarded as suspicious and unwanted in public spaces and at times even discouraged by the implementation of specific policies such as the sign at the checkout tills in the grocery store. In other words, it is apparent that regardless of gender, the youths' experiences of moving through space are not decoupled from their personal traits which results in certain accessibility barriers. However, it seems like the male respondents' experiences of this are mainly connected to their age, whereas the personal traits mainly creating barriers to the female respondents' accessibility barriers are first and foremost connected to their being female.

The fear-based exclusion to female youths' accessibility can also be understood as an additional authority constraint. One respondent described how she had "heard things that had happened to other girls" and therefore felt wary of walking outside. Here is an example of how authority constraints are not necessarily expressed as a 'hard' manifestation of power, but rather in 'soft' terms such as the societal norm contributing to the notion of girls and women not being safe in public spaces. Ultimately, this notion dictates that not all areas are accessible to everyone and not at all times (Neutens et al., 2011).

5.4 Accessibility in and in relation to Brunnsbo

This theme contains the somewhat complex feelings the youth held toward their home area of Brunnsbo. While the absolute majority really liked where they lived, many of them simultaneously described the area as boring for young people. Just like the barrier theme, aspects of this theme are diverse and suitable to be presented by sub-themes.

5.4.1 Accessibility from and within Brunnsbo

The youths gave rather corresponding opinions on how they viewed their access to the city from Brunnsbo. Except for the respondents who described being wary of heavily trafficked transport nodes (see 5.3.3 *Avoided places*), going to central parts of Gothenburg was viewed as easy.

"Brunnsbo is good, it's quite central, there's Backaplan, we're close to the city, it's close to everything actually."

"Going back and forth from Brunnsbo [in relation to other parts of Gothenburg] is pretty smooth. There are no problems at all. Easy peasy."

This was especially true when the respondents put their perceived accessibility in relation to situations experienced by friends and acquaintances who live in other parts of the city.

“Everything is very central, we are very close to everything [from Brunnsbo]. Like, I know a guy who lives in Källered [...] so he has to take trains and stuff to - yes, a commuter train! - to get to places. Okay, so it doesn't take him that long, I think it takes him 10 minutes to get to the city with the train. It's only that they go like, once every half an hour and sometimes once an hour so sometimes he has to wait for a long time. And sometimes he misses the train and has to wait at the station for a long time for the next train.”

Accessibility within Brunnsbo was sometimes perceived as good with many respondents stating how they are content with current destinations, services and transport options in their home area. Many of the respondents also highlighted how they enjoyed living close to their friends. They spoke to a great degree of the social qualities of the area and how its close-knit structure facilitated a strong local cohesion.

“Everything is close, so it's kind of good. Everything's kind of here. The school, the youth community centre, friends, Selma [Lagerlöfs torg], Backaplan, somewhere to shop for food... Yeah, pretty much everything that I need is here.”

“I like Brunnsbo the way it is now. There aren't that many stores but whatever, it doesn't matter because at least I don't really care about that, you can just go to Backaplan for that. What I like about Brunnsbo is that it feels like home, when you go out you always meet someone that you know so it's easy to hang out. You know, most young people who live here go to the same school and a lot of us have lived here for a long time, maybe all our lives, so you know everyone.”

“Most of the places I want to go to are located in Brunnsbo. It's like my friends, and school and the grocery store. I especially like that all my friends live here. We can just go to the youth community centre and hang there, you know everyone pretty much.”

Other respondents however told of how they perceived the area lacking in existing commercial amenities, that the local square was ‘boring’ and offered little variation which appears to qualify as exclusion from facilities as perceived by the youths. Like Church et al. (2000) describe this accessibility barrier as a lack of various facilities ranging from health to shopping to leisure, the youths identified several missing amenities they would like to see being added to the area.

“It would be good if there could be another café or something similar here in Brunnsbo. Maybe an Espresso House or something like that. And a Subway or something similar so that you can buy something to eat when you're in a hurry.”

“Well sometimes it can be a little hard if you're home alone without your parents and you like me can't really cook. Then it's hard because it can be hard to find somewhere you can go buy something readymade that is not pizza. Yeah, I think there should be more places, well restaurants where you can buy readymade food. Today... there is like three or maybe four places but they should be more varied [in the style of food that they offer]”

Many of the respondents, while agreeing that Brunnsbo lacked certain commercial facilities, did however not view this as a problem. On the opposite, they viewed having to leave Brunnsbo to run errands as something that disrupt everyday routines, as walking to destinations is an activity that has come to be associated with tedious routines and monotonousness.

“We don’t really have any clothing stores or book stores or places that here but I think that’s good! Then when you need to go buy something, you *have to* take the bus and then it becomes more of a journey to go there, it’s fun! I feel like when I walk somewhere it’s just the same old, usual thing that I’m doing, like going to school.”

That youths want to travel for the sake of travelling highlights arguments put forward by Mohktarian et al. (2015), of the need to place emphasis on the very diverse motivations of travel. From the above quote, it becomes clear that youths’ accessibility practices are not exclusively stemming from extrinsic needs, where basic human needs are satisfied or merely being the results of derived demand. Instead, that the youths want certain everyday destinations to be located within a distance that excludes the ability to walk there demonstrates the intrinsic characteristics of their accessibility needs. In other words, having to use public transport to go somewhere outside of their home area of Brunnsbo offered an opportunity to fulfil these intrinsic needs, all the while they were able to also satisfy travel needs of more extrinsic qualities such as going to commercial facilities for needed purchases. Therefore, it becomes clear that youths’ travel needs are indeed to be found throughout Maslow’s hierarchy of needs, as presented by Mokhtarian et al. (2015) in relation to travel demand.

In addition to lacking commercial facilities in Brunnsbo, some youths complained about there not being enough things to do for people their age in their immediate area, another aspect of the exclusion from facilities accessibility barrier.

A: “There really aren't enough things to do in Brunnsbo. At least not for us young people.”

Q: “What do you think is missing?”

A: “No idea... But there is definitely something that's missing.”

“We usually just hang out at home because there is nothing else in Brunnsbo to do.”

One respondent described how the only thing to do for young people during the times of the year that they are unwilling to spend times outdoors because of harsh weather conditions is to go to the youth community centre. The respondent also raised several issues they believed related to the exclusion from facilities accessibility barrier demonstrating itself in deficient opening times of the centre and their potential consequences for the youths and the immediate community of Brunnsbo and Norra Hisingen.

“So I think like this. It is good that the community youth centre is available to us young people because of many different reasons. And that's like the one thing that young people can do here. [...] I understand that the staff can't work weekends and so on because they have children and family and things like that, but I think they should - maybe not they [the staff] - but Norra Hisingen, the neighbourhood or something, those in charge should arrange stuff for young people to do in weekends and for times when the youth centre is closed. Because it prevents youth from doing criminal stuff or doing these... stupid things.

Mischief, petty crimes. If it's closed they might get mixed up in the wrong things. Do you understand what I mean? If the youth centre is open in the weekends too, then they might think 'well we can just come here [to the youth centre] and do stuff and hang together'."

However, the youths described the summers as better in terms of informal activities available to take part in, again highlighting the strong local cohesion present in Brunnsbo and how the exclusion from facilities accessibility barrier is challenged by better weather conditions.

A: "On like nice summer days we just hang in Brunnsbo all day long, from morning to night."

Q: "And what do you do when you 'hang'?"

A: "Well, you play football, and walk around in the area and things like that, you just hang."

Q: "Is there a big difference in the things you can do here in the summer, compared to winter?"

A: "Yes, a *huge* difference. Like, in the winter there is no one out. No one. But in the summer it's different. Then other people, like older people from other areas come and like gather here and we all hang out. And there are like more activities and things like that. It's like... more spontaneous, that you just meet people, friends, outside and get up to things with them."

"Like... in the winter you don't even want to be outdoors, you just want to stay inside but in the summer it's the other way around. Then you don't want to be home, you just want to stay out. You know, the football field a little way over there, in the summers it's *packed*. There are so many people hanging out there, it's like *everyone*. Yeah, like everyone is out and we play football together, we have barbeques together, everyone gets fed. There really couldn't be a better atmosphere."

It seems then, that the range of formal and informal activities available to youths in Brunnsbo are dependent on the season of the year. The lack of formal activities does not seem to matter as much to the youths during the warmer seasons as the weather during those times allows them to socialise outdoors in the area, an activity that replaces the need to go to the youth community centre in order to satisfy the same need of being social with friends. This of course makes the activity of socialising with friends more accessible to youths during the warmer months of the year as opposed to the colder ones. It also highlights findings made by Passon et al. (2008) who established that meeting places are especially valued among youths in order to socialise with their peers in places they can claim as 'theirs'. Just like how Passon et al. (2008) found that the meeting places can be of both formal and informal makings, the respondents spoke warmly of the youth community centre and the relative easy access to it in winter as well as how certain areas of Brunnsbo such as the football field, become informal, well-appreciated meeting places in summer.

5.4.2 Areas outside of Brunnsbo are viewed as uninteresting

While many of the respondents were complaining about the lack of things to do in Brunnsbo, they were simultaneously unwilling to search activities and things to do in other parts of the city of Gothenburg. In fact, many of the respondents expressed a direct disinterest in for example central Gothenburg, which in many instances was likened to the shopping centre Nordstan and its immediate surrounding areas.

“I really never go to the city. I really don't like it there. I don't really know what I would do there actually. It's comfortable here [in Brunnsbo], what I need is here. Should I need anything else I'm just going to Backaplan, or Selma. I don't see the point in going to like... central Gothenburg, Nordstan and those places. It's just annoying going there.”

“I prefer staying here in Brunnsbo except for going to my gym which is in the city. But otherwise I can't really be bothered to go into the city, it's mostly boring there.”

In some cases though, there seemed to be more of a ‘notional’ impediment, rather than disinterest, that prevented youths from seeking destinations outside of Brunnsbo. They simply could not imagine why they would travel to other parts of the city or what could be found to do there.

“If I would go somewhere outside of Brunnsbo I wouldn't really know where to go in that case, I don't really know what you could do. Or, like I don't know what to do and so in other places, I usually do not go to the city so often. There aren't that many places except for places here in Brunnsbo that I want to go to...”

“It's not very often that I leave Brunnsbo, partly because I really like it here and partly because I guess I wouldn't really know where to go or what to do in other places. I mean, sometimes you don't have anything to do [in Brunnsbo] but I don't think I would go anywhere else in those situations. Why would I? Why go somewhere if you don't know about it in the first place?”

Just like how Lynch (1977) found that one of the most important barriers to children's free movement is lack of spatial knowledge, the above quotes demonstrate that this is something also influencing youth accessibility practices. The youths simply do not see any reasons to leave Brunnsbo as they do not know where they in that case would be going.

5.4.3 Unwillingness to leave Brunnsbo

Closely related to the previous sub-theme of areas outside of Brunnsbo being viewed as uninteresting, there was a clear expressed aversion among the respondents to leave their home area of Brunnsbo and its surrounding areas. Many times, it was explained by the respondents appreciating the familiar setting Brunnsbo offered, with closeness to friends and locations they are well-acquainted with. Other times Brunnsbo was only travelled out of if necessary.

“Like me personally... I don't like being in other places than Brunnsbo, do you understand? Because it has happened several times, that I have gone to some other place, maybe like Bergsjön or Hammarkullen, some of those areas. You know, you don't feel like home there. I mostly like being in places where I feel like home. So I keep myself to Brunnsbo.”

“I mostly know people from Hisingen so I mostly keep myself to Hisingen but I mostly like being in Brunnsbo. Like we, me and my friends, like Brunnsbo and we like to hang out here.”

“Most often I don't really go anywhere outside of Brunnsbo, only if it's something necessary. Like going to the hospital, or the dentist or something like that. Or if I'm going to see my cousins at their place.”

Other times, the reason was outright dislike for other areas, more based on emotional reasoning the respondents were unable to rationalise.

“I don't usually go anywhere in central Gothenburg actually, or any other places outside of Brunnsbo. I just don't like it and I don't really know why. I only leave Brunnsbo to go to my Koran school, in the mosque. But I rather stay in Brunnsbo.”

A: “I don't like to go outside Brunnsbo-Backa. I never really leave.”

Q: “Why is that?”

A “I don't know really, I really don't like to go anywhere. It just doesn't feel right so I'm almost never outside of Brunnsbo.”

It seems that the youths in Brunnsbo are mainly content to satisfy their accessibility needs in their own neighbourhood, something that aligns with previous research on younger children's attitudes toward independent mobility. Like how Crawford et al. (2017) established that younger children are more likely to independently practice mobility in well-known areas, it seems like the youths are content to satisfy their accessibility needs in an area that they are familiar with and where they recognise people, as opposed to unfamiliar areas they feel they 'don't belong' or that it just 'doesn't feel right' to go to.

Undoubtedly, there are some levels of perceived 'excludedness' among the youths. Especially accessibility to commercial facilities in Brunnsbo is experienced as limited among the respondents, whether they regard it as a problem or not. In addition to that, there is a clear disinterest among the youths to leave Brunnsbo, unless they absolutely have to, such as the respondent mentioning the hospital or dentist appointments. Regardless of the reasons behind this and the apparent dislike of central Gothenburg, this (chosen) geographical exclusion seems to have contributed to (or perhaps stems from) Brunnsbo being seen as an area highly characterised by strong local cohesion as advised by Church et al. (2000). The youths describe to feel 'like home' when walking through their neighbourhood and especially point out the social qualities of the area where they can walk out the door without specific plans and spontaneously meet up with people they know which again coincides with findings of Passon et al. (2007) and the importance of meeting places when considering youths' accessibility needs.

6. Concluding discussion and questions for future research

In this concluding chapter, the major conclusions of the thesis are presented and discussed in relation to the research questions and aim. The chapter is ended with the discussion of suggestions for future research in order to bring forward the understanding of youths' accessibility needs, practices and barriers thereof additionally.

6.1 How do youths perceive and practice accessibility?

One clear image that emerges from the analysis is that youths' accessibility practices to a great extent are characterised by proximity; the majority of destinations frequented by the youths are located within their home area of Brunnsbo, creating relatively small actions of youth. Though, few of the youths have chosen to arrange their everyday lives so that they need to be mobile to a greater degree than their peers through their enrolment in schools located at distances requiring the use of public transport. Some of the youths have also chosen to take part in spare time activities requiring them having to leave Brunnsbo a few times a week. However, had the same spare time activities been available in Brunnsbo, the youths claimed to have rather participated in them there, further demonstrating the youths' preference for proximity in relation to accessibility.

Interestingly however was that, even though so much of the youths' accessibility was practiced within geographically small activity spaces, cycling was not viewed as a viable transport mode to carry out these practices. In fact, cycling was not even considered a transport mode at all among the youths who favoured public transport modes that are available to them, free of charge. As mentioned in the analysis, it seems like the free access to public transport has turned the youths into highly skilled, routine users of public transport, to the extent that they choose to travel by it to destinations that are located within cycling, or sometimes even walking distance. In the light of policies, such as Gothenburg's traffic strategy, emphasising the importance of planning for accessibility through slow modes such as walking and cycling, it becomes apparent that there is a gap between policy and practice. Particularly so, as the traffic strategy specifically identifies children and youths as key actors to reach with cycling policy implementations as "travel habits are established at an early age" (Göteborgs Stad – Trafikkontoret, 2013, p. 37). While it of course is important to also allow for youths to become experienced users of public transport for this same reason, it appears as the easy access to public transport serves as a barrier for youths to practice their accessibility through cycling.

6.2 Which needs do urban youth have on accessibility in terms of activities and destinations?

The age of the respondents and the fact that none of them are attending upper secondary school is likely one of the causes to why the activity spaces of youths are relatively small and very much connected to local social ties. Most of the respondents were born in, had grown up in and always attended school in Brunnsbo, enabling them to create strong ties to the local area and the people living there whom they often had life-long social relationships to. The youths clearly valued this close-knit area cohesion, to the point where their needs on accessibility were influenced by it. The youths seemed to be mainly content with the current organisation of the urban landscape and present accessibility as their needs often were characterised by friendship, familiarity and proximity – qualities that were sufficed in present day Brunnsbo. Even youths who complain about there “not being anything to do for young people” were reluctant to leave Brunnsbo to pursue activities to cease their boredom.

Other needs on accessibility concerning activities and destinations held by the youths were among others proximity to school, some commercial facilities – mainly food related ones – and the youth community centre, again demonstrated how their accessibility needs are highly influenced by the need to be social and to have a place that is ‘theirs’.

6.3 Which, if any, barriers do youths identify as preventing them from practising accessibility within the city?

Very clearly, parents are still enablers and restrictors of youths’ accessibility needs. Likely, the respondents’ ages contribute to this. As some, though few, of the respondents have daily needs requiring them to leave the area of Brunnsbo (in turn obliging them to be more dependent on fast modes such as public transport to employ mobility as a mean to satisfy their accessibility needs), parents still seem to view leaving Brunnsbo and its immediate surrounding areas as an activity needing an explanation or reason. They are also more likely to approve of the activity causing the youths to leave Brunnsbo if it is motivated by extrinsic needs. Likewise, travel needs motivated by intrinsic needs are more probable to be restricted through the parents’ final authority of their children. The youths’ accessibility practices are also affected by the parents’ time space resources and the strategies that they employ to realise their projects in time and space. These strategies entail the delegation of chores to their teenaged children, ultimately affecting the needs youths have on accessibility (for example proximity to a grocery store) but also their accessibility practices in themselves as household related chores contribute to the

youths' arrangements of their everyday lives according to fixed times and fixed places. These barriers have been put into relation to Hägerstrand's (1970) concept of constraints, including the principle of return and the assumption of the barrier-free action space.

Capacity constraints	Spatial knowledge limited to Brunnsbo and its immediate surrounding areas. Transport modes – cannot drive; discard cycling
Coupling constraints	Need to coordinate activities stemming from household needs as delegated to them in time and space Role of the mobile phone in relation to parents
Authority constraints	Parents as enablers and restrictors, control Societal norms and actual incidents influence especially girls' perceptions of public space as unsafe and scary

Table 4: Barriers to youths' accessibility as understood by Hägerstrand's (1970) constraints

As can be viewed in table 4, another major barrier to youths' accessibility is the perceptions of fear, either of 'scary' people or 'creepy' places that are associated with the sudden appearance of 'scary' people. This was especially expressed by the female youths which is not surprising as it concurs with previous research related to the topic. Through the testimonies given by the female respondents it becomes apparent that girls' accessibility often is riddled by their constant internal negotiation about whether the time they are traveling, where they are going and the route they are taking to get there are to be considered safe. Male youths on the other hand, experience different kinds of constraints that are rather related to their being the age they are. These however, are most likely to occur within commercial settings, whereas the girls' fears of being observed and/or subjected to harm are present as long as they are spending time in public. This of course highlights the fact that youths' accessibility needs, practices and barriers thereof are diverse and heterogeneous.

6.4 Recommendations for future research

The youths examined in this thesis were all 6th to 9th graders, who but for three exceptions, went to the closest located school, allowing them to pursue their mobility through slow modes such as walking. In other words, none of the respondents had started upper secondary school. Therefore, for future research it would be of interest to consider how the accessibility practices, needs and barriers of youths potentially change when they pursue their future education in new schools as this is likely to widen their current activity spaces, hence changing the needs youths have in relation to accessibility. Though, whether the altered accessibility needs would

constitute a factor that influences youths' accessibility practices in terms of lessening its strong association to social needs and proximity would be an interesting aspect to investigate.

Another interesting aspect of youths' accessibility practices found in this thesis is the apparent dislike for and non-use of cycling as a transport mode. As mentioned, this is in contrast with some of the ambitions of Gothenburg city's transport strategy which is set out to create opportunities and possibilities for youths to undertake slow, sustainable ways of transport such as cycling in order to adjust to future urban transportation challenges. With this background, it would be valuable to further examine this gap between policy and practice so that the understanding of one hindering aspect of the adjustment to future challenges in urban transportation can be extended.

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Appendix

Appendix 1 – The activity diary

What time is it	Where am I	Where am I going	How am I getting there	With who am I	Comments (optional)

Appendix 2 – The interview guide for semi-structured interviews

Interview guide: Semi-structured interviews

Interviewer: *This interview is held as one of part of collecting material for a master thesis in geography. The thesis will be about youth accessibility in everyday life. For example, it may be how you go to school or to a friend, and how you may choose to not go to an activity because it is difficult or expensive. There are no incorrect answers - on the contrary, all you share with me regarding your current everyday accessibility is important and will be useful in this study to describe and explain the everyday accessibility of young people in Gothenburg - perhaps also in order to improve it.*

Of course, your answers will be anonymised and your name will not appear anywhere in the thesis. It's your thoughts about the subject, not you as a person, that is interesting in terms of the thesis. Quotations will be reproduced in order to explain my results. If the quotes contain names, places or persons that are easily connected to you, these will be changed to prevent identification. I would like to record this conversation to facilitate a correct transcription of the quotes, is it okay for you? The recording will be deleted once the transcription is finished.

Background questions

- Age
- School. Which grade? Which school?
- Part time job
- Spare time activity/ies
- Family structure
- Driver's license and car in the household
- Accommodation. How long have you lived here?
- How could Brunnsbo be more accessible? (Both within Brunnsbo and away from Brunnsbo.)

Theme 1 - Activity diary

- In the diary you have filled in like this ... is it representative of an ordinary day in your life?
- (How does it differ from how you usually move during a day?)
- Can you explain what you did here...
- Here you have not completed activities between xx and xx, is that correct?

Theme 2 - Accessibility practices

- What does a typical day look like for you? Which places do you usually visit?
- Which areas and places in Brunnsbo do you usually visit?
- Which areas and in Gothenburg, except places in Brunnsbo, do you usually visit?
- How do you usually go to these places?
 - By foot?
 - By bus or tram?
 - With bicycle?
 - By car (= driven by parent or other adult)
 - With skateboard?
 - In another way
- What kind of transport mode do you prefer? Why?
- Is there any transport mode/s you would never use? Why?
- Do you decide how to move in your daily life? For example, regarding:
 - Transport modes
 - Places and destinations
 - Time of the day
- If you do not decide this independently, who does it for you / in consultation with you? Why do not you decide independently?
- At what age did you start to decide more yourself regarding your daily movements between destinations?
- Do your parent/s help you if you need to go somewhere? For example by driving you to destinations? Why? Why not?
- Do you go to places with together with people (e.g. friends, parents)? Which places do you usually go to in that case?
- Do you help doing household chores like shopping or picking up/dropping off younger siblings?
- Do you participate in spare time activities (e.g. sports, play an instrument, practice a religion etc)? In that case, where do you have to go to do so? How do you usually get there?

Theme 3 - Accessibility needs - within and away from Brunnsbo

- What do you want to be/live close to? School? Friends? Recreational activities? Etc.
- What do you think is most important to have good accessibility to? Why?
- What do you think it is least important to have good accessibility to? Why?
- What do you think about accessibility where you live? Does the area suffice your everyday accessibility needs? How? If not, how could it be better? Do you think that there is something missing?
- Is it important that the upper secondary school is close to your home? Is it unimportant compared with other requirements?
- Do you think there are enough things to do here in Brunnsbo for young people? Why? Why not?
- If you would like to go for a coffee with a friend, where would you go? Do you go somewhere nearby, or would you go to central Gothenburg? Why do you choose as you do?
- If you would like to go swimming for a hot summer day, do you think it's easy or difficult to do that? Where would you go? Why?
- Are you going to take a driver's license when you turn 18? Why? Why is it important? Why not?

Theme 4 - Accessibility barriers

- Was it easy to get here to the youth community centre today? Why? Why not?
- Do you experience barriers to your daily accessibility? How?
These obstacles could, for example, be:
 - That you feel uneasy or afraid of or in certain places
 - That public transport does not go as you wish/often enough
 - That it's hard to know how to get to certain places
 - That you do not have time to go somewhere
 - That you are not allowed to go to the desired place
 - That it costs too much to get there
- Is there any particular activity/service you think is difficult to get to? Which? Why?
- Have you ever cancelled an activity you've planned to go on because you thought it too hard/difficult to go there? Why?
- Do you feel welcome everywhere?
- Are there any areas or places in Brunnsbo that you would like to visit more often if it had been easier to get there? Why is it hard to get there?
- Are there areas or places in Gothenburg, except Brunnsbo, that you would like to visit more often if it was easier to get there? Why is it hard to get there?
- Are there any areas or places in Brunnsbo that you would like to visit but never been to? Why?
- Are there areas or places in Gothenburg, except Brunnsbo, that you would like to visit but never been to? Why?
- If you had to choose for yourself, where in Gothenburg would you like to live?
- Do you think it's easy or difficult to implement your daily accessibility needs:
 - By foot?
 - Via bus or tram?
 - By bicycling?
- Are there any transportation modes that are harder to use than others? Why?

Other questions

- How could Brunnsbo become more accessible? (Both within Brunnsbo and away from Brunnsbo) → Repeated question
- Is there anything that you think I forgot to ask about or anything you would like to add?