



# Nightfall at URBAN13

Women's experiences under the bridge

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# ABSTRACT

URBAN13 is a public space under the Bispeengbuen bridge in Copenhagen, Denmark. The Municipality and urban developers have taken strident steps to transform the once desolate space once known for crime into a flourishing, safe and inclusive community space. Yet for many, namely women, the space is still perceived as being unsafe at night.

This thesis examines how women experience the public space of URBAN13 at night, by uncovering and exploring elements of the material and immaterial that affect their perception of safety. Conceptual themes surfaced with engagement at the site through autoethnographic research, and additionally, 10 women were recruited as participants. They were asked to video-record their experience walking alone through the space at night, followed by an on-site, walk-along interview with the researcher.

It is argued that the perception of safety is affected by material and immaterial cues found in the public environment. Starting with an absence of life at night, there is a felt risk stemming from null natural surveillance and eerie atmosphere, and additionally, associating the emptiness to environments of which women have been instructed to avoid at night.

Regarding the visual aesthetics and maintenance of the underpass, almost all participants perceived a negative affordance from the presence of trash wherein it helped to create a negative atmosphere through physical incivility associations. However, for one participant, the grimmy aesthetic gives both a sensory and social affordance for her to want to smoke and drink. Here, the importance of experiential history gets uncovered, wherein previous positive practice at similar spaces instilled a positive perception to URBAN13.

Through the concepts of concealment and entrapment, it is argued that spaces that offer hiding potentiality for would-be-offenders, such as the bin and container zone and darker areas, and the "alleyway"-like placement of containers affording a feeling of entrapment, are felt as uncomfortable and unsafe. Additionally, the sound of traffic creates a wall of noise which too affords a sense of entrapment. Resultantly, some participants state an unwillingness and uncomfot to venture to, or stay long in the aforementioned spaces, seeing as they could potentiate a threatening encounter, and additionally, the distance from a busier street entails that calls for help would be left unheard.

However, not all participants experience a low perception of social safety in the space. It is argued that personal history plays a large part in dictating what is safe or unsafe. In fact, in one instance, the high perception of safety becomes a counterbalance to what one participant would like to use the space for.

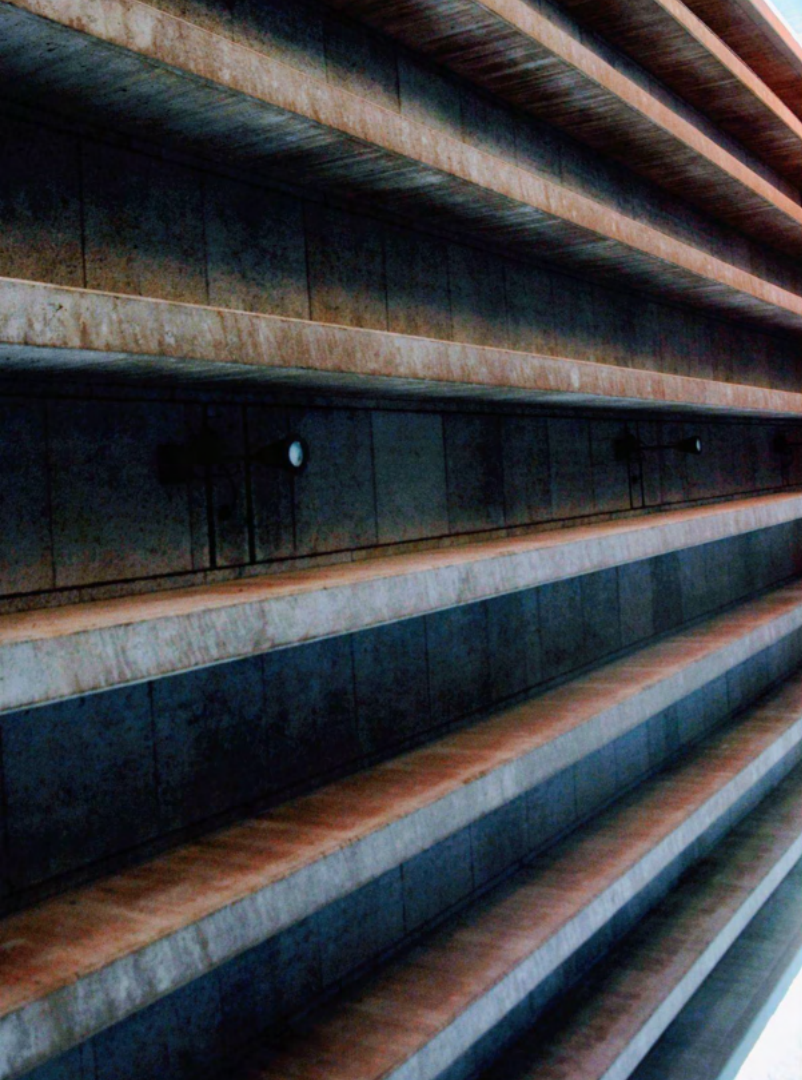
A further point argued is in regard to lighting. Many participants experience a spotlight effect under the main HID lighting that fills the space, perceiving themselves as being too visible. However, for one, comfort is found in its wayfinding-like and long visual range functional affordances. Additionally, the atmospheric, sensory, and emotional affordances of different lighting and lighting effects are explored through the flickering of a faulty bulb and fairy lights. The flickering creates a spooky, horror-film-like atmosphere, affecting an uncomfortable, felt-bodily experience and associative, emotional and anticipatory affordances. Conversely, the presence of fairy lights helps to infuse a positive and welcoming festive meaning to the space, holding symbolic value wherein experiential history connects them to festivals and late-night summer hangouts.

This thesis contributes to wider academic discussions on gendered bodies in public spaces, the design of public space and how both the material and immaterial environmental cues can affect a women's perception of safety.

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# INTRODUCTION

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Lying under the Bispeengbuen motorway bridge in Copenhagen, Denmark is a 4,000m<sup>2</sup> space currently being enlivened by efforts from the social entrepreneurship organisation, URBAN13. Since 2019, they have taken on the task to turn the once desolate underpass known for criminal activity into a flourishing, multifunctional and inclusive social space. Despite their continued, commendable efforts, a problem remains. The space is still perceived by many in the public as being unsafe, predominantly at night. For women, this perception of unsafety is heightened, also reflecting a known gendered difference regarding the use and experience of public spaces in the Danish capital.

Since 2010, the Municipality of Copenhagen has been creating an Urban Life Report (Bylivsregnskabet) based on surveys of people's activities in the city's public spaces (Københavns Kommune, n.d). The most recent report published in 2019 highlighted some gendered differences surrounding activity within the public realm, especially at night. 24% of women responded that they do not like being outside when it is dark (compared to 10% men), that they fear crime (25% women, 18% men) or that they prefer public spaces where there are a lot of people around (61% women, 42% men). 42% of men believe there is adequate street lighting in their neighbourhood, whereas for women, the percentage is lower (34%) (Københavns Kommune, 2019).



Although the Urban Life Report is based on a survey, there has not been any mapping or evaluation on how the public use, perceive and experience different neighbourhoods or public spaces. In 2011, a report by the Danish Ministry of Housing, Urban and Rural Affairs highlighted that only 28% of people who actively use the public spaces in Copenhagen are women, despite there being an equal distribution of women and men walking through or past the public spaces (Ministry of Housing, Urban and Rural Affairs, 2011). For a city branding itself on its diversity, high quality of public life and liveability for all, the aforementioned reports highlight the gendered contradiction in Copenhagen's public spaces. Both reports accentuate the importance and relevance of gaining more knowledge on gendered experiences in the city, especially surrounding the sense of safety and night time experiences of women.

In this thesis, I therefore examine how women experience the public space of URBAN13 at night, by uncovering and exploring elements of the material and immaterial that affect their perception of safety. Conceptual themes surfaced with engagement at the site through autoethnographic research, but additionally, 10 women were recruited as participants. They were asked to video-record their experience walking alone through the space at night, followed by an on-site, walk-along interview with the researcher.

During this thesis, the world was experiencing an unusual situation caused by the outbreak of the COVID-19 virus, and as a result of government mandated restrictions to help ease the spread, many indoor public spaces were brought to a close. Resultantly, the importance of public urban spaces for populations living within metropolitan areas, including the city of Copenhagen, became ever more pertinent.

The qualitative findings from this thesis could help guide professionals such as the administration behind URBAN13, urbanists, city developers, municipalities, architects and lighting designers to reckon with their future designs or help to redesign current works, and additionally, encourage a women-centric design approach.

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# 1.1 CONTEXT OF THE RESEARCH

In this section, the context of research will be explained. Firstly, the importance of studying night-time experience will be introduced, followed by an overview of the notion of the perception of safety. The case study - the area under the Bispeengbuen bridge, referred to in this thesis as URBAN13 - will be highlighted, as well as some of the organisation's projects currently being realised.

## *The 24hr city*

The United Nations estimates that 5 billion people will be dwelling in urban areas by the year 2030 (UNPF, 2016). A relational element to urbanisation is that it creates a change in the way people experience the city throughout all times of the day and night. Nowadays, more social and economic life are occurring once the sun has set, affecting the very life cycle of a city. Arup (2015) understands it as a phenomenon affecting the way people experience and live their urban life, naming it the "24hs city". This recent phenomenon highlights the requisite for a logical form of organisation to help the economic and social

life aspects within cities at night (Eymeri, n.d.). The urban sphere at night is commonly perceived as less safe (Hardley 2019; Hardley & Richardson 2019), and this perception can differ depending on an individual's gender, sex, age and/or ethnicity, amongst other factors. Therefore, there is a growing impetus for urban spaces to be studied at night, helping to uncover how different individuals experience the urban realm once the sun has set. Results are key to develop an understanding of the relations between spatial configurations, planning, design and experience (Ebbensgaard, 2015. p. 127).

## *The gendered public space*

Public spaces have an integral role in a democratic society and public life. They function as places where different groups in society can meet, socialise and vocalise concerns, and accordingly, can act as a political platform. In a democratic city, the right to use public spaces should, in theory, be equal to the population irrespective of sex, ethnicity, class, abilities, etc, and the possibilities to influence how the city is shaped, designed and structured should also be openly exercised by all (Hudson & Rönnblom, 2008. p. 74). Consequently, the outcome would then entail equal rights in public spaces, that different needs are

being met and a sense of inclusion to the city and urban life is felt by all.

Swedish geography and gender researchers Christine Hudson and Malin Rönblom (2008) state that, in practice, this theoretical notion of a democratic city is not being realised. Resultantly, certain minorities in society are excluded from the city and its public spaces, wherein their needs are not being adequately heard (ibid. pp. 74-75). For years, feminist geographers have proclaimed that "city space has been gendered in a way that tends to exclude women from the public space realm, or to include them only in highly scripted and delimited roles" (Ruddick, 1996. p. 135). Resultantly, being in the public sphere is experienced differently by women and men. In regards to spatial mobility, it has been argued that men are less controlled than women (Thomas, 2005), due to heteropatriarchy influencing the roles for each gender, also disciplining bodies so that young women may act appropriately in public spaces (Zárte, 2014). For example, as a consequence brought on from the sexualisation of a woman's body by the male gaze (Hyams, 2003).

In literature from the 18th century, the figure of the aimless stroller, the observer within the city, was that of a man. Philosophers Goethe and Rousseau came to define this as the concept of 'flaneur'. Deborah Nord (1995) very aptly described

the 'flaneur' as a traditionally middle class, masculine person of leisure whose privileged position in society shielded him from the curiosity and questioning of the crowd. He was the subject, not an object, a spectator rather than a spectacle. Conversely, a woman could not share such a privilege to aimlessly walk the streets with equal freedom. She was often under the gaze, being the object, a spectacle to be beheld by the watchful eyes of men.

Gender is not a biological or cognitive category but more of a social construct, and for this thesis, it is said to be a culturally defined attribute that exists and changes through time and space. In relation to gender, culture in this sense is material and malleable. It can however be argued that some attributes remain universal. In his book *Philosophy of Fear*, Lars Svendsen (2008) stipulates, "In a culture that in many ways is characterized by social integrations, fear is something we all share, a unifying perspective on existence. Fear has become a basic characteristic of our entire existence." Fear is felt universally, however, there exists a fear 'specific' to women. It must also be noted that fear is also experienced differently amongst women (Wattis et al., 2011; Pain, 2001) wherein class, ethnicity, age, sexuality, (dis)ability and other power structures may influence and determine women's experiences in the public realm.

As highlighted by Pain (2001, p. 903), "feminists have viewed women's higher fear of crime as a manifestation of gender oppression and a damaging form of control of women's lives, reproducing traditional notions about women's 'place' in society". An overwhelming number of feminist geographers have declared the perception of fear as being one of the main seemingly relevant issues for determining the gendered experience of public space. The study of geographies of fear within feminist geography has predominantly focused on examining the relationship between women's perceptions and uses of public space and fear. Geographer Tovi Fenster (2005) describes that women perceive public spaces as "male hostile areas". These perceived male controlled spaces can cause women to feel a sense of exclusion from the public realm because of concerns surrounding safety and fear. The sense of fear can turn public spaces into spaces of avoidance at certain times in a day, wherein women are said to avoid using some urban areas at night.

Multiple studies have declared that fear is marked by gender and determines one's experience of the city and freedom of movement (Valentine, 1992, Ruddick, 1996, Koskela, 1997, Pain, 2001). In reality, however, a gender-fear paradox exists: although women's fear of (predominantly sexual) assault derives from strangers within the public realm, data shows that victimisation is

notably higher at home with partners or acquaintances (Vansetti Miranda & van Nes, 2020, p. 3). Although women are less likely to be victims of crime, there is a higher likelihood for them to perceive their environment as unsafe (ibid.).

As previously shown, many earlier feminist writings have tended to focus on the negative aspects of women's experiences in public spaces. Pain (2001), conversely, emphasises that the urban realm has a plethora of meanings to different people and that "the city is also frequently a place of excitement and opportunity for women, not just a place to be feared" (Pain, 2001, p. 904). Different notions of femininity are intertwined with different constructions of the fear of crime, where the emphasis on fear and its negative consequences for women have reproduced notions about female weakness, embedded both in our society, the media and public spaces. Despite these reproduced norms and the idea of women's fear, the city is increasingly a site of risk-taking and adventure for younger women (Pain, 2001, pp. 904-905).

#### *Actual social safety and perceived social safety:*

Social safety can be defined as the protection or semblance of being protected against danger caused by or threatened to be

caused by human actions within the public sphere (Boomsma & Steg, 2014. p. 194-195). Social safety is delineated into two categories: actual social safety and perceived social safety. Actual social safety is representative of actual crime rates, such as statistics showing armed robberies, muggings or physical attacks. Actual social safety may not always result in perceived social safety, which is that people may not feel safe in public despite no real dangers being present (ibid. p. 195). Perceived social safety shares similarities with perceived personal danger, perceived safety or risk and fear of crime, and may be reflective of cognitive and affective responses to risks (ibid.). In this thesis, perceived social safety will be defined as a more general cognitive response - the perception of safety.

### *Gender and the perception of safety*

A paramount factor that influences the perception of safety is gender. For example, women at university are on average three times as fearful of being a victim of sexual violence at night on campus compared with men (Fisher & Sloan, 2003). This may be the outcome of a fear of sexual violence resulting from images portrayed by the media, firsthand experiences, and/or warnings or experiential histories from other people (Pain, 2000; Valentine, 1989). A low perceived social safety can have a direct influence

on behaviour. Studies by Keane (1998) and Valentine (1989) have shown that women tend to avoid certain situations and places that they perceive as unsafe. Resultantly, this may affect their ability to participate in activity such as walking in the public sphere at night (Boomsma & Steg, 2014. p. 195). However, continued practice in a space can transform one's opinion and feeling (Cresswell, 2009), wherein reference memory can transform the unknown=unsafe rhetoric into pleasant placemaking. In relation to lighting, Blöbaum and Hunecke's (2005) study found gender to be one of the strongest predictors of perceived social safety, with women generally perceiving lower levels of social safety in the same lighting situation compared with men. To sum up, the potentiality of sexual violence leads to a lowered perception of safety in women compared to their male counterparts, which in turn, can affect women's behaviour in the public sphere.

### *The public space and perceived social safety*

A subsequent factor that can influence the perception of safety for women is the way the built environment is designed. How the public space is framed can create avenues for potentially frightening situations, reducing the perception of social safety even when a crime is neither in progress nor near (Boomsma & 12

Steg, 2014). Factors that have been shown to influence perceived social safety include the presence of other people in the space, lack of maintenance of the space, level of lighting and elements of concealment and entrapment.

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## 1.1.1 THE CASE: URBAN13/BISPEENGBUEN

### *Trolling under the bridge*

In a generalised perception, bridges and underpasses are gritty spaces where darkness can prevail. Norse legend depicted them as the dwellings of trolls: cranky creatures that haunt the undersides of bridges. Outside of the realm of legends, a more realistic association has been made between bridges and vagabonds, who are likened to modern day trolls that dwell within the concrete caves.

Public perception of the underpass Bispeengbuen in Copenhagen, Denmark, shared a similar negative connotation - being an archetypal, functionalist, infrastructural artefact known for its sketchy environment and crime dealings. At least it was the case, until the Municipalities of Frederiksberg and Copenhagen, and other actors, decided to try and intervene.

## *The history of under the bridge*

On the border between Nørrebro and Frederiksberg in Copenhagen, Denmark lies a colossal 6-lane motorway bridge, Bispeengbuen. The bridge was built between 1970 and 1972 as a result of modernist urban planning to provide better conditions and efficient access to and from the city centre by automobile. To maintain a link between the two neighbourhoods, Bispeengbuen was raised to grant access for people to walk and cycle underneath. For many years, Bispeengbuen and its immediate surroundings have been widely debated urban areas in the Danish capital in regard to state and local policies, urban planning, public opinion, and because its position creates a frontier between Lundtoftegade, a social housing area that was once on the highly contested Danish ghetto list, and Bispeengen, an area known for flat ownership. Frederiksberg and the Municipality of Copenhagen were left with a 4,000m<sup>2</sup> space underneath the motorway, which became known for crime and a place deemed unsafe by the general public, regarding levels of crime, darkness and eerie hauntedness cultured from a lack of regular use (NIRAS, 2011).

Frederiksberg Municipality described the vast space underneath Bispeengbuen as a area that could be experienced as dually a mental and physical barrier and a 'no man's land', and thus

sought to redevelop the area into a free space flourishing with opportunity for creativity and new ideas to be expressed (Frederiksberg Kommune, 2013). In an attempt to alter the existing barriers within the 'no man's land', the Municipality's board of directors adopted a master plan in 2013, followed by an area renewal project to develop the space between 2014-2018. The renewal project touched on themes such as multifunctional and social sustainable development, events and branding, as well as the testing of ideas and projects. The fundamental goal being that the different themes would provide real-world experiences of possible solutions for the space, and additionally, to create opportunities to test solutions for the future use of the area (Frederiksberg Kommune, 2013. p. 59).



Photo of Bispeengbuen in 1972 (Copenhagen Museum, n.d)

Amidst the area renewal development process, a plethora of actors were involved and events were held that helped in transforming the space and its identity. These included a collaboration with the architectural firm, Platan, and musical festival events such as Carpark Festival and Bas Under Buen. In the autumn of 2017, an open call for tender was put out by Frederiksberg and the Municipality of Copenhagen, who invited actors to create a 5-year project for the public urban space underneath Bispeengbuen (URBAN13 et al., 2019). The self-identified Do-It-Yourself organisation URBAN13 won the vote with their community-focused proposal filled with social entrepreneurship endeavours and community strengthening initiatives, and were granted permission to redevelop the temporary space between 2018-2023.

Since occupying Bispeengbuen from 2019, URBAN13's efforts have helped to further transform the residual space into a temporary, multi-functional, urban and cultural gathering place with a plethora of staying affordances for neighbours and visitors, such as sports courts, a social-run diner, as well as coworking containers for entrepreneurs to utilise. The aim has been to create an inclusive community space for the area's residents which can aid in bridging the disconnect between the two city districts on each side of Bispeengbuen, and simultaneously give something back to the city of Copenhagen

(ibid.) As stated by URBAN13 (n.d),

*"URBAN13 will work for a city that puts the meeting between people on the agenda. Through an engaging local effort, daily life under the Arch and a set of accessible frameworks, the project will infuse communities across backgrounds. It is in the meeting with our neighbors that cohesion is strengthened and prejudices are broken down"*

URBAN13 have won the right of use of the area until September 2023, but speculate the contract will be extended due to the nature of politics surrounding large scale infrastructural and mobility changes. Money has already been allocated by the Municipality of Copenhagen to conduct pre-studies into the financing, design, contracts and traffic adjustments surrounding the potential removal or partial removal of the bridge. However, the political negotiations surrounding the infrastructure plans that will determine the outcome are still ongoing as of May 11, 2021 (Carlsen Mazor, 2021).

Meanwhile, in the limbo awaiting the fate of the bridge, the urban space beneath, which for the purpose of this thesis will be identified as URBAN13, is brimming with opportunity for further urban intervention. The expansive space can be seen as a canvas, ripe for further renewal and full of opportunity to help 15

foster a better community cohesion between the diverse demographics in the area. And for the administration behind URBAN13, they identify it as a continued opportunity to make the male-dominated space more inclusive for women.



*A male-dominated space*

A public life survey was carried out by COurban, a Copenhagen based design collective based in the co-shared container city of URBAN13, in the spring of 2020. The survey was based on Jan Gehl's public life survey, which is a widely recognised method to examine public urban life and aids to uncover how a space functions and is used and experienced by different groups and individuals within society.

The public life survey is based on three methods: a general registration map, a movement pattern, and a staying activities study. The public life survey highlighted that women only constitute 15% of the users that spend time and occupy the space of URBAN13, despite the number of women and men passing through the space being almost equal (COurban et al., 2020). In order to make the space more inclusive for women, the team behind URBAN13, along with COurban and AIM - two urban developers also sharing the coworking on-site container - collaborated to create and gain funding for a gender-focused urban project, Buens Torv, that aims to address the gender imbalance within the space.

### *Buens Torv pilot project*

The overarching goal of the project is to increase the number of women using the urban space under Bispeengbuen as a natural part of their daily lives, rather than solely in connection with events (ibid.). The project will entail the completion of three physical measures that have a special focus on reducing some of the barriers that exist today in the URBAN13 space. The focus is to generate a higher level of safety, greenery, small intimate

spaces and a heightened spatial connection between the inside and outside (ibid.). The first implementation is a greenhouse, the second is wayfinding, and the third an art passage.

The main target group for the project is women and girls aged 13-25 years. Local girls and women with different ethnic backgrounds were involved through a participatory design process to help design the wayfinding, with an aim of increasing the sense of safety in the public space.

Although this pilot project seeks to make the space more inclusive for women, the general findings were predominantly based on a survey and thus do not uncover the deeper, multisensorial and embodied individual experience of the space. Furthermore, with the focus group being young women aged 13-25 years, women outside of this age bracket were not included in the design process. Therefore, there is a gap of understanding regarding how this demographic perceives and experiences the URBAN13 space.



## 1.2 RESEARCH QUESTION

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In this thesis, I wish to investigate how women experience the activity-driven space of URBAN13 when the sun comes to rest at night. Their embodied experience of the space will be uncovered and analysed, with a focus on the perception of safety. This thesis therefore engages with the following research question:

*How is perceived social safety experienced in the space of URBAN13 by women at night?*

By uncovering women's nighttime experience at URBAN13, I wish to highlight the spatial-material and immaterial elements that are problematic for enabling the space to be used more inclusively.

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## 1.3 PAPER OUTLINE

In the first chapter, the introduction and context of the research are presented. Based on these, the research question is expressed. The second chapter consists of the state of the art, focusing on what already exists in the field of the perception of safety. The third chapter describes the theoretical framework used as the analytical glasses for understanding and examining the case study. The fourth chapter contains the methodology, consisting of the research approach and methods carried out in this ethnographic research and also calls attention to the study limitations and areas for further research. In the fifth chapter, the research question is answered through the various analytical points that surfaced during the study. Lastly, the sixth chapter provides the conclusion that sums up the main points found within the thesis related to the research question.



/2

STATE OF THE ART

Several quantitative studies have examined the influence of physical characteristics on perceived safety. Starting with the influence of lighting levels and other physical characteristics in space, Loewen et al. (1993) highlighted that lighting, low concealment (an open space) and spaces to seek refuge were said to be important factors influencing a perception of safety. Boomsa and Steg (2012) used virtual representations to explore the influence of entrapment (ability to escape) and gender on perceived social safety with varying levels of lighting, following evidence from Blöbaum and Hunecke (2005) who showed that entrapment has greater impact on behavior and is a stronger predictor of perceived social safety. More recently, Lis et al. (2019) used a photograph rating survey to examine women's perceived nighttime danger and walking preference in parks in relation to areas of concealment. Through virtual urban design interventions, Navarrete-Hernandez et al. (2021) explored gendered differences in the perception of safety in public space. Gau et al. (2014) studied social mechanisms on the disorder–fear relationship related to the incivilities thesis, finding a strong connection between disorder and fear, and additionally, an impact on social cohesion and social control.

Qualitatively, Koskela (1999) and Sandberg and Tollefsen (2010) explored how previous violent experiences affect behaviour and fear in public spaces in Finland and Sweden respectively,

focusing on narrative and personal recounts. Alvi et al. (2001) studied women's fear of crime in public housing, and Wattis et al. (2011) uncovered, via off-site interviews, female students' perceptions of crime and safety in a post-industrial landscape at night. Furthermore, Dastgheib (2018) examined the role of lighting in women's perception of safety in in-between spaces of residential areas.

As the aforementioned studies show, much has already been done to examine the perception of safety regarding the physical characteristics of a place. More often than not, visuals or visual representations are used to elicit quantitative and/or qualitative data from participants, or hearing narratives and experiences in the public realm related to fear and perception of safety. This therefore highlights a scarcity in research for the embodied, in situ experiences of women regarding a situated and site-specific place. Furthermore, there exists a lack of focus on immaterial cues that also affect the perception of safety, namely atmosphere. Resultantly, this thesis has an overarching focus on the embodied, situated experience of women, in real-time at night, exploring both the material and immaterial elements of the urban sphere that affect perception of safety.



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## THEORETICAL FRAMEWORK

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## 3.1 PHILOSOPHY OF SCIENCE LENS

In the following thesis, phenomenology will be used as a main theoretical framework in order to elaborate on the experience of perceived safety by women in the URBAN13 space at night.

As a theoretical framework, phenomenology explores how we perceive, experience, and behave in the world. German philosopher Edmund Husserl (1859-1938), who established the foundations of the school of phenomenology, described that "human beings experience the external world as objects of consciousness" (Emerling, 2005. p. 214). It depicts that human understanding of the world materialises from our lived experience. Resultantly, the connection between the surrounding world and our consciousness is therefore essential.

Maurice Merleau-Ponty furthered Husserl's work by focusing on the concept of embodiment and perception. According to Merleau-Ponty (1962), phenomenology intends to study social phenomena as they appear before any reflection of it, for example, by offering commentary on space as it is being experienced. Human experience thus originates from the sensing, perceiving body. Meaning is created through our everyday human and social engagements entwined with the environment and its material and

immaterial affordances (Cresswell, 2009). Subjectivity as human beings is nourished by the physical body, and Merleau-Ponty concludes that the body's influence is paramount for the purpose of gaining knowledge surrounding how humans perceive the world. Through the phenomenological lens, humans are connected to the world via the body, thus rejecting the Cartesian philosophy where body and mind appear to be disconnected (Emerling, 2005. p. 215).

In regard to the urban setting, perception is mediated by dialogical relations amongst people and objects. We are able to 'see' through an interplay of all our senses, wherein it becomes "an activity that enunciates and gives shape to urban spaces; one that is not localized but that 'spatializes'" (Pinder, 2005. Cited in Degen et al. 2008. p. 12). It can thus be argued that urban spaces are experienced through a broad variety of visual modes which are entwined with other diverse sensory registers (Degen et al. 2008. p. 12).

Phenomenology, as a practice-oriented approach, aims to understand rather than explain social phenomena. It gives precedence to people's experiences elicited in their own words and descriptions, of which will be the case with this thesis.

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## 3.2 AFFORDANCE THEORY

Cognitive psychologist James Gibson developed affordance theory in the 1960s, stating that, "The affordances of the environment are what it offers the animal, what it provides or furnishes, either for good or ill" (Gibson, 1979. Cited in Chemero, 2003. p. 182). For example, light affords us the illumination to visualise our surroundings and thus makes it possible to navigate spaces at night. Beyond these 'first-tier' affordances, there are subsequent meanings and values. For instance, dimmed lighting can make people feel calm and relaxed in the home setting, whereas in an empty public space, it may help instill a feeling of unease.

What has been implied is that an affordance is a resource, or a "possibility for action" provided to any individual by an environment, "by the substances, surfaces, objects, and other living creatures that surround the social actor" (Raymond et al., 2017. p. 4). The substances are in reference to the solid or semisolid matter consisting of chemical compositions that are not directly perceivable by our sensory systems. The surfaces, conversely, are what can be directly seen, touched, smelt, heard or tasted. For Gibson, the majority of action is therefore at the surfaces (2014. p. 19) and the sense experiences are transmitted through the air which acts as a medium.

When we perceive the surfaces of the substances with our sensory systems, there also lies the possibility of perceiving the affordances transmitted by the medium of air. It can therefore be said that affordances exist in the space between the subjective and objective environment. Resultantly, "The environment of animals and men is what they perceive" (ibid. p. 11), wherein the perception of the environment creates said environment. According to Gibson, perception means awareness gained by actively seeing, hearing, smelling and touching, as well as moving around.

Furthermore, affordances are the outcome of real-time or direct perception-action processes, in so far that they are dependent on the existence of an individual that has the capabilities to perceive and utilise them (Raymond et al., 2017). Personal and shared experiential history, or familiarity with a place, may be required to perceive some affordances (Vihanninjoki, 2020. p. 1). What this suggests is that the environment does not provide the same affordances for everyone, as the ability to perceive them can vary between individuals.

Affordance theory has its origins in perceptual or ecological psychology, but scholars have applied it to urban design, planning and architecture (Kopljar, 2016). By studying how the

values and meanings of substances in the built environment are perceived and enacted, we can understand their affordances. Affordance theory has thus been applied as a theoretical approach to analyse the relationship between the built environment and users regarding the form and spatial layout of this environment (Alrabadi, 2020. p. 63). Additionally, it grants the connecting of inherent meaningfulness and experiential elements of a space with its spatial, material and immaterial characteristics, and such elements can be categorised into various affordances such as a social, cognitive, physical, sensory or functional affordance (Jenkins, 2008. Cited in Mukherjee, 2017. p. 57).

Affordance theory will be used to highlight the affordances of both the material and immaterial elements found and experienced in URBAN13, analysing how said affordances influence the perception of safety. An immaterial element will now be discussed through the concept of atmosphere.

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## 3.3 ATMOSPHERE

Conjuring up an atmosphere denotes its elusiveness and evanescence, a phenomenon void of borders. According to the German philosopher Gernot Böhme, atmospheres are elements that surround and “fill the space with a certain tone of feeling like a haze” (1993. p. 114). The concept of atmosphere holds no singular meaning, use or succinct definition (Bille et al., 2015), but offers multiple interpretations, from an objective meteorological meaning to more subjective moods. The latter are evoked by the tangible and intangible characteristics of built environments, focusing on the aesthetic and emotional qualities of atmosphere. In this sense, atmospheres are affective, producing bodily and emotive responses and feeling states. This thesis is not focused on the meteorological conditions of atmosphere, but extends its focus to atmosphere as felt qualities of a space that can affect emotions and mood.

Peter Zumthor, a Swiss architect notable for his work on atmosphere, suggests that “We perceive atmosphere through our emotional sensibility [...] We are capable of immediate appreciation, of a spontaneous emotional response, of rejecting things in a flash” (2006. p. 13). Atmosphere as an analytical concept provides some measure of objectivity to our grasp of feelings in an environment, helping to avert the demarcation of<sup>24</sup>

moods as solely projections of individual mental states (Bressani & Sprecher, 2019. p. 2).

### *What constitutes an atmosphere: The ecstasy of things*

Böhme contends that the production of atmospheres cannot be ascribed to one thing nor person, but conversely, to multiple elements in relation to each other. He argues that atmospheres can be produced by the qualities of things, named as their "ecstasies". Ecstasies show the way things radiate into a space and therefore contribute to the creation of an atmosphere, and in addition, they can make an impression on us, modifying our mood or the way we feel (Böhme, 2016. p. 5). In connection with the previously discussed affordance theory, "atmospheric feelings are relatively homogeneous complexes of affordances" (Griffero, 2019. p. 46) and can thus usually be attributed to "generators".

Conversely, Hermann Schmitz, another famed researcher on atmosphere, contends that atmospheres are "groundless" and void of a likely point of origin, especially regarding a derivation from objects. However, this thesis will follow Böhme's line of thought of atmosphere as quasi-things or effects of the "ecstasy" of things, of which proceed from and are created by things, persons or their constellations (Böhme, 2016. p. 19).

### *Identifying atmosphere*

Böhme (2014. p. 43) eloquently posits that, "Atmospheres fill spaces; they emanate from things, constellations of things and persons... [as] an aesthetic concept, atmosphere acquires definition through its relation to other concepts...". It is due to this reason that atmosphere, in a relational approach to analysis, is commonly discussed and linked with concepts describing the qualities of spatial experiences or objects. To describe the feeling of an atmosphere, a question arises - what sensation do these other terms describe? The language associated with atmosphere is often used to express an awareness of something that manifests itself in the relationship between one's self, objects and the environment.

Conversely, for research using a non-representational approach, the identification and naming of an atmosphere is deemed problematic, as "naming would freeze what is in process, determine what is indeterminate" (Anderson & Ash, 2015. p. 40). The ambiguous nature of atmosphere would thus be lost, "housed within the unity of a name" (ibid.). For the purpose of this thesis, atmosphere will be examined through the representational approach. Participants used their own adjectives to describe the atmospheres experienced whilst walking through the space of URBAN13.

## *The perception of atmosphere*

In a blink of the eye, a space already makes an impression on us. We sense the atmosphere even prior to identifying its details or having an intellectual reflection on it (Pallasmaa 2014, 232). The act of judging and interpreting the environment is a complex multi-sensory fusion of various factors which create an overall atmosphere, feeling, ambience or mood. The perception of atmosphere involves judgement through the five conventional senses, but also goes beyond these to include sensations such as orientation, gravity, balance, stability, motion, duration, continuity, scale and illumination (ibid). Therefore, atmosphere is perceived in a peripheral, diffuse and unconscious manner wherein the entire body and existential senses are used and stimulated.

Additionally, personal background may also influence the manner in which people perceive atmospheres. Harris (2015) states that our backgrounds - including social, environmental, economic, familial, religious, educational - influence individuals to focus on certain elements of the environment and stimulate emotional and cognitive reactions in accordance to cultural values and norms. Therefore, one individual may respond differently to another when confronted by a particular environment.

## *Atmosphere in research*

Urban researchers have posited atmosphere - and the related concepts of ambience and mood - to reflect on a plethora of phenomena including urban sensory environment analysis (Edensor, 2012; Thibaud, 2011), public space (Koch & Latham, 2011), illuminated space (Edensor, 2012), the mega-city (Adey, 2013), surveillance (Adey et al, 2013), mobility (McCormack, 2008), street performance (Simpson, 2013), English football (Edensor, 2014) and additionally, the relationships between non-human things (Ash, 2013) to name but a few atmosphere-related phenomena, whereas its analytical use in conjunction with the perception of safety has seldom been explored.

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## 3.4 THEORIES SURROUNDING THE PERCEPTION OF SAFETY

While the concept of atmosphere will be used to analyse the role of immaterial perceptions and their affordances affecting a perception of safety, the following theories will focus on interpreting the interaction between an individual and the social and physical environment.

### 3.4.1 Theory of prospect-refuge

A number of studies (Newman, 1970; Appleton, 1975; Nasar, 2000) have confirmed the relationship between the physical environment and the perception of social safety in the urban realm. In 1975, Appleton introduced the theory of prospect-refuge to delineate how the physical characteristics of space influence the perception of safety (Rijswijk and Haans, 2017, p.2). The theory stipulates that an urban space that provides the ability to see (prospect) and the ability to hide (refuge) contribute to a perception of safety. The theory puts emphasis on the "range of vision" as an element that increases the chance of survival by identifying a potential offender and additionally, affording the possibility of not being seen (ibid.).

Furthering Appleton's theory, Nasar (2000) introduced three characteristics of the built environment that can signal immediate danger, thus influencing the perception of safety: concealment, entrapment and prospect.

#### *Concealment*

Nasar (2000, p.197) defines concealment as "a physical occlusion of space big enough to hide a potential offender", including walls, dark spots and trees. Despite concealed places potentially offering the ability to take refuge (Appleton, 1975), Nasar asserts that concealed places predominantly offer opportunities for potential offenders to hide, therefore reducing a sense of safety for potential victims (Nasar, 2000). Consequently, this is suggestive that a low level of concealment, (an open view and no hiding opportunities for potential attackers), has a higher perception of safety from a potential victim's perspective (Boomsa & Steg, 2012, pg. 197).

#### *Entrapment*

Entrapment refers to "the difficulty a person would have escaping when confronted with a potential offender" (ibid.). It has two dimensions: the social and physical. The social denotes the

extent of being incapable of contacting people for help, whilst the physical involves the physical elements of the space that inhibit the ability to escape (ibid.).

### *Prospect*

Prospect represents the characteristics of a space that enable unobstructed views over the surroundings (Rijswijk and Haans, 2017. p.3).

The theory of prospect-refuge will be used in the thesis to situate locations, infrastructures, as well as some immaterial cues within URBAN13 that are problematic for achieving low level of concealment and entrapment and high level of prospect which are associated with higher levels of perceived safety.

### **3.4.2 The social-psychological model of fear of crime**

While the theory of prospect-refuge predominantly focuses on the physical environment, the social-psychological model of fear of crime details both the physical and social environment. This model attributes fear of crime to four psychological factors: evil intent, attractivity, power and criminalisable space. Evil intent details the extent that people attribute criminal intent to others

in the space.

Attractivity concerns the degree that people see themselves (or belongings) as being attractive targets for crime. Power designates the extent that people believe they can cope with a threat or assault by an offender. Criminalisable space highlights place, time and the presence of others as elements describing the degree to which an individual perceives a situation as supporting criminal activity (van der Wurff et al., 1989. Cited in Rahm, 2021).

### **3.4.3 Eyes on the street**

Natural surveillance is indicated as one of the main factors affecting actual and perceived safety in urban space (Lee et al., 2016. p. 2). A key factor in natural surveillance is “visibility” which, in interaction with the presence of people in a public space, increases the perception of safety (ibid.).

In the Death and Life of Great American Cities (1961, cited in Lee et al., 2016), Jane Jacobs introduced the concept of “eyes on the street”. Based on her theory, the presence of other people increases the number of eyes on the street, resultantly enhancing natural surveillance. Heightened natural surveillance, she argues, reduces the opportunity of crime for potential

offenders and “being watched by people makes an urban space safe” (ibid. p. 2). By extension, it is further argued that this increases the likelihood of witness and bystander intervention, thereby decreasing crime and increasing the perception of safety (Navarrete-Hernandez et al., 2021).

She examined the association between the level of crime and public street use, arguing that possibilities of crime decrease in a crowded street. Furthermore, she declared that the physical characteristics of the built environment, such as orientation of buildings, can increase the number of “effective eyes” on the street, whereby natural surveillance can occur from people in the buildings watching the street (ibid.).

Some researchers and scholars believe that Jacob's theory is merely a prescription for real crime prevention rather than the perception of safety (Aliasgari, 2013. p. 15). Conversely, others have extended her theory and highlighted the importance of “eyes on the street” on affecting the perception of safety as well, seeing as it considers the daily experience of inhabitants (Wekerle, 2000; Lee et al., 2016).

#### **3.4.4 The incivilities thesis**

A subsequent lens to explore the effects of the social and physical environment on the perception of safety can be done through the incivilities thesis. It is a theoretical notion delineating how local physical deterioration and disorderly social behavior can create concern for personal safety and community viability within a public space (Robinson et. al., 2003. p. 238). Physical incivilities refer to the deterioration of the public sphere and can include the presence of litter, vandalism, graffiti, and vacant or dilapidated buildings (ibid.). Social disorder refers to behavior usually from strangers in the space and are considered threatening, such as “verbal harassment on the street, open solicitation for prostitution, public intoxication, and rowdy groups of young males in public” (Sampson & Raudenbush, 1999. p. 604).

The theory posits that instead of actual crime itself, physical and social disorder in the community can lead to increased fears of crime as a result of an emotional response to experiencing a loss or reduction in social civility (Roberts & Indermaur, 2012. p. 64). A related element to this theory is the collective efficacy concept.

##### *Collective efficacy concept*

Collective efficacy describes social cohesion amongst neighbours combined with a willingness to intervene - if the need were to arise - in the interests of the common good (Sampson et al., 1997, p. 918). A common premise is that areas where collective efficacy is well-developed exhibit lower levels of disorder (ibid).

The incivilities thesis, along with the interrelated collective efficacy concept, will be used as an analytical tool to highlight areas of physical and social disorder within URBAN13 and the affordances such elements have in affecting the perceived social safety in the area.

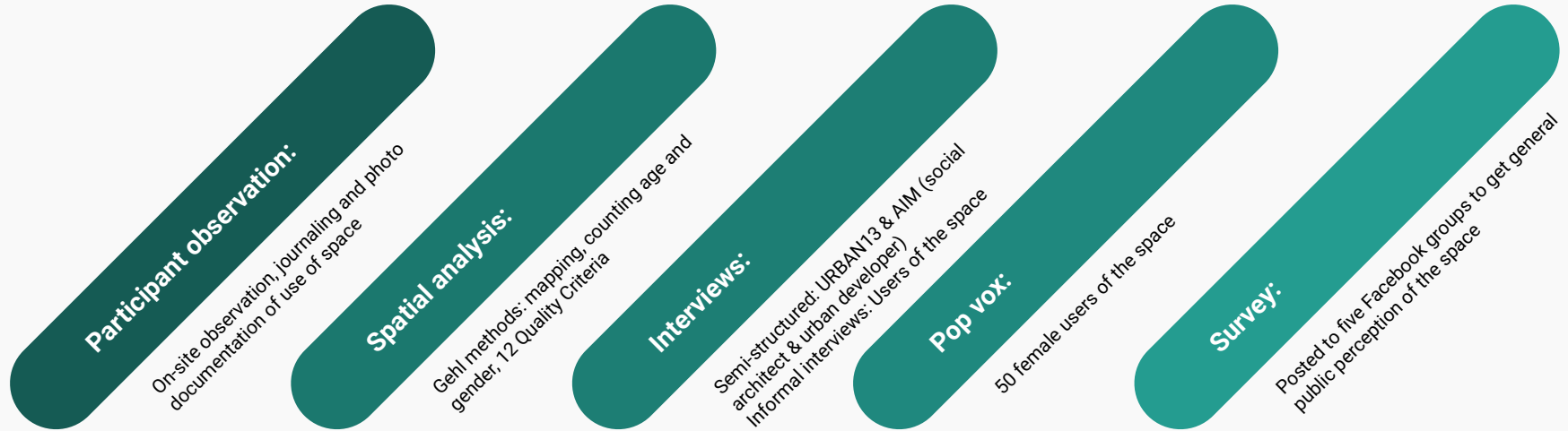


/4

## METHODOLOGY

The purpose of this section is to highlight the various methodology used to collate and analyse the data in a manner that allows for triangulation. It must be noted that the focus for this thesis changed halfway through the research process, and as a result, there are two sets of methodologies. The first provided an overview of the use of and general public perception of the URBAN13 space. The data collated subsequently helped to focus on the subject now being examined, which has been explored through methodology of the embodied experience of the space from an individual level.

## METHODOLOGY SET 1



## METHODOLOGY SET 2

### **Autoethnography:**

Personal account of multi-sensorial experience under URBAN13

### **Video documentation:**

6 female participants documented their experience of walking around URBAN13 at night

### **10 multisensory walk-along interviews:**

With the same 6 female participants after they sent me their video documentation AND with 4 female participants who opted to not do the video documentation. Together we walked and discussed the multi-sensorial experience

### *Research strategy: Grounded Theory*

Corbin and Strauss (2008, p.12) define grounded theory as a research strategy wherein a theory is “derived from data, systematically gathered and analysed through the research process”. I started with an area of study and allowed the theory to emerge from the data, and as the process is iterative, insights were gained by consistently comparing data, and going back and forth to extract meaningful elements (ibid.).

### *Research method*

Qualitative research is scientific inquiry that aims to build a holistic description to inform the researcher's comprehension of a social or cultural phenomenon (ibid.). It enables the researcher to capture participants' opinions, experiences and emotions. As a qualitative and ethnographic researcher, I do not seek to elevate the individual and subjective experiences to a generalised truth. Conversely, I aim to highlight how material and immaterial elements of the urban fabric influence experience through embodied, personalised, and sometimes dialogical accounts from the URBAN13 space.

Using a qualitative method enables the researcher to study this subject in-depth from a small sample size. Within qualitative

research, there is no fixed number for the sample size. As a result, data was therefore collected until data saturation was reached (Bryman & Bell, 2015). The ethnological research was carried out during the spring period (early April 2021) in Copenhagen, Denmark.

### *Data Preparation and Analysis*

As grounded theory engages in theoretical sampling, data collection and analysis happen concurrently and inform each other (Corbin & Strauss, 2008). The goal is to generate explanations from the data, which will be approached by reflecting on discoveries uncovered during the interviews. Furthermore, data has been analysed through coding of the interview transcripts. Resultantly, similarities, patterns and differences in the relationship between the coded data were detected to create a set of categories and themes (Miles et al., 2014). Data was subsequently organised using an Excel spreadsheet and the identified themes were reviewed to generate a thematic map of the analysis. The analysis was then completed by linking the research question and literature to the findings.

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## 4.1 METHODOLOGY SET 1

As previously mentioned, the focus for this thesis changed halfway through the research process. The first methodology set was used to get an overview of the use of and general public perception of the URBAN13 space - and how the public could imagine art to be added to the space as the administrators behind URBAN13 had received an art grant from the Municipality of Copenhagen. Data was collected over a three month period from January to April 2021. On-site fieldwork, including participant observation, vox pop interviews, Gehl spatial analysis and informal interviews, and off-site informal interviews around nearby populated public spaces were conducted in order to get public opinion on the URBAN13 space. Online surveys were also posted on five local Facebook groups in order to further reach the public and obtain additional quantitative and qualitative data on the perception of the space.

The data collated informed me of the general issues regarding perceived safety in the space and subsequently helped to focus on the subject now being examined, which has been explored through methodology set 2.

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## 4.2 METHODOLOGY SET 2

### *Participants*

Participants were recruited by the following methods. Firstly, as mentioned in methodology set 1, an online survey detailing the perception and experience of URBAN13 was posted on various local social media groups. There was an option for survey respondents to leave their contact details if they were willing for further discussion or involvement. Respondents who were women were subsequently contacted, briefed on the change of focus and asked to participate in the new study. Secondly, friends and acquaintances were asked to be involved, which also created a snowball effect in finding other women willing to become participants.

All participants were debriefed on the research and of the general perception of URBAN13, and were asked if they would feel comfortable to come to the space alone and video record their experience, followed at a later date by a walk-along interview with me. One participant did not feel comfortable to video record alone, and additionally, three did not have enough time, so they solely participated in the walk-along interview with me.

## *Autoethnography*

Autoethnography is a qualitative research method which allows the researcher to write in a highly personalised style, stemming from their experience to extend an understanding about a particular societal phenomenon (Wall, 2006). As I am a woman, I used my own embodied experiences of the space to gain a deeper and more personalised understanding of the space. I used my experience to further situate the understanding of my participants and draw out similarities and differences in relation to our perceptions of safety. An autoethnographic account of my embodied experience of walking through URBAN13 at night in early April was documented. My accounts and reflection will be situated in italics at the beginning of each element in the analysis section to set the scene of the topic subsequently analysed in greater depth.

## *Individual video recording*

Participants were asked to visit URBAN13, alone, at night (after 22:00) and video record the multisensory experience whilst walking around the space. Using their mobile phones, their embodied experience was recorded, such as describing the environment, the atmosphere and how different socio-spatial

and socio-material elements affected them. The experiences described and highlighted by participants' solo video recordings of the space then provided context for the semi-structured questions I asked in the walk-along interview that followed. This allowed me to explore and examine these individual nuances to a deeper degree and ask follow-up questions to the experiences uncovered in the video recording in order to gain further in situ data on their experiences. Furthermore, the perception of social safety can be affected and differ from being in the space alone versus in the presence of company. By asking participants to record their experience alone, it helped to circumvent this, and additionally, helped uncover further nuances and experiences from an individual-woman-in-space perspective.

## *Walking*

As we navigate on foot through the nocturnal city, we participate in an act of meaning-making of the space that surrounds us (Ingold & Vergunst, 2008). Our sensory systems are in constant adjustment to a plethora of stimuli that, along with personal experiential histories, can affect our perception of the environment around us. Walking is an embodied experience where the ideas of “affect, rhythm and embodiment are central”<sup>36</sup>

in the performative and sensory experience of walking, allowing for a mode of thinking-on-the-move" (Mygdali, 2019. p. 42). Engagement in the surrounding space highlights distinctive affordances. Benediktsson and Lund state that "the lives of human beings are tangled up with the temporalities of constantly unfolding landscapes, in a never-ending journey" (2010. Cited in Ebbensgaard & Edensor, 2020. p.4). Walking thus represents that our experience is shaped ongoingly and alters in response to shifts in "mood, tenor, colour or intensity of place and situation" (Wylie, 2005. p. 236). Resultantly, walking as a method can "capitalise on the environment as a prompt to discussion" (Macpherson, 2016. Cited in Ebbensgaard & Edensor, 2020. p.4).

### *Walk along*

Kusenbach (2003. p. 46) describes walk-along interviews as being a "hybrid between participant observation and interviewing" wherein participants walk with the researcher and provide feedback on their own experience whilst being engaged in the study field. Particularly when researching themes and concepts such as spatial practices, environmental perception and social architecture, they can be an effective research method. As they aid in giving further spatial context to the

interview, they allowed me to uncover and highlight spatial practices that may be difficult to examine in a more traditional interview environment (ibid. p. 463). Additionally, walk-along interviews give a context of place to the study and allow for my participants' interpretations, experiences and practices to be contextually explored and examined within the space (Carpinio, 2009).

After watching, transcribing and coding a participants' solo video walk, I compiled semi-structured interview questions to ask in the subsequent walk-along interview. However, in a means to maximise the benefit of the walk-along interviews, it was paramount that participants were given a greater degree of control over the research process than in a more traditional qualitative interview. By doing so, participants were able to discuss the area being researched in the manner that they saw fit and to focus on areas and elements that had higher personal significance (Clarke & Emmel, 2010 p. 2). This liberty was particularly important since the purpose of this research is to highlight and understand individual experiences of URBAN13, and subsequently, it helped to reduce the influence that I as a researcher can exert over participants' responses.

## *Ethical Considerations*

Informed consent to start, voice record and share opinions was obtained from all participants. Participants were informed that their descriptions/experiences collected for this research could appear in my final thesis and that this may also include citing verbatim quotations from the video recording and/or walk-along interview. Furthermore, names have been altered to ensure anonymity. By informing them of the anonymity, this helped to ensure that participants could feel comfortable to speak more freely about discomforting past and present experiences, as well as voicing opinions about contentious societal issues.

## *Positionality*

When I entered the space of URBAN13, I did so as a researcher and woman. Resultantly, I was able to build a certain sense of rapport with my participants because we have shared similar gendered experiential histories to some extent, and some of the feelings being conjured up in the space were mutually experienced. In research, such as this that seeks to discover embodied personal experience, there is a unique relationship between researcher and participant, and resultantly, the issue of

voice arises (Wall, 2006). Realising the potential influence my own experience in the space could have on the participants, I only mentioned my feelings and/or added them to the discussion once the same had already been vocalised by the participant.

## *The possible effects of COVID-19*

As a result of the COVID-19 pandemic, the government mandated a closure of public institutions, hospitality dining and indoor exercise hubs from December 2020 to May 2021. As the music venue Garagen located at URBAN13 was closed due to the pandemic, this may have affected the presence of people in the later hours of the early night. Resultantly, the perception of safety may have been affected by a possible reduction of public presence and related or constructed ambience this may have afforded the space.

## *Study Limitations and Future Research*

### 1. Intersectionality

Experiences in the urban realm at night are scripted through differences surrounding gender (Valentine, 1992), class (Edensor, 2003),

& Millington, 2009), culture (Bille, 2019), sex (Williams, 2008), and race (Henery, 2019). I therefore acknowledge the limitations of my study which focused on a rather homogeneous group of participants, wherein all participants are middle-class, tertiary educated, Caucasian women. Furthermore, all identify with the female gender. Further studies casting a broader sample can examine perceptions of safety with a greater intersectional focus. This could highlight important facets of embodied experience from other minorities that are also important to consider and include in the (re)design of public spaces.

## 2. Control study

This study focuses solely on women's experiences at URBAN13, as previous research showed they use the space less and the Municipality reported they feel more unsafe than men in the urban realm at night. Conducting a control study where the same questions were asked of men could have highlighted some additional gendered nuances in the space, whether they be similarities or differences. This study therefore is limited in the sense that it is difficult to assume that all the experiences felt by women in the space are totally gendered, despite evidence provided by previous studies.

## 3. Seasonality and day/night

The ethnological research was carried out during the spring

period (early April 2021) in Copenhagen. Being a city in the Nordic region, early spring can still be harsh regarding the climatic elements. This April experienced an abundance of rain with temperatures reaching -1°C at midnight, heating up to less than 10°C during the day. Accordingly, the season also had a potential impact on the use of the space - perhaps more individuals use the space at night during times of milder temperate, which could then influence the atmosphere and sense of social safety. Additionally, the potential effect on the general atmosphere, whereby temperate weather may alter the perception of atmosphere.

Additionally, this study focused on the night-time experience, not taking into account how women experience the space during the daytime where there is a vast difference in use of space and ambience. It could thus be interesting to study the space at a different season and time of day to explore any shifts in the perception of social safety.

## 5. Post-Buens Torv project completion

The administration behind URBAN13 have been implementing a gendered-focused urban project to help make the space safer. Conducting a similar embodied experience study of the space after the project's completion could be used as a post-evaluation or a comparative study to this thesis.



# /5

## ANALYSIS

The analysis chapter will highlight and examine the spatial, material and immaterial elements in the URBAN13 space, showcasing their affordances and the affective abilities they have in influencing the perception of safety. In order to make the analysis more legible, they will be discussed in different sections as predominantly separate entities. However, the perception of safety is very much an interplay of such elements situated in the URBAN13 space.

## 5.1 SPATIAL ANALYSIS

The spatial analysis will describe and visualise the location, spatial setup and material affordances, as well as the users of the space.

### 5.1.1 The location

As for its context in the city of Copenhagen, Bispeengbuen, and relatedly, URBAN13, stand out for its sheer volume in the urban fabric, creating a formidable visual concrete frontier between the districts of Nørrebro and Frederiksberg, with Nordre Fasanvej being a main road connecting the two. Along Nordre Fasanvej there are multiple shops and supermarkets of which are closed by 22.00, and university student dorms (Engbakken Kollegium) and late night kiosks. On the eastern, Nørrebro side (Ågade) lies Lundtoftgade, a concrete-laden apartment building with predominantly low income tenants. The housing area was previously on the government's highly contested 'ghetto list', which contains a list of social housing areas that have a high density of tenants from a 'non-western' background, and high rates of criminality and unemployment, amongst other things. On the west (Bispeengen) lies a line of condominiums

with a well maintained façade that visually express the wealth often known to be found within the Frederiksberg Municipality. Squeezed symbolically at the border between these two areas is where URBAN13 lies.



URBAN13 outlined in orange

### 5.1.2 What is the structure?

As a functioning underpass with a busy motorway on top, Bispeengbuen is a functionalist piece of infrastructure. It is a concrete-laden structure of which 4,000m<sup>2</sup> of its underground area is being used by the URBAN13 organisation. The section used by URBAN13 is roughly 5m in height, 100m in length and 40m wide.

Stemming from various urban interventions involving urban developers and organisations such as URBAN13, the use of the space under the bridge has been evolving. The current design intention is to give affordance to a diverse mix of activities in order to make this underpass vibrant, dynamic and more inclusive, as will subsequently be outlined.



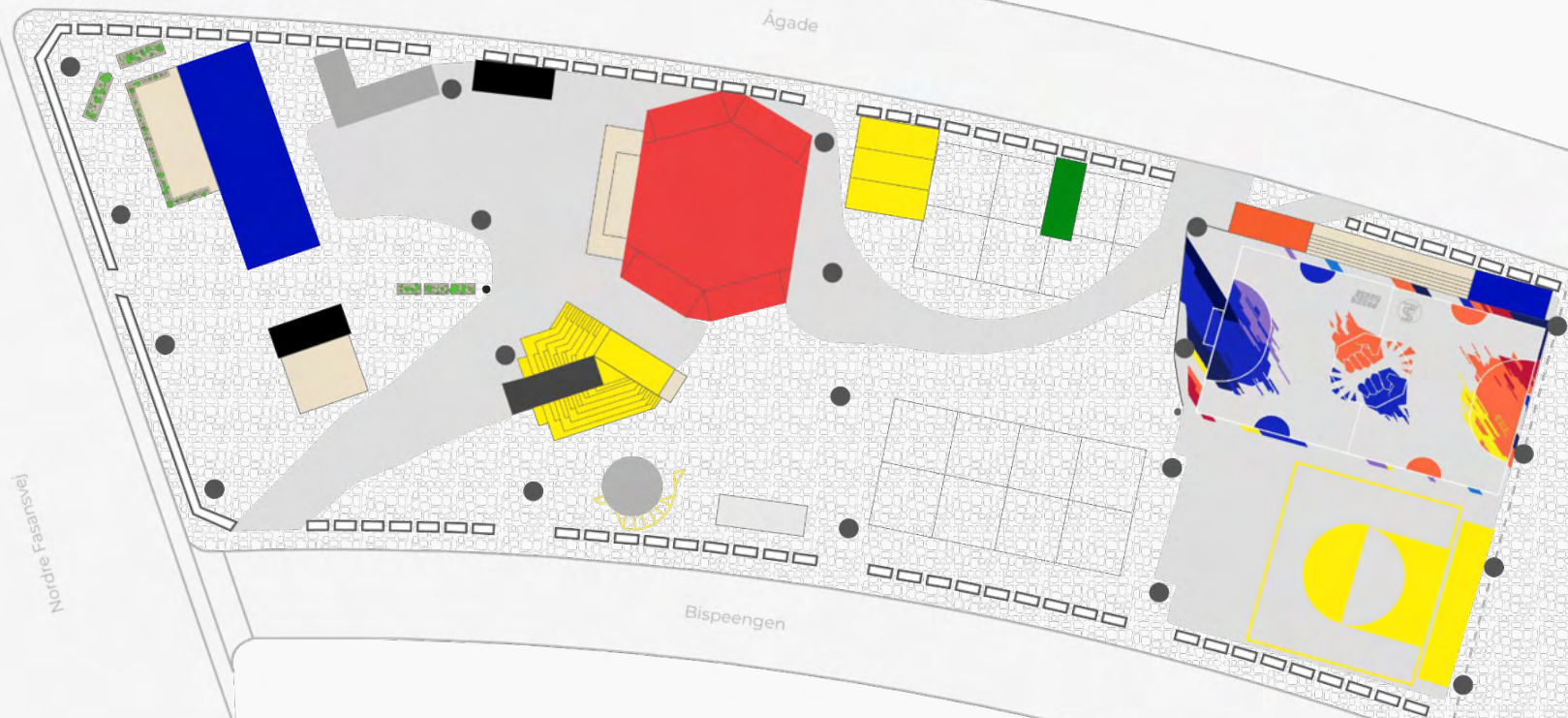


Figure 1. URBAN13 map

### 5.1.3 Material spatial affordances offered to the public (refer to figures 1 and 2)

Like other underpasses, URBAN13 is experienced on foot or bicycle mainly from within and is often used as a thoroughfare between the two districts. In addition to being a walkthrough, there are various facilities and materials that afford a plethora of staying activities, most of which have heightened activity during daylight hours.

#### The containers

In the northern zone, there are eating possibilities at Pop's Diner, (which closes at 22.00) as well as seating options in front/along Nordre Fasanvej. The association behind URBAN13, alongside other urban developers, work from a coworking container (in blue).

The positioning of these two containers next to each other, but not touching, creates an open gateway that serves as an unofficial entrance to the area. Garagen (in red) is an event space used for movie and concert showings (which was closed during the fieldwork due to COVID-19), and to its left is a meeting room (in yellow, closest to Bispeengen), two are used for storing sport equipment (yellow and green, closest to Ågade), one is for art (light grey) and one is used as a clubhouse for Street Society's (a social, non-profit, sports organisation) sport practitioners.

#### Sports and workout facilities

There are also areas and facilities that afford sport and fitness practice. The yellow workout bars invite users to be active, and next to it are a set of wooden stairs that

are often used as part of workout routines or for sitting and watching what unfolds in the space, or more often in the evening, for locals to sit and drink beer. Connected to the stair apparatus is a skate ramp. In the southern end there are two sports courts that are often in use during the day and early evening, by the public and the Street Society teams.

#### Seating options

There are multiple seating opportunities throughout URBAN13, starting from in front of the entrance alongside Nordre Fasanvej, in the space in front of Garagen, the stairs, tribune stairs by the sports courts and an abundance of moveable seating found in random placements throughout the space.



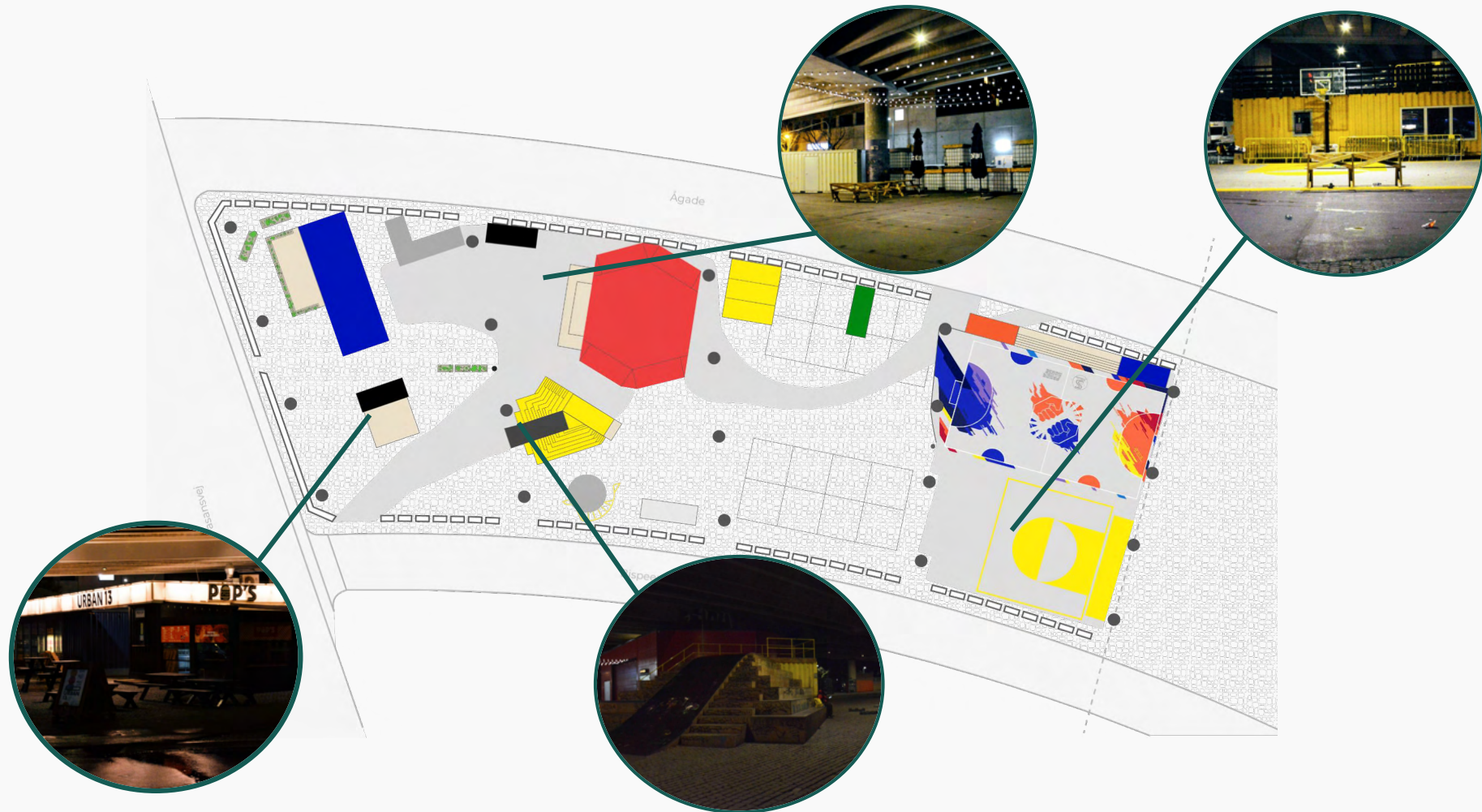


Figure 2. URBAN13 map

### 5.1.4 The lighting at night

When entering the interior space of an underpass, the effects of the weather are transformed, and an artificial light often supersedes the darkness that remains if entering from the streets Bispeengen and Ågade that run longitudinally parallel. High intensity discharge (HID) lighting shapes the kind of illumination that the main longitudinal stretch of URBAN13 is bathed in (figure 3.). HID lights are conventionally used when there is a requirement for high levels of light over large spatial areas, commonly including large public areas, underpasses and roadways (Scholand, 2012). In the case of URBAN13, the artificial, functional HID lighting creates brightness in the space, affording a person the topographic ability to feel spatially situated in the environment. It



figure 3.

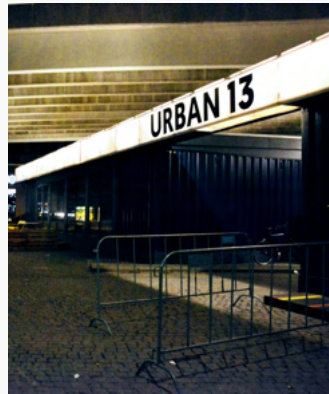


figure 4.



figure 5.

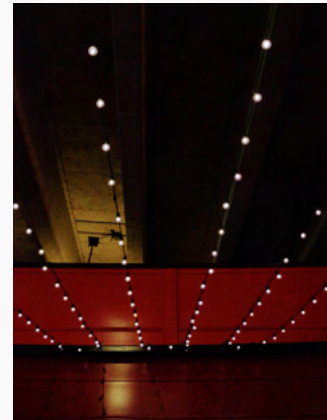


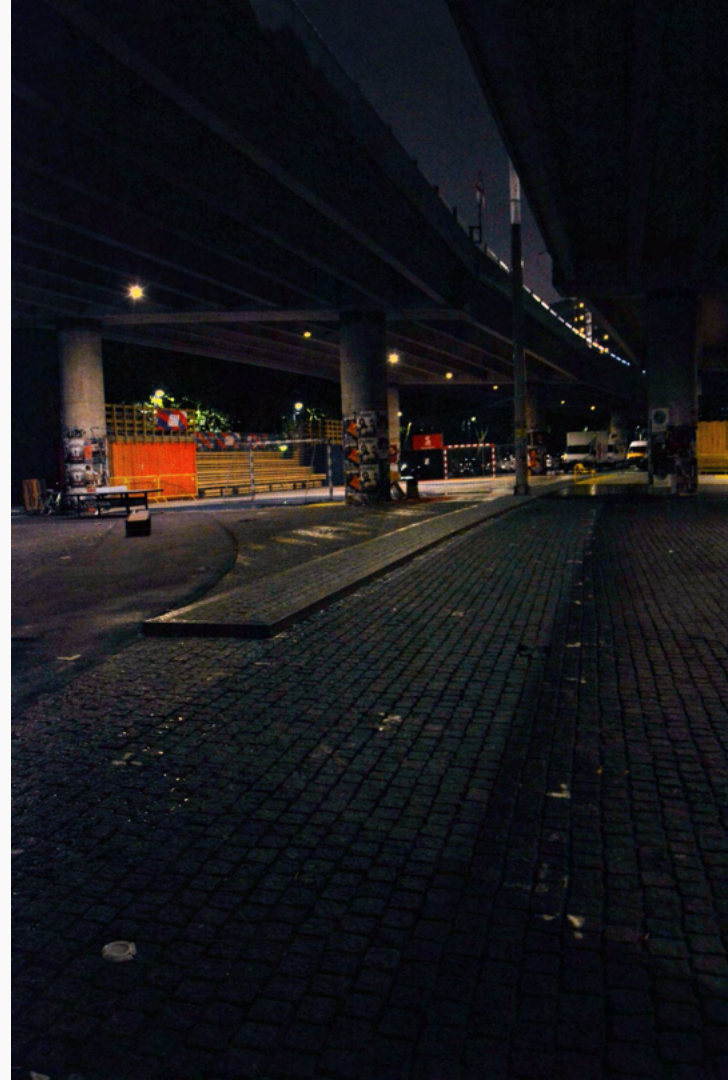
figure 6.

provides a high illumination to the majority of the space, in a uniformly dispersed manner. There is almost no differentiation of the lighting outcome wherein no special feature of the space is highlighted, nor can much visual excitement be generated. It is fully uniform and functional to provide a high level of illumination and long-range visibility. Towards the northern end, the lighting is more varied. The unofficial “entrance” to URBAN13 has a retro, illuminated plexiglass-like sign with “URBAN13” on it (figure 4). Running longitudinally on Nordre Fasanvej is a LED light installation which changes colour every 10 minutes, from blue to rainbow to green (figure 5). Additionally, at the front of the Garagen event venue, there is a cascading fairy light installation (figure 6).

### 5.1.5 *Who uses the space?*

A public life survey was carried out by COurban, a Copenhagen based design collective based in the co-shared container city of URBAN13, in the spring of 2020. The public life survey highlighted that women only constitute 15% of the users that spend time and occupy the space of URBAN 13, despite the number of women and men passing through the space being almost equal (COurban et al., 2020). This report, however, did not detail a separation between day and night use.

After spending more than 10 hours conducting autoethnography and walk-along interviews, it was clear that the space is seldomly used for staying activity (at least between 23.00-1.00), but some people, namely men, did walk and cycle through from time-to-time. Furthermore, all people present and conducting staying activity such as sitting, drinking, playing basketball or conversing as a small group during these visits were men.



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## 5.2 EMPTINESS AND THE ABSENCE/PRESENCE OF LIFE

*Walking further from the street of Nordre Fasanvej with its omnipresence of car traffic, I walk under and through the brightly illuminated URBAN13 sign that delineates the border between the outside and the URBAN13 underpass. After passing the workout zone covered with marks and traces of previous use, I encounter a space so expansive and empty. The underpass is at least 5 metres above ground. Its sheer height I had not previously noticed in such detail as the medley of co-working and dining containers, workout structures and skateboard ramp make the space appear fuller and the scale of the motorway infrastructure less daunting. The empty floor space in this middle zone rolls on for approximately 100 metres before meeting the colourful basketball and football courts in the distance. Here, alone in the middle, I feel small and insignificant, a tiny spec found on the floor of a large scale concrete construction, yet my footsteps are audibly heightened by the sheer scale of the echo-chamber space. No other being is around, but that absence feels enhanced from the lack of urban furniture or functional materials as previously encountered in the northern zone. I move towards one of the solid concrete pillars supporting the underpass. It is covered with posters both old and new, reminding me that the "present is saturated with illegible traces, memories and forms of hearsay from the past that continue to make their mark" (Edensor, 2008, p.331). I closely inspect the details of the remnants. Some events are long gone, remaining as "'hauntings' of things that have moved on but left their mark" (Amin, 2004. Cited in Edensor, 2008, p. 314). Some are recently plastered, the smell of the glue declaring the freshness of their existence. There is an omnipresent automobile soundscape created by the cars riding above me and along Nordre Fasanvej. It feels like a 360 degree soundscape of cars humming, a constant white noise in the background that brings focus to and further highlights the quiet and stillness under the bridge. Despite this constant sound, the space itself feels quiet, the absence of life echoing without sound amongst the eerie atmosphere diffused within the space. I am calm, yet remain alert for any new noises or movements that may suddenly arise.*

The following section will detail the affective atmospheres and affordances brought about by the emptiness and absence of life in the space, and how they influence a sense of safety whilst myself and participants walked through the space. Additionally, elements of the space that constitute as signifiers of life in the space, along with the presence of people will subsequently be examined in relation to their affective affordances.

### 5.2.1 Emptiness

Danish poet Søren Ulrik Thomsen aptly summarises the feeling of being situated in spatial emptiness during nightfall in his atmosphere-laden poem (2002. Cited in Jensen & Lanng, 2016. p. 87),

The worst place after midnight  
is the vast pathway systems of the suburbs  
which connect the sparkling housing blocks  
and in this very moment always oddly empty  
even though you very well feel  
that somebody was here a moment ago  
and that in a moment you will hear footsteps behind your back



The northern entrance of URBAN13 has constant passing of cars, and at times pedestrians, along with a multitude of facilities. In contrast, this middle zone (photo on the left) is void of facilities and feels empty in both function and life. An emptiness can be felt by "the materiality of which is realized through its juxtaposition with a surrounding fullness" (Mygdali, 2019. p. 42). The emptiness and absence of life that often fills the nightscape of URBAN13 evokes an atmosphere that some participants have described as "eerie", "dead" and a place of "absence". As stated by Lisa, "It's not just the lighting. I mean, it's also the lack of people. It's more that maybe rather than lighting, like the atmosphere. The absence of life... it feels a little eerie to see nothing and no one."

The absence of life in the middle zone takes on an object-like body, wherein it appears to exist not solely as an afterthought of perception, but conversely, as a freestanding presence. Consequently, it acquires powers and potentialities similar to things (Fowles, 2010. p. 27). A powerful, sensory affordance emanates through the object-like absence that instills a feeling of risk, wherein "The examined actions place emptiness and silence in the core of embodied attention, creating situations of openness and risk" (Mygdali, 2019. p. 42).

Ultimately, this emptiness and absence of life can correspond with a potentiality of risk and thus affects the perception of safety in three manners. Firstly, with the space being void of people, there would be an inability to contact people for help if the need were to arise, as previously referenced as the social dimension of entrapment (Rijswijk and Haans, 2017). Secondly, an absence of people in the public space means that natural surveillance afforded by the “eyes on the street” is non-existent. Thirdly, emptiness in an urban context can be associated with negativity, wherein “emptiness is often perceived as a forgotten and insecure place, a vague area in the urban fabric” (Pluta, 2017, p. 90). In regard to the latter, this was particularly felt and expressed by Lisa, stating “The more empty or isolated the place is, it's more obvious it would be a place for drug dealing and stuff. So I think it would attract certain groups of people, people that I would want to avoid.” She therefore attributes the emptiness, coupled with the night hour and general grittiness of the space, to being the type of situation and environment that would support criminal activity. As place, time and the lack of presence of others are elements describing the degree to which an individual perceives a situation as supporting criminal activity (van der Wurff et al., 1989. Cited in Rahm, 2021), she therefore denotes it as a “criminalisable space” which is attributed to a fear of crime and thus impacts on her feeling of safety.

### *5.2.2 The emptiness affect on the physical and emotional*

“When I first came, I felt a goosebump.”

Lisa, participant.

The affective powers of the empty space conjured up an emotive and corporal response for Lisa, wherein the eerie atmosphere the emptiness helps to create also affords a physiological reaction. This effect showcases how an atmosphere can inform and mediate human movement and agency “by placing us in a particular physical and emotional state” (Thibaud, 2011, p. 209). As for Dora, the eerie atmosphere produced from the lack of life and material in the middle section goes so far as to inhibit her mobility. She notes, “I probably wouldn't even want to come past the sports furniture at the front cause it seems so quiet and far from the street [Nordre Fasanvej]. It looks very eerie.” Her statement conveys how an atmosphere can inform and mediate human movement and agency, rather than solely being a felt experience. As noted by Thibaud (2002, p. 6) “the ambience affects our conduct and bodily state. An ambience may stimulate or relax us, grab us or carry us away, transport or paralyse us, and so on... an ambience is not just felt. It also affects movement”. Resultantly, the eerie atmosphere and ambience from the empty space, coupled with the distance of

the middle space from a busier street which could afford social surveillance from the passing cars, constrains her movement and willingness to venture further. This therefore highlights that atmospheres can be affective entities that affect the manner in which people navigate space, whether it be facilitatory or restrictive.

However, atmospheres are not fixed. Evident transformations in an atmosphere can be produced by reconfiguring the relations of bodies and affects, the introduction of new objects, and addition, by people and behaviours (Anderson and Ash, 2015). The emptiness and its related eerie and still atmosphere can quickly be disrupted by the introduction of a new body into the space, who with their presence, co-constructs a new atmosphere.

After a paired walk with Nana from the northern entrance to the expansive empty and still middle void of any people, we hear some distanced laughter and music emanating from the southern end. After taking a few more steps, we spot the source of jubilation coming from some teenagers sitting on top of the yellow Street Society container. The closer we venture toward them, the atmosphere of stillness changes. Their distant chatter gradually becomes heightened, their laughter somewhat calming, filling the expansive emptiness and stillness with signs

of life. Their spatial engagement is ludic, completely overflowing what was a felt emptiness and eeriness and an objectified absence of life. Bringing along their portable boom box, and with it, their taste for hip-hop music, they influence the atmosphere, co-producing it. As put by Böhme (2016. p. 131) "through their lifestyles, the inhabitants of the city are also, always, producers of its atmosphere." The perception of safety changes. Nana remarks, "It's like, 'oh, it's safe.' Knowing those people hear you, you feel better. So that's so good, especially if it's people doing something." Nana's comment illustrates the social dimension of entrapment, which refers to the extent to being unable to contact people for help if the need were to arise (Rijswijk and Haans, 2017). The presence of people heightens her perception of safety in the area by reducing the social entrapment element, and furthermore, affords natural surveillance and bystander intervention in regards to "eyes on the street". The safety affordance from these people being there thus helps her feel safer. However, for Nana, this is contingent on the people being in situ with a visibly discernable purpose that looks benevolent, rather than an aimless wanderer whose unambiguous nature could be read with potential threat. This too was expressed by Lisa, "I mean if someone's just hanging around in the corner, that doesn't make me feel better. But someone exercising or eating a burger, that makes it feel more secure because it looks like people are busy doing

something and not just hanging around." These two women are highlighting the effect from the social-psychological model of fear of crime. As stated in the theory section, one attribute to fear of crime regards evil intent. This references the extent to which people attribute criminal intentions to others (Rahm et al., 2021). It can therefore be argued that the presence of people has a safety affordance, wherein they reduce the social dimension of entrapment and provide "eyes on the street", but only insofar that the people present are perceived as non-threatening beings.

### *5.2.3 A gendered place of night time avoidance*

The empty space matches the descriptions of places that women have generally been instructed by society to avoid at night due to safety issues. The association then holds a negative emotional affordance to the space of which was mentioned by 6 out of 10 participants. As stated by Toni, "I've been told my whole life to be careful and to not go to places where there's no people and to always be in sight of others. Being under this bridge doesn't feel like that's the case. It's the type of place I've been told time and time again to avoid at night." Toni subsequently highlights her opinion on gendered-imbalance of experiencing public spaces and the perception of safety at night. She takes on a sense of the space from a male perspective, bringing familiar

male figures to the scene to imagine how they would experience the space at night. As stated by Toni, "I can really imagine a lot of guys that I know, like Vedran [her ex-boyfriend] not having a problem being here, under a bridge. I feel like they generally feel safer in public spaces. They don't even think that anything could happen." Indeed, this showcases that perceptions of fear/violence in the public sphere can be gendered as they stem from the perceptions of the public space and who should occupy it at particular times of the day or night (Mott & Roberts, 2013). Due to the perception of fear of violence that women can experience in quiet public spaces, the space is considered not as open or accessible for women to experience and explore (ibid.).

The gendered urban safety rhetoric that is often told by the media, parents, guardians and the government also influences the designation of the space being perceived as safe to explore as a woman at night. As stated by Dora, "I've never had a bad experience of someone stalking me or attacking me ever in my life, but it's just enough reading or watching films and the news that kind of tell that story a lot. It is enough for me to feel like I should be cautious." Again, with the emptiness and general setting of URBAN13 matching spaces that are told to be unsafe by cues from society, this already holds a reflective and associative influence on these two women whilst walking in URBAN13 at night. Resultantly, the associations provide a

negative emotional affordance wherein the women are already aware of the potentials for danger that have been heard to emit from places such as desolate public spaces.

#### *5.2.4 Marks hinting at life in the emptiness*

Traversing through the middle of the space, there are multiple concrete pillars that have a functional affordance of structurally supporting the underpass, but in addition, they provide a surface for posters to be plastered on. The affordances of the posters will now be reviewed, detailing how they affect some participants and the atmosphere diffused within the space.

"Walking past many posters, it's nice because you know something is going on here."

Mara, participant

"You have all of the posters that are announcing the life that is happening outside of here, or in there."

Ronda, participant



The posters - especially those that are new and highlight future events happening both in the space of URBAN13 and neighbouring zones and venues - become a signifier of life and activity in the space. An affordance emitting from these tangible signs of life is that images of more life get conjured up. This is reminiscent of the words from Pallassma (2014, p. 241) who stipulates that "Traces of life support images of safety and generate further images of continued life". Although a small nuance in a vast desolate space, the presence of fresh posters detailing upcoming events aid in altering, or at least pausing, the perception of the space as dead and empty.

Ronda continues,

"It's mixed with taggers, parts falling apart. What was a poster is no longer a poster, it's now scrap paper that's been drawn on, and then reposted on, then drawn on and then fallen off. You have layers, an onion effect, which I think draws everyone in. And any place that looks like it has life, you can see yourself inside of it because, dimensions."

Ronda describes the multiple dimensions of liveliness expressed and emanating from the layered posters and tags. The posters are a symbolic representation and trace of life in the space, their presence giving a positive emotional affordance. Pallassma (2014, p. 240) states, "We also read a temporal layering or narrative into the setting, and we appreciate emotionally the layering of temporal traces as well as images of past life in our settings". In terms of atmospheric affordances, the pillar is a 'generator' of atmosphere, tincturing the space with imaginary narratives of livelihood both old and new. Overall, visually seeing marks of life within the temporal emptiness of the space aids in instilling a sense of life to the otherwise "dead" space, as previously categorised by almost all participants, and affords a sense of comfort through their representation of a space with presence and life.

### *5.2.5 the presence of people*

The presence of people in a public space can have an impact on the ambience of the space, as well as the perception of social safety. Whilst walking with Ronda one wet night, the space was more populated by people than on any other walk-along interview. Two men were playing basketball, while three other men were sitting and drinking on the stairs. A lively atmosphere was created by the life and activity at play in the expansive space. As described by Ronda, "I like the sound. I like hearing the sounds of the basketball, dribbles and people having conversations that I cannot understand and people having conversations that I can understand." She also expressed a differing view on the sense of safety and any related inhibition by the noise, "There's all these sounds that enforce safety because you're surrounded by things. If I screamed, people would come, they would see and it would also probably echo in here." The presence of people here aids in increasing a sense of social safety in two manners. Firstly, it instigates a lowered social entrapment, which denotes the extent of being capable of contacting people for help if it were necessary (Rijswijk and Haans, 2017). Additionally, a heightened sense of natural surveillance is afforded through the "eyes on the street", of which is provided by the presence of these individuals. Resultantly, Ronda felt very safe in the space due to a high sense of natural surveillance.

## 5.3 THE PRESENCE OF TRASH AND DISORDER

*Looking in the distance, the pavement is coloured with pieces of trash and random chunks of building materials. It is as if this area were left to itself without attention to maintenance, the minimal embellished materials in the expansive space seemed to fade away in the saturation of trash. I see at least 3 bins within 20m, they are not overflowing, yet trash still lays on the floor. My attention is quickly diverted to the tribune stairs as I see something is on fire. I quickly run over to inspect the smouldering piece which seemed to be the remains of some cardboard. Again, a trace of past life can be observed "where the traces of past activities are articulated as absent through tools left behind... 'a host of ghostly signs and traces'" (Edensor, 2005. Cited in Bille et al., 2010. p. 12). So too is this ghostly presence, wherein the instigator(s) had already vanished from sight but left an embered trace that is rapidly fading away. Although the physical trace disappears, the affective element remains in space and within me. I feel slightly uneasy, knowing that delinquency has been in the otherwise empty environment.*



This chapter will highlight and examine the affective affordances of the presence of trash and signs of disorder and the ways in which they impact on the perception of social safety experienced within the space.

### 5.3.1 *The presence of trash*

"It makes it more unwelcoming in a way because when you have trash, it looks like people don't care and just throw shit on the ground. There's bins... And nobody's coming here to clean it up. It's just left for it to take care of itself and nothing takes care of itself. So yeah, that makes it just feel more unwelcoming. Whereas when it's clean, somebody's taking care of it and it feels safer."

Jana, participant

"The trash. It starts here already. It feels like somewhere people would go and just pee, if they had to pee, looking for a pee place. This is a good place."

Lisa, participant

"In general, it doesn't appeal to me when there's trash all over, it shows that people don't care and do what they like."

Nana, participant

The lack of maintenance and presence of trash was addressed by nine out of ten participants as being problematic and contributing to a negative atmosphere in the space. In terms of the presence of trash's atmospheric affordances, here, the significance of the "ecstasies of things" for the overall

atmosphere can be observed. The examples show that the presence of trash radiates neglect and uncared for. Furthermore, the sense of neglect and uncared for feels forlorn, and the atmospheric feeling emanating from the trash takes on a symbolic nature. Pallassma (2014, p. 240) contends that "Atmosphere or ambience is an epic experiential dimension or prediction, as we automatically read behavioural and social aspects – either existent, potential or imaginary – into the atmospheric image". The atmosphere radiating from the "ecstasy" of trash provides the predictive agency of the space being experienced by incivility.



The presence of trash provided the most negative comments, signifying that the place has not been taken care of, both from a maintenance level and user level, and are physical signs of incivility. As previously mentioned in the theory section, physical incivilities include physical evidence of decay, decline, or poor maintenance of the physical environments (Roberts & Indermaur, 2012). In the case of URBAN13, litter, random building materials and a general lack of upkeep permeate the space and were identified by participants as elements that affected their comfort in the space.



Relating to affordances of things, Bennett (2010. Cited in Jensen & Lanng, 2016. p. 53) mentions 'thing-power' as a way of seeing the relationship between individuals and 'stuff'. The trash is not only a disused and discarded physical piece, it becomes something more. Its ordinariness is transformed, exceeding its status as a mere object "and manifest traces of independence or aliveness" (ibid.). The presence of litter can affect human perceptions of the spatial environment in which it lies, taking on a sensory affordance as a visual signifier. Litter becomes a sign of 'physical incivility', which as previously described exemplifies how low-level breaches of standards in a community signal an weathering of conventionally accepted norms and values (Sampson & Raudenbush, 1999). As "The streets, parks, and sidewalks still belong to no one and therefore to everyone" (ibid. p. 604), incivility is impactful due to its visual symbolism and salience. Seeing the displays of incivilities in the public space are thus perceived as cues for a space losing its civility. Resultantly, the presence of this physical disorder has a triggering effect, where it becomes a predictor for further incivility (ibid.). There is a fear for other incivilities and potentially dangerous crimes to follow. As noted by Brunton Smith (2011. Cited in Roberts & Indermaur, 2012. p. 64), "Visible signs of neighbourhood disorder are predictive of fear of crime". The physical environment is thus understood to reflect the level of social control wherein, "The physical condition of spaces communicates the local

community's efforts to control crime and damage, repair past damage, and prevent future crimes from occurring" (Stevens, 2009. p.375). In the case of URBAN13, the presence of trash and lack of maintenance is reflective of a low level of social control, the negative sensory and signifying affordance of which ultimately impacts on the sense of comfort and security in the space.

As previously mentioned in the context section of this thesis, the association of URBAN13 is an urban and social initiative helping to address the issue of the lack of community cohesion in the border between Frederiksberg and Nørrebro. The physical disorder often present in URBAN13 can thus be illustrative of a collective efficacy that is lacking in the area. To reiterate the concept of collective efficacy from the theory section, it describes social cohesion amongst neighbours combined with a willingness to intervene - if the need were to arise - in the interests of the common good (Sampson et al., 1997, p. 918). Areas where collective efficacy is not well developed exhibit higher levels of disorder (ibid.), as is experienced at URBAN13.

### 5.3.2 Differing trash expectations

The presence of trash and disorder, however, was not felt and

experienced the same way in all participants. For Ronda, her embodied experience with trash was felt differently, reminding us that "The quasi-objective character of atmospheres implies that different subjects encountering them may respond in varying ways" (Griffero 2014, p. 29). The presence of trash still has an appeal, helping to create a grungy atmosphere that is conducive for some of the activity, such as drinking and smoking, that she wishes to partake at URBAN13.

*"I think there's also this dirty edginess around it. So the whole point of being a little bit grungy is also an appeal. I'm still coming in because it is that way. I'm critiquing it because I'm 31 and I have a different lifestyle decision now. But am I still drawn to it? Yeah. I'm going to come and drink and smoke here. Would I do it if it were super clean and nice? No."*

The presence of trash and the general grungy aesthetics thus gives a sensory affordance, providing a suitable atmosphere for her to stay, drink and smoke in. Additionally, it provides a social affordance whereby her desire to drink and smoke are perceived by her as fitting to the environment from these begrimed material and immaterial cues.

Further conversing with Ronda, she tells me that back home in 58

the United States, she would frequent underpasses and undersides of bridges. The grungy atmosphere and edginess of such sites appealed to her, and still do as with the case of URBAN13, for it affords her with the ambience she wishes to exercise her desired staying activities within. She states, "It's a grimy place for me to do my grimy things." She does not deem the space unsafe, for its characteristics are what she expects to be at such a site. Her experiential history here is of importance in her current embodied experience in the space. Her visits and experiences under other bridges and underpasses were not faced with any danger. Cresswell (2009, p. 169) states that "The sense we get of a place is heavily dependent on practice and, particularly, the reiteration of practice on a regular basis." Her familiarity with such "grimy" places means that she is accustomed to the atmosphere that they evoke, her perception of the space has therefore been created through practice. As previous experiences have not been fought with negativity, she also does not associate this space with negativity, thus affecting her perception of social safety, highlighting that "the perception of the emotional affordances can strike rather different chords" (Griffero, 2014, p. 29) depending on personal experience and biography.

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## 5.4 CONCEALMENT AND ENTRAPMENT

This following section will tell of the zones, spatial setups and immaterial cues that were addressed as affording concealment and entrapment within the URBAN13 space.

### 5.4.1 Concealment

*Whilst still walking southwards through the expansive middle, I notice an area to my left that seems sheeved in greater darkness. There is a concrete pillar blocking my full view of the dark space, but I also see a green container and a medley of bins packed together. I am still alone in the space, which otherwise seems open and empty, but a thought does cross my mind of the possibilities that could lurk out of my range of vision. I am not afraid, but feel hesitant to venture close to such an area filled with structures ripe for playing a game of hide-and-seek.*

Areas of concealment are physical occlusions of space, sizable enough to hide a potential offender such as a wall, a tree or a dark area (Nasar, 2000, p. 127). Four participants highlighted and commented on some problematic spatial zones in URBAN13, wherein the positioning of the infrastructure and height-scale are perceived to create concealment-like opportunities. The areas that were experienced as having such opportunities will subsequently be examined.

#### Bins and container zone (figure 7.)

The placement of the containers and bins, coupled with a lower degree of illumination reaching this space, provide affordances of cover for people to hide behind, therefore affecting some women's perception of social safety whilst navigating on foot in the wide open space. This area can be described as a "blind spot" wherein it contains large amounts of refuge (opportunity for a would-be attacker to hide) and minimal prospect (unobstructed views), thus having potential to evoke a degree of fear amongst individuals (Ratnayake, 2013. p. 4)

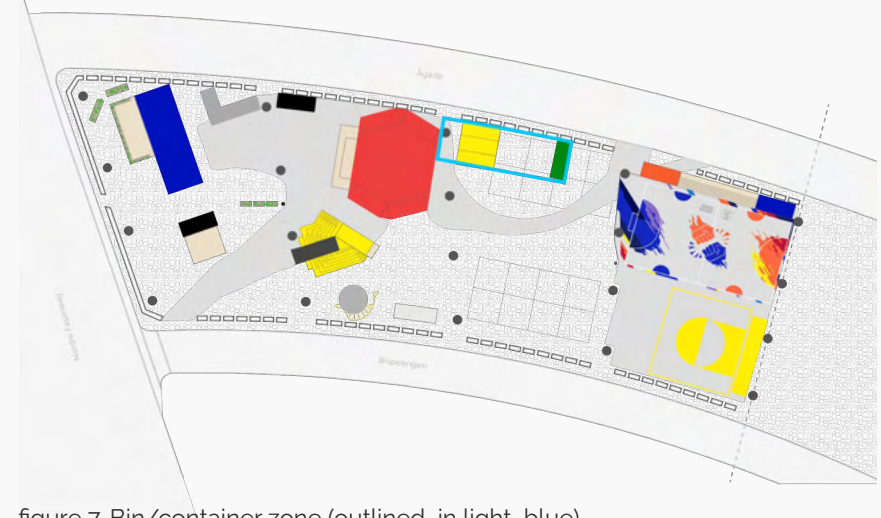


figure 7. Bin/container zone (outlined in light blue)

Dora stated a need to be alert for movement, especially in the bin and container areas where a potential offender may be concealed outside of her visual range

*"If I was waiting here on my own, I'd be on the lookout if someone was walking past me or seeing if they were in a less lit up spot just so I can keep an eye if they were going to come up and talk to you or not. It is quite a big area. Like if someone was going to attack you, they could do it from all sides quite easily, I think, in this space. I wouldn't want to stay here long at night, because maybe other people are also lurking about behind the containers or bins and not doing much."*



Sofia also addressed the space and its inherent discomfort in her video, "There is this space over here with the bins that makes me feel uncomfortable, could someone be hiding behind there?" This was also felt by Nana, when she expressed, "The left side [the bin zone]. I mean if you just stand here you think 'oh maybe people pee there.' It's darker and looks like a good hiding spot, so I guess that's never a good place to go to." In addition to this zone being experienced as having a low social safety perception due to concealment elements, the noticeably lower level of illumination that extends from the HID light strip adds to the discomfort. Poor lighting affords a would-be-offender a space of hiding, and as explored by Valentine (1989, p. 386) "Such opportunities for concealed attack are often exacerbated by bad lighting and ill considered and thoughtless building design and landscape". Although the northern end, closest to the busy Nordre Fasanvej street, also has structures that can create concealment-like opportunities, they were not highlighted by the participants as being problematic or affecting their sense of safety. This is attributed to the natural surveillance afforded by the location's close distance to the busy street, and an ability for calls for help to be heard.

### *Concealment and past experience*

Experiential history can affect the manners in which a person experiences space, influencing both the ability to perceive some affordances and affecting the delineation of cues in the environment, both material and immaterial, as being safe or otherwise. One participant, Lisa - a native Copenhagener, disclosed some negative public experiences that now influence her mobility and sense of safety whilst navigating in the public realm, of which will subsequently be explored.

Lisa's past experiences of being robbed and attempted to be robbed still influences her mobility journeys in the public realm at night. As such, she avoids places of concealment that could potentiate a threat. As stated by Lisa,

"I don't like these little secluded areas around the containers and bins where you can't see anything. I would be fearful that someone could be hiding behind them. I have been robbed in Copenhagen and also attempted. It was many years ago, but when people walk behind me or I see hooded figures coming towards me, I just sort of freeze a little. So I tend to not choose the secluded spaces."

Lisa's interpretation of the space has been shaped by her past violent experiences in urban spaces. Being in a similar spatial situation has a negative emotional affordance for her. It sparks memories and situates the view into a personal sphere wherein "the 'elements' of architecture are not visual units or gestalt; they are encounters, confrontations that interact with memory" (Pallasma, 2005. p. 63). Consequently, the fear surrounding potential violence which emanates from experiential history gets triggered. Ultimately, this affects how she engages in spatial practices, being wary of and avoiding areas of concealment, such as those afforded by the spatial placement of the bins and containers.

### *Zero feeling of concealment*

Not all participants expressed a feeling of concealment whilst walking through URBAN13. For Ronda, at no point during her experience did she feel unsafe or concealed. As stated by Ronda,

*"This is probably the darkest area and it's still not dark. I couldn't have sex here. I think that when I'm out and gauging safety, is my safety about me being attacked or about being caught? I think it is a very distinct experience where there are lots of experiences where you're waiting to be caught. I don't feel at any point unsafe, my safety is actually getting caught doing something I'd want to do that might not be legal."*

Ronda states that the level of illumination that the lighting affords creates too much visibility and natural surveillance, where the "eyes on the street" could readily see her. The whole walking experience felt concealment free due to the visibility afforded by the HID lighting, "This place is well lit, there's no place to hide. With this amount of lighting, you can see everything." Relatedly, this would impede on her ability and willingness to carry out particular actions and behaviour, of which are deemed socially unacceptable and disorderly in public. It can thus be argued that as the lighting and its visibility affordance acts as a deterrent to disorderly conduct, there is in fact a heightened perception of safety for Ronda.

The feeling of visibility is also attributed to the presence of people in the space, of which did not occur in other walk-along or video recordings. Whilst Ronda and I were having our walk-along interview, there were two groups of men aged between 40-60 years



sitting, drinking beer and conversing amongst each other. Their appearance was somewhat ragged and haggard and it felt as though they were locals to the space. As highlighted by Ronda,

*"I don't feel threatened by them at all. They seem like they're in their space and they're enjoying their own time. And I wouldn't have a problem, nor did I have a problem when I walked by them."*

The presence of these men offered no source of contention to Ronda, for she felt zero evil intent from them. In fact, their presence provided "eyes on the street", and coupled with the HID lighting that afforded high visibility and zero concealment, were sources of deterrence for if Ronda wished to carry out more deviant behaviour in the public sphere. Again, a knock on effect would entail a reduction in the willingness to behave in a socially disorderly manner, thus increasing the perception of safety.

#### *Side streets (Ågade and Bispeengen):*

The streets running parallel to URBAN13 have different affordances that affect the perception of social safety whilst walking along the path in the area. Despite not being part of URBAN13, they are important to mention as 4 out of 10

participants stated that they would be more likely to take a detour and walk along them rather than URBAN13 alone at night. It was also highlighted that each side had different affordances related to a feeling of safety, of which will now be examined.

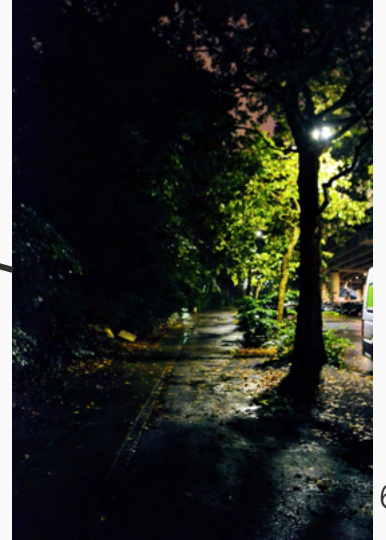
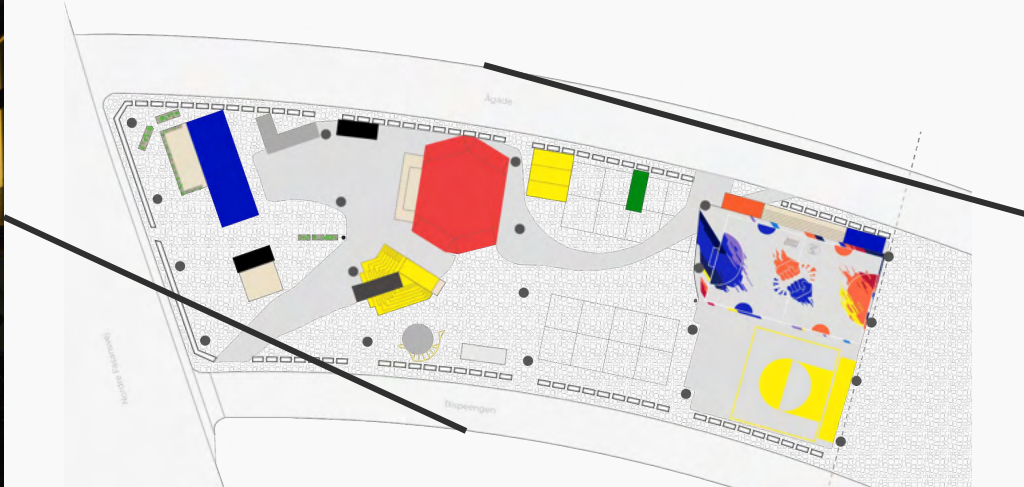
#### Ågade vs Bispeengen

When discussing the streets parallel to URBAN13 and her feeling and willingness to walk along them in order to reach the URBAN13 space or another destination, Mara mentioned elements of concealment that would affect her comfortability to walk on the Lundtoftegade/Ågade side. As stated by Mara, "I would probably be more comfortable walking on the other side [Bispeengen] because there are apartment buildings along the way, at least over there. People live there and can see out of the windows. I guess there's that thing with trees and people hiding in trees and bushes and stuff. So I think that can make you feel more uncomfortable because somebody could jump out."

This too was experienced by Jana, "I think the apartment buildings [Bispeengen], nobody can just jump out. It's just like a wall and some windows, so I know what's there and it's more open... I guess people living there could also see you. Whereas here [Lundtoftegade/Ågade] I don't know what's there. I can't

see everything. So then that would make me feel more uncomfortable." Mara and Jana highlight the "eyes on the street" affordance provided by the inhabitants of the apartment buildings on the Bispeengen side. Walking along Bispeengen, you can often see signs of life within the apartments, with some dwellings having their lights on. The light shines from their windows, informing a passerby that there is presence within, and with that, eyes that can survey the street. The orientation of buildings running parallel to the walking path thus can increase the number of "effective eyes" on the street, whereby natural surveillance can be afforded from people in the buildings watching the street.

In contrast, on the Lundtoftegade/Ågade side, there are no dwellings close to the path to offer the same natural surveillance, therefore a perception of safety is lower due to a fear surrounding the social dimension of entrapment and the thought of the possibility for would-be offenders to feel less deterred. Furthermore, the vast array of bushes and shrubbery offer the ability of a would-be offender to be concealed. Their placement also acts as a visual obstruction, affecting the level of prospect for the women to readily see around them. The adverse effect of the concealment and lack of prospect is that it reduces their sense of social safety in the area, wherein it plays on a fear that a potential offender could be hiding out of their visual range.



### 5.4.2 Entrapment

*Walking onwards, I decide to take a different trajectory from when I walked from the northern end to the southern. Instead of passing more familiar territory of the fitness equipment, I take the walkthrough between the large yellow container and the Garagen music venue. As I shuffle my feet through, the previous expansiveness of the wide, open underpass gets funneled in, like I have entered a parallel world where the spatial dimensions have been reversed. I now feel larger, the human scale of the container readjusting my sense of size in the urban fabric. The space, however, feels animated by a slight increase in anxiety, of which results from a feeling of entrapment. I ponder how I would feel and react if a person were to appear at the opposite end or behind me. I examine the space and its close confines, its alleyway-like form could prove difficult for an escape route. With such a loud soundscape created by the constant flow of car-traffic on the above motorway and Nordre Fasanvej, would my call for help even be heard?*

Through the alleyway

*"I think the areas between the containers I feel most unsafe. They're not super high, but high enough to completely shelter and they're very close together. So it almost feels like small alleys where you'd never go as most women, because it feels like if you were here and there was somebody in here, it's too small for you to turn around and leave. But then what if that person wants to harm you or just cat-call you or just say anything to you? It kind of feels like you're almost calling for, looking for a possible negative experience. So I just avoid it."*

Sofia, participant.

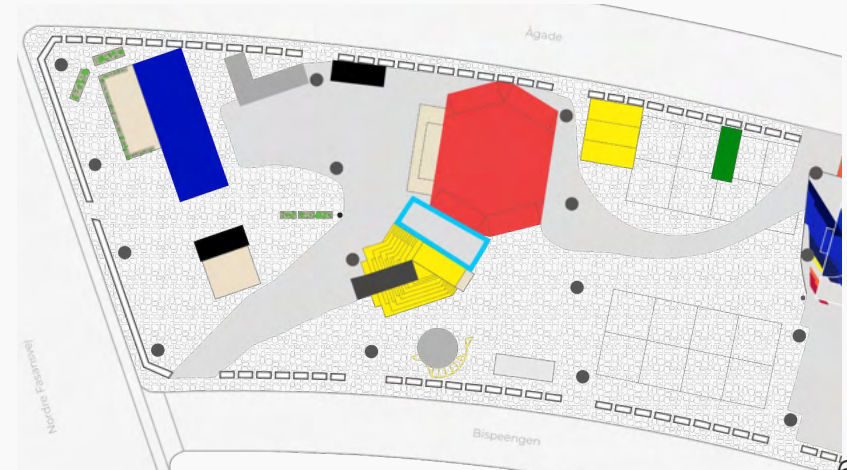


figure 8. "Alleyway" outlined in light blue

This particular zone (figure 8.) was highlighted by multiple participants as an area perceived to be less safe due to issues of entrapment and an element of concealment too. The spatial placement of the yellow container close to, but not touching the red Garagen music venue creates a space akin to an "alleyway". Seven participants connected the alleyway that can enable entrapment, with negative experiences such as a difficulty to escape. To reiterate from the theory chapter, entrapment is the level of difficulty a person would experience escaping when confronted by a potential offender (Boomsa and Steg, 2012). This difficulty was highlighted by Patricia, who states, "There could be someone waiting there. There's no space for me to exit easily. Someone could jump out from the corner, that's sort of the feeling I get." As for Mara, although she generally felt comfortable throughout her walk and subsequent walk-along interview, the alley-like area also conjured up a discomfoting feeling, compounded by the effect of lowered lighting, "It's almost a narrow alley. There's not a lot of light. Which is funny, because it's still yellow. So it still has colour but because it's not lit up you don't really feel comfortable in the same way at least. You just feel closed in." Mara previously stated that she associates the colour yellow with happiness and brightness, but due to the prevailing darkness, this animated affordance of the colour is lost and cannot endow the space with a pleasant energy or atmosphere. Additionally, Mara's description



highlights the affordance of lower lighting to create a more zoomed-in feeling in the space. Similarly, Böhme, (2016. p. 207) contends that "You get spatial experiences in darkness as well, with a space seeming close and oppressive". It has been argued that opportunities to escape are of particular importance for women navigating in the public realm (Pallasma, 2005; Valentine, 1989), and is enough to reduce a sense of social safety, despite no potential attackers being present (Boomsa & Steg, 2012. p. 197). Furthermore, there is also an element of concealment, where movement towards the exit of the alley is filled with a little nervous anticipation of who could potentially be out of the visual frame.

### *Entrapped by a wall of sound*

A further point of entrapment will now be examined from an auditory perspective through the effect of traffic sound. The noise from the traffic from Nordre Fasanvej and the motorway above has a constant presence at URBAN13. The presence of traffic and its associated soundscape provides different affordances that are dependent on the location of where one stands in URBAN13, as will subsequently be examined.

*"I honestly wouldn't expect there to be less noise here because it's under a very busy bridge. So I think that could be a part of the charm of the space even, if it were done right."*

Toni, participant

The sound of traffic comes as no surprise to Toni, in fact, it contributes to the very essence of being in an urban setting. Although she sees no need for the noise to change, she is aware of the compounded effect this has with other negative attributes of the space in regard to the feeling of unsafety. She goes on to say, "I don't think that could be changed anyway for this specific area. And I don't think there's a need for it to change. But if you're in a negative mindset of feeling unsafe, it just adds to the feeling of shadiness, creepiness." When questioned further, the reasoning behind the sense of creepiness was due to the noise wall, "To me, it's not the cars themselves, it's just the fact that it creates a lot of background noise so that you wouldn't be heard if you were to call out for help or whatever."

The soundscape collectively created from the rushing of cars above the underpass and on Nordre Fasanvej can have differing affordances related to perceived social safety depending on where a woman is located in URBAN13. At the northern entrance, the close distance to passing cars affords a sense of

social safety through natural surveillance, “eyes on the street” and an ability of calls for help to be heard, as previously defined as the social dimension of entrapment. The further into the URBAN13 space one traverses, the affordance of the car soundscape transforms. It now takes on a negative affordance, becoming an element of entrapment, a sound barrier for contacting others for help.

This experience was felt by 6 of the 10 participants who experienced an enclosed feeling, or a “wall of noise”, resulting from the intensity of sound emanating from the street and motorway. As stated by Jana,

*“I wouldn’t sit there [a seat in the middle zone] because it feels like if I were to sit here alone, it feels like it’s open, but I feel sheltered in a weird way and not even physically necessarily, but by the noise from the streets that feels like there’s walls of noise everywhere.”*

What Jana explains is the social dimension of entrapment, wherein there is an inability to contact people for help if the need arises (Boomsa and Steg, 2012). This feeling of entrapment mediated by the car soundscape was also experienced by Josephine who stated, “I guess it feels it’s open, but it feels like it’s kind of closed to the sides with the noise.” Jana continues by mentioning the adverse effect of the noise walls,

*“If there were anything to happen, which is something you think a lot about as a woman, or at least a woman with my life experience, I think that’s a pretty universal one though. If there’s walls around you, you feel like you wouldn’t be heard in case something happens.”*

This was reiterated by Josephine, “If somebody were to come up here and just do anything, I feel like nobody would notice.” The high sounds emanating from the street and cars render their escape from a potential offender more difficult due to the inability to call for outside help and be heard. Ultimately, this affects their perception of social safety wherein “The possibility of entrapment is enough to decrease feeling of social safety, even when there are no potential attackers present” (ibid. p. 197).

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## 5.5 LIGHTING

This section will highlight and discuss the role that lighting has in atmosphere creation and the perception of social safety at URBAN13. In the online survey distributed to five Facebook groups associated with Bispeengbuen, URBAN13 and their surrounding neighbourhoods, 80% of participants (30 female, 13 male) voted lighting as an issue impacting the sense of safety at URBAN13, and that a new light installation would attract them to visit the space more often (75%). Additionally, 6 out of 10 interview participants highlighted the impact of the lighting in either or both video and walk-along interviews, stating that the main functional HID lighting installed has a negative impact on their embodied experience of the space.

Lighting has a plethora of affordances that affect us in a multitude of ways. We are reliant on its physical properties in order to navigate the environments around us during night time hours. Additionally, light speaks to us as human beings in manners more difficult to quantify, it has the capacity to affectually influence us (Major et al., 2006). This chapter will therefore examine the affective qualities of light under URBAN13 and highlight the heterogeneous effects and perceptions that unfolded between different participants. It will begin with the main, functional, HID lighting, moving then to the effect of experiencing a “flickering of light”, and concluding with the atmospheric effects of a space diffused by fairy lights.

### 5.5.1 The burn of the spotlight

The main artificial lighting used at URBAN13 produces a nocturnal environment that is flooded with light, mimicking and even surpassing the daytime illumination by sunlight. Whilst walking through some areas of URBAN13, namely directly under the HID light pass that follows the underpass in a vertical manner, the light is exceptionally bright, giving affordance to visibility of a vast chunk of the URBAN13 area, including persons traversing the space. However, the HID lighting has strong lumens, resulting in a very high brightness that, for some, affords a spotlight effect if one were to walk under it. As stated by Josephine, "In the big open space, it's so bright, like you are under a large spotlight."

This was similarly experienced by Anna,

*"And so if there wasn't anyone in this space at night in the second half, I wouldn't really want to walk through that. I would feel a little bit unsafe, like I'm under some sort of spotlight. But the first half, I think I would still feel safe because it's so well lit. But in terms of inviting and interesting, not really at all. It's quite bland, very concrete."*

This is not an isolated case in excessive lighting within the public urban domain, nor is the discontent limited to one case. Edensor (2017. p. xi) contends that "excessive, standardized, and low-quality lighting is engendering a growing disenchantment with an over illuminated world". A negative affordance of such an excessive brightness is that some women feel overexposed and visible in such an expansive space, especially when the space is void of other people. Due to the



lack of presence of people in the space, there are effectively no benevolent “eyes on the street” that could warrant natural surveillance. Instead, there is a sentiment that potential, malevolent, concealed “eyes on the street” could be gazing at the women whilst they walk under the spotlight. Some women thus feel too visible, especially seeing that the side streets [Bispeengen and Ågade] are, in contrast, diffused in a noticeable darkness, and additionally, the spatial arrangement of some areas, such as the trash zone, provide affordances for hiding (as previously discussed in the entrapment and concealment chapter). When considering the importance of Jacobs’ “eyes on the street” concept, the ability of increased lighting to make spaces be perceived as safer can be questioned. Instead of seeing lighting giving a direct affordance for safety through visibility, enhanced illumination should be considered as a way to attract more people to a space at night, therefore creating greater (actual and/or perceived) safety through the presence of people and activity.

### *Over-illumination and perception of safety: the lighting paradox*

This section will briefly discuss a recent study on the role of high illumination and its negative effect on the perception of women's safety in public at night. After analysing over 80 of the most unsafe ‘hotspots’ identified by women in Melbourne, Australia, a study conducted by the Gender and Place department at Monash University found that high illumination, or very bright and overlit spaces, does not correlate with young women's perceptions of urban safety (Kalms, 2019). As stated by head researcher Nicole Kalms (ibid.) “our research into unsafe “hotspots” has found young women's perceptions of urban safety do not correlate with the most brightly lit spaces.” The findings showcase that areas with higher illumination have a higher likelihood of being perceived as unsafe sites, wherein “the average light level across these sites was twice what was measured across safe sites” (ibid). Conversely, a more layered lighting approach helped to heighten women's perception of safety in a public space. As stated by Kalms, (2019) “The analysis showed that consistent and layered lighting – where there are multiple light sources and where surfaces with different reflective values are taken into consideration – makes women feel most safe.”

### Suggestion:

As the aforementioned paragraphs have highlighted, the lightscape at URBAN13 could benefit from a reimagining, not only to help increase a perception of safety, but also to reduce the homogeneity of illuminance. Creating an imaginative lighting installation could generate more visitation to the space at night and connectedly, more “eyes on the street”. Furthermore, using imaginative modes of lighting can highlight overlooked textures, forms and spaces, and in doing so, break up the homogeneity and create a layered lighting effect that the aforementioned study found to be effectual in increasing a perception of safety. One very obvious space to intervene is the underpass concrete beam structure. It spans the entire space, connecting all facets and materials under the bridge. The expansive middle section was stated by participants and some public as the greatest source of disenchantment and discomfort in the URBAN13 space, and part of this was to do with the highly uniformed and illuminated HID lighting there.

### *Comfort under the guiding light*

The experience of the HID lighting was not homogeneously felt by all. Ronda, as discussed in the concealment chapter, felt that the visibility afforded by the HID lighting would impede on conducting socially disorderly behaviour, thus hinting to an increase in the perception of safety. In another manner, Dora had a positive experience with the HID lighting wherein she felt comforted by its wayfinding-like attributes that positively affected her whilst walking in the space. As stated by Dora,

*“I’ve gone past all the workout furniture and kind of [entered] a big open space that’s very empty and still. There’s a strip of lights you could follow as you walk, that would make you feel a bit more comfortable. I wouldn’t want to go much outside of the lights. It just feels like a disused area.”*

For Dora, the light acted as an illuminated walkway, a functional affordance that provided her a clear trajectory to follow whilst navigating the expansive and empty space. Light can have a directional affordance, wherein “lighting effects guide understandings about how to act and manoeuvre within distinctive spatial and social settings” (Sumartojo et al., 2019, p. 2). When further questioned about the effects of the lighting, Dora described, “The lights definitely do make it more

transparent in a way, like you can see everything. And so you feel more comfortable." The artificial, functional HID lighting affords brightness in the space, giving Dora the ability to see the surrounding environment. Simultaneously, the space surrounding her allows room for free movement, aptly named a "clear space" wherein the spatial depth can be assessed by one's eyes through the brightness afforded by lighting (Böhme, 2016. p. 207). An emotional affordance of such a clear space "is one of security and freedom" (ibid.), whereby one has a wide, long and clear visual perspective. Although there still remains possibilities for threat to happen in a clear space, the overall experience is that everything stays at a distance and that this distance implies security and freedom of movement (ibid.). Overall, for Dora, the light not only became a guide for her movement, but the bright illumination that afforded a "clear space" and a long visual range affected her sense of comfort

### *5.5.2 The flickering of light*

*Step by step, my feet slowly propelled me northwards as I followed what felt like directional lighting provided by the linearly placed lights. The surroundings were calm and still, the absence of movement, life or material remained present, but I had grown accustomed to the emptiness and it no longer felt so obtrusive. Suddenly this uniformity of illumination and calm was interrupted*

*by a flash. I was enveloped by a quick fleeting feeling of fright. Extending my head upwards, I took in the source of disruption, a flickering of a lone HID lightbulb. I took in the moment, sensing that the successive flickerings felt like violent outbursts of energy that tintured the space and my skin with a new atmosphere. Standing still for a moment, with only a minute shuffle of the positioning of my feet for greater comfort, the slight shift highlighting the urban grit between my soles and the cobblestones. Once I returned my body to stillness, the flickering had already come to an abrupt end, and with that, calm and uniformity reigned again.*

During my walk-along with Dora, who as previously mentioned, had found positive affordances with the HID lighting, we experienced a flickering of light that affectively moved us. As stated by Dora, "I think the lights are flickering a little bit. It is a bit disconcerting." She stops walking, directing her gaze upwards to the source, and announces "It's quite intense and feels a little spooky". Her experience showcases an affective affordance of atmosphere to instill a feeling of discomfort, but also to influence her movement, reminiscent of how "atmospheres may interrupt, perturb and haunt fixed persons, places or things" (Anderson, 2009. p. 78). Her initial experience of the flickering light caught her off

guard, a tense feeling diffused in the air making her search for the source in order to determine what it in fact was. She likened it to a camera flash, like she was being surveilled by a hidden entity, stating tat, "It's like a camera or something. At first you are kind of looking for it, but it's already gone. I guess it was kind of unnerving." The source of this atmospheric effect in this case was easily deducible, the sharp, unnerving yet fleeting atmospheric experience was concretely connected to the faulty light. This effect highlights that atmospheres are "Physically ineffable, though sometimes actually condensed in a certain area or anchored to some object that may be their primary cause, they still appear "external" enough to suddenly attack us, take over and then, just as suddenly, abandon us" (Griffero, 2019. p. 12).

After deducing the flash came from a faulty bulb, the feeling of tension stemming from the need to be alert shifted to sensing the new atmosphere it had co-creatively washed over the environment. Its fault - and the connected atmospheric effects afforded by this - mirrored a typical setting of an unsafe space that is prone to negativity. As positioned by Dora, "They're stereotypical mise en scene of a bad place, like you just need the dripping pipe somewhere and then some rats running or something." Dora relates the unfolding scene to similar environments already known to her, this connective tissue of environmental cues showcasing that "When the subject matter is reasonably familiar, relevant distinctions speedily offer themselves" (Dewey, 1934. Cited in Pallasmaa, 2014. p. 232).

Time seemed to slow down after finding the flickering source and a "spooky" atmosphere diffused the space, sensing a foreboding outcome that follows the scenes in a tick-tock, horror movie-like clockwork fashion. This relational distinction was mirrored by Toni, who also experienced the flickering light during our walk and likened the effect to a scene from a horror film,

*"It's kind of spooky, like a typical horror movie. Somebody's going to get you, like a flicker of the light. It's like, do-no-no-no-nom. Then, typically, the woman runs. But then I can really imagine a lot of guys that I know not having a problem being here, I just feel like they generally feel safer and this wouldn't affect them."*

What Toni alludes to is a gendered stereotype often conveyed in horror films, where women traditionally assumed the roles of victims, fleeing from a perpetrator. However, this rhetoric is changing, with horror becoming one genre where women are taking on new roles

not solely as victims, as was more prominent in the past, but as heroes victorious from victimisation or as monster-like perpetrators (Younger, 2017).

Additionally, what Dora and Toni have experienced is akin to the 'anticipatory' quality of atmosphere, which is defined as "the feeling that something is about to happen or has just happened – which acts to create both coherence and tensions within the bodily ensemble" (Brown et. al, 2019. p. 6). Another participant, Mara, also experienced the flickering and associated emotional effects, stating, "It's also funny because logically, it's just a flickering light. But you connect it to some kind of horror movie and then suddenly it creates a thing in your head. Logically, it doesn't really make sense. It's irrational, but yeah, it could make you feel a little bit uncomfortable." The horror movie-like quality of the flickering light affords an affective uncomfortable felt-bodily experience, and has an associative emotional affordance that anticipates something more negative to come. Ultimately, this sense of foreboding can have an impact on comfort in the zone.

### 5.5.3 The calming effect of fairy lights

*Walking northwards from the large open space filled with absence, I start to leave behind the intense illumination radiating*

*from the HID light bulbs. I pass through a walkthrough between a yellow container and the red wall of the Garagen music venue. A damp musk permeates the air, and in contrast to the space before, it is darkly lit. The light rays dissipate in intensity by the time they reach the space, further blocked by the container which acts like a wall against light. I sense the space is endowed by gloominess as my eyes adjust to the lessened light. I feel slightly uncomfortable by the tight spatial dimensions somewhat akin to an alleyway potentially impeding on my ability to escape if the need arises, of which is exacerbated with the reduced lighting. Fortunately this sensory experience is fleeting. The further I venture north, the quicker the gloomy atmosphere dissipates, afforded by the spatial transition. Every step brings me closer to the area in front of the Garagen music venue, a zone filled with warmth and welcoming. The fairy lights are a mood lifter, bestowing the space with a soft warm light and affording a calming ambience. The colour is a softer hue and creates a sense of cosiness within the large and expansive area. Drooping overhead, they conjure up an image of being a blanket stitched together by strings of light, tucking you under in a cosy benevolent spell. I feel a willingness and desire to stay and take in the space, rather than keep mobile to lessen the impact of the harsher light rays that extend throughout the*

*underpass. This is also due to other material and spatial affordances in that space: the plants, organised seating, the closed-in, yet not entrapped feeling of the placement of furniture and containers and the closeness to Nordre Fasanvej.*



*"As soon as I see the fairy lights, there's something about fairy lights that are just very festive, like I automatically feel like this is not a dodgy area. It's just closed up for the night."*

*Dora, participant*

Artificial lighting can facilitate the creation of nocturnal meanings of public spaces that "materialize social phenomena such as moral, power, identity, intimacy, atmosphere, safety, social borders etc" (Sørensen & Bille, 2007. Cited in Ebbensgaard, 2015. p. 115). In the case of the fairy lights, their presence and the radiant, claiming glow emanating from their bulbs help to construct an intimate atmosphere in the otherwise open space. The fairy lights' powerful propensity to tincture the surroundings provokes both affective and emotional resonances in the sensing body, wherein it instigates sensual pleasures and comforts (ibid.). As such, seven participants mentioned a felt change in comfort levels upon reaching this space. The affective attributes of the light help to construct a different, more positive atmosphere in comparison to the wide open, somewhat sterile feel to the middle space. This space, in contrast to the previous, is touched by a dim lighting that radiates a sense of "intimacy" and "cosiness", as stated by six participants and also felt by myself.

Additionally, multiple participants mentioned a symbolic affordance to the presence of fairy lights. Through an experiential history of experiencing places diffused by such lighting, four participants drew associative links to the

presence of fairy lights and very positive places such as festivals, living rooms, events, all in all, places that are generally experienced with a liveliness and positive atmosphere. Mara states that,

*"It's welcoming because of the lights hanging down. I did Sofa Sounds in Aarhus, which are intimate music concerts, and we would always hang up these lights for the show. They reminded me of that, which were cosy and intimate experiences and reminds me of music. When I see that, I'm like, 'oh, I need music and a beer.' It makes me feel really comfortable."*

These associative affordances of the lights therefore too creates an emotional affordance, wherein the space in front of Garagen is seen in a positive light. As stated by Toni, "It just feels like a typical sort of open garden summer concert venue feel, very familiar to me. Maybe I wouldn't even mind sitting on one of these benches if I had to sit for 15 minutes." This lighting addition to the otherwise rather uniform lighting typography predominantly found in URBAN13 changes and infuses the area in a different light, something that has emotive correlations to chilling, festivity, or in other words, conjuring up positive emotional associations. The previous feeling of being under the spotlight has now been removed, replaced with a feeling of calm and for some, a desire to even stay and take in the relaxing atmosphere.





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CONCLUSION

In this thesis, I have aimed to answer the research question:

*How is perceived safety experienced in the space of URBAN13 by women at night?*

Through autoethnography, video recordings and walk-along interviews with ten women, I uncovered thematic material, immaterial and spatial elements that influence the perception of safety. Through these contextual discussions within the analysis, the following points can now be concluded.

When there is an absence of life at night at URBAN13, it takes on an object-like presence. Consequently, it has a sensory and emotional affordance, instilling a feeling of risk in three manners: Producing a social dimension of entrapment, having null natural surveillance via “eyes on the street,” and additionally, can have a negative environment association, of which can be perceived as an space that could allow for criminal activity and that women should avoid at night. Resultantly, these factors increase a fear of the ability for crime to take place, as well as an inability to seek help if needed. It thus can impact on the perception of safety, as well as affect the emotional state so far as to inhibit movement to some areas such as the “empty” middle zone. This thesis has also shown that emptiness is not static, and introductions of people to a space can alter the atmosphere and perception of safety by

reducing the social dimension of entrapment, but only insofar that the people present are perceived as having no evil intent.

Regarding the visual aesthetics of the underpass, there were ambiguities raised regarding the tolerance and affective attributes of being in a space with a large presence of trash and disorder. For almost all participants, trash had a negative affordance wherein it helped to create a negative atmosphere, in conjunction with other elements such as the emptiness and traffic wall of sound. Associations were made between trash and physical incivility, wherein the displays of disorder are predictive of further incivilities, thus aiding to create a perception that more serious crime could eventuate in the area. Seeing as the purpose of the URBAN13 intervention is to help bridge better community connection between the two neighbourhoods and create a safer, more inclusive space, the physical, and sometimes social disorder present in URBAN13 can thus be illustrative of a lack of collective efficacy, signifying that social cohesion amongst neighbours is lacking, and with it, an ability for incivility to prevail. However, for one participant, the grimmy aesthetic gives both a sensory and social affordance. It provides a suitable and accustomed aesthetic that matches the environment she wishes to practice her desired activities of drinking and smoking. Additionally, the environment is perceived as open and socially acceptable for such activity to take place

.This case highlights the importance of experiential history, wherein previous positive practice at similar spaces instilled a positive perception to URBAN13.

Regarding the element of concealment in URBAN13, the spatial layout is sensed to afford avenues of hiding for a potential offender. This included the bin and container zone, of which was exacerbated by the lowered illumination, lack of natural surveillance and social dimension of entrapment stemming from the wall of noise and long distance to a busier street. In regard to entrapment, the alleyway-like creation afforded by the close spatial placement of two facilities created a feeling of entrapment possibilities for some. Additionally, the sound of traffic created a wall of noise which too afforded a sense of entrapment. Resultantly, some participants stated an unwillingness and discomfort to venture to, or stay long in the aforementioned spaces, seeing as they could potentiate a threat and calls for help would be left unheard. Personal biography was also shown to hold influence here, wherein the fear surrounding potential violence emanating from experiential history got triggered for one individual, making her constantly wary of and avoiding areas of concealment and entrapment at night. Conversely, an ambiguity was found. The same participant who is accustomed to being in similar environments stated that the whole walking experience felt concealment free due to high visibility afforded by the HID

lighting. On top of this, there were groups of men present during our walk-along, their presence became “eyes on the street” that would equally provide help if she needed, but their presence also afforded natural surveillance that would also inhibit her ability to conduct less than socially acceptable practices, therefore also feeling that others too would be deterred from conducting other practices of incivility. This anomaly therefore showcases that a perception of safety for women is not always about a threat of danger and a likelihood to receive help from bystander intervention, but can translate to the ability to not get caught during a socially disorderly act.

A further point is in regard to lighting. Many participants experienced a spotlight effect under the main HID lighting, feeling themselves as being too visible. There was a sentiment that potential, malevolent, concealed “eyes on the street” could be gazing at the women whilst they walk under the spotlight. However, for one, she felt comforted by its wayfinding-like functional affordance, and additionally, the long visual range or “clear space” such bright lumens afford. Additionally, the atmospheric, sensory, and emotional affordances of different lighting and lighting effects have been explored through the flickering of a faulty bulb and fairy lights. The flickering created a spooky, horror-film-like atmosphere, wherein it afforded an affective uncomfortable felt-bodily experience and subsequently

, an associative emotional affordance that anticipates something more negative to come. Conversely, the presence of fairy lights helped to infuse a positive festive meaning to the space, holding symbolic value wherein experiential history connects them to festivals and late-night summer hangouts. They thus enable some women to experience the urban space in a different, more positive light, as a place potentially welcoming their presence.

Although they have been discussed predominantly as separate entities affecting the perception of safety, it is indeed an interplay of these aforementioned material and immaterial elements situated in URBAN13 that have such affordances. The thesis concludes that the lived, sensory experiences of women in urban nightlife must be acknowledged in planning and need to be examined further within studies of nighttime spaces and the perception of safety, taking into account the multitude affordances of the material, immaterial and spatial elements.

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# REFERENCES

- Adey, P. (2013). 'Air / Atmospheres of the megacity.' *Theory, Culture & Society*. 30(7/8). 291-308.
- Adey, P., Brayer, L., Masson, D., Murphy, P., Simpson, P., & Tixier, N. (2013). 'Pourvotre tranquillité: Ambiance, atmosphere, and surveillance.' *Geoforum*. 29. 299-309.
- Aliasgari, M. 'Illuminating the non-place', M.S thesis, KTH, Stockholm, Sweden, 2013
- Alrabadi, S. (2020). Crowdability of Urban Space. Ordinary rhythms of clustering and declustering and their architectural prerequisites. Architecture and built environment, Faculty of Engineering, Lund University, Lund.
- Alvi, S., Schwartz, D., DeKeserdy, W. & Maume, M. (2001). 'Women's fear of crime in Canadian public housing'. *Violence Against Women*. 7(6). 638-661. doi: 10.1177/10778010122182640.
- Anderson, B & Ash, J. (2015) 'Atmospheric Methods'. In P. Vannini. ed. *Non Representational Methodologies: Re-Envisioning Research*. London. Routledge Publishing. 34-51.
- Appleton, J. (1975). *The experience of place*. England. John Wiley
- Arup. (2015). *Cities Alive - Rethinking The Shades of Night*. Arup. viewed on 3 May 2021  
<<https://www.arup.com/perspectives/publications/research/section/cities-alive-rethinking-the-shades-of-night>>
- Ash, J. (2013). 'Rethinking affective atmospheres: Technology, perturbation and space times of the non-human.' *Geoforum*. 49. 20-28.
- Bille, M. (2019). *Homely atmospheres and lighting technologies in Denmark: living with light*. London, UK: Bloomsbury.
- Bille, M., Hastrup F. & Sørensen T.F. (2010). *An anthropology of absence*. New York. Springer.
- Blöbaum, A., & Hunecke, M. (2005). 'Perceived danger in urban public space: The impacts of physical features and personal factors.' *Environment and Behavior*. 37. 465-486.
- Boomsma, C. & Steg, L. (2014). 'Feeling safe in the dark: Examining the effect of entrapment, lighting levels, and gender on feelings of safety and lighting policy acceptability. *Environment and Behavior*. 46. 193-212. 10.1177/0013916512453838.
- Böhme, G. (2014). 'Urban Atmospheres: Charting New Directions for Architecture and Urban Planning.' In C. Borch. (ed). *Architectural Atmospheres*. Berlin, Boston: Birkhäuser. 42-59. <https://doi.org/10.1515/9783038211>
- Böhme, G. (2016). *The aesthetics of atmospheres*. Edited by J.P. Thibaud. (1st ed.). Routledge. <https://doi.org/10.4324/9781315538181>
- Bressani, M. & Sprecher, A. (2019). 'Atmospheres.' *Journal of Architectural Education*. 73(1). 2-4. DOI: 10.1080/10464883.2019.1560792

Brown, S., Kanyeredzi, A., McGrath, L., Reavey, P. & Tucker, I. (2019). 'Affect theory and the concept of atmosphere.' *Distinktion: Journal of Social Theory*. 20(1). 5–24.

Bryman, A. & Bell, E. (2007). *Business Research Method*. Cambridge. Oxford University Press.

Carlsen Mazor, J. (2021). 'Nedgravning af Bispeengbuen kastes ind i forhandler om trafikaftale.' Tv2Lorry. viewed on 15 May 2021 <[https://www.tv2lorry.dk/koebenhavn/nedgravning-af-bispeengbuen-kastes-ind-i-forhandler-om-trafikaftale?fbclid=IwAR3rcT8UFOjCueit8tNylxobESaP-zRln\\_Ltj\\_\\_-X4CrbvWvkOci5tp4GPM](https://www.tv2lorry.dk/koebenhavn/nedgravning-af-bispeengbuen-kastes-ind-i-forhandler-om-trafikaftale?fbclid=IwAR3rcT8UFOjCueit8tNylxobESaP-zRln_Ltj__-X4CrbvWvkOci5tp4GPM)>

Carpiano, R. M. (2007). 'Come take a walk with me: The "Go-Along" interview as a novel method for studying the implications of place for health and well-being.' *Health and Place*. 15. 263–272.

Chemero, A. (2003). 'An outline of a theory of affordances.' *Ecological Psychology*. vol. 15. 181–195. DOI:10.1207/s15326969eco1502\_5

Clarke, A. & Emmel, N. (2010). 'Realities Toolkit #13 Using Walking Interviews.' Manchester University. viewed on 15 May 2021 <[www.socialsciences.manchester.ac.uk/realities/resources/toolkits/walking-in-interviews](http://www.socialsciences.manchester.ac.uk/realities/resources/toolkits/walking-in-interviews)>

Corbin, JM. & Strauss, AL. 2008. *Basics of qualitative research: techniques and procedures for developing grounded theory*. 3rd ed. Thousand Oaks, CA: SAGE.

COurban et al. (2020). Buens Torv - Væksthus, ledetråd og kunstpassage under Bispeengbuen. Unpublished document. Copenhagen

Cresswell, T. (2009). Place. *International Encyclopedia of Human Geography*. 8. 169–177.

Dastgheib, S. (2018). 'Light and perception of safety in-between buildings: The role of lighting in perception of safety from female perspective in in-between spaces of residential areas.' KTH Royal Institute of Technology

Degen, M., DeSilvey, C., & Rose, G. (2008). 'Experiencing visualities in designed urban environments: Learning from Milton Keynes.' *Environment and Planning A*. 40. 1901–1921. <https://doi.org/10.1068/a39208>

Ebbensgaard, C.L. (2015). 'Illuminights: A sensory study of illuminated urban environments in Copenhagen.' *Space and Culture*. 18(2). 112–131. doi: 10.1177/1206331213516910.

Ebbensgaard, C.L., & Edensor, T. (2020). 'Walking with light and the discontinuous experience of urban change.' *Transactions of the Institute of British Geographers*. 1–14. DOI: 10.1111/tran.12424

Edensor, T. (2008). 'Mundane hauntings: Commuting through the phantasmagoric working-class spaces of Manchester, England.' *Cultural Geographie*. 15. 313–333.

Edensor, T. (2012). 'Illuminated atmospheres: Anticipating and reproducing the flow of affective experience in Blackpool.' *Environment and Planning D: Society and Space*. 30(6). 1103–1122. doi: 10.1068/d12211.

Edensor, T. (2014). 'Producing atmospheres at the match: Fan cultures, commercialisation and mood management in English football.' *Emotion, Space and Society*. xxx. 1–8.

Edensor, T. (2017). *From light to dark: Daylight, illumination, and gloom*. University Of Minnesota Press

Edensor, T., & Millington, S. (2009). 'Illuminations, class identities and the contested landscapes of Christmas.' *Sociology*. 43. 103–121. <https://doi.org/10.1177/0038038508099100>

Emerling, J. (2005). *Theory for art history*. New York: Routledge.

Eymeri, J. (n.d.). *The Nocturnal City*. New Cities. viewed on 1 May 2021 <<https://newcities.org/the-nocturnal-city/>>

Fenster, T. (2005). 'The right to the gendered city: Different formations of belonging in everyday life.' *Journal of Gender Studies*. 14(3). 217–231.

Fisher, B.S. & Sloan, J.J. (2003). 'Unravelling the fear of victimization among col-lege women: Is the "shadow of sexual assault hypothesis" supported?' *Justice Quarterly*. 20. 633–659

Fowles, S. 2010. 'People without things'. In M. Bille, F. Hastrup & T.F. Sørensen eds. *Anthropology of absence: Materializations of transcendence and loss*. New York. Springer Science + Business Media. 23–41.

Frederiksberg Kommune. (2013). *Helhedsplan for byudvikling: Bispeengbuen. Bæredygtig storby... og helt sin egen*. Frederiksberg Kommune, By- og Boligområdet, Bygge-, Plan- og Miljøafdelingen

Gau, J.M., Corsaro, N., & Brunson, R.K. (2014). 'Revisiting broken windows theory: A test of the mediation impact of social mechanisms on the disorder–fear relationship.' *Journal of Criminal Justice*. 42. 579–588.

Gibson, J.J. (2014). *The Ecological Approach to Visual Perception*. (1st ed.). Psychology Press. <https://doi.org/10.4324/9781315740218>

Griffero, T. (2019). *Places, affordances, atmospheres: A pathic aesthetics* (1st ed.). Routledge. <https://doi-org.ep.fjernadgang.kb.dk/10.4324/9780429423949>

Hardley, J. 2019. 'Mobile Media and the Urban Environment: Perceptions of Space and Safety.' Paper presented at the American Association of Geographers Annual Meeting. Washington DC. April 3–7.

Hardley, J. & Richardson, I. 2019. 'Mobile Media and the Embodiment of Risk and Safety in the Urban Night.' Paper presented at the Association of Internet Researchers Conference. Brisbane. October 2–5.

Harris, R. (2015). 'Uncommon ground: Cultural differences in space perception.' In Bakman, J. and Wójcik, M. (Eds.), *The way things aren't: Deconstructing reality to facilitate communication*. Inter-Disciplinary Press. 3–31. [https://doi.org/10.1163/9789004374454\\_002](https://doi.org/10.1163/9789004374454_002)

Henery, C. (2019). *Race and the paradoxes of the night*. African American Intellectual History Society. African American Intellectual History Society. viewed on 10 June 2021 <<https://www.aaihs.org/race-and-the-paradoxes-of-the-night/>>

Hudson, C. & Rönnblom, M. (2008). 'The Woman Made City – Feminist Utopia or Practical Possibility?' In S. Deneffe (ed.) *Utopies féministes et expérimentations urbaines*. Rennes. Presses Universitaires de Renne.

Hyams, M. (2003). 'Adolescent Latina bodyspaces: Making homegirls, homebodies and homeplaces.' *Antipod.* 3. 535-558. DOI : 10.1111/1467-8330.00338

Ingold, T., & Vergunst, J.L. (2008). *Ways of walking: Ethnography and practice on foot.* Aldershot. Ashgate.

Jensen, O. & Lanng, D. (2016). *Mobilities design: Urban designs for mobile situations.* (1st ed.). Routledge. 10.4324/9781315723099.

Kalms, N. (2019). More lighting alone does not create safer cities. viewed on May 10 2021  
<<https://theconversation.com/more-lighting-alone-does-not-create-safer-cities-look-at-what-research-with-young-women-tells-us-113359>>

Koch, R. & Latham, A. (2011). 'Rethinking urban public space: Accounts from a junction in West London.' *Transactions of the Institute of British Geographers.* 37(4). 515-529.

Kopljär, S. (2016). *How to think about a place not yet: Studies of affordance and site-based methods for the exploration of design professionals' expectations in urban development processes* (Lund: Lund University).

Koskela, H. (1999). "Gendered exclusions: Women's fear of violence and changing relations to space.' *Geografiska Annaler.* 81(2). 111-124.

Kusenback, M. (2003). 'Street phenomenology: The go-along as an ethnographic research tool.' *Ethnography.* 4(3). 455-485.

Københavns Kommune. (n.d). Bylivsregnskab. viewed on 10 May 2020  
<<https://www.kk.dk/artikel/bylivsregnskab>>

Københavns Kommune (2019). *Københavnernes holdning til bylivet i lokalområdet - 2019. Teknik- og Miljøforvaltningen.* Københavns Kommune.

Lee, J.S., Park, S., & Jung, S. (2016). 'Effect of crime prevention through environmental design (CPTED) measures on active living and fear of crime.' *Journal of Sustainability.* 8(9). 1-16.

Lis, A., Pardela, Ł., Can, W., Katlapa, A. & Rąbalski, Ł. (2019). 'Perceived danger and landscape preferences of walking paths with trees and shrubs by women.' *Sustainability.* 11(17). 45-65. <https://doi.org/10.3390/su11174565>

Major, M., Speirs, J., & Tischhauser, A. (2006). *Made of light: the art of light and architecture.* Birkhauser.

McCormack, D. (2008). 'Engineering affective atmospheres on the moving geographies of the 1897 Andrée Expedition.' *Cultural Geographies.* 15(4). 415-530.

Merleau-Ponty, M. (1962). *Phenomenology of perception.* London: Routledge and Kegan Paul.

Miles, M.B., Huberman, A. & Saldaña, J. (2014). *Qualitative data analysis. A methods sourcebook.* 3rd ed. Los Angeles. Sage.

Ministry of Housing, Urban and Rural Affairs. (2011). *Byens Bevægelsesrum – Et studie af byrums evner til at fremme fysisk aktivitet og møde mellem mennesker.*

Miranda, J.V. & van Nes, A. (2020). 'Sexual violence in the city: Space, gender, and the occurrence of sexual violence in Rotterdam.' *Sustainability*. 12(18). 1-29.<http://dx.doi.org/10.3390/su12187609>.

Mott, C. & Roberts, S.M. (2013). 'Not everyone has (the) balls: Urban exploration and the persistence of masculinist geography.' *Antipode*. 46(1). 229-245 DOI: 10.1111/anti.12033

Mukherjee, A. (2017). *Organizational Space Collapsed, Organizational Space Expanded : Experiencing Space with ICT, Affordance and the Body*. Business administration. Université Paris Sciences et Lettres.

Mygdali, S. 2019. 'Walking in silence/urban encounters.' in C Kakalis. *Architecture and silence*. (1st ed). Routledge. London. 41-6. viewed 10 July 2021. <https://doi-org.ep.fjernadgang.kb.dk/10.4324/9780429437823>

Nasar, J.L. (2000). 'The Evaluative Image of Space.' In W.B. Walsh (Eds.). *Person-environment psychology: New directions and perspectives*. Lawrence Erlbaum. 117-168.

Navarrete-Hernandez, P., Vetro, A., Concha, P. (2021). 'Building safer public spaces: Exploring gender difference in the perception of safety in public space through urban design interventions.' *Landscape and Urban Planning*. 214. 104-180.

NIRAS (2011). Festivalen "Liv under Buen" - Evaluering. Foreningen "Liv under Buen"

Nord, D. (1995). *Walking the Victorian streets*. London. Cornell University Press

Pain, R. (2001). 'Gender, race, age and fear in the city.' *Urban Studies*. 38(5-6). 899-913. DOI : 10.1080/00420980120046590

Pallasmaa, J. (2014). 'Space, place and atmosphere. Emotion and peripheral perception in architectural experience.' *Lebenswelt: Aesthetics and Philosophy of Experience*. 4. 230-245. <https://doi.org/10.13130/2240-9599/4202>

Peña-García, P., Hurtado, A., Aguilar-Luzón, M.C. (2015). 'Impact of public lighting on pedestrians' perception of safety and well-being.' *Safety Science*. 78. 142-148.

Pluta, A. (2017). 'Urban void as a potential of the contemporary city development.' *Biblioteka Regionalisty*. 95-103. 10.15611/br.2017.1.09.

Rahm, J., Sternudd, C. & Johansson, M. (2021). 'In the evening, I don't walk in the park: The interplay between street lighting and greenery in perceived safety.' *Urban Des Int*. 26. 42-52. <https://doi.org/10.1057/s41289-020-00134-6>

Ratnayake, R. (2013). 'Fear of crime in urban spaces: Influence of environmental features.' *Presence of People and Social Variables*. 1-18.

Raymond, C.M., Kyttä, M. & Stedman, R. (2017). 'Sense of place, fast and slow: The potential contributions of affordance theory to sense of place.' *Frontiers in Psychology*. 8(1674). 1-14. doi: 10.3389/fpsyg.2017.01674

Rijswijk, L.V. & Haans, A. (2017). 'Illuminating for safety: Investigating the role of lighting appraisals on the perception of safety in the urban environment.' *Journal of Environment and Behaviour*. pp. 1-24.

Roberts, J. & Indermaur, M. 2012. 'Are neighbourhood Incivilities Associated with Fear of Crime?' in Pietsch, J & Aarons, H. Australia: Identity, Fear and Governance in the 21st Century. Canberra: ANU E Press

Robinson, J.B., Lawton, B.A. & Taylor, R.B. (2003). 'None.' *Journal of Quantitative Criminology*. 19(3). 237-274.

Ruddick, S. (1996). 'Constructing difference in public spaces : Race, class, and gender as interlocking systems.' *Urban Geography*. 17. 132-151.  
DOI : 10.2747/0272-3638.17.2.132

Scholand, M. (2012). Max Tech and Beyond:  
High-Intensity Discharge Lamps. Lawrence Berkeley National Laboratory.  
Berkeley. viewed on 20 May 2021  
<<https://www.osti.gov/servlets/purl/1047755>>

Sampson, R.J. & Raudenbush, S.W. (1999). 'Systematic social observation of public spaces: A new look at disorder in urban neighborhoods.' *American Journal of Sociology*. 105(3). 603-651.

Sandberg, L. & Tollefsen, A. (2010). 'Talking about fear of violence in public space: female and male narratives about threatening situations in Umeå, Sweden.' *Social & Cultural Geography*. 11(1). 1-15, DOI: 10.1080/14649360903420178

Simpson, P. (2013). 'Ecologies of experience: Materiality, sociality and the embodied experience of (street) performing.' *Environment and Planning*. 45(1). 180-196.

Stevens, Q. (2009). '"Broken' public spaces in theory and in practice.' *Town Planning Review*. 80. 371-392. 10.3828/tp.2009.3.

Sumartojo, S., Edensor, T. & Pink, S. (2019). 'Atmospheres in urban light', *Ambiances*. 5. 1-20.

Svendsen, L. (2008) *Philosophy of Fear*. London. Reaktion.

Thibaud, J. 2002. From situated perception to urban ambiances. First International Workshop on Architectural and Urban Ambient Environment. 6-8 February. Nantes. France.

Thibaud, J. (2011). 'The sensory fabric of urban ambiances.' *Senses and Society*. 6(2). p 203-215.

Thomas, M.E. (2005). 'Girls, consumption space and the contradictions of hanging out in the city.' *Social & Cultural Geography*. 6(4). 587-605.

UNPF. (2016). Urbanisation. United Nations Population Fund. viewed on 3 May 2021. <<https://www.unfpa.org/urbanization>>

URBAN13. (n.d). About. URBAN13. viewed on 1 March 2021.  
<<https://www.urban13.dk/about/>>

URBAN 13 et al. (2019). Street under Buen. URBAN 13. viewed on 1 May 2021  
<[www.frederiksberg.dk/sites/default/files/meetings-appendices/1603/Punkt\\_255\\_Bilag\\_2\\_Bilag\\_2\\_Street\\_under\\_Buen\\_projektforslag\\_fra\\_URBAN\\_13.pdf](http://www.frederiksberg.dk/sites/default/files/meetings-appendices/1603/Punkt_255_Bilag_2_Bilag_2_Street_under_Buen_projektforslag_fra_URBAN_13.pdf)>

Valentine, G. (1989). 'The Geography of Women's Fear.' *Area*. 21(4). 385-390.

Valentine, G. (1992). 'Images of danger: women's sources of information about the spatial distribution of male violence.' *Area*. 24. 22-29.

Vasnetti Miranda, J. & van Nes, A. (2020). 'Sexual violence in the city: Space, gender, and the occurrence of sexual violence in Rotterdam.' Sustainability. 12(18). 1-29. <https://doi.org/10.3390/su12187609>

Vihanninjoki, V. (2020). 'Atmospheric affordances and the sense of urban places.' Contemporary Aesthetics, 8. 1-12.

Wall, S. (2006). 'An autoethnography on learning about autoethnography.' International Journal of Qualitative Methods. 146-160. doi: 10.1177/160940690600500205.

Wattis, L., Green, E. & Radford, J. (2011) 'Women students' perceptions of crime and safety: negotiating fear and risk in an English post-industrial landscape.' Gender, Place & Culture. 18(6). 749-767. DOI: 10.1080/0966369X.2011.617914

Wekerle, G. (2000). 'From eyes on the street to safe cities.' Journal of Places. 13(1). 44-49.

Williams, R. (2008). 'Nightspaces: Darkness, deterritorialisation and social control.' Space and Culture. 11. 514-532. <https://doi.org/10.1177/2F1206331208320117>

Wylie, J. (2005). 'A single day's walking: Narrating self and landscape on the South West Coast path.' Transactions of the Institute of British Geographers. 30. 234-247. <https://doi.org/10.1111/j.1475-5661.2005.00163.x>

Younger, B. (2017). Women in horror: Victims no more. viewed on 13 June 2021. <<https://theconversation.com/women-in-horror-victims-no-more-78711>>

Zárate, M. (2014). Managing fear in public space : young feminists' intersectional experiences through Participatory Action Research. Les cahiers du CEDREF. 10.4000/cedref.967.

Zumthor, P. (2006). Atmospheres: Architectural environments - Surrounding objects. Basel. Birkhäuser. viewed on 1 July 2021. <https://brian-ambroziak-g5af.squarespace.com/s/atmospheres.pdf>

## APPENDIX

Participant video Recordings:  
<https://drive.google.com/drive/folders/1iNBukRWcTPHePLw176nzUrgE7tYJqgcl?usp=sharing>