



Understanding User Experiences and Diverse Utilization of Urban Transit Spaces:

A Case Study of Bijlmer ArenA Railway Station Area

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Understanding User Experiences and Diverse Utilization of Urban Transit Spaces:

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Cover image: Bijlmer ArenA railway station façade. © Chloë Verkooijen



Foreword

Dear reader,

Before you lies my thesis for the master Human Geography. During my master, I became fascinated with the way urban spaces influence the human senses, experiences, and choices people make in urban spaces. I knew I wanted to dedicate my thesis research to these subjects and was lucky to do it under inspiring supervision from both the University Utrecht and the institution where I did an internship: Breda University of applied sciences, the place where I also obtained my bachelor's degree. I want to thank Paul van de Coevering, for the supervision, feedback, and brainstorming sessions during my internship. The feedback and ideas he provided brought my thesis to the next level. I also want to thank Elisa Fiore, my university supervisor for her guidance, feedback, and honestly, moral support. I'm really glad she was the one supervising me.

I also want to thank my sweet cousin, Renée for taking the time to read my entire thesis and providing it with comments. Of course, I want to close off by thanking all the respondents who participated in this research, Domitilla, Maurice, Morena, Ed, Yannick, Liselot, Femke, Marie, and Jeroen. I could not have done this without them.

This thesis took me through a path of ups and downs. As I was doing the walk-along interviews, I started to find out that the answers to my research questions were way less interesting than other results that came out of it. It resulted in me reshaping the research structure, theoretical framework, and results to account for the more interesting findings of the study. I'm really glad I did this because I can now say I'm extremely happy and proud of the thesis I've delivered. I hope you, the reader, enjoy it too.

Chloë Verkooijen



Summary

Stimulating public transit use is vital due to its beneficial contribution to the environmental crisis and problems like congestion (Wael et al., 2022). As gateways to city centers, railway stations are increasingly given a key role in urban development due to increased accessibility of urban areas and more and more, railway stations are being acknowledged for their contradictory identity of being both a node and a place in itself (Chorus & Bertolini, 2011). High density urban development around transit stations is becoming more common in the Netherlands, also around railway station Bijlmer ArenA. Prior to developing a station area, it is interesting to find out how its users are currently experiencing the area. During an internship at Breda University of applied sciences, a study was done on users' current experiences of the Bijlmer ArenA station area, and the way they are currently utilizing the station: as a node or/and as a place. Existing literature on the node/place dynamics at transit stations and urban experiences was reviewed and three contexts were formulated that should be considered together when trying to understand human experiences: the physical, sociocultural, and personal contexts. Based on existing literature and the research aim of this study, the following main question was formulated: *How does railway station area experience relate to the use of the station as a node vs. the station area as a place?* This question was answered by employing ethnographic research methods, involving non-participatory observations and semi-structured walk-along interviews (WAI) with photo elicitation. The observations provided a first understanding of the research area, while the WAI's gathered in-depth data on users' experiences and utilization of the station area. The respondents for the WAI's were chosen based on their familiarity with the area, purpose in the area, and demographic characteristics.

The data from the WAI's was analyzed by transcribing the interviews and using deductive and inductive coding methods: color coding and thematic coding. The results aimed to present a comprehensive examination of station area experiences at Bijlmer ArenA. The respondents' experiences highlight a distinction between an east and west side of the railway station area Bijlmer ArenA divided by the railway tracks. The east side of the station area is positively perceived for its physical features like the Sandcastle building, greenery, places to sit and temporary decorations. The area is perceived as lively, but safety perceptions vary. Respondents talk positively about the amenities on the east side, like restaurants and shops and how they reflect the neighborhood's cultural diversity. Demographics do not notably affect perceptions. The west side of railway station area is characterized by its large-scale design. There are mixed feelings about certain buildings and the public restrooms and trash bins are generally negatively perceived. Feelings of safety are threatened in the area due to the deserted feel of the area on regular days and presence of large crowds (especially hooligans) on event days. Gender seems to impact safety feelings on the west side of the station area during events, particularly before and after soccer games.

The data gained from the WAI's showed three modes of utilizing the station area: using the station as a node for transit and transfer, using the station area as a place where they have a specific goal, and using the station area as a place for residing and lingering. Results show that also in this case there is a remarkable difference between the east and west side of the station area. The west side of the station area is mostly associated with using the station area as a node or as a place where one has a specific goal. It involves efficient and purposeful engagement. Respondents that use the area as a place with a specific goal, appreciate the accessibility of amenities close to the station and prioritize convenience and proximity over aesthetics. Not many respondents use the area as a place for residing and lingering, and when they do, it is done on the east side of the station area. These users value relaxation and leisure.

Despite the removal of the physical barrier created by the train tracks in 1977, the different experiences, mindsets and uses of the respondents seem to create a perceived barrier between the two sides: a neighborhood-oriented side and a leisure-focused side. This sparks questions about the desire for different users to cross into each other's area of use and conventional urban connectivity ideas.

Based on the results, two ideas for future development of the station area Bijlmer ArenA have been offered: 1. An integration scenario where the west side of the station area is also turned into a neighborhood with additional amenities like houses, stores for everyday shopping that are open at all times of the day, pubs, and workspaces. This will create a vibrant space not just on event days, but also on regular days. 2. A Distinct Character scenario where the divide between east and west is maintained or even enhanced by giving the west side of the station area a festival-like atmosphere at all times of the day with vibrant colors, temporary design elements like flagpoles and other decorations, more greenery, food trucks, and live music on the street. This last scenario does however challenge the municipal ideas of seamless connectivity between places. Both scenarios aim to make the station area a more appealing place for recreating, and social interaction, leveraging its accessibility as a transportation hub.

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1 Introduction

1.1 Problem exploration

Railway stations are the gateways to city centers (Du et al., 2021) and therefore, city planners are trying to give railways a key role in urban development (Chorus & Bertolini, 2011). Making cities more accessible by public transit is vital seeing as our world is currently in an environmental crisis. The transport sector is the second biggest source of greenhouse gas (GHG) emissions in Europe and within the transportation sector, motorized road transport accounts for 72% of GHG emissions (Sun et al., 2020). The increase in traffic in the city's central areas is a challenge that a lot of cities are currently facing. Public transit development can aid in these challenges by solving congestion and other environmental problems that result from these trends (Wael et al., 2022). Therefore, promoting public transit use and ultimately developing railway station areas, is very important. Current experiences are important mediators of future (travel) behavior (Lee, 2009) and should therefore be taken into account when developing railway station areas to stimulate public transit use.

For a long time, the practice and theory on railway station development have shown a deficient understanding of the contradictory identity of a station area (Bertolini & Spit, 1998). Nowadays, the railway station is increasingly understood as both a location of transfer and travel and a destination in itself, and thereby it is generally recognized that land use patterns and transport patterns are closely related to each other seeing as land use patterns partly elect places for human activity and the distribution of these activities call for transportation patterns (Chorus & Bertolini, 2011).

High-density urban development around transit stations is increasingly common in the Netherlands. Cities like Utrecht, Groningen, Zwolle, Eindhoven, Breda, and Tilburg are all currently developing their central station area, which is also due to nationwide policies such as "Nieuwe Sleutelprojecten" (2000). The *station area of Bijlmer ArenA* is one of the locations for urban development in the near future. During a conversation with Hellas Schelleman (2023), project manager of Station area Bijlmer ArenA for the municipality of Amsterdam, the woman stated that the Bijlmer will be densified with approximately 50.000 new houses. The document 'Development Strategy ArenAPoort 2030' published by the City of Amsterdam (2022) confirmed that 5.700 of these new houses with belonging amenities will be built in ArenAPoort, the area surrounding Bijlmer ArenA transit station. This type of development will change the dynamic in the area a lot. It is therefore an interesting study area in terms of the node-place dynamic (Bertolini, 1999). Bijlmer ArenA is also an interesting study area when considering its history, current identity, and types and amounts of visitors. Consultancy firm APPM and Breda University of applied sciences, are conducting research in this area and during an internship at Breda University of applied sciences, this thesis will contribute to that research.

Approximately 40 years ago, the railway station Bijlmer ArenA was nothing more than a node where train and metro lines were combined on an embankment on a grassy surface (Rouw & Huisman, 2008). Since then, the station has developed massively and so has its surrounding area. The station area is not just a point of transfer but also ranged with houses, offices, and large amenities for shopping, consumption, and leisure (Rouw & Huisman, 2008). On the east side of the station, you will find office buildings, schools, houses, and smaller shopping facilities and on the west side some office blocks and larger amenities with mostly a leisurely character are ranged, among which soccer stadium Johan Cruyff Arena, the Ziggo Dome, AFAS live, Pathé mega multi-screen cinema and a large furniture and interior design mall (Rouw & Huisman, 2008).

The NS (Dutch Railway Company) regularly investigates station area experiences based on a few topics in a questionnaire. This was also researched for station area Bijlmer ArenA by letting participants rate the station area on some of its specific elements on a scale from 1-10 (the full table with quality measurements can be found in appendix 1). In this general evaluation of station perceptions by its users, it is evident that the station has a low rating when it comes to a cozy and intimate ambiance (5,69), comfort in terms of shelter from rough weather (5,73), and feeling of safety after 7 pm (5,97) (NS, 2023).

A participation event that was organized by the municipality of Amsterdam, concluded that participants see the Bijlmer ArenA transit station as the eye-catcher of Southeast but the area around it is experienced as empty, abandoned, grey and gritty (*Development Strategy ArenAPoort 2030*, 2022). The wish of the municipality of Amsterdam is therefore to improve the urban quality of the transit node in terms of place, public transit node, and experience which should make the node fitting for both of its faces on days of large events (with high amounts of visitors) and regular days (Schelleman, 2022). While the municipality focuses on improving the area around the station, other parties are responsible for the development inside the station and the transport systems itself (*Development Strategy ArenAPoort 2030*, 2022). Therefore, this research dedicates itself to the area surrounding the Bijlmer ArenA station building and not the inside of the station or transport planning. To be able to develop an understanding of how the area currently functions in terms of place, node, and experience, a qualitative study will be carried out to gain insight into the current experience and uses of the station area.

1.2 Research goal

With the existing academic literature and perspective of future developments in this area in mind, the goal of this research is to explore how people are currently experiencing the railway station area of Bijlmer ArenA and how this relates to the way people are using the station: as a node or/ and as a place. The experiences and ways of using the station are the basis for recommendations for future research and practical recommendations on how the station area could be developed to improve the urban experiences and people's use of the station as both a node and a place.

1.3 Relevance

The societal relevance of this research lies in the fact that a lot is changing in the area. This has a big impact on the area, also given its history (which will be touched upon in Chapter 3). The station area will be used by even more people after the large development of adding 50.000 new houses is realized. Because of this, it is important to give a voice to the experience of the station area's current users to derive ideas in terms of improving the area, also for potential new users. The municipality of Amsterdam can use this research when making plans for future developments in the area. Knowledge on the current experiences of users of the area can be valuable. In a broader context, the study contributes to the general improvement of urban experiences in railway station areas and designing railway stations as both a node and a place.

Existing literature within the field of human geography has already shed much light on the concept of experiences and their relation to urban areas. Urban areas, or cities, are usually positioned as the

context that influences people's experiences in cities and the choices they make in the city (Cosar & Kozak, 2014; Lynch, 1960; Packer & Ballantyne, 2002; Ram et al., 2016), in this literature however, the way that different context together influence urban experiences are underexposed. Some studies also identify a social context in user experiences (Bisani & Choi, 2016), and other studies strongly highlight a personal context that shapes experiences (Degen & Rose, 2012). Even though many studies identify different contexts that shape urban experiences, not many studies link these contexts together in relation to experiencing urban areas (Vloeijberghs, 2015). Falk & Dierking (2016) have done this, however, in the context of museums. They argue that the physical, sociocultural, and personal contexts constantly influence and affect each other and therefore individual's experiences can only be understood when considering these contexts together. This study will position this idea in the playing field of urban railway station areas thereby contributing to academic literature on urban experiences around railway station areas and studies on a railway station being both a node and a place. This is relevant since previous research on the experiences of transit users gave less attention to the out-of-vehicle environment, such as the area surrounding station buildings and bike and walking routes towards the station (Park et al., 2021).

1.4 Research structure

The research questions that this study strives to answer are as follows:

How does railway station area experience relate to the use of the station as a node vs. the station area as a place?

This question will be answered by adopting the case study of railway station area Bijlmer ArenA. Subsequently, the following sub-questions will structure this research:

- ◇ *How is the Bijlmer ArenA railway station area utilized by current users?*
- ◇ *What physical, social, and personal factors influence users' experiences of the Bijlmer ArenA railway station area?*
- ◇ *What are the most important anchor points for improving the experiences at the station area of Bijlmer ArenA, to promote usage of the station area as both a node and a place?*

These questions will be answered by using a combination of qualitative research methods: observations, go-along interviews, and photo elicitation.

Whilst observing, the profile of the study area will be examined. When observing the area's profile, the three contexts (physical, social, and personal) are used as guidelines. To answer the questions of how the station area is experienced and used, the go-along method will be used (Kusenbach, 2003). Nine respondents are interviewed during a walk-along in the railway station area of Bijlmer ArenA. The ethnographic method of go-along is very suitable to explore environmental perception and spatial practices (Kusenbach, 2003). Kusenbach argues that *"by exposing the complex and subtle meanings of place in everyday experience and practices, the go-along method brings greater phenomenological*

sensibility to ethnography” (Kusenbach, 2003: p. 455). Allying with Kusenbach’s go-along method, Degen & Rose, (2012) developed the walk-along method. The main goal of the walk-along method is to enter the sensitive experience of the passerby and attain people’s perception in motion (Thibaud, 2001). Walk-along interviews have proven to be a very suitable way of accessing the connection of local communities to their environment (Evans & Jones, 2011). They are specifically useful for researching spatial experiences (Amaya et al., 2022). Also, a visual method is added to the walk-along method. In combination with a walk-along, photo-elicitation is a great technique to apprehend effective, indescribable, everyday moments in the field (Yi’En, 2014). Respondents are therefore asked to take pictures during the walk to highlight certain aspects concerning the study concepts. These pictures are used as triggers for underlying feelings and memories that can arise (Tonge et al., 2013).

To gain as many insights as possible with the limited time and resources at hand, a most diverse group of respondents will be chosen employing purposive sampling. Finding unity in the respondents’ opinions will generate meaningful insights on how the respondents’ experiences of the area could be improved and how the area is currently used as a node and as a place.

1.5 readers guide

The next chapter of this thesis contains the theoretical framework with the existing literature on urban experiences and the utilization of transit station areas. Chapter three will elaborate more on the operationalization of the research, thus the way the research questions are planned to be answered and the methods that will be used are described. Chapter four will contain the analysis of the results that came out of the study. Hereafter, a conclusion will be written in Chapter five, in which the research questions will be answered. In the last chapter, the discussion of this study is reported including recommendations for future research and practical recommendations for the future development of the case study area.

2 Theoretical framework

This chapter will give an overview of existing literature that is relevant to this study. The literary review will bring concepts and models to light that form the basis for the following field research. The chapter will elaborate on the node/place dynamics in station areas and the way urban experiences can be understood.

2.1 Station area as a node and a place

A railway station, as a geographical entity, has two identities. It is a *node* (a location of access to trains and other travel networks) and it is a *place* (a part of the city with a diverse assemblage of buildings, infrastructure, and open spaces) (Bertolini & Spit, 1998). A node can be understood as a point where supplementary parts center or originate and they are the basic component of a network (Bertolini & Spit, 1998). A place is a geographical location that is absorbed with meaning and a location where daily life practices take place (Cresswell, 2009). The original idea of the place-node model by (Bertolini, 1999) is the balancing of transport with land use since station areas are not only nodes in a public transit network but also important landmarks in the city (Vale et al., 2018). When one wants to improve the value of a station area, it is necessary to create a certain cohesion between the node and place characteristics of these locations (Peek, 2006). Improving the transit station will improve the accessibility of a place and create favorable conditions for urban development in the area (Chorus & Bertolini, 2011). This interaction between the place and node identity of a railway station is summarized in Bertolini's (1999) Node-Place Model.

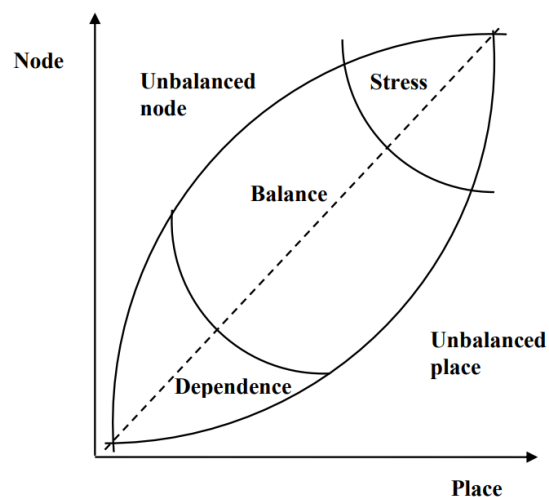


Figure 1: The Node-Place Model. Source: Bertolini, 1999

In The Node-Place Model, five ideal types of situations for a station area are distinguished. Every situation echoes the position of a station area on the node and place scale (Chorus & Bertolini, 2011). The next sub-paragraphs will elaborate on this node and place scale separately.

2.1.1 Railway station as a node

The distribution of human activity such as living, working, education, and leisure, requires the utilization of transport systems to overcome the gap between these places of activity (Chorus & Bertolini, 2011). In this network of transportation, a railway station can be seen as a central injunction, a node. The railway station as a node can be seen through two different discourses that both center around the idea that people use the station to *travel from one place to another*:

A transportation-planning discourse: the transit node as an interconnecting link between different transport networks, which contributes to efficient and effective transport (Peek, 2006). In this discourse, the station is a node within a hierarchical network system, and the network position leads to a certain use of the networks. By adding origins and destinations to different locations that are connected to each other by a network, local use can be influenced (Peek, 2006). This idea however focuses on creating efficient use of the transit services and does not stress the out-of-vehicle environment. It is therefore not relevant to this study.

An engineer-technological discourse: the transit node as a transfer point that should be able to create an easy and smooth transfer of passengers (Peek, 2006). This last discourse is centered around the idea that traveling by public transit is characterized by transferring since public transit systems exist of multiple modalities. The original Node-Place model of Bertolini (1999) has been extended to also incorporate access to the station by other modalities (Vale et al., 2018). Accessibility is a very important aspect of the railway station as a node, since a trip by public transport almost always requires the utilization of another mode of transport to get to the railway station or from the railway station to the desired destination (Chidambara, 2019). This is also referred to as the First Mile/ Last Mile (FMLM). The FMLM is one of the most important factors in determining the choice for public transport (Kåresdotter et al., 2022). The FMLM is referred to as the arrangement of travel service from home to a public transit node (The First Mile) or the other way around (The Last Mile) (Wang & Odoni, 2016). A more general definition of FMLM is that the last mile is the gap between a public transit node and one's destination and the first mile is the gap between one's origin and the public transit node (Kåresdotter et al., 2022). Kåresdotter et al. have made a model of this definition in figure 3. The FMLM is linked to the accessibility of a transit node and is therefore also linked to whether individuals choose to use public transit (Zellner et al., 2016).

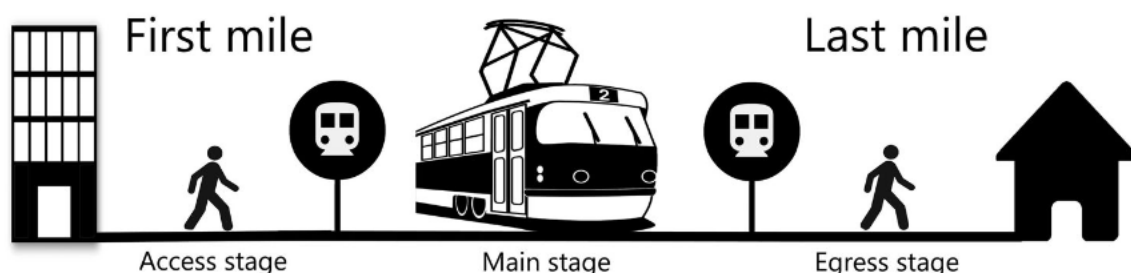


Figure 2: Definition of the first and last mile relating to different stages of trips. Source: Kåresdotter et al., 2022.

There are numerous ways to cover the FMLM, but walking is generally the most used way of traveling the FMLM in Western Countries (Daniels & Mulley, 2013). Cycling is also a much-used mode of transport for the FMLM, especially in the Dutch context (van Kuijk et al., 2022). However, the focus of this research remains on walking as The Node-Place Model assumes walking as the egress mode of a

station (Vale et al., 2018). Moreover, even when another mode of transport is utilized to get to or from the railway station, one still has to walk the last meters from the (bicycle). parking, or bus stop to the platforms (Jehle et al., 2022). In the case of the station as a node, walking from and towards it is a functional act with the sole purpose to get to the desired destination, with little attention or care for the surroundings. This is also referred to as *purposive walking* (Wunderlich, 2008). The end of the next sub-paragraph will elaborate more on these 'ways of walking'.

2.1.2 Railway station as a place

For a long time, transit station areas were considered a combination of engineering and architecture (Bertolini & Spit, 1998). Because of this, the railway station areas became more ruled by considerations of logistics instead of the creation of a place (Dales, 2011). The station areas were designed according to their only function, with little connection to historic city centers (Du, van Wesemael, et al., 2021). These days, however, it is increasingly recognized that new station areas should be constructed to also give it place value, which changed the isolated transport enclaves of the past to urban areas where economic, cultural, and social amenities are combined, creating a higher quality of public space (Du, van Wesemael, et al., 2021).

The railway station as a place can be seen through two other discourses that both center around the idea that people use the station area as a *place i.e., a destination in itself*:

An urban planning-city economic discourse: because of its good accessibility, the transit place is a central location where a diversity of urban functions can be concentrated, stimulating the economic and spatial quality of the area (Peek, 2006). When spaces are lively, and continuously used, an urban environment will be created that is well maintained, safe, and healthy which makes the area an attractive place to live and work in (Andersson, 2021). In the case of a station area, the station area as a place would also invite users to visit shops or cafes, walk around, linger, or recreate in other ways, instead of just using the area as a transfer location.

A cultural political-sociological discourse: the transit place as a place to meet other people with spaces that offer opportunities for both individual and collective meetings (Peek, 2006). This type of social behavior in urban spaces is described by Stevens (2006) as 'play'. Play is socially constructed by people that engage in urban environments. In this case, the station area could function as the site for play. Stevens' (2006) definition of play suggests that not all human action attempts to be efficient or serve just one influential purpose, but rather that the way people experience the environment can be exploratory, fanciful, and disorderly.

To conceive a railway station as a place, it is necessary to demarcate it. One way to do this is through the walkable radius, which is defined by an assumed maximum walking distance (700-800 meters) and time (10 minutes) to the station (Vale et al., 2018). The walkable radius, however, does often not coincide with the actual walkable distance due to both physical and mental barriers and the type of user (Bertolini & Spit, 1998). Concluding, the railway station as a place in the city can be defined as follows:

"All the built and open spaces, together with the activities they host, contained within the perimeter designed by a 'walkable radius' centered on the railway station building, as amended to take account of case-specific physical-psychological, functional-historical and development features." (Bertolini & Spit, 1998 p. 13)

The station area as a node encompasses the FMLM: walking to and from the railway station as a functional act. However, the station as a place can give walking a whole new meaning. In this case, walking can be seen as a form of embodied knowing, learning, and relating to places (Küpers & Wee, 2018). The embodied practice of walking includes that walking is something we do and experience through our body (Spierings, 2022). Because of this, walking does not just have to be a means of getting from one place to another, but it can also correlate to physical and mental health benefits (Chan et al., 2021). This is an example of how meaning is given to the practice of walking, creating also attachment to places (Chan et al., 2021). Diverting from the spatial design principle of walking as a means of transportation, it is increasingly perceived as an elemental way of experiencing urban spaces (Wunderlich, 2008). Whilst walking, an individual can learn about places while developing feelings and thoughts for them (Wunderlich, 2008). Wunderlich (2008) also indicates different types of walking:

Purposive walking: with a clear destination in mind, one's aim is to get to their destination quickly. One will walk at a rapid pace and in a constant rhythm. During the walk, there is little awareness of the environment. This type of walking correlates with the station area as a node, as was already discussed in paragraph 2.1.1.

Discursive walking: the destination of the walk is not as important as the journey itself. There is more space for spontaneity during the walk and therefore the pace and rhythm of walking varies. Opposite to purposive walking, one has complete awareness of the environment. This type of walking correlates with the station area as a place.

Conceptual walking: Through this type of walking, one attains new knowledge of the urban space. One builds a reflective and critical awareness of the environment. One could be a researcher, artist, or explorer in the area. This type of walking correlates with the station area as a place.

The different types of walking relate to different utilizations of the station area, but they also generate different types of experiences. How these experiences emanate will be clarified in paragraph 2.2.

2.1.3 The station area as a node and place

For a long time, the practice and theory on railway station development have shown a deficient understanding of the contradictory identity of a station area (Bertolini & Spit, 1998). Augé's work, for example, shows that railway stations are a stereotypical non-place that cannot be defined as historical, relational, and/ or as a space with identity (Augé, 2020). However, it was shown in the last paragraph that station areas are increasingly being perceived as both a location of travel and a destination in itself. A well-known concept that combines land use with transportation patterns is Transit Oriented Development (TOD). TOD has been included in policy for reducing travel by car (Shatu & Kamruzzaman, 2014) and it is characterized by high land-use densities and mixed-use communities near transit stations to encourage the use of public transit, cycling, and walking (Van Lierop, 2022). This type of development also improves the environmental quality of an area (Hasibuan et al., 2014). The concept TOD that was brought to life in the United States in the late 1980s (Carlton, 2007), is proof of the growing interest in station area development as both a node and a place. However, a balanced node/ place does not necessarily have to be a TOD (Vale, 2015).

Land use patterns and transport patterns are related to each other in the sense that land use patterns partly choose places for human activity and the distribution of these activities requires transportation patterns (Chorus & Bertolini, 2011). When land use patterns around the station change, so does human activity in the area. Although the main goal of a station area is still quick travel time, in recent

times some people might also want to grab a meal or a coffee (Hertogh, 2018) using the station area also as a place instead of just a node. Bertolini's (1999) original Node-Place Model considers the basic idea that the improvement of the transport arrangement (node value) of a location will generate conditions that are favorable to the future development of a location due to the improvement of its accessibility. Consecutively, the development of the location (place value) will initiate conditions that are favorable to the future development of the transport system, due to the growing need for transport (Chorus & Bertolini, 2011). Thus, a railway station must be well connected to both other nodes in the transport network as to its surrounding area (Crockett & Hounsell, 2005). The high accessibility of the station can attract housing and offices and the many passengers that are using the station through their mode of travel, create a need for retail and culinary services (Jehle et al., 2022).

The introduction showed the results of research that was done by NS (Dutch Railway Company), investigating users' station area experience at Bijlmer ArenA. This concluded that the station has a low rating when it comes to a cozy and intimate ambiance (5,69), comfort in terms of shelter from rough weather (5,73), and feeling of safety after 7 pm (5,97) (NS, 2023). Stimulating the place features (housing, offices, retail, and gastronomy) in the surrounding area of a railway station, can also change the feeling of safety and security in the area (Beckmann et al., 1999). Accordingly, a diversity of functions and uses both enhances the attractiveness of a place as it contributes to the local economy around railway stations (Zemp et al., 2011). The other way around, the increasing attractiveness of the railway station area due to higher feelings of safety and economic opportunity, also increases the attractiveness of public transit as a mode of travel creating a higher demand for transit services (Tiwari, 2015). All of this confirms that a railway station area is a lively location that adds to the city's character and is more than just a stop on a railway line (Jehle et al., 2022).

Individuals can use the railway station area in different ways, just as a node, as a place, or as both a node and a place. But explaining the use of the station area goes back to theories on explaining human behavior. One of the first scholars to create a theory for explaining and predicting human behavior was Icek Ajzen. Ajzen (1988) has proposed the Theory of Planned Behavior (TPB) which suggests that intentions lead to behavior and these intentions are influenced by attitudes, subjective norm, and perceived behavioral control as can also be seen in figure 4.

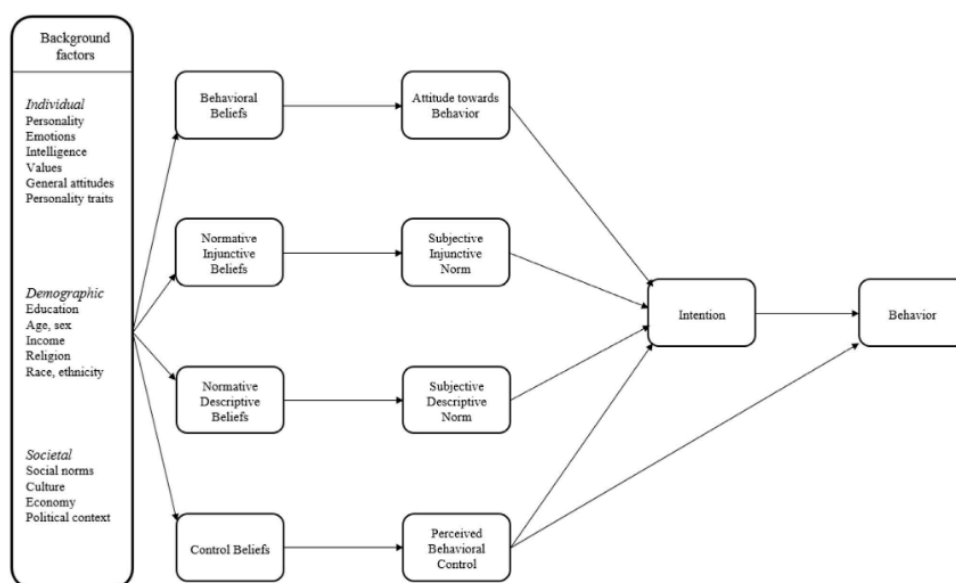


Figure 3: The theory of planned behavior model. Source: de Leeuw et al., 2015.

The TPB remarks that certain background factors (individual, demographic, and societal factors) play an important role in predicting and explaining human behavior. After Fishbein and Ajzen's introduction of the theory of reasoned action (the predecessor of the TPB), the theory was shortly also introduced in research on travel behavior (Gärling & Fujii, 2009). Donald et al., (2014), for one, have extended the TPB model so it accounts for travel behavior by also considering normative processes, habits, and environmental considerations.

Experiences are also an important mediator of behavior, as current experiences (e.g. user satisfaction) can determine future visitation behavior (Lee, 2009). The next paragraph will elaborate more on the way that urban transit spaces emanate human experiences.

2.2 Experiences

The interest in urban experiences was joined by Kepes and Rasmussen and conclusively by Jane Jacobs and Kevin Lynch (A. Jacobs & Appleyard, 1987). This term disclosed a new vocabulary of urban design that built upon the senses, materials, structures, benches, styles, the weather, greenery, and streetlights which were all amenities that potentially could be utilized by users (A. Jacobs & Appleyard, 1987). The different types of using the station (as a node vs. as a place, or both) influence the perceptions of the area. In turn, a certain experience of the railway station area can also influence the way people use the area. Experiences are therefore an important theme in this research. The TPB remarks background factors that play a role in predicting and explaining human behavior: social attitude and personality trait (Ajzen, 1991) which can also be summarized into a personal and sociocultural context. Falk & Dierking add another context that contributes to behavior and experience: the physical context. The personal, sociocultural, and physical contexts always connect and interact with each other, and experiences and behavior can only be understood if these three elements are considered together (Falk & Dierking, 2016).

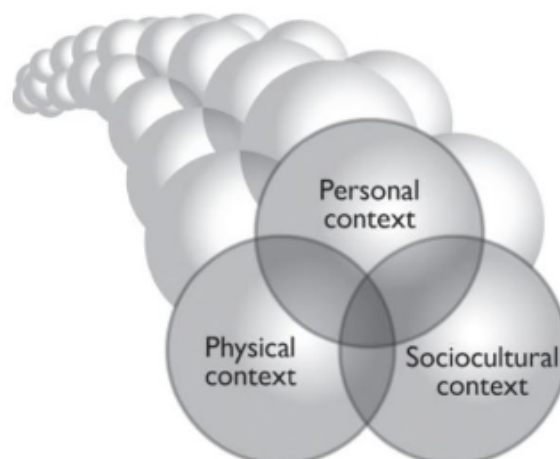


Figure 4: The Contextual Model of Learning. Source: Falk & Dierking, 2016.

The three contexts (physical, sociocultural, and personal) create the structure for the remainder of this paragraph. Every sub-paragraph will in turn elaborate on one of the contexts and describe how these relate to urban experiences.

2.2.1 Physical context

“as gateways to city centers, the atmosphere, image, and design of public spaces around stations have been involved in the discussions of “quality at station areas” for enhancing the sense of place and gathering people” (Du et al., 2021. p.4).

When looking at the way the physical context contributes to human experiences, most studies identify safety & security of an area, and comfort an area offers as the most important psychological factors for positive or negative experiences (Hernandez & Monzon, 2016). Iseki & Taylor (2010) also concluded that safety is the most important determinant of user satisfaction. Dai et al., (2019) divide four aspects of evaluating satisfaction of station areas: traffic organization, space design, public facilities, and landscape aesthetics. Incorporating the place-node model by Bertolini (1999), Du et al. (2021) have created a model for the overall quality perception of transit stations based on their physical context. This model summarizes all the previously mentioned factors for gateway experience in three elements: aesthetics, comfort, and safety. Within the physical context, aesthetics, comfort, and safety will be used as organizational sub-dimensions.

Du et al. (2021) summed up concrete indicators that can influence station area perception within the sub-dimensions of the physical context: aesthetics, comfort, and safety (figure 6). The following text will touch upon the sub-dimensions as proposed by Du et al. (2021) in more detail.

Dimension	Definition	Indicators
Comfort	The presence, numbers, and maintenance of amenities, used by people spending longer time in the station area.	<ul style="list-style-type: none"> Phone charging station Wi-Fi Outdoor space to sit and linger Accessibility facilities Kids play zone Noise level Air quality Trash bin Food and drinks Toilet facilities Lockers Shelter from wind, rain, and cold Temperature and ventilation
Aesthetics	Architectural design, landmarks, and other landscape features perceived by users	<ul style="list-style-type: none"> Quality of station squares Landmarks and architecture Streetscape (facade continuity, human scale design, etc.) Public art Quality of furnishing and decoration
Safety	The environmental supervision, such as lighting, presence of police and staffs, as well as maintenance of spaces	<ul style="list-style-type: none"> Well-maintained amenities Good lighting Priority for pedestrians over cars No dead-ends Help in an emergency (existence of police and staff) Presence of other people

Figure 5: Comfort, aesthetics, and safety indicators measured in surveys. Source: Du, et al., 2021.

Comfort

The comfort that an urban space offers usually relates to its available amenities and facilities. People can find comfort in having shelter from certain types of weather, having a place to sit and rest, having

shops available where they can buy drinks, food, or other necessities, having trash bins available for depositing waste, and the availability of WI-FI or charging possibilities can all influence peoples experiences of a place (Du, et al., 2021). Comfort can also refer to elements that reduce the effort of using and moving through public spaces (Hespanhol, 2018). Examples are broad and smooth pavements to walk upon, and nice areas to play and sit that are favorable for conversation and people-watching (Hespanhol, 2018)

Aesthetics

Aesthetics, comprise the elemental connections with the world and the human capacity to ascribe meaning to experience (Du, et al., 2021). The aesthetic of a place is defined by its architectural and landscape design. The way buildings and the space between buildings are designed, have a large effect on human experiences of the urban area (Degen & Rose, 2012; Carmona, 2009). The aesthetics of an area can also be reflected by colors, textures, material use, and variety/ uniformity (Degen, 2008). An important academic to write about the aesthetic of urban spaces was Kevin Lynch. In his book “The Image of the City” (1960) he distinguished five elements that create the image of a city: paths, edges, districts, nodes, and landmarks. Identifying and structuring an environment is a fundamental ability of all mobile animals and we create an image of a place based on the sensations that the environment offers (Lynch, 1960). A railway station is an important part of a city’s image, as it functions as a node, a landmark, it is penetrated and interconnected by paths, and it can function as an edge when the station rails form a barrier between two places.

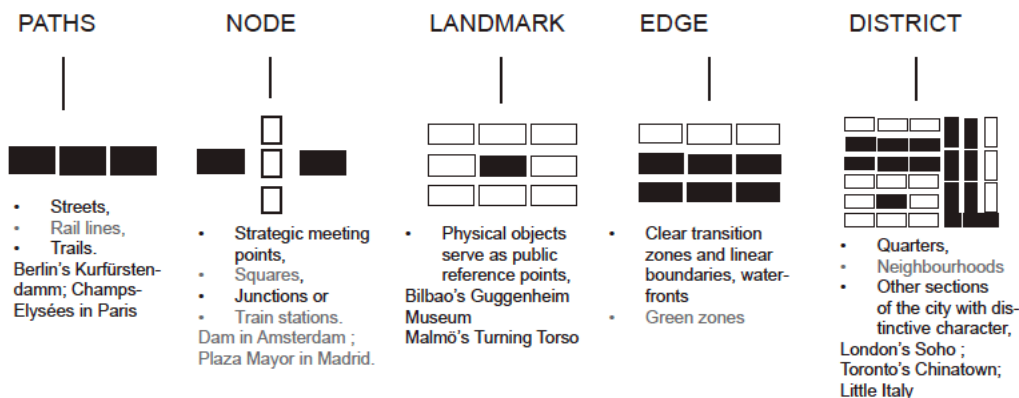


Figure 6: Kevin Lynch's diagram of the "Five Physical Elements". Source: Jojic, 2018.

Other elements to influence the aesthetic of a place are the quality of station squares and their furnishing and decoration, public art, and the streetscape, including human-scale design and façade continuity (Du, Druta, et al., 2021).

Safety

In the pyramid of Maslow, safety is after human's basic physiological needs, the most important, basic need for humans in their life (Poston, 2009). This was also applied by Gehl (2006) in his Maslow-inspired pyramid of the pedestrian landscape:

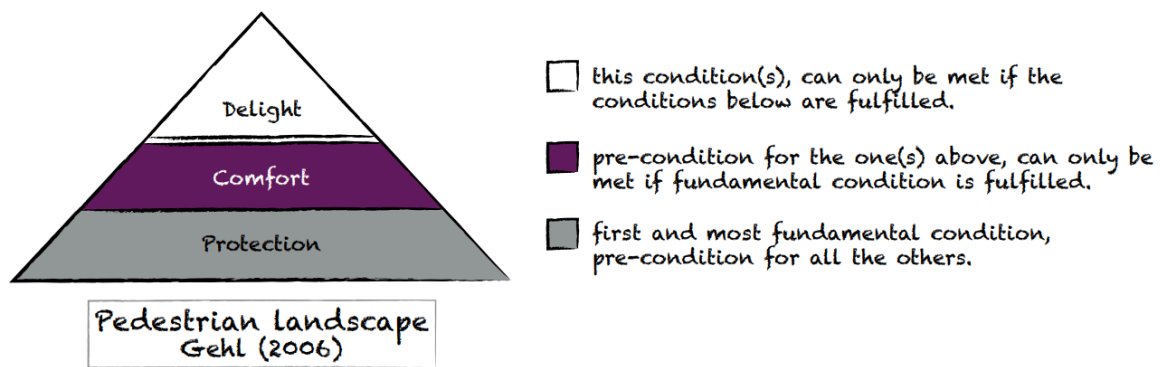


Figure 7: Pedestrian landscape. Source: Gehl (2010) adjusted by: Scheltema, 2012.

Physical features to improve safety should be well-maintained and prioritize pedestrians over cars. Also, the absence of dead-ends, good lighting, and the presence of surveillance can improve safety in the area (Du, Druta, et al., 2021).

2.2.2 Sociocultural context

*“Space is permeated with social relations; it is not only supported by social relations but it is also producing and produced by social relations”
(Lefebvre 1991: 286).*

The combination of accessibility and the presence of public spaces leads to transit station areas being one of the limited groups of locations where the urban population is still present in all its diversity: businessmen, tourists, homeless people, and students (Peek, 2006). These heterotopia's (Hajer, 1996) are the anchor points of urban experiences as they facilitate both planned and unplanned interaction between people (Peek, 2006).

Mehta (2009) researched that more than 90% of his respondents were observed to carry out their social activities on, or near, physical *props* (Stevens, 2006) in a place, like street furniture, places to sit, sidewalks, signs, gates, fences, bicycle stands, trashcans, trees, light poles, shopping windows and so on. The sociocultural context therefore constantly interacts with the physical context. Falk & Dierking (2016) argue in the context of museums that even when a person is alone and has no direct social interaction in the area, there is an indirect interaction since a museum in itself is a socioculturally constructed product. This thesis argues that the same applies to the station area and public spaces in general since many different people (acquainted or unacquainted) are using the same space. This idea of public space as a socially constructed product did not arise until the 50s/ 60s when academics such as Jane Jacobs sought to understand urban establishments rather than criticize them (Lofland, 2009). Jacobs (1961) devoted studies to how different aspects of the city (city blocks, households, districts, streets, parks) affected each other. In her studies, she was expecting to find a social vacuum, but instead, she found a complexity of interaction, actions, and acts. Lofland (2009) describes urban spaces which are constituted by social linkages between strangers or acquaintances in the same space

as *the public realm*. The public realm can be defined by the linkages between people and between people and place.

Low (1996) argues that theories on human experiences must integrate the attitudes of social production and construction of space, whereby focusing on the way external forces produce space, how humans are themselves constructors of their own realities, and how these realities affect other people's experiences (Low, 1996).

The case study [railway station area Bijlmer ArenA] that will be researched, is very interesting in terms of different visitor densities. On days when events are held at the large entertainment amenities (Johan Cruyff Arena, AFAS live, Ziggo Dome) the area deals with a lot of visitors. On ordinary days, there are much less visitors. Conclusively, on certain days and times users of the station area of Bijlmer ArenA can be confronted with many other people using the same space. On other days, there are much less people that the users of the station area (unconsciously) interact with. This creates a very interesting and dynamic sociocultural context in the area. Everyone experiences the presence of other people differently. The psychological perception of visitor density can be defined as 'crowding' (Neuts & Vanneste, 2018).

Crowding can be perceived in two ways: Crowding as a negative assessment of visitor density (Popp, 2012; Neuts & Vanneste, 2018; Graefe et al., 1984) and positive crowding perceptions (Popp, 2012). Negative assessments of crowding arise from the perceived density, social constraints, and distractions, but mostly from the stress that large crowds can provoke (Kalb & Keating, 1981). The negative perception of crowding is largely dependent on personal characteristics (Neuts & Nijkamp, 2012), but also depends on the physical context including the layout of streets, functionality of the area, and the social aspect of the local culture (Neuts & Vanneste, 2018). Neuts & Vanneste (2018) distinguish the same three contexts of crowding experiences as are used in this research: environmental factors [physical context], social factors [sociocultural context], and personal factors [personal context]. In this case, the physical context can create differences in crowding tolerance (e.g. residential neighborhoods, recreational sites, or commercial districts) (Neuts & Vanneste, 2018). At an event site, for example, people expect to be confronted with many people, and this adds to the event experience, but when one is in a rush to catch a train, many amounts of other travelers at the station could create a negative experience or even feelings of stress. It is also researched that green spaces, accessibility, and cleanliness of an area can influence density perceptions (Neuts & Vanneste, 2018). In the social context, the (unwanted) behavior of other people (littering, noise nuisance, rude behavior) has a big effect on crowding perceptions (Neuts & Vanneste, 2018). In the personal context, Neuts & Vanneste (2018) argue that personal preferences in terms of privacy, social interaction, and crowding influence perceptions.

While the comfort of public space is compromised during high space occupancy (mostly due to feelings of stress), feelings of safety can be reduced when there is low space-occupancy (Advani & Nisha, 2013). Lis & Iwankowski (2021) argue that when people see other people in a public area and are not detached from them by visual obstruction, they feel safe and well. The active people should, however, be some distance away and therefore it is meaningful to create spaces for relaxation distant from active spaces but where these people can still clearly see the active people (Lis & Iwankowski, 2021). The liveliness of social spaces increases social sustainability which continuously contributes to feeling safe, social interaction, and inclusion (Khemri et al., 2020). Liveliness, which can be defined as the continuous use of space, leads to well-maintained urban environments and makes the area an appealing, healthy, and safe space to work and live (Mitrašinović & Mehta, 2021). Therefore, in some ways, the presence of other people can also be experienced as "positive crowding". While most studies on crowding generally focus on the negative assessment of crowding, some academics

adversely argue that crowding can also be positively perceived. Certain architecture and a crowd could for example add to the visitor experience creating some kind of positive atmosphere where the people bring the place to life (Popp, 2012). People also do not have to join the crowd, they could prefer sitting on a bench, or on a square and watching other people passing by (Popp, 2012). Being in a public space with other people can also ensure a feeling of social safety with mixed pedestrian movements and activities that provide “eyes on the street” (Bennetts et al., 2017). Lively places (in this case a place where people experience positive crowding) are usually characterized by expressive building facades with steps, ledges, corners, nooks, alcoves, and small setbacks (Mehta, 2009). The lively blocks in Mehta’s (2009) research, were also almost always characterized by a mix of places to eat and drink, places for daily shopping needs, and other shopping services like bookshops, florists, footwear stores, and so on (Mehta, 2009).

2.2.3 Personal context

“Paying attention to how the senses frame our experience of cities invites us to capture a largely ignored aspect of city life that is as significant as their physical structure, namely their ‘character’ or ‘mood’.” – (Degen, 2008. p. 10)

This quote relates to the way that our experiences are framed. The framing of experiences is part of the personal context. The experience derived from urban space’s physical features and sociocultural context cannot be understood without the personal context. Kirk et al., (1963) argue that there is a distinction between objective (physical) and behavioral environments. The objective environment is the physical world around us, as was touched more upon in the previous texts. Behavioral environments, however, consist of “psycho-physical fields in which phenomenal facts are arranged into patterns or structures that acquire values in cultural contexts” (Haggett & Chorley, 1967; p. 20). Kirk believed that it was the behavioral (not the physical) environment that provide a basis for human behavior and decision-making (Holloway & Hubbard, p.45). That is why experiences can influence human behavior as well. The behavioral environment will create an image. These images of place are, and our knowledge of the environment is, not just built up from visual hints but even more so from the senses (sight, taste, touch, smell, hearing). The senses constantly receive environmental information which creates perceptions and experiences (Holloway & Hubbard, p.45). Therefore “The senses play a crucial role in mediating and structuring urban experience” (Degen, 2008. p.3). However, it is important to note that the senses are not personal or individual, but very much shaped by social and cultural norms, which confirms that again, the sociocultural context and personal context overlap here. There are different senses through which you can pick up stimuli.

Seeing

Individuals have a horizontal field of view. Thus, it’s easy for people to look sideways, but it’s more unnatural to look upwards when walking through an area (Gehl & Rogers, 2013). People will therefore mostly perceive things and activities that are happening on the ground level. What happens above ground level, is harder to perceive since the less a person sees, the less they experience it (Gehl & Rogers, 2013). Based on human visual limitations, Rooney et al. (2017), concluded two ways of experiencing architecture: by focal vision and ambient vision. Visual things that contribute to urban experiences include urban design and architecture, landscaping and greenery, lighting level, variety or uniformity in design, amenities, and people. There are also different ways of looking at these things.

Degen & Rose (2008) describe different ways of seeing where people could have a broad, surveying gaze when walking from one place to another (manoeuvring look), a more concentrated and focused gaze when searching for something (shopping look), or an extremely focused look where everything else fades to the background (parenting look).

Hearing

Different from our sight, the sounds we hear are not visible and are therefore not limited by our horizontal gaze. The increasing urbanization and densification of European cities are accompanied by increasing noise and noise levels. Constantly, people in urban areas are confronted with human and non-human sounds such as other people talking or shouting, phones ringing, street musicians, the noise of traffic, trains, and trams, noise of construction work, and sirens (Holloway & Hubbard, 2013). Urban sounds can raise feelings of annoyance and stress (Mursali et al., 2016). Hegewald et al. (2020) suggest that policy to reduce traffic noise might increase wellness by contributing to the prevention of anxiety disorders and depression. While urban sounds are usually associated with feelings of stress, annoyance, and anxiety, natural sounds have quite the opposite effect. Nature sounds, including animal sounds and sounds from wind and water, can indeed improve health, and lower stress and annoyance levels (Buxton et al., 2021) whereby improving urban experiences.

Smelling and tasting

Odors are usually seen as the most prevalent sensory stimuli since you cannot control them and smells do not respect boundaries (Degen, 2008). When one is in an urban area, the nostrils can be teased with all kinds of smells coming from shops, traffic, or other people. Smells can be ordered in space and can therefore be place-related (Degen, 2008). Degen (2008) argues that in the Aristotelian hierarchy of the senses, seeing and hearing were seen as the human senses. In this hierarchy smelling and tasting were secondary and characterized as more animalistic. Smells can raise positive feelings, like the smells from a bakery, or flowers. But smells can also create negative experiences, for example, the smell of gutters, smoke, emission, smog, waste, and urine. Smells are related to emotions and are also related to memories (Bensafi & Rouby, 2007), and both emotions and memories can be mediators of present experiences (Degen & Rose, 2012).

Touching

While we cannot control what we hear or smell, we can control what or who we touch. Touch is the most intimate sense as it is usually used as an expression of love and affection. Yet when touch is negatively perceived, this intimacy can quickly turn into feelings of danger and fear (Degen, 2008). In terms of walkability, touch is a very important sense as it lets us make contact with the ground (Degen, 2008), and by touching the ground in a certain rhythmicity, we walk. The world around us can communicate with us through its materials and can awaken our experiences to us, it appries us about 'being' in the world (Rodaway, 1994). One could also feel other bodies brushing against their own, or feel the different textures of an area (Degen & Rose, 2012). When being outside, another thing we feel immediately is the temperature. We can feel comfortable or uncomfortable in certain thermal conditions. The state of mind that asserts satisfaction with the thermal condition of an environment, can be described as thermal comfort (Ramspeck et al., 2004). Thermal comfort is, however, subjective as different people have different preferences for temperature level, thermal acceptability, and thermal comfort level, which are important indicators for thermal comfort (Lai et al., 2020).

The stimuli mentioned above can generate a physiological response and emotions. These reactions are relevant because the way people feel in urban places has a big impact on how individuals behave in them (Al-Husain et al., 2013). Sensory stimuli can cause emotional reactions and these emotional reactions clarify environmental impacts on our daily routines, but they also reflect the perceptions people have of the city and its physical environment (Zardini & Schivelbusch, 2005). Davidson & Milligan (2004) suggest that therefore, emotions are sensible and understandable in the structures of space. (Xiao et al., 2020) incorporate Lefebvre's (1997) idea that a person's understanding of space is assembled through movements of the sensorial body and mental reactions, saying that sensory stimuli are essential to bring about emotional reactions. These emotional reactions can then mediate a positive or negative experience.

It is also interesting to see if experiences are influenced by demographic variables. Morgan et al. (2010) researched differences in terms of gender, age, and income to find relationships between tourist experience dimensions, and using a Chi-square test they concluded that the experience dimensions are generally not dependent on the demographic characteristics of the respondents (Morgan et al., 2010). This is generally not the case with urban sensory experiences, which again proves that the senses are not personal but social and collective. Many studies show how gender differences, for example, can affect mobility choices and perceptions, especially when it comes to safety perception (Hidayati et al., 2020). The study of Hidayati et al. (2020) shows that many negative experiences concerning safety were ascribed to females and much less to men. Boomsma & Steg (2014) also argue that gender is an important personal factor that affects perceived safety and that women even avoid places if they perceive them unsafe (Boomsma & Steg, 2014). It can be concluded that while the physical and sociocultural context provides stimuli that can create experiences, these stimuli first pass through a personal filter where emotions and personal demographic factors transform the stimuli into a positive or negative experience.

2.2.4 The connection between the contexts

The experiences of two people can never be similar, because they depend on the different physical, sociocultural, and personal contexts. These contexts influence experiences separately but they also overlap in some ways (Falk & Dierking, 2016). The physical context shapes the playing field for social interaction and relations, and the sociocultural context makes the physical context lively and used. The stimuli that the physical and sociocultural generate, pass through an individual's personal filter that is created by the senses and their demographic characteristics. This personal filter, therefore, gives meaning to the stimuli, creating a personal experience. It can thus be concluded that indeed, as Falk and Dierking's (2016) model of learning proposes, the three different contexts overlap in certain ways as is also summarized in the following quote: "Physical space restricts and enables the free flow of sensory experiences and proximity of other people" (Kristensen, 2004, p. 89). The detentions make a sensory experience available, for example, the vision of materials and sights and sounds (Kristensen, 2004).

2.3 Conceptual model

The conceptual model in the next paragraph visualizes the relations between the physical, sociocultural, and personal contexts and their effect on the use of the station area. In the model one can see that the physical, and sociocultural interact with each other and influence the personal context. The personal context functions as a filter. All the contexts together mediate an experience of, in this case, a railway station area. It was also established in the literature review that experiences can influence human behavior and therefore also the way one uses the station area: as a node or/and as a place. The other way around, the use of a station area can also influence experiences.

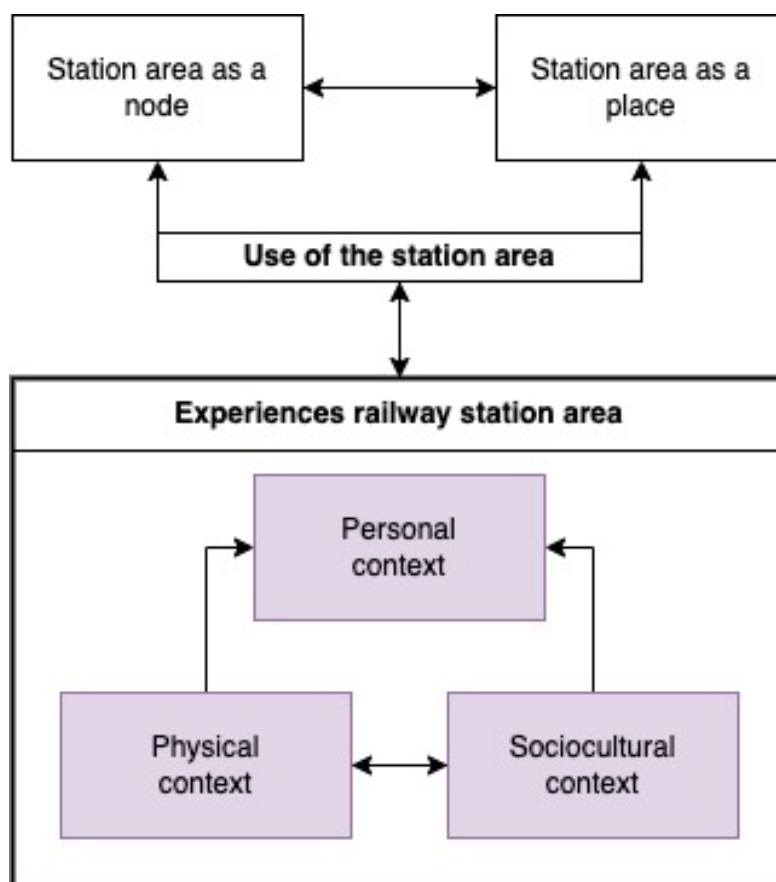


Figure 8: Conceptual model. Source: Author.

3 Methodology

Urban experiences are a complex thing to research. The research methods used to gain a better understanding of people's experiences of the railway station area of Bijlmer ArenA will be discussed in this chapter. This chapter also gives more information on the case study and the respondents that contributed to this study. The chapter will be closed off by explaining how the research data will be analyzed including the possible limitations of the research methods.

3.1 Case study: Bijlmer ArenA railway station

The area in which station area experiences will be researched is located in and around the railway station Bijlmer ArenA. This transit station lies within Bijlmermeer, or the Bijlmer, a neighborhood in the Southeast of Amsterdam. The Bijlmer was created because of the severe housing shortages in the post-war period of the 1960s (Leeming & Shakur, 2003). The Bijlmer was the fabrication of experimenting with high-rise buildings and public housing (Blair & Hulsbergen, 1993). It was intended to follow the ideals of Swiss architect La Corbusier, about creating a city with high-rise buildings within a green, park-like area (Zandvliet, 2011). The planners' ideal for this area did not have the expected effects: Helleman & Wassenberg (2004) have described three groups of problems in the Bijlmer in 2004: The unfinished character of the Bijlmer, great livability problems, and a mismatch between housing demand and supply.



Figure 10: Original plan Bijlmer. Source: Leeming & Shakur, 2003.



Figure 9: Development Bijlmer. Source: City archives Amsterdam, 1975

The neighborhood has since been revitalized and little by little affordable housing in the Bijlmer is disappearing, returning to the initial ambition with the modernist views of attracting middle-class families, which has caused gentrification to surface (Moors, 2020). More recent developments in the Bijlmer were based on social renewal to decline unemployment rates, create better crime control, and facilitate economic development of the area (Chiara Mazzarella & Remoy, 2021). All these positive developments contributed to repairing the Bijlmer's image, by creating demand for extra housing and jobs (Helleman & Wassenberg, 2004c).

In an interview with Hellas Schelleman (2023), project manager of station area Bijlmer ArenaA for the municipality of Amsterdam, she stated that the Bijlmer will be densified with approximately 50.000 new houses. The policy document ‘Development Strategy ArenAPoort 2030’ published by the City of Amsterdam (2022) confirmed that 5.700 of these new houses with the belonging amenities will be built in ArenAPoort, the area surrounding Bijlmer ArenaA transit station. This could be seen as a new revitalization plan for the Bijlmer. In the Development Strategy ArenAPoort 2030, a few themes are the basis for the area’s transformation: *Compleet en verbonden* (complete and connected)- *Een centrum voor iedereen* (a center for everybody)- *Goed bereikbaar* (well accessible) - *Levendige openbare ruimte* (lively public space)- *Duurzaam en toekomstbestendig* (sustainable and future proof).

Bijlmer ArenaA transit station is positioned in proximity to large entertainment amenities such as Ziggo Dome, AFAS live, the Johan Cruyff Arena, and large shops and other entertainment venues (see also figure 12). Because of this, the station often deals with peak crowd flows (Bruijl, 2022). A participation event that was organized by the municipality of Amsterdam, concluded that participants see Bijlmer ArenaA transit station as the eye-catcher of Southeast but the area around it is experienced as empty, abandoned, grey and gritty (*Development Strategy ArenAPoort 2030*, 2022). Using qualitative research methods, the current experiences of the railway station area of Bijlmer ArenaA will be further examined.

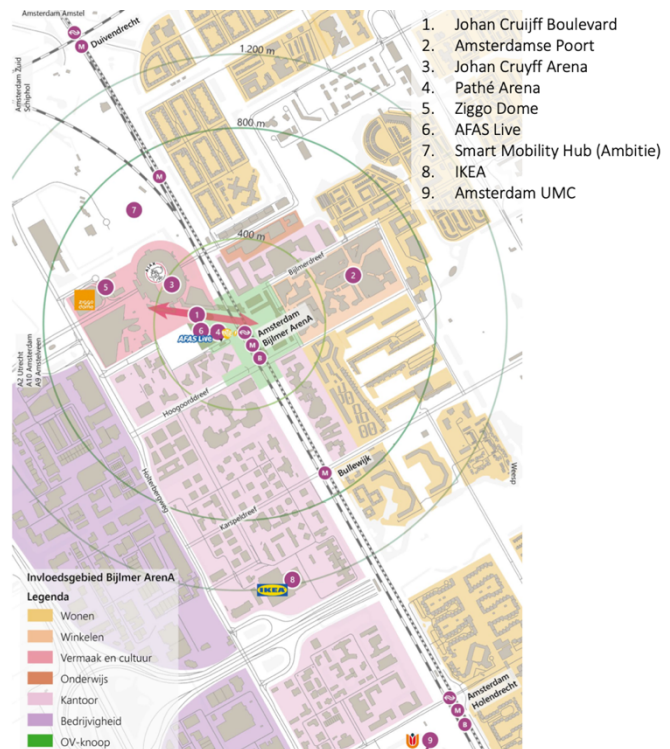


Figure 11: Functional map of ArenAPoort. Source: Goudappel Adviseurs & City of Amsterdam, 2022.

3.2 Research methods

Ethnographic research methods, and more specifically, sensory ethnographic methods have been booming used in all kinds of academic disciplines among which the discipline of human geography (Pink, 2015). Two types of ethnographic research will be carried out for this study: non-participatory observations to get a good image of the study area and semi-structured walk-along interviews with photo-elicitation to gain in-depth data on station area experiences and types of uses.

Observations

Firstly, observations will be carried out in the area. These will be structured, non-participatory observations on a few different days since “the ethnographers’ orientation to writable events change with time in the field” (Emerson et. al, 2011. p. 28). The observations were used to illustrate a first image of the case study area. Emerson et al. (2011) have described four stages of observations and writing ethnographic fieldnotes. He suggests that firstly, one should start by taking notes of the initial

impressions of the area, including things in the physical environment that are available and perceptible through the senses as well as the feel of the locale and other people in the environment. Second, based on the personal senses noting what is significant or unexpected in a specific setting or social world. Hereby, looking at what raises attention, is surprising, counter to one's expectations, for example, impressions, verbal, and non-verbal interactions, feeling tones, and incidents. Then, moving beyond the ethnographers' personal reaction to try and grasp what others in the area experience and would see as significant and important. Looking for meaningful things to those studied: actions, events that catch the attention of other people, interactions, where/why they stop. Lastly, new settings should be tried to capture by writing systematic notes on routine actions in the area. Asking the question of "how" instead of "why". Since in this study, observations are only used to gain a first impression of the physique of, and social behavior in, the area, steps three and four of Emerson's (2011) will not be carried out. Creating an understanding of the way others experience the area, will be done by carrying out the walk-along interviews.

Walk along interviews

The interview is the most common way of collecting data for qualitative research (Jamshed, 2014), however according to some academics, the interview as a research method has its limitations since it is not appropriate for the field of sensitivities (Keen et al., 2013; Pink, 2009). Incorporating a mobile method [e.g., a go-along method] into the interview, however, will "enable the exploration of attachments to and knowledge of places as a form of situated cognition using the full array of senses" (Stevenson, 2014. p. 341).

The "go along" method was originally introduced by Kusenbach (2003) as a qualitative research tool. Kusenbach argues that this tool is different from ethnographic methods such as observations and interviews because it can access reflexive and transcendent aspects of one's lived experience. The go-along method is particularly appropriate for themes such as environmental perception, social realms, and spatial practices (Kusenbach, 2003). Allaying with Kusenbach's go-along method, Degen & Rose (2012) developed the walk-along method. The main goal of the walk-along method is to enter the sensitive experience of the passerby and attain people's perception in motion (Thibaud, 2001). Many other academics stress the competence of this method in researching spatial experiences and connections to an area (Evans & Jones, 2011; Amaya et al., 2022)

With the walk-along method, the goal is to gain knowledge that is normally not spoken about, the unexpected and invisible that people feel or sense, that they would normally not deem necessary to mention or talk about (Pink, 2015). The practice of walking will better help to understand the diversity of meanings given by us to a theme (Ingold and Vergunst, 2008). Like Pink (2015), the goal is not to define the sensoriality of the local environment around Bijlmer ArenA but to use this sensoriality of the local environment as a context for understanding the actions of people in the area, specifically, their actions toward the use of the railway station area at Bijlmer ArenA as a node and a place.

By analyzing 31 articles on the walk-along interview (WAI) method, Amaya et al. (2022) have created some guidelines on how to prepare for such an interview. These involve that one should start the interview by collecting the socio-demographic information (age, gender, socio-economic status) of the participants and do a pilot testing of the WAI method before beginning the study. It is also important to consider the weather conditions and season in which the WAI takes place since, for example, winter could be associated with people having less engagement with the outdoor environment, but heat and sun exposure could also hinder walking practices (Amaya et al., 2022).

The respondents that will participate in the WAI's are familiar with the area and are therefore likely comfortable in the area. They are regular visitors of the area and they therefore do not have to adjust to a new setting. Since they already know the area, they've also already formed an opinion and perception of the area which makes it more likely that honest answers will be given instead of answers the participants think that the researcher wants to hear (Evans & Jones, 2011).

For the respondents to also become comfortable around the researcher, the WAI will start with a short conversation where the researcher and participant will get acquainted and in which the participant will get instructions on what is expected of them. The researcher will ask some questions to get to know the participant better (including questions on their name, age, gender, highest finished education, the reason for regularly visiting the case study area, and any other questions that spontaneously arise). Then, the researcher will give the participant the following instructions: *"You are familiar with the area so I would like you to show me the area surrounding the station that you visit frequently. I'm interested in your area of use. During this walk you can comment on things you see, hear, smell/taste, and feel and how they translate into a positive or negative experience. This can be related to your personal preferences, physical features in the area (e.g. architecture, textures, materials, littering, colors), and the way that (the presence of) other people influence your perception of the area. You can remark anything that makes this area pleasant, or not, that makes you angry or happy or fearful, and things that you would like to see differently or should stay exactly the same"*.

After this part of the WAI, the actual walk of approximately 30-60 minutes will start (the interview times are dependent on the participants and the routes they choose). This method where the participant decides the route is called the 'natural go-along' (Evans & Jones, 2011). Another option is to walk a route with the participants that is predefined by the researcher: 'the guided walk' (Evans & Jones, 2011). However, since the study area is so diverse in terms of amenities and reasons for visiting the area, and because the interest of this study is finding out how people are using the area, a predefined route could limit the response from the participants when they for example never usually walk through certain parts of the predefined route. The natural go-along provides an extra element of data that shows what the participant's area of use is and what parts of the area they visit most and are therefore most familiar with. The data on the places they go or have been can be as important as data on the places they have not (Clark, 2017). GPS will also show the participant's engagement with the surroundings and their meaningful locations (Martini, 2020). To record all these routes, the study will make use of GPS data through an iOS application that tracks walking routes (MapMyWalk by Under Armour). GPS data can show patterns between participants' preferences for certain elements or routes in the area and is, therefore, a relevant addition to the WAI (Kusenbach, 2003; Evans & Jones, 2011). The GPS data will be visualized through a map that shows the walked routes, and conclusively where people go in the area.

The WAI will be closed off with some concluding questions, including questions on the way that the elements that the participants have commented on during the walk contribute to their use of the station area of Bijlmer ArenA as a place of travel or a destination in itself. The participants are also asked to summarize what makes the area a comfortable or uncomfortable place to reside in. Moreover, the participants are asked if the station area is only a place of functionality or also for residing and lingering. Closing off, the participants are asked if changes in the area could positively/negatively change their perceptions of the area.

The study area is very diverse on regular days versus on days when events are scheduled in the area in terms of crowds, visitors, and general atmosphere. However, ultimately this thesis will give some insights into current station area experiences which Breda University of applied sciences will take into consideration for future research on the possible improvement and development of the area. The

motivation for this study was the fact that 50.000 houses will be added to the Bijlmer. This is why the most interesting focus for this thesis lies in researching regular days in which 'everyday life' occurs. Also, researching regular days as well as getting a good understanding of experiences on 'event days' is due to the time constraints of this thesis not feasible. The WAI's are therefore scheduled on regular days and times (between 10 am and 6 pm). The WAI's will be carried out in the months of May and June in 2023. Within these months the chances of days with good weather, meaning occasionally sunny and no regular precipitation, are more likely which is beneficial for the smooth running of the WAI's.

Above, the advantages of using the WAI as a research method were made clear, namely that it creates rich data on environmental experiences, and since the participants are familiar with the area, they will likely be more comfortable giving more natural responses. However, this method also knows some disadvantages. For one, the ethnographers themselves will experience all kinds of sensory stimuli during the WAI's. It is therefore important to acknowledge their own sensory subjectivity (from a personal and cultural perspective) and to not imply these perceptions to the respondents through questions or comments (Pink, 2015). The researcher's personal perceptions or answers that were given by former participants could be incorporated into the questions towards the participants, steering them in a certain direction. This can be prevented by asking open questions and asking questions based on the participant's former answers. The researcher must try to remain objective to gain unbiased research results, which can be difficult for a first-time ethnographer to do WAI's. Another challenge is the fact that the research area is outdoors and generally related to all kinds of noises (trains rushing by, wind, other people talking), which can make it difficult to make a sound recording that is well understandable (Clark & Emmel, 2010). For security reasons, the researcher will therefore record the interviews with a digital memo recorder, as well as a smartphone. This will increase the chances of getting good results. The last challenge for this research method is that participants must be able to walk well through the area. This could exclude certain target groups who are for example less vital, can't walk well, or don't want to walk for 30-60 minutes (Evans & Jones, 2011).

With sensory ethnographic research, the researcher can come across unforeseen realizations which are characteristic of the way that ethnographers will learn during fieldwork (Pink, 2015). This can subsequently be a base for a new focus during following WAI's.

Photo elicitation

Amaya et al. (2022) conclude that using tools, such as a camera, could be useful in providing visual documentation of everyday life actions and contexts. An important choice to make when using this method is determining who will take the pictures: the researcher or the participant (Bryman, 2016). Since the goal of this research is to gain insights into the participant's personal experiences, it is more interesting to let them take the pictures as they have to mindfully think about how they want to capture it and what framing they want to use.

That's why in addition to the WAI's, the respondents were asked to take pictures of their favorite, uncomfortable, or comfortable places during the walk. The photos that were taken by the respondents provide indications of how the respondents view the environment and elements that they deem significant (Hall, 2009). The practice of walking inspires photography in the sense that it pushes people to think and deepen their engagement with the area by producing spontaneous situations (Pyyry, 2015). Letting the participants of the WAI's take photos along the way, is meaningful since photographs are considered as the visualization of the experiences and meanings that respondents

give to places (Van Hees et al., 2017). For taking photos a digital camera will be used to limit distractions from for example a smartphone, and for people to hopefully concentrate more on the framing of the picture they're taking. It is possible to schedule a follow-up interview with the respondents to find out more about the pictures they have taken (Pink, 2007). However, due to the time constraints of this thesis, the choice was made to ask about their motivation for taking the photograph, and why that is noteworthy to them, on the spot so an extra interview will not be necessary. The method of photo-elicitation, however, also has some challenges. The participants need to take the time to take a photograph and while they're talking about the environment, they could forget to take pictures. The ethnographer can alert them every now and then, but this could take away the spontaneity. Also, reminding the participants to take a photograph could make them feel as if on the spot, there is apparently something noteworthy to take a picture of, even though they otherwise wouldn't have, which again could steer them in a certain direction.

Summarizing, the first observations will be a general orientation of the field. Observing and writing about it will lead to considering what other events are similar and worth noting. With every observation moment the research gets more focused on certain issues and the researcher starts to note incidents of the same type and can look for patterns (Emerson et al., 2011). The WAI's will then give a more grounded analysis in the final ethnography, generating in-depth data on user experiences in the railway station area.

3.3 Respondents

As was already mentioned in the previous paragraph, the respondents that will participate in the WAI's must be familiar with the area and are therefore likely comfortable in the area and have a clearer perception and opinion of the area. Moreover, it is expected that people familiar with the area will give more honest answers as it can indirectly affect them personally through their use of the area (Evans & Jones, 2011). Participants of the WAI's are therefore people who live in the area, work in the area, or visit it regularly when going to events, stores, friends, family, amenities, or other regularly occurring situations. It was researched that gender, age, education, and visit purpose can have an effect on the quality perception of the station. In Du, et al.'s (2021) study, income, ethnicity, household composition, and visit frequency did not show significant effects on quality perception of a station area. Amaya et al. (2022) also concluded that age, gender, and socioeconomic status are important factors determining the outcome of WAI's. Gender, because differences between males and females were found in terms of gait behavior, flat ground walking, walking times (Amaya et al., 2022), and perceived safety in public spaces (Boomsma & Steg, 2014). Age is important because differences were found in perceived safety, levels of walking, and reasons for walking. Socioeconomic status is found to be a mediator in walking frequency that is transport related and it can influence recreational walking (Amaya et al., 2022). Based on this, respondents will be chosen by trying to best vary in age, gender, and socio-economic status. Respondents will be chosen through purposive sampling. This method is regularly used in qualitative research for information-rich cases and to use limited resources as effectively as possible (Patton, 2002). Since the researcher is not that familiar with the area and does not have a lot of contacts there, finding participants was more challenging. By starting to search for participants within the researcher's personal network and using a snowballing effect to broaden this network, suitable participants were chosen whereby using the limited resources as effectively as possible. Respondents could sometimes fill a double role: One respondent is familiar with the area because of visits in his private time but also knows a lot about the development and architectural

motivations in the area since he worked for the architectural firm that worked on the area. Another respondent is personally familiar with the area but also knows a lot about the station area because of his work for the Bijlmer ArenA station at NS (Dutch Railway Company). Though the method of purposive sampling is prone to research biases, this bias contributes to the efficiency of the method (Dolores & Tongco, 2007). The following table offers an overview of the respondents and their demographic information. Due to privacy reasons, family names were not mentioned.

Name	Gender	Age	Highest finished education	Reason for frequent visit	WAI date	WAI time
Domitilla	X	45	PhD	Going home, travelling to work	4/5/2023	11:00
Maurice	M	22	High School	Visiting family, friends, or concerts	11/5/2023	11:00
Morena	F	57	High School	Place of residence	12/5/2023	13:30
Ed	M	51	WO	Previously work, now AJAX soccer games	12/5/2023	15:00
Yannick	M	28	HBO	AJAX games	20/5/2023	11:00
Liselot	F	27	HBO	Events	20/5/2023	11:00
Femke	F	24	MBO	Events at Ziggo Dome	1/6/2023	12:30
Marie	F	26	WO Bachelor	Former resident	6/6/2023	12:00
Jeroen	M	44	PhD	Head of research NS and works in the area frequently	14/6/2023	17:00

Table 1: Respondent information. Source: Author

3.4 Data analysis

The data analysis will start by combining the observation data and translating this into a first description of the case study area's physical features and actions that are carried out by users of the area. Then the WAI recordings will be completely typed out into a text document. This will not be outsourced to another person. However, an application (Transkriptor on iOS) is used to automatically transcribe the audio files into text documents. All the automatically generated transcripts are then thoroughly read through by the researcher while listening to the audio file so that the transcripts can be corrected where they do not match the audio file. This will be done by the researcher herself because this way the researcher will already start learning about the data. Thereafter, the transcripts will be analyzed using color coding which is a way to link certain statements to different research themes that came forward in the observations, literature study, or while reading the WAI transcripts. Through color coding, certain quotes will first be classified into a few main themes that are important for this study. With a deductive analysis method, a predefined framework is used as a starting list of codes. However, the deductive method is combined with inductive coding, where codes could also emerge from the continual process of rereading the data (Love & Corr, 2022). After this general coding method, a more detailed analysis will take place. By doing a thematic analysis, the goal is to find out people's experiences, values, opinions, and views. This method is therefore especially useful for gaining insights in, and understandings of, people's experiences (Caulfield, 2019). The code tree that was a result of the analysis can be found in appendix 3. The analysis of the interview data is the basis for the results. Chapter four will first illustrate an image of the study area based on the observations. This image will then be enriched by the data that was obtained from the WAI's in the paragraphs that follow.

4 Results

This chapter will get into the results from the observations and WAI's that contribute to answering the research questions. Firstly, a summary of the observations will sketch the first image of the study area in terms of its physical design and how individuals were observed moving within it. More in-depth information on the experiences and use of the study area was gained through the WAI's, which will be reported on in the remainder of the chapter. Summarizing, the first paragraph will create a mental image for the reader which is useful for understanding the rest of the results.

4.1 Observations

When coming out of the station, you walk right underneath the train tracks. The rails are lifted above the ground floor creating a somewhat dark entrance into the area surrounding Bijlmer ArenA. Across from the entrance, you can see a long wooden bench that stretches from east to west, parallel to the entrance/ exit doors of the station. Behind this long bench, many bicycles are stalled, and just behind these bicycles, you can see a supermarket and a game hall.

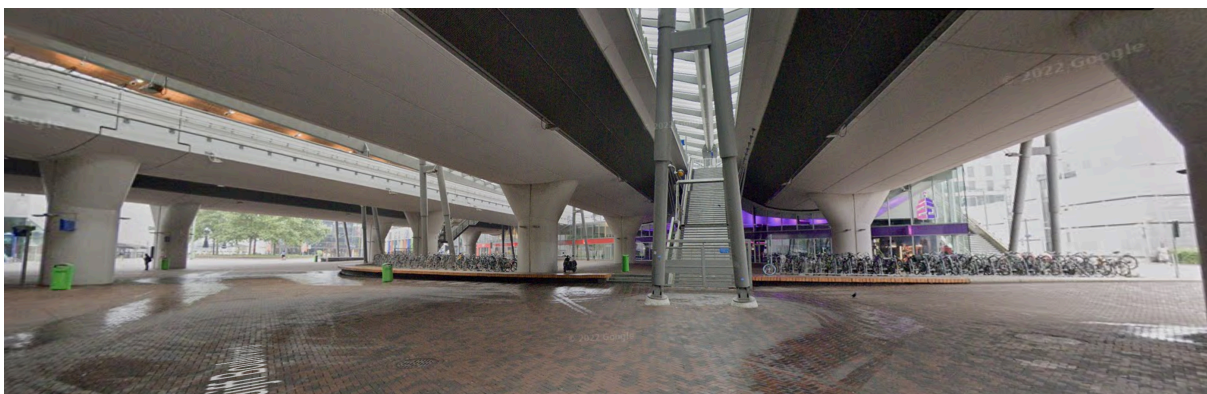


Figure 12: Panorama of exit Bijlmer ArenA station. Source: Google Maps, 2023.

As the functional map of ArenAPoort also showed (figure 12), the rails seem to be a border between two different areas. On the east side of the station, there are many houses, a shopping area, and some schools and offices. The west side is almost completely designed as a place for offices and leisurely amenities. When walking towards the east side of the station, one enters a large area enclosed by a horseshoe-shaped building. This building accommodates a hotel, some restaurants, offices, and a coffee store. Within the borders created by the horseshoe-shaped building, is a square, paved with stone but decorated with trees, ledges, modern streetlights, and a grass bump. In a funnel-shape this area continues into the Amsterdamse Poort (figure 14), a smaller shopping street with all kinds of amenities for everyday shopping.

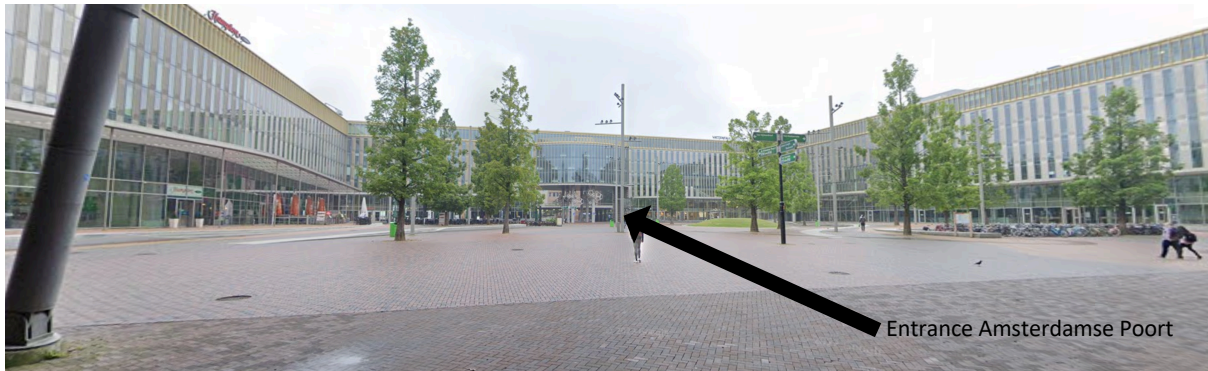


Figure 13: Panorama of east side station area. Source: Google Maps, 2023. Arrow and text added by author.

Just behind the Amsterdamse Poort, you will find the houses of the neighborhood and a small area dedicated to a few schools, counting ROC, HvA, and Amsterdam School of International Business, and some offices, including ING.

The west side of the station leads you into a large boulevard that stretches all the way to the Ziggo Dome, Johan Cruyff Arena, and a large furniture mall. It's a very vast, open space with tall buildings. Here, you will find amenities that are not meant for everyday shopping or leisure, like the Decathlon (a large outdoor/ sports store), Mediamarkt (a large electronics store), Perry Sport (a large sports store), and Pathé cinema. All these stores have a large catchment area. There are also some places to eat and get a drink in this area. They, however, seem to be closed most of the time in the morning and just past noon. At the start of the boulevard, there are some stone bench-like props to sit on, but moving along the boulevard, props like these seem to disappear. Instead, you see trash bins, public toilets, streetlights, and just a few trees. The facades of the large amenities on the right side of the boulevard are painted in bright, alternating colors.



Figure 14: Panorama of west side station area. Source: Google Maps, 2023.

While observing other people's actions in the area a few things are striking. A lot of people are walking towards and from the station in the morning. Most people seem to be coming from the east side of the station area. In the morning, only a few people are sitting down on a bench or other prop, but most people seem to be on the move and in a hurry. People are walking to and from the station, but besides that, not many people are inhabiting the area. Around noon, however, the east side of the station is packed with people. People are walking with sandwiches in hand, wearing backpacks or fancy clothes, and talking to each other. It is also evident, that the terraces on the east side of the station that were empty, are now filled with people getting lunch or a drink in groups of people. There are also some people working in the coffee store or picnicking on the grass bump on the square. The

Amsterdamse Poort is also quite crowded. Many people are grabbing something to eat at the small food shops and some elderly people are sitting on benches around the trees. The west side of the station, however, is still quite empty in terms of visitors. Some people are walking around, but not many people are sitting down or hanging out in groups. Later in the afternoon, it is again less crowded than during lunchtime, but people are still walking through the area and walking to and from the station. The general visitors of the station area, seem to be businessmen and -women, students, and essentially people carrying backpacks, briefcases, or other baggage to or from the station. A few people seem to be a bit confused, smell like weed, or are talking loudly in foreign languages. The cultural diversity that is so characteristic for the neighborhood of Bijlmer, isn't directly noticeable in the environment that directly surrounds the station. It, however, does become increasingly noticeable when walking towards the east of the station and into the Amsterdamse Poort. In this street there seem to be a lot more residents of the Bijlmer that are shopping, working in the shops, or sitting on benches talking to each other. One day of the observation there was a huge market on the east square just adjacent to the station and suddenly, there were many people that had not been seen in that area before during observations. People of different colors, speaking in all kinds of different languages, and of all kinds of different ages. It seemed like the whole neighborhood came out to this market to stroll around (figure 16).

Generally, during lunchtime, the east side of the area became very crowded. Also, after approximately 5 pm, the terraces started to fill up with people grabbing drinks and talking to others. In the mornings and after lunch, the area is generally way less crowded apart from a few single individuals walking through the area.

Now that the first global image of the area was drawn in the past text, more intensive information on the way that this area is perceived by some of its users, will be described in the following paragraphs. Some of the paragraphs also use descriptions from the observations to give some background information on the elements respondents have commented on.



Figure 15: Market at the square on the east side of the station. Source: Author

4.2 Under the rails

Before deciding to go to the west or east side of the station area, visitors have to exit the station under the train tracks. It is interesting to consider this relatively small area as well. In 1977 the train rails were lifted above the ground so people could now pass from the east into the west side of the station area and the other way around (Rouw & Huisman, 2008). When walking out of the station the rails hinder a lot of natural light, filling the area with shadows. There is a large wooden bench just outside the station where you can sit and just behind it are bicycles stalled everywhere and just before the benches, you will find some public restrooms and trash cans. Respondents experience this area as quite uncomfortable. Domitilla states that: “It feels like as soon as I'm out of the station, I just want to move away from it. Maybe that is the vibe. We also started walking immediately. You don't want, I don't want to hang out like in that. It's cold”. Also, the public restrooms make respondents feel uncomfortable in the area (Domitilla, 45; Maurice, 22; Jeroen, 44; Femke, 24). Even though the restrooms generate feelings of discomfort, Maurice (22) states that “even if those restrooms were not there, I would not sit there [on the wooden bench], also because of the bicycles behind it, and yeah. I don't know, under those railways, it's like you're sitting under some kind of bridge”. The design of the station area is not something that the respondents have pointed out as negative. Most find the station in itself perfectly fine (Jeroen, 44; Maurice, 22; Yannick, 28; Liselot, 27; Morena, 57). Generally, people can appreciate the architecture and some even go as far as to say: “I find the station beautiful” (Morena, 57). Some respondents also appreciate the lights that the game hall produces, making it a real eye-catcher in this area (Femke, 24; Maurice, 22). Moreover, by respondents the supermarket Albert Heijn is seen as a nice and convenient addition to the area as well (Domitilla, 45; Liselot, 27; Yannick, 28). This concludes the evaluation of the space just outside the station that is still seen as some kind of border, from which people move away into their area of use. They can go in an eastern or western direction, but there is no route in the northern direction, and a southern direction will lead you back into the station building and towards the bus station. Therefore, this is the first moment in the station area where respondents have to make a choice in terms of their station area use: going east or west. For some people, the action happening here could be one out of habit. For some, the choice could be made on the spot.



Figure 16: public restrooms under train rails. Source: Respondent Maurice



Figure 17: Viewpoint towards east side station area. Source: Respondent Ed.



Figure 18: Viewpoint towards west side station area. Source: Respondent Ed.

The surrounding area of the Bijlmer ArenA railway station can be divided into east and west sides, since the results of the WAI's concluded quite a few differences in terms of experiences in the west and east side of the station area, this division will be used as the structure for the next paragraphs. Per side, the experiences and utilization of the station will be evaluated based on the qualitative data gained from the WAI's. One thing to note before getting into the results is the following: the respondents were asked to walk through the area they use, which means not everyone has visited the same area during the WAI. This could result in a relatively low number of respondents that gave their opinion on a specific element on one of the two sides. Looking at the GPS data that was visualized into maps one can see that five respondents have chosen to walk through the east side of the station area, and six respondents have chosen to walk through the west side of the station area. This study used the feedback of nine respondents which means that some people had an area of use in both the east and west side of the station area and some specifically used only one side.

During the WAI's the routes that the respondents chose to walk, were mapped using GPS data. This GPS data was visualized with red lines on a map of the Bijlmer ArenA station area. All the separate

walking routes per respondent can be found in appendix 4. In the map below, all these routes are laid over each other to show the study area of this thesis (the overlapping of these images results in a quite blurry map, but the routes are still visible). All the red lines thus show what the respondents' collective area of use is.

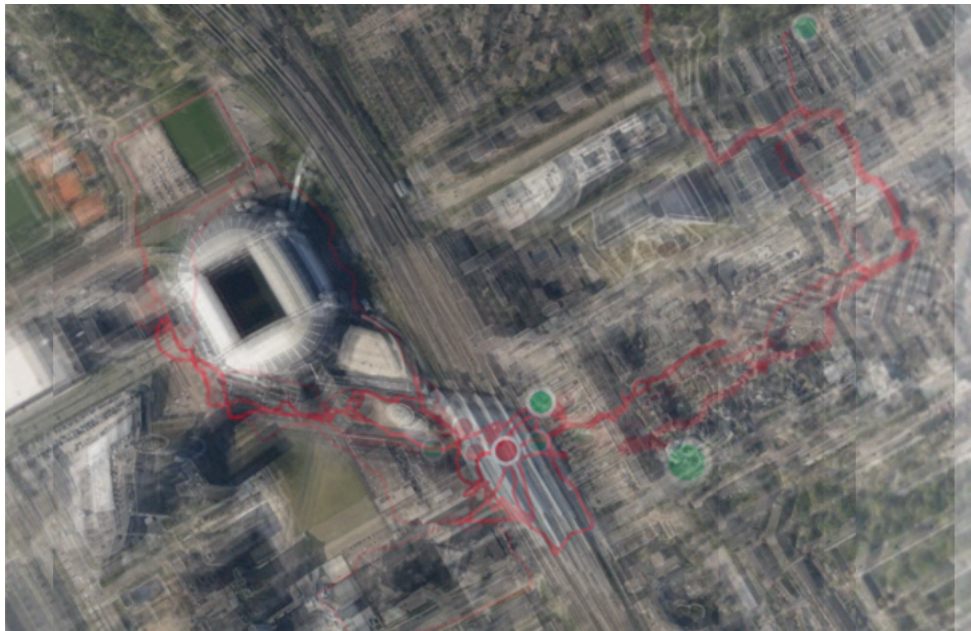


Figure 19: Map with overlain WAI-routes. Source: MapMyWalk, 2023. Adjusted by author.

This study only wishes to evaluate the experiences of the station area. Based on the GPS data, observations, and walkable radius of station areas, the red ovals in the map below globally sketch an image of the space that is defined as the 'station area' of Bijlmer Arena.

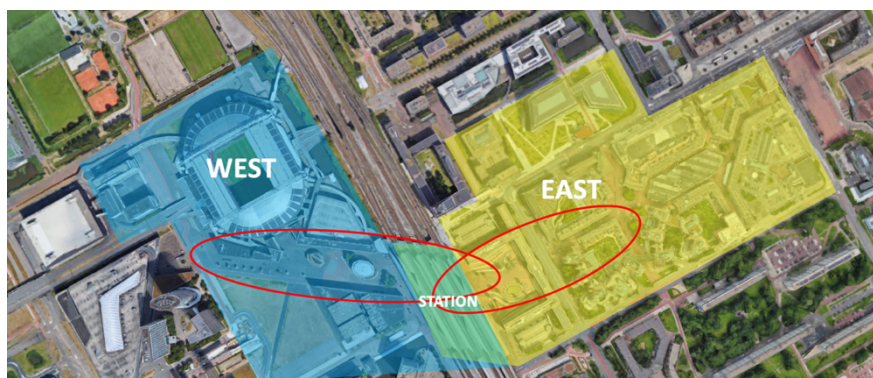


Figure 20: Map of the station area Bijlmer Arena. Source: Google Maps, 2023. Adjusted by Author.

4.3 East side of the Bijlmer Arena railway station

The next paragraph will elaborate on the experiences of respondents that regularly use the east side of the Bijlmer Arena station area. The paragraph will be structured based on the three contexts that were discussed in Chapter 2. A first visual impression of the east side of the station area created by pictures that respondents took during the WAI's can be found in appendix 5.

4.3.1 Physical context

Aesthetics

When walking towards the east side of the station, the first noticeable thing is a large horseshoe-shaped building that surrounds the square. In this building, multiple functions are established: a Hampton hotel, some restaurants, a coffee café: Lebrov & Sons, and offices, including Vattenval. A lot of glass is used in the design of the building. However, this striking building was not pointed out by any of the respondents.



Figure 21: Panorama of the east station area. Source: Google Maps, 2023.

When walking straight through the tunnel underneath this horseshoe-building, you walk towards The Amsterdamse Poort. An interesting building called 'the Sandcastle' comes into view. Generally, this building seems to generate positive feedback from respondents, with one person saying it's "such a special building" with "somewhat strange architecture" (Domitilla, 45). Another respondent mentioned that "the building is also beautiful from the inside" and that it is "iconic" (Morena, 57). Apart from the Sandcastle building, the general opinion among respondents of other architectural features were less positive. The buildings in the shopping street are perceived as unattractive by two respondents (Maurice, 22; Marie, 26). Maurice stated that "These surroundings, and especially those buildings up there, I don't think they are very pretty, no. It's not an attractive sight". Marie (26), in turn, mentioned that "I find these buildings



Figure 22: Sandcastle building. Source: Respondent Morena.

around here quite ugly". Even though the architecture does not really generate positive experiences, the shopping street is generally seen as a clean and neat place that is well maintained by respondents (Domitilla (45); Marie (26); Maurice (22)). The literature suggests that furnishing and decorations can influence people's experiences. These elements will be addressed as props. The idea in the literature of interruptions in the streetscape being experienced positively was also confirmed in the WAI's. The temporary flagpoles in the structure of the main walking route were pointed out as making the area feel cozy (Jeroen, 44) and a temporary flower shop on wheels was quoted to "do wonders" to an area (Jeroen, 44). Props in the form of places to sit, are by most respondents that walked through the east area, also perceived as a positive attribute of the public space (Domitilla, 45; Marie, 26; Morena, 57; Maurice, 22). Marie (26) states that especially seating places made of natural material and near greenery are pleasant: "You could sit on the square a little further, but those where these concrete, kind of large seating places, but never near trees. I like to see this now with the wood, you know, a kind material" (Figure 24). Marie (26) goes on to say that green, shadow, and natural colors in the city in general give her a nice feeling of peace and positivity. The positive value of greenery in an urban environment is also noted by others (Domitilla, 45; Jeroen, 44; Maurice, 22). The square on the east side just outside the station has some nice green structures in the form of trees and a large bump of grass that interrupts the stone surface.



Figure 23: Wooden bench around a tree. Source: Respondent Marie.

Comfort

It was already established that the east side of the station has nice places to sit, offering comfort to its users. According to existing literature, another important aspect of experiencing the comfort of an area is determined by its amenities. Observations have shown that all kinds of amenities for shopping, eating, and drinking are established in the area. The restaurants in the horseshoe-shaped buildings, are by some respondents experiences as places where you can have a nice meal during which one can sit and relax and take the time to consume (Femke, 22; Domitilla, 45). The restaurants also stretch outdoors in the shape of a terrace where people can sit down and get a drink.

Going into the Amsterdamse Poort, you will find more places to eat, but respondents associate these with just getting "a quick bite to eat" (Jeroen, 44; Femke, 22). Someone did note that the amenities in this street reflect the Bijlmer as a neighborhood through its cuisine which is (like the neighborhood itself) multicultural and diverse (Domitilla, 45; Jeroen, 45). This is also reflected in other stores like clothing shops (Domitilla, 45; Marie, 26). On this side of the station, you can find shops that have been in the neighborhood for a long time like a shop called "Le Paris". In the context of the area being developed rapidly and large chains that were established in the area (Domitilla, 45; Marie, 26), one respondent notes the following: "A lot of people are going to miss shops like these when they leave [when they cannot compete with the large chains coming to the neighborhood] because these shops attract a lot of locals. They have been coming here for 20 years, they know everybody that works here and comes here. But these shops are not attractive for people outside of the city" (Marie, 26). She voices the concern that the neighborhood's identity is slowly disappearing from the shopping streets as the area is gentrifying. Another respondent confirms that she finds this development is mostly bad (Domitilla, 45). One inhabitant of the area, however, likes the changes that the gentrification of the

area brings along. She likes the fact that it keeps the area diverse and attracts younger people (Morena, 57).

Safety

During observations, it was noticeable that the area had a lot of police surveillance. On many days there were police cars stationed on the square, or police officers walking around. While it is expected, by existing literature, that this would give people a safer feeling, this was not the case for everybody. Domitilla (45), a respondent of Italian background, claims they do not associate the police with feelings of safety, but more so with feelings of unsafety. They say that “some of us Italians, we don’t have a very friendly relationship with the police”. Even though they have not experienced this in the Netherlands, they still associate it negatively. The other respondents did not voice their experience of the police patrol on the east side of the station area as negative.

Other elements on the east side of the station area that influence safety, were the shop partitions after closing time. A respondent comments that the massive prison-like shutters give an unsafe feeling in the sense that “a lot must be going wrong here, and here I am walking on the other side of the safe, protected area...this just says, ‘go away’.” (Jeroen, 44).

On a more positive note, it was already established that the area is positively perceived as comfortable in terms of cleanliness and good maintenance, which literature suggests, contributes to a safe environment.



Figure 24: Store partitions. Source: Respondent Jeroen.

4.3.2 Sociocultural context

Generally, the east side of the station is perceived as quite lively by the interviewees (Marie, 26; Jeroen 44; Femke, 24). Many people inhabit the space and are residing in it. One respondent even mentioned that especially in de Amsterdamse Poort, she is surprised by the amounts of visitors, saying that just a few years ago the area was never this crowded with people (Marie, 26). Marie also remarks that when she lived in the area, she usually saw people of color walking through it and out of the offices and shops and she would hear all kinds of different languages. Now, she notices that an even more diverse pool of people and cultures are mixed in the area and sitting together on benches in the sun (Marie, 26). Another resident of the area claims that this is the best thing about this neighborhood: that everyone respects each other in this area and lives harmoniously together (Morena, 57). Marie (26), states that the presence of all these people makes her feel safer when walking through the area and towards the railway station. Other respondents agree that the presence of other people enhances their safety feeling in the area. However, the safety feeling due to other people’s presence does depend on the types of individuals that inhabit the space. One respondent states that sometimes, the area is inhabited by hanging youths, and homeless people which makes him feel less comfortable

wherefore he would refrain from residing in the area (Maurice, 22). Other respondents agree that certain people ‘hanging’ in the area, especially at night, can increase feelings of unsafety (Marie, 26; Jeroen, 44). On the east side of the area, is a night shelter for homeless and addicted people and these people are released out on the street again in the morning. One inhabitant finds the behavior of these “junkies”, as she calls them, very annoying. Even though her feelings of annoyance, their behavior or general presence, does not make her feel unsafe in the area (Morena, 57).

Some respondents note that the square just before entering the Amsterdamse Poort, outside the railway station, is very large and empty (Domitilla, 45; Maurice, 22). One respondent states that “This is kind of, well, after this square, the liveliness of the Bijlmer ArenA is really on that side [towards the Amsterdamse Poort]” (Maurice, 22). These respondents especially note the large surface of the square, the stone, and the absence of people.

Other respondents do not agree with this statement. Some immediately feel comfortable in this area (Morena, 57; Jeroen, 44). Jeroen (44) states that “turning around [to the square on the east side of the station] I’m like, yes, they’ve thought about this. I feel comfortable here, there are people eating, there are trees and shadow”. It is important to note that these differences in perception could depend partly on the times of the WAI’s. Observations concluded that during lunchtime and after approximately 5 pm, the area is generally more lively than in the morning hours or between lunch and 5 pm, which could result in different sociocultural assessments. Morena (57) and Jeroen (44) do, however, also acknowledge the large scale of the square, and say it needs the expanse for hosting neighborhood activities, like the market that was also mentioned in the observations paragraph. Morena (57) says that, as an inhabitant, she would like it if community activities and events like these were organized more often. During activities like these, a lot more people are attracted to this square, not only businessmen and women that you usually see there but also inhabitants of the neighborhood of Bijlmer.



Figure 25: East square station area Bijlmer ArenA. Source: Respondent Maurice.

4.3.3 Personal context

The personal context has already, perhaps unnoticeably, been mentioned numerous times in the results of the physical and sociocultural context. Whenever meaning is given to a physical feature in the public space or the interaction with the sociocultural context by describing a certain experience, one has touched upon the personal context. The senses are constant receivers of the stimuli that the physical and sociocultural context generates. An element of the personal context that has not been illuminated yet, is the way that demographic characteristics play a role in urban experiences. The WAI’s on this side of the station area did, however, not conclude that there is any noticeable difference in experience between men and women, between different ages, or between different economic backgrounds.

4.4 West side Bijlmer ArenA railway station

The next paragraph will touch upon the experiences of respondents that regularly use the west side of the Bijlmer ArenA station area. This paragraph will also be structured based on the three contexts that were discussed in Chapter 2 as was done in paragraph 4.3. A first visual impression of the west side of the station area created by pictures that respondents took during the WAI's can be found in appendix 5.

4.4.1 Physical context

Aesthetics

When walking out of Bijlmer ArenA railway station, a person can also choose to go in the western direction, entering the ArenA Boulevard. One of the first buildings to come into view is the metal-look building which accommodates the Pathé cinema. Some respondents note their positive perception of this building. One respondent finds this a tough-looking building, but in a positive way (Ed, 51). Another respondent voices her positive perception of this building and says that she likes how the building is kind of see-through (Marie, 26). However, Ed notes that even though the architecture is nice, the plinth of the building is only lively at its beginning, with the entrance to the cinema and a terrace, but “the rest of the building is all a closed box” (Ed, 51).



*Figure 26: Metal building at the west side station area.
Source: Respondent Ed.*

In the middle of the Arena Boulevard, two large, round-shaped pavilions are placed. These pavilions accommodate a restaurant and some companies to get fast food. The opinions of these pavilions differ among respondents. One respondent states that these pavilions have such an enormous size that they could function as residential buildings. He negatively comments on the fact that these feel completely out of scale and that they now obstruct the sightlines from the Boulevard to the railway station (Jeroen, 44). Another respondent, on the contrary, states that these pavilions form a nice disruption in the vast space, creating a more pleasant scale (Ed, 51).

On the right side of the boulevard, one will find two long and tall buildings whose façades alternate in color. In this building, large shops like the Mediamarkt, Decathlon, Basic-Fit, and Perry Sport are accommodated.

One respondent, who also worked with the architect of these buildings, notes that the alternating colors are a way to make the very large building feel more intimate. However, other respondents do not share this positive perception of the design. Some mention it looks cheap (Liselot, 27) and ugly (Yannick, 28; Marie, 26). Another respondent says that the idea is good, but it feels like it is an excuse for the actual problem of this area, which is that he feels very small in it (Jeroen, 44).

A reoccurring theme concerning the aesthetics of this area is the non-human scale. The perception of the area is that “there is just these big buildings, big, big streets” (Domitilla, 45). A respondent comments on the fact that this is just a vast space that does not have the intimacy of a square (Ed, 51). Almost all respondents have commented on the non-human scale of the west side of the station area, by (perhaps unnoticeably) saying that everything in it is huge and that they feel small in it (Liselot, 27; Yannick, 28; Maurice, 22; Domitilla, 45; Jeroen).



Figure 27: Arena boulevard on day of Harry Styles concert.
Source: Respondent Marie.

Another eye-catcher in the area, which is by definition a very large entity, is the Johan Cruyff Arena. One respondent, who worked with the architect of this area, mentions that the architects have tried to ‘wrap’ the Arena with the bright colored buildings, so this enormous entity would not feel as large as it is (Ed, 51). Still, respondents generally find the Arena quite intimidating, and ultimately, huge (Yannick, 28; Liselot, 27; Femke, 22). One respondent says that “when grabbing a beer here, you do not feel like you’re going to a soccer game at all, because of all the rubbish [the colorful, long buildings] that is standing in front of it” (Yannick, 28).

Generally, the respondents experience the aesthetic of the area as very large, grey (Maurice, 22), and gritty (Marie, 26). One respondent feels as if the area is designed in a way so that it cannot be broken (Ed, 51). He suggests that adding more green or nice flowers could improve the area (Ed, 51). The current lack of green in the area and the negative assessment of this fact, does also not go unnoticed by other respondents (Marie, 26; Maurice, 22; Jeroen, 44).

Comfort

Not just the large, stone-paved, boulevard and tall buildings, are made of a non-human scale, also the props in the area are made of a scale that is measured on capacity and not human size. There are many trash bins present in the area, which literature suggests, generally contribute to the comfort of an area. However, even the trashcans in this area seem to be made on a non-human scale. In fact, humans are smaller than some of the trash bins (Jeroen, 44). Toilet facilities are, the literature suggests, also seen as a contributor to the comfort of an area. However, in this case, most respondents have commented negatively on the public restrooms (dixies) that are stalled on the Arena Boulevard (Jeroen, 44; Maurice, 22; Domitilla, 45), and many respondents comment on their nasty smell (Liselot, 27; Yannick, 28; Femke, 23; Maurice, 22; Jeroen, 44; Domitilla, 45). In terms of food and drink facilities, the west side of the station area hosts quite a few restaurants, take-away food shops, and cafés. Some respondents observe that while this is usually a good thing on days of events since they have many choices on where and what they want to eat before an event (Femke, 23), most of these amenities are closed on regular days (Yannick, 27; liselot, 28; Ed, 51). The respondents comment that in this area, everything seems to revolve around the Arena, and even food and drink facilities adjust their opening times to events at the Arena and other leisurely facilities in the area (Yannick, 27; Liselot, 28).



Figure 28: Respondent Jeroen near a non-human scale trash bin at the Arena Boulevard. Source: Author.



Figure 29: Public restrooms at Arena Boulevard. Source: Respondent Jeroen.

The general level of comfort is not perceived well by the respondents and many respondents note that the area does not have a cozy atmosphere (Maurice, 22; Yannick, 27; Liselot, 28; Jeroen, 44; Ed, 51).

Safety

The uncozy atmosphere in the area can contribute to the safety levels of the area. Some respondents note that they wouldn't feel safe walking here at night on a regular day (Maurice, 22; Liselot, 27; Yannick, 28; Jeroen, 44). On days when there are soccer games planned at the Arena, two respondents mention, a lot of Riot Control vans are stationed throughout the boulevard (Liselot, 27; Yannick, 28). Liselot (27) notes that this can influence the safety of the area in two ways: it contributes to safety

since she knows the police will interfere if things get out of hand, but their presence also generates tension in the area. Another respondent says that on regular days, the area lacks surveillance which is why the area is associated with less safety (Jeroen, 44). However, it is noted that the area is quite clean and well maintained on regular days (Femke, 23; Maurice, 22), which, literature suggests, adds to feelings of safety in public spaces. The west side of the station area is also designed in a way that makes one respondent feel very enclosed in the space, and she feels like there are not many ways to get out of it (Liselot, 27). Another respondent voices the same experience, saying that “once you get stuck here [when public transit is not running, or one misses the last train or metro], then you’re really stuck, you almost can’t get out of Amsterdam anymore” (Femke, 23).

4.4.2 Sociocultural context

The interesting element of the west side of the area in terms of people densities is the fact that on days of soccer matches, concerts, or other events in the area, the place is overflowing with people. But on other, regular, days the area has much fewer visitors. Respondents have noted this contrast as well (Yannick, 28; Liselot, 27; Maurice, 22; Ed, 51; Jeroen, 44; Femke, 23). On the regular days when the WAI’s were done, people noted how quiet (Maurice, 22), empty, and abandoned (Ed, 51; Jeroen, 44; Marie, 26; Yannick, 27; Liselot, 28) the area was. Quoting one of the respondents, during the WAI, the area “is just switched off” (Ed, 51). The absence of people during the day, made respondents voice that they would not like to be in the area in the evenings due to expected feelings of unsafety (Yannick, 28; Liselot, 27; Domitilla 45; Jeroen, 44; Maurice, 22). One respondent mentions that in the evenings on a regular day, he finds his route toward the station uncomfortable since all the stores are closed and the area feels abandoned (Maurice, 22). Not all respondents voice their feelings of unsafety. Another respondent who regularly visits the area on days of events mentions that she never really feels unsafe in the area since there is always something going on or people walking around (Femke, 23).

While the WAI’s were held on regular days, the area has evoked memories of other days and times in many of the respondents, which is why these are also interesting to mention. On days when there are events planned in the area, it is crowded with people. One respondent mentions that this, especially when visiting the area for the first time, can be very overwhelming (Femke, 23). One respondent sometimes experiences feelings of annoyance when other people, for example, walk in their way or are not considerate of others (Femke, 23), while it is also voiced that all those people add to the excitement of visiting an event (Femke 23; Maurice, 22; Yannick, 28). While literature suggests that the many amounts of visitors can contribute to feelings of stress, respondents mention that at Bijlmer ArenA, they already expect all those amounts of visitors on event days and handle it with coping mechanisms. One respondent says, “it’s just a matter of learning to deal with it” (Femke, 23) and another respondent agrees “it’s expectation management because if you come here, I know I’m coming to a big event so it will be really crowded” (Ed, 51).

Experiences in the area also depend a lot on the type of event that is planned that day; a soccer game, punk-rock, pop, or other concert all attract different types of visitors, with different behavior (Yannick, 28; Liselot, 27; Femke, 22; Marie, 26). It is generally considered that ‘hooligans’ coming to the area for a soccer match, are very disruptive and act out negatively perceived behavior (Liselot, 27; Ed, 51; Marie, 26). Teenage fangirls that visit concerts in the area are perceived as selfish and inconsiderate of others in the area (Femke, 23), but the visitors of concerts that attract all kinds of people of different ages and gender, are perceived as more jovial (Yannick, 28; Liselot, 27; Marie, 26; Femke, 23).

Especially hooligans are a negatively perceived visitor type. Respondents associate them with vandalism, fighting, and other inappropriate behavior (Ed, 51; Liselot, 27; Yannick, 28; Marie, 26, Jeroen, 44). One respondent notes that maybe, since the area is designed so inhumanely, this might also stimulate inhumane behavior from certain people (Ed, 51). Thus, creating a space that cannot be broken, can tell people that it is expected of them that they will break things stimulating accommodating behavior. Ed (51) suggests that designing a more human-like space with greenery and flower mixes could stimulate the humane behavior of misbehavers in the area.

4.4.3 Personal context

As was also mentioned in the paragraph on experiences of the east side of the station, the personal context has already, perhaps unnoticeably, been mentioned numerous times in the results of the physical and sociocultural context whenever meaning is given to a physical feature in public space or the interaction with the sociocultural context by voicing a certain experience. Literature showed that demographic characteristics of a person can influence experiences and perceptions. The WAI's have not concluded differences in experiences based on socioeconomic background or age. However, gender differences have seemed to affect experiences in terms of crowding differently on the west side of the station area. One respondent says that on evenings when a soccer match will be played, there is a certain tension in the air that makes her feel unsafe (Liselot, 27). This unsafe feeling is largely determined by the fact that the largest part of the visitors is male, and as a female she feels vulnerable in the crowd (Liselot, 27). Two other respondents, who are male, also experience this tension, but they perceive it positively. One respondent says that he likes the tension because it adds to the excitement of the event (Yannick, 28; Maurice, 22). Yannick (28) however does say that he would not feel comfortable with his girlfriend walking alone in that type of crowd, which again points to gender differences in terms of crowd experiences on event days.

4.5 General experience

Generally, the respondents mention that a lot has already been improved in the area. Some respondents seem to dwell on memories and experiences of the past during the WAI as they talk about the things that are different now. The area did not have the best image in the past, "it was just not nice at all here [Bijlmer in general]"... "Many times, it was just abandoned"... "But now I see that it is actually really crowded...I've actually never seen it this full before [while walking through the east side of the station area]" (Marie, 26). Another respondent also says that especially the east side of the station area is being positively renewed (Liselot, 27; Maurice, 22). On the west side, two respondents memorize that it used to be just an empty, grey area and they are surprised that it is a little livelier now (Yannick, 28; Liselot, 27). Even though some of the respondents seem to experience the area as improved compared to how it used to be, they still voiced many things that could be revised even further to make it a more comfortable place for them to use.

4.6 Using the station as a node and a place

All respondents have a very personal and unique perception of the area, and their experiences are linked to the choices they make in terms of using the area. Existing literature suggests that station areas can be used in different ways. The main division that can be made in terms of using the area, is using the area as a node or/and using the area as a place. This paragraph will analyze how the respondents are currently using the area and how that relates to their perception of the area. People were also asked what their reason for frequently visiting the area was. Reasons for visiting were generally: going home (Morena, 57; Marie, 26, Domitilla, 45) visiting family and friends (Maurice, 22), going to a concert (Femke, 23; Maurice, 22), going to a soccer match (Yannick, 28; Liselot, 27; Ed, 51) or going to work (Jeroen, 44; Ed, 51) whereby some respondents use the area for multiple of the named options.

The WAI's have concluded that there are different ways that respondents use the area. These can be divided into three main categories: Using the station area as a node, using the station area as a place with goal intention, and using the station area as a place to reside and linger. Based on these three types of uses, the next part of this paragraph will be structured.

4.6.1 Using the station area as a node

All the respondents have made, and still regularly make, use of the transit services that Bijlmer ArenA offers. Therefore, all the respondents use the station area as a node. They use public transit to get into the area, to transfer, and to travel to other places. They go their FMLM by foot, bicycle, or bus. One of the quotes proves that some people use the area almost exclusively as a node: "I would only go in there because I thought that that was the end of it. It's just a station" (Domitilla, 45). Their experience is probably a big mediator of using the station as a node since they go on saying that "it feels like as soon as I'm out of the station, I just want to move away from it. Maybe that is the vibe. We also started walking immediately" (Domitilla, 45). Another respondent's experience is as follows: "I think this is kind of the character of this area, like yeah, you come here not to stand still, but go in somewhere, or you have to catch the train again. So, it's a short visit" (Maurice, 22). As for going the FMLM (walking from and to the station) respondents seem to agree that they just want to go to the station or their destination quickly and would therefore always choose the shortest route (Maurice, 22; Marie, 26; Yannick, 28; Jeroen, 44). They would not choose another route that could be nicer to walk through if it will take them extra time. This, as well, says a lot about people's purpose in the area. During the WAI's it was interesting to note that it seemed as if many people were really paying attention to their surroundings for the first time. Respondents voice that they have never really taken the time before to look around (Maurice, 22; Femke, 23). This indicates a *purposive way of walking* in the area which is characterized in the literature by having a clear goal in mind and little attention for the surrounding area.

It was said that the station area of Bijlmer ArenA can be divided into an east and west side. In this case, the association of the station area as a node seems to mainly apply to the west side of the station area and the square adjacent to east side of the station. One respondent compares this area to an airport saying that "you know, sometimes at the edge of a city or near the airport where you have like just big streets and big buildings where people live or hotels. That's how the whole area feels to me. So, in that sense, it makes you feel less like real people live there. It's more like a passage space

because it's hotels" (Domitilla, 45). This quote translates the perceived character of the area by the respondent and also influences their use of the area as they just use it as a place of transit (Domitilla, 45).

4.6.2 Using the station area as a place with goal intention

Large amenities like Mediamarkt and Decathlon, but also a cinema and smaller shops are located close to the railway station. This proximity makes these amenities, and generally the area around the station, a well accessible place to visit. This was acknowledged by some of the respondents as well (Femke, 23; Maurice, 22). One respondent likes how the train 'drops' you right into the heart of the area and everything you need is there: entertainment, shops, and places to get food and drinks (Femke, 23). The functionality of the area is a much-discussed topic during the WAI's. Many respondents express that they find the west side of the station area very functional in terms of amenities and design (Yannick, 28; Liselot, 27; Maurice, 22; Femke, 23; Morena, 57;). Different respondents have voiced their different purposes for visiting the area. It is evident that for most respondents, their purpose in the area influences the way they define the area. One respondent for example says "I'm not in Amsterdam that much, so if I am, I like to really be in the city's center. Then this area, to me, is just this haven for events, and because I come here so much this, to me, is just 'events'" (Femke, 23). Another respondent says he does "not come here for this area, I come here for the [soccer] game" (Ed, 51). More respondents say the same thing about the station area in general: "I don't come here for a day. I just come here for the purpose of going to a game and a concert, and then I'm gone" (Liselot, 27), "No indeed you just walk across this area in one go to get to your destination, you just don't think about it" (Maurice, 22). Because the west side of the station area is experienced as functionally designed, they for example do not always care about the way the place looks, one respondent saying that "I care less about the appearance in relation to the goal for which I am here" (Femke, 23). Again, respondents mention they usually enact a *purposive way of walking* with a clear goal in mind which seems to add to the experienced functionality of the area. These respondents seem to not really care about the surroundings safe for the fact that it is functional and accommodating to their goal and purpose in the area. However, some amenities in the area could complement these purposes. When someone is going to a concert, for example, they have the possibility to grab some food or drinks or sit around on a terrace beforehand at one of the amenities that are situated in the area. Some respondents mention they do this sometimes (Femke, 23; Yannick, 27; Liselot, 28; Jeroen, 44), but other respondents say that "When you go to a concert, you are not grabbing a beer in front of the door, if you can go in or something. Yeah, then you go, then you're here already, so you just want to go to the attraction right away or you have some kind of deadline that you have to be there" (Marie, 26) and another respondent voices the same idea of going to their destination as soon as possible and not hang around beforehand (Maurice, 22).

It was already discussed that different respondents had different reasons to visit the area. Their reason for visiting largely determines their area of use. Respondents going to an event, soccer game, the cinema, or to the large-scale shops, mostly stay on the west side of the station area (which can also be seen in the GPS data that showed the WAI-routes the respondents with these reasons for visiting chose). Respondents going home, visiting friends and family, or working in the area mostly make use of the east side of the station area. This again creates some kind of diversion between the east and west sides of the station area. Even more so when asking respondents about the side they do not regularly visit. One respondent who lives in the Bijlmer, with her area of use being mostly the east side

of the station area, voiced that she has no reason to visit the west side of the station area (Morena, 57). When she was asked if she believed more inhabitants of the area felt that way, she answered by stating “Yes, definitely” (Morena, 57). Other inhabitants of the area also say that while living in the area, they have never really visited the west side of the station (Marie, 26; Domitilla, 45). One of the respondents also said that “It feels like on this side [west side of the station area] there's mostly people who come for specific things, maybe to go to Mediamarkt, to go to the cinema. It's not the people who live in the neighborhood and instead on the other side where we were before, it's more the neighborhood people and so, I'm automatically more attracted to hanging out in the neighborhood rather than in a more like airport-like space, you know? I think that's why I don't come on this [west] side” (Domitilla, 45). Other respondents seem to prove her point. Indeed, it is interesting to see that the other way around, people who regularly visit the (leisurely) amenities on the west side of the station, rarely venture into the east side of the station area. When some respondents were asked if they ever come on the east side of the station things like “no, never” (Liselot, 27), or “no, not really” (Yannick, 28) were said. One respondent mentions that she sometimes visits the restaurants on the east side of the station, which are accommodated in the large horseshoe-shaped building, but she does not go farther than that first square and would not really go into the Amsterdamse Poort beyond (Femke, 23). All of this seems to prove that respondents with different purposes in the area do not, or rarely, cross into each other's area of use.

4.6.3 Using the station area as a place to reside and linger

Some of the respondents have mentioned that when going to an event, soccer game, or to the cinema they do sometimes grab a drink in the area beforehand (Femke, 23; Yannick, 27; Liselot, 28; Jeroen, 44). However, almost all respondents say that while they might grab a drink or recreate in the area before they visit their (leisurely) amenity of purpose, they would not specifically travel to the place with the purpose of hanging out in it, by grabbing a drink or eating out (Maurice, 22; Yannick, 28; Liselot, 27; Marie, 26; Femke, 23; Ed, 51). Some also mention that this area might be difficult as a place to reside and linger in since it has the city center of Amsterdam as a frame of reference (Yannick, 28; Liselot, 27; Femke, 23; Maurice, 22). However, a few respondents say they would specifically travel to this area for the (leisurely) amenities which due to their large scale, have a large catchment area (this was already confirmed in paragraph 4.6.2). The more small-scale shops in the Amsterdamse Poort on the east side of the station area do not have a big catchment area. Therefore, some respondents say they would not visit the station area specifically for the shopping area in the Amsterdamse Poort (Marie, 26; Maurice, 22). Even an inhabitant of the Bijlmer says she rather travels to Amstelveen by bus to go shopping since the range of shops appeals to her more there (Morena, 57). Some respondents seem to avoid using the station area as more than a place that accommodates their goal, but not every respondent refrains from residing and lingering in the area. Specifically on the east side of the station area, some respondents mentioned that they sometimes hang out in the area by for example sitting on a bench (Morena, 57), sitting on the terraces (Maurice, 22), or going to a restaurant (Femke, 23).

The observations concluded that people seem to be using the east side of the station also as a place and destination in itself, since people were seen wandering around, sitting on benches, ledges, and the grass bump, or the terraces. One respondent remarks that normally, he would not hang out on the terrace here, but when it is already filled with other people and the weather is nice, he would be more attracted to the idea of residing there (Maurice, 22). It was already established that some of the

respondents said that if they have a purpose for being in the area (like going to a concert for example) they would like to grab some food or visit a restaurant in the area beforehand, but when they do not have another reason for being in the area, they wouldn't come to the area with the only reason to visit the restaurants or terraces (Femke, 23; Maurice, 22; Domitilla, 45). Some respondents say they wouldn't visit the restaurants and terraces on the east side, period (Yannick, 28; Liselot, 27). The person who does sometimes visit a restaurant in the area, says that when she does, she associates the restaurants on the east side as places where you can sit, relax a little, and have a last peaceful moment before the concert starts, while food and drink amenities on the west side are mostly associated with 'grabbing a quick bite to eat' and unhealthy (Maurice, 22; Femke, 23).

It was observed, that during lunchtime, many people are walking with sandwiches in hand through the Amsterdamse Poort, sitting around on terraces, benches, ledges, and grass, or going back into the offices. This, and the WAI's conclude that in terms of using the east side of the area as both a node and a place, many people also seem to be using the east side of the station area as a place to linger and reside in, which was much less seen in the west side of the station area (except for days when large concerts are held in the area and people were already lingering around and waiting in line from an early time). While walking through the east side of the station area with one of the respondents, she mentions while pointing to a stone bench that she regularly sits there with her sister (Morena, 57). Another respondent says she usually rarely sits on the benches in the Amsterdamse Poort on the east side of the station area, but she does find them inviting due to the wooden materials and tree in the middle of the circle-shaped bench (Marie, 26).

4.7 The barrier between east and west

The results show that even though the physical barrier created by the railways was lifted in 1977 (Rouw & Huisman, 2008), the station and train tracks still seem to create some kind of barrier between the east and west sides of the station area. A respondent says that the connection between the east and west sides of the station is not an inviting one (Jeroen, 44). Another respondent summarizes the diversion between the east and west sides perfectly with this quote: "[the east and west side do not connect well] in terms of character and in terms of facilities, because you can go there [east side], that's just a really normal shopping center with those really medieval streets, which are very small-scale and organic. This [west side] is very, very large scale and straight, so they've tried to link that, but they're still different areas" (Ed, 51). A respondent, who is also the head of research at NS, concludes that, yes, in traffic-engineering terms the area is connected but in terms of urban design and functions, it is not (Jeroen, 44).

While municipalities generally see barriers as a flaw in public space that should be avoided, if possible (which is also confirmed by the municipality of Amsterdam in the rapport 'Development Strategy SouthEast'), the question that is raised here is the one that asks if a barrier like this, is indeed an undesirable thing? Currently, the station seems to divide the station area into a neighborhood side (east) and a leisurely side (west), where people living, working, or visiting friends and family in the area utilize the east side and respondents going to concerts, soccer matches of large shops mostly visit the west side. A few respondents question whether it is desirable for both types of visitors (inhabitants and day tourists) to cross into each other's area. They both have a completely different mindset based on their purpose for visiting the area: the excitement of going to an event and the carelessness regarding the area due to its unbreakable design and temporary visit vs. the feeling of comfort when going home and caring for the environment they inhabit. Respondents justly question whether they

would want to live on the west side when hooligans are terrorizing the place every other week, or when the noise keeps them up at night (Marie, 26; Jeroen, 44; Ed, 51). Others question whether they would want to live there because even though the area is very lively at some moments, it is extremely empty and quiet most of the time. Then again, the nuisance could be limited when houses are added to the area since a more human environment could increase people's care for the environment. Houses in the area could also make the place livelier on regular days as more people are using the space for their everyday practices and generate more 'eyes on the street' (Marie, 26; Liselot, 27; Yannick, 28; Ed, 51; Jeroen, 44). Also, the good accessibility of the area that is granted by proximity to the railway station makes it a perfect location for housing development.

5 Conclusions

The railway station of Bijlmer ArenA has presented a complex interplay of the physical, sociocultural, and personal contexts that shape users' experiences. The users' experiences seem to make a distinction between an east and west side divided by the railway tracks. The east side received mostly positive feedback from its physical context, especially the Sandcastle building in the Amsterdamse Poort, the greenery, seating areas, used materials, a temporary flower shop, and other temporary decorations contribute positively to the atmosphere. However, other architectural features in the Amsterdamse Poort are less favorably received. Respondents derive comfort from the available amenities on the east side like restaurants and shops reflecting the neighborhood's diversity. Safety perceptions are mixed, influenced by factors like the presence of the police and the presence or absence of other people. Generally, the east side of the station area is experienced as vibrant and as a place for meeting other people. Even though the varying experiences in the area, demographic characteristics do not noticeably seem to influence perceptions on this side of the station area among respondents.

The respondents characterize the west side of the station by a large-scale design and a less cozy atmosphere. Some positively note the view of certain buildings like the Pathé cinema, while others find buildings quite imposing due to the lack of human scale and rough materials. The comfort of the area is marred by certain elements in the area, including public restrooms and oversized trash bins. Safety concerns come from the abandoned feel of the west side on regular days and the contrasting high visitor density on event days, with hooligan behavior being negatively perceived. In terms of demographic characteristics influencing experiences, gender seems to affect feelings of safety during crowded events, especially before soccer games. In general, it is recognized that the station area has been improved over time and has become more vibrant, but further suggestions have been suggested to create a more comfortable and inviting environment. The interaction between the physical, sociocultural, and personal contexts, emphasizes the need for more integral planning and regulations to provide in the diverse experiences of users.

The analysis has shed light on the way that respondents utilize the station area, and this revealed different patterns in terms of their engagement with the area. The utilization of the station can be divided into three primary modes of use: those who use the station area as a node, those who visit the area as a place with a specific purpose, and those who linger and reside in the area. This distinction is important to understand the diversity of experiences and expectations that people have when coming into this area.

The respondents who view the station primarily as a node, often engage with the area with efficiency and purposefulness. They use the area for public transit, transferring, and reaching a desired destination with minimal attention to their surroundings. This "get in and get out" approach lines up with people's specific goal in the area, which could be catching a train or reaching their destination quickly. The west side of the station area, which is perceived as functional and similar to an airport passage, is where this node-based use is most outstanding.

Respondents who see the station area as a place for their specific goals, recognize the good accessibility and proximity to amenities like shops, entertainment venues, and restaurants. They seem to appreciate the convenience of landing directly in the heart of the area that provides for all their needs. However, for these types of users, the aesthetic and atmosphere of the area are of less importance than their primary goals, resulting in less attention to their surroundings while walking through the area.

At the same time, respondents who use the station area as a place to reside and linger, particularly do this in the east side of the station area. Some respondents note their appreciation of the spaces that are available for relaxation, like seating places, terraces, and grassy areas. These respondents are more prone to engage with the area beyond a stern functional purpose, by also seeking leisure and enjoyment in the space.

Interestingly, the differing mindsets and objectives of the station area's visitors create a perceived barrier between the east and west sides of the station area. Some respondents question if it is desirable to let people with different visit purposes cross into each other's area of use, due to their different objectives of visiting events or shops or finding the comfort of their neighborhood. This separation motivates intriguing questions about the role of barriers in urban spaces, challenging the traditional wisdom that supports the seamless connectivity of places.

Ultimately, it is proposed that experiences influence the types of uses of the station area and in contrast, the use of the station area and one's purpose in the area, also influence their experience at the Bijlmer ArenA station area.

6 Discussion

This thesis, as part of the Master Human Geography, provides valuable insights for researchers, policymakers, and practitioners in various fields that relate to urban planning, social sciences, and urban design, and the academic field of Human Geography.

6.1 Validity and limitations

This study researched users' experiences of the station area of Bijlmer ArenA and the way that regular visitors of the station, use the area. Nine respondents, who frequently visit the study area, were interviewed during a walk-along through the railway station area of Bijlmer ArenA. The WAI's resulted in in-depth data on their experiences and use. To gain valid and representable insights, people with different purposes in the area were interviewed: inhabitants, people working in the area, day tourists, and event visitors. The different and rich experiences of the different respondents with varying purposes, ages, gender, and socioeconomic backgrounds created valid results for the Bijlmer ArenA station area as a case. However, since environmental experiences and types of uses were specifically researched in the case of Bijlmer ArenA, the results are not externally valid and therefore not applicable to other railway station areas.

The internal validity is relevant since this study searched for a causal relationship between independent variables (elements within the physical, sociocultural, and personal context that influence experiences and the utilization of the station area) and dependent variables (station area experiences and utilization), and the internal validity can be compromised when multiple factors influence the dependent variables (Johnson, 2019). To ensure the internal validity of this research, it was tried to create similar interview circumstances by for example interviewing people only on regular days between 10 am and 5 pm. However, this was quite difficult to maintain due to the respondents' own schedules. Other elements like weather circumstances and the Bijlmer's image and stigma also seemed to influence experiences that were voiced during the WAI. Moreover, there were little predefined questions prepared for the WAI, with the idea that the respondents would walk through the area and comment on anything they felt was important to note. This could exclude certain elements affecting their experiences and utilization of the station area and result in different interview questions, making it difficult to compare interview answers to other respondents and endangering internal validity.

Maintaining ecological validity depends on having a broad focus and reflecting on the fact that individuals act within psychological, social, disciplinary, and cultural contexts (Perry, 2022). While this was tried to best encompass by also studying the sociocultural and personal context, not all risks to the ecological validity are exterminated. The WAI's created an everyday setting in which the respondents usually also move through the station area, but still, the WAI could feel a little unnatural. Since the respondents know they are participating in research, they could now notice and look for things they would normally not notice or care about. Also, it was chosen to carry out the WAI in the native language of the respondents, if possible, which in all but one cases was Dutch. Quotes that were used in this thesis have therefore been translated to English which could undermine the precision of the quotes in the native language. The results of the study could also be influenced by the types of respondents that participated. While it was attempted to create a diverse pool of respondents, not all types of people were represented in the study. People who were less mobile,

younger than 22, or older than 57 were not questioned. Also, respondents that were interviewed, were approached by using the researcher's personal network and snowballing from there on, which could result in a biased group of people with a certain societal positioning, and again excluding people that were a little harder to reach for the researcher. Especially, inhabitants of the area seemed reluctant when being approached for a WAI on the street or in shops. It took some time to find respondents who lived in the area. When people in shops or on the streets were asked to participate in a WAI for university research, they regularly voiced that they did not want to participate. Maybe, if these people were approached differently, and the question was formulated differently, they would have been more inclined to participate. The respondents that did participate were given instructions beforehand on what was expected of them during the WAI. While listening to the audio-files of the interviews when transcribing, it was sometimes noticeable that the researcher did not always maintain a neutral front. Some questions asked upon the respondents' answers were suggestive, whereby the researcher's opinion shimmered through the question, which is not desirable for the validity of the research since it could stir respondents in a certain direction they perhaps did not choose themselves. It was stated beforehand that this part of the research methods was going to be challenging for a first-time ethnographer. In future research, there will be paid extra attention to not voicing one's own experience and subjectivity to the respondents.

The respondents themselves have chosen the research area around the station by deciding which route was followed during the WAI. This did therefore exclude some parts of the station area as the research region. The south side of the railway station area including the bus station of Bijlmer ArenA was therefore not a part of the research area in this study, but they are very relevant when thinking about the future development of the station area.

Despite the criticized validities of this study, it can be stated that the research is valid for the case study area around railway station Bijlmer ArenA. Most of the results seem to align with the results of previous research on the elements shaping environmental experiences and the use of railway station areas. Some conventional ideas concerning the operating of barriers in urban areas and the municipal desire for unbarricaded connection between places were challenged. The outcomes of this study can be used by many parties like municipalities, urban planners, NS, and owners of amenities in the area when they think about the possible improvement of the area as both a node and a place and the experiences of its users.

6.2 Recommendations

Practical recommendations

Whilst keeping all the interesting dynamics of this research area in mind, a few practical recommendations for the development of the area will be explained. These scenarios focus mainly on the west side of the station as out of the interviews it seems that people are generally satisfied with the way that the east is designed and used.

- *Integration scenario:* Breaking the perceived barrier between the east and the west side by turning the west side of the station into a neighborhood as well while keeping the present amenities but adding all the amenities that a neighborhood also requires (houses, stores for everyday shopping, a cozy pub, and places to work). This type of development would add to the municipalities development goals of creating a station area around Bijlmer ArenA that is complete and connected. The area will become livelier at all times of the day since it is now

also a place of residence and everyday activities. By using smart architectural and design measures to lessen the non-human scale feel of the place while still being able to accommodate large visitor densities, the area will become a more pleasant place for all kinds of activities. However, a more radical option is one challenging the conventional wisdom that advocates for seamless connectivity:

- *Distinct character scenario:* Maintaining the invisible barrier, or perhaps even creating a physical one, and giving the west side of the station a festival-like character, which makes the area feel like a lively festival terrain at all times by adding more colors, temporary design props like flags, flagpoles, artwork, food trucks, and live music on the streets combined with more greenery and places to sit and recreate, which also lessens the feel of the non-human scale of the place. This way, the distinct characters of both sides are amplified and the barrier between the two sides could even be made clearer by adding a physical demarcation between the sides. The demarcation could be made of a see-through material since literature suggests that to enhance experiences, a barrier should not form a visual obstruction between places.

Both scenarios are expected to strengthen the station area as a place and destination in itself, where more people would like to recreate, reside, and interact with others. Also, the station area grants the perfect basis for this type of development since the station as a node makes the area a very well accessible place by public transit.

Future research recommendations

To gain even more insights into station area experiences at the Bijlmer ArenA station area by its vastly diverse visitors, further research is necessary. Further research could be done by deeply diving into one of the physical, sociocultural, or personal contexts. This research has resulted in a more exploratory image of its user's experiences and utilizations, but this could be deepened by focusing on just one of the contexts. Also, the WAI's were held on 'regular' days, but many respondents seemed to memorize their different experiences on days of events or at night when especially the west side of the station area is completely crowded or completely abandoned. It would be interesting to do research and learn more about how experiences and uses of the station change in the evenings and on these non-regular days with soccer matches and concerts in the area. Also, if future research was done with a larger number of different respondents, even more patterns could be found in the contrasting experiences that are significant and could represent the whole population or even create indications for other railway station areas as well.

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Appendix

1 Station Amsterdam Bijlmer ArenaA experience measurements by NS

Station Amsterdam Bijlmer Arena - meting 2023-Q1



Station: Amsterdam Bijlmer Arena	Thema - Aspect (Via +)	Beoordeling	Voorlaatste Beoord.	Voortschrijdend	Voortschrijdend Benchmark
<input type="radio"/> Zoeken					
<input type="radio"/> Aalten	<input type="checkbox"/> Algemeen Oordeel Station	7,02	6,91	7,10	7,24
<input type="radio"/> Abcoude	Uw algemeen oordeel over dit station	7,02	6,91	7,10	7,24
<input type="radio"/> Akkum	<input type="checkbox"/> Algemeen Oordeel Perron	7,01	6,93	7,08	7,15
<input type="radio"/> Alkmaar	Uw algemeen oordeel over het perron waar u wacht of heeft gewacht	7,01	6,93	7,08	7,15
<input type="radio"/> Alkmaar Noord	<input type="checkbox"/> Steervol	6,39	6,47	6,54	6,65
<input type="radio"/> Almelo	Ik ervaar dit station als gezellig	5,69	5,86	5,81	6,05
<input type="radio"/> Almelo de Riet	Ik ervaar dit station als levendig	6,92	6,92	7,02	6,88
<input type="radio"/> Almere Buiten	Ik ervaar een ontspannen sfeer op dit station	6,56	6,65	6,78	7,02
<input type="radio"/> Almere Centrum	<input type="checkbox"/> Uitnodigend	7,22	7,08	7,14	7,02
<input type="radio"/> Almere Muziekwijk	Ik ben tevreden over het totale winkel aanbod op dit station	7,39	7,08	7,23	6,88
	Ik vind het personeel op dit station klantvriendelijk	7,51	7,48	7,53	7,75
	Ik voel me uitgenodigd om op dit station iets te kopen	6,55	6,59	6,53	6,30
	Ik weet op dit station waar ik informatie kan inhouden	7,50	7,43	7,48	7,35
Legenda	<input type="checkbox"/> Wachtdiabeleving	6,09	5,94	6,41	6,25
Beoordeling:	Ik ervaar het wachten op dit station als comfortabel	6,18	6,26	6,54	6,30
2023-Q1	Ik ervaar voldoende beschutting tegen wind, regen en kou op het perron	5,73	5,43	6,24	6,24
	Ik kan mijn tijd op dit station aangevaan besteden	6,36	6,21	6,42	6,18
	<input type="checkbox"/> Doorstroming	7,76	7,64	7,87	7,69
	Ik ervaar dat er genoeg ruimte is op dit perron	7,84	7,66	7,91	7,62
	Ik kan op dit station ongehinderd de trein bereiken	7,69	7,62	7,84	7,77
	<input type="checkbox"/> Oriëntatie	7,76	7,47	7,75	7,71
	Ik heb een goed overzicht op dit station	7,69	7,56	7,73	7,69
	Ik vind de borden die de weg aangeven (bewegwijzering) op dit station duidelijk	7,84	7,32	7,74	7,68
	<input type="checkbox"/> Schoon	7,76	7,54	7,81	7,77
	Ik ervaar dit station als schoon	6,04	6,19	6,16	6,89
	Ik vind het station fris ruiken	6,36	6,33	6,27	6,75
	<input type="checkbox"/> Veilig	6,86	7,16	6,98	7,26
	Ik ervaar de verlichting op dit station als prettig	7,43	7,51	7,43	7,46
	Ik voel me veilig op dit station s avonds na 19:00 uur	5,97	6,53	6,36	6,99
	<input type="checkbox"/> Overig	7,36	7,20	7,38	7,54
	Ik ervaar de directe omgeving van dit station als prettig	6,80	6,76	6,91	7,28
	Ik kan makkelijk bij het station komen	8,41	8,25	8,37	8,30
	Ik vind dat het station er verzorgd uitziet	6,86	6,62	6,85	7,05

Voortschrijdend Benchmark:

Gewogen gemiddelde van alle stations van type Mega tussen 2022-Q2 en 2023-Q1



Toon alle metingen



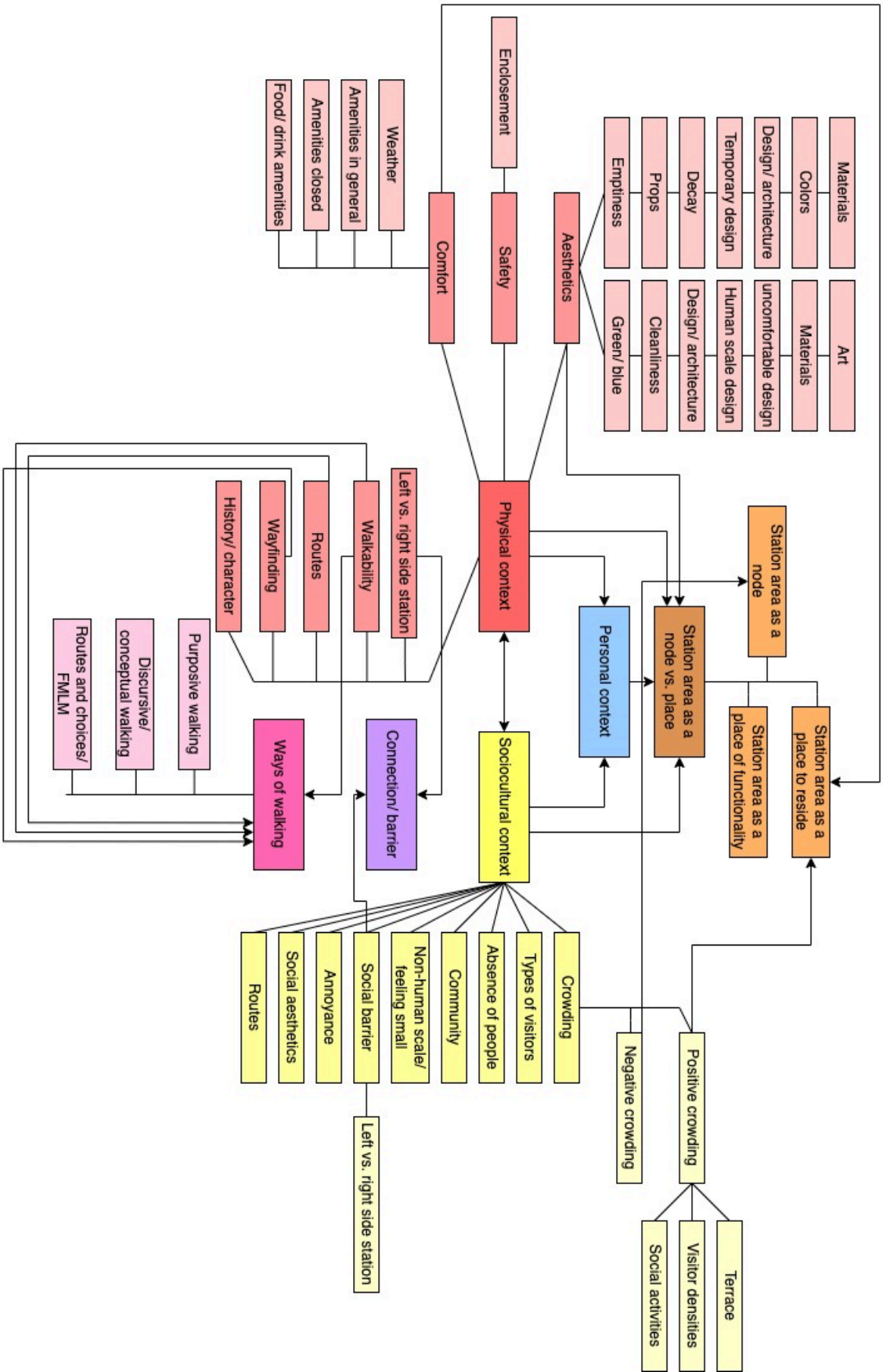
Toon open antwoorden



2 Observation topic list

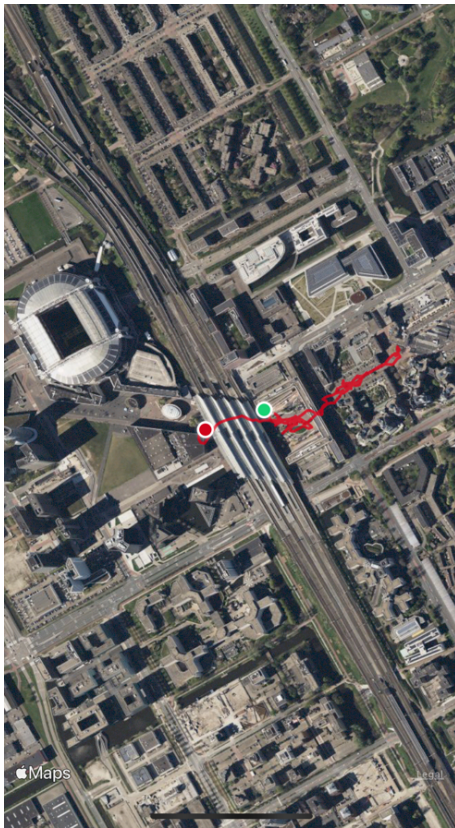
Physical setting	
Movements and stops	
Type of visitor	
Actions	
Tastes and smells	
Atmosphere	

3 Code tree

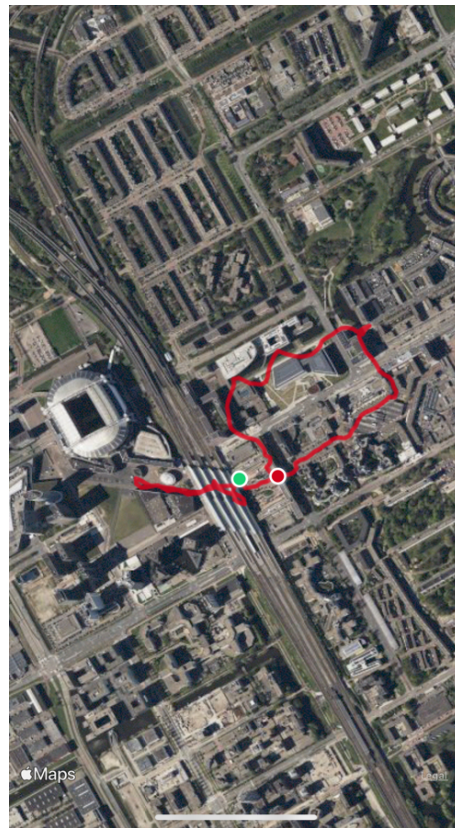


4 Routes of the walk along interviews

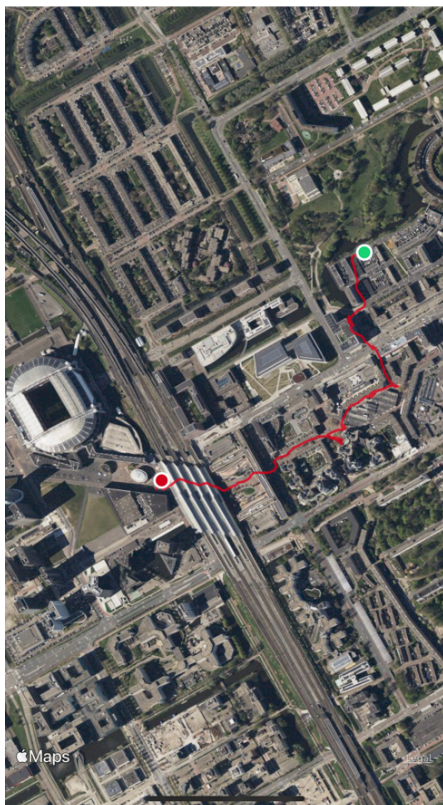
Domitilla – June 4th 11:00



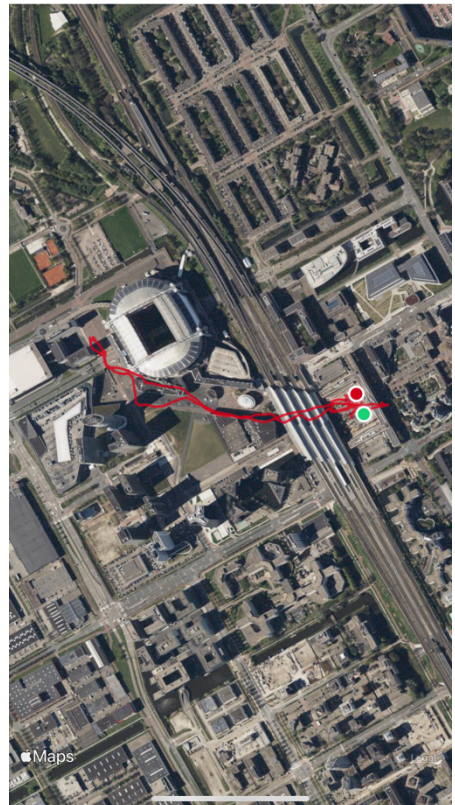
Maurice – June 11th 11:00



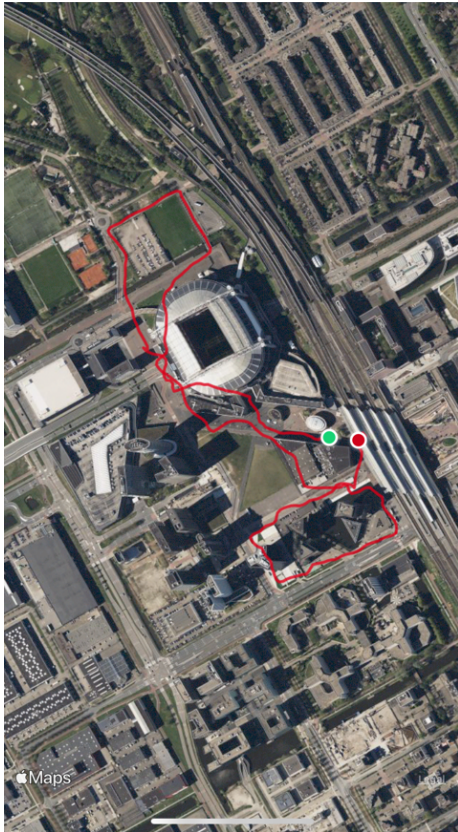
Morena – May 12th 13:30



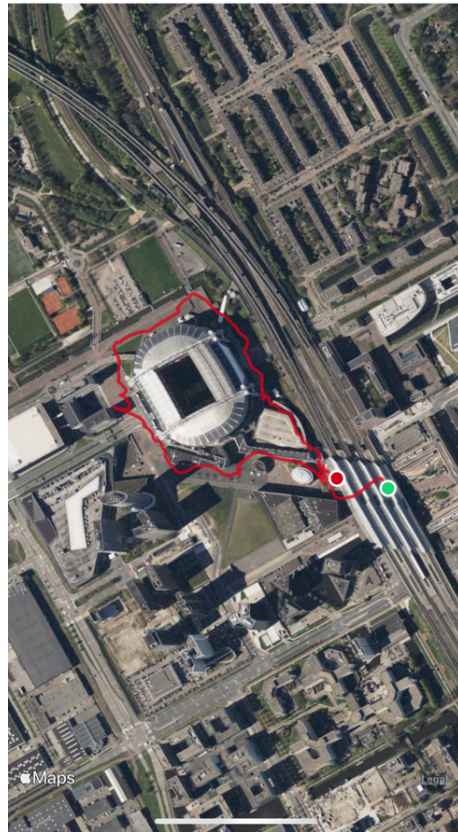
Ed – May 12th 15:00



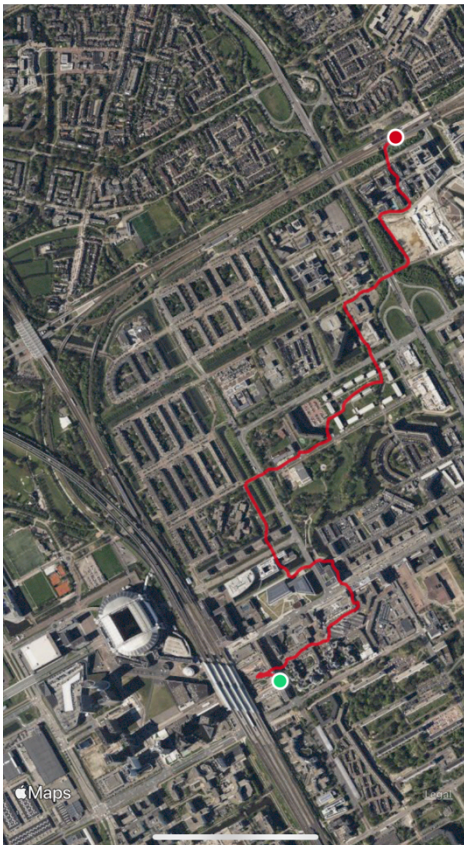
Yannick & Liselot – May 20th 11:00



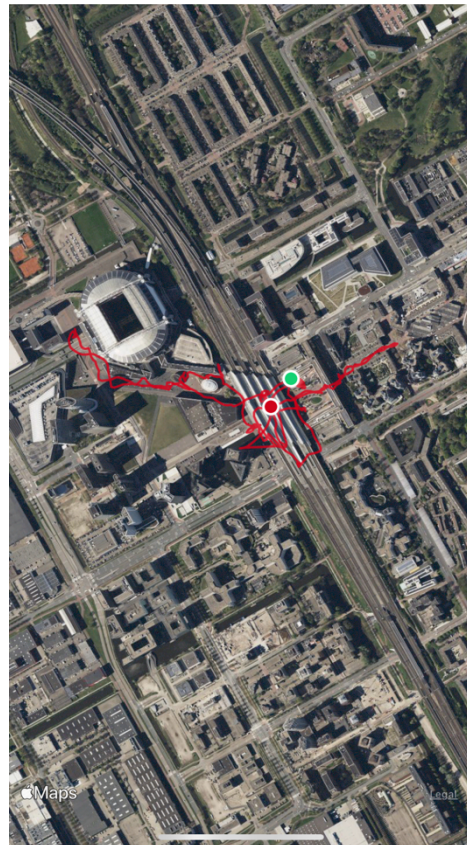
Femke – June 1th 12:30



Marie – July 6th 12:00



Jeroen – June 14th 17:00



5 Impression of the station area Bijlmer ArenA

Impression east side station:



Impression west side station:



Made by respondent: Ed



Made by respondent: Jeroen



Made by respondent: Marie



Made by respondent: Maurice



Made by respondent: Liselot



Made by respondent: Ed

6 Additional information

The interview transcript, transcript analysis, recorded interviews, and all pictures taken by the respondents can be sent on request.