

Playscaping The City:

The Potential of Integrating Urban Action Sports in Public Spaces as
Planning Tool for Social Cohesion



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This paper investigates the potential of integrating urban action sports (UAS) in public spaces as planning tool for enhancing social cohesion, focussing on Stadhuisplein in Eindhoven as a case study. Initially perceived as hostile and of low living quality by the municipality, Stadhuisplein has been revitalized by UAS participants, transforming it into a vibrant communal area that supports mental wellbeing and creates trust-based networks. This study shows that promoting UAS in central public spaces can help facilitating healthy, open and engaging communities, increasing social interaction and perceived safety, increasing social cohesion for all users. Additionally, this study exemplifies the importance for local authorities to provide a visible platform for communication. The case of Stadhuisplein strikingly demonstrates that the perception of and trust in local authorities and planning projects can greatly suffer from the lack of appropriate communication and information exchange, despite willingness and efforts to increase participatory initiatives in planning, maintenance and decision-making.

Key Words: Public Space – Social Cohesion – Community Building – Urban Action Sports -
Governance

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1.0 Introduction

Public spaces have the potential to serve as vital arteries for urban societies, fostering social interaction, recreation, social networks, and a sense of community. Successful public space can generate a sense of belonging and hold a special meaning to local communities and shape a city's image. It is, therefore, crucial to consider public space as key factor for the advancement of urban cohesion (Pinto & Remsar, 2015). Regardless, studies suggest that it is a common reality how urban citizens face isolation, loneliness and alienation from their neighbours and the urban environment, and more so than non-urban residents (Karmaker & Raychaudhuri, 2015; Henning-Smith et al., 2019; Finlay & Kobayashi, 2018; Montgomery, 2015). Factors such as a growing reliance on cars, outdated paradigms in planning and architecture, city dividing zoning and land-use policies during urban renewal, reluctance of public and private institutions to take responsibility for public urban environment, and the neglect of infrastructure often lead to the emergence of urban public spaces that lack identity, social interaction, and social or cultural significance (Sameeh et al., 2019). The neglect of urban public space significantly reduces the liveability of neighbourhoods or cities, as it may lead to an increased feeling of unsafety, or it derives communities from potential social interaction and exchange, which may lead to feelings of loneliness (Aguila et al., 2019). This can have significant negative impact the social cohesion of local communities, as stated by Aguila et al. (2019). Montgomery (2015) also connects this increasing isolation, loneliness, and alienation to urban sprawl and the decreasing proximity of friends and family.

Another common shortcoming of public space design and urban areas is a lack accessibility and availability of opportunities for physical activity. Governments are challenged by significant increases in the frequent occurrence of chronic diseases, obesity and sedentary lifestyles (Morris & Roychowdhury, 2020). This, as mentioned by Portacolone (2017), is also a factor contributing to increased social isolation of urban citizens. Due to car oriented urban planning practices, decentralized cities, poorly designed, and hostile public spaces, Giles-Corti et al. (2015) highlight that the lack of physical activity has been an increasingly serious burden for society. Inactivity is a great risk factor for chronic diseases that heavily challenges health systems and causes some five million preventable deaths globally (Giles-Corti et al., 2015). And while at first glance it might seem like this is within the responsibility and domain of public health institutions, research provides clear evidence of an overlap between the realm of urban planning and physical activity. More convenient and safer access to public space and sporting facilities to increase and promote physical activity is, therefore, strongly encouraged to create a healthier society (Giles-Corti et al., 2015; Kural, 2010). Kural (2010) also analysed a shift towards growing importance of committal and temporal flexibility in the participation in or execution of physical activities. This indicates the importance of a structural change in the approach of planning for physical activity, towards more accessible, low-threshold, informal sporting facilities in public space, which are non-committal and flexible in time-planning.

Regarding the multiplicity and complexity of problems that are negatively impacting social cohesion in urban communities, this research suggests the consideration of integrating urban action sports (UAS) facilities within multifunctional urban public space, hypothesizing for a valuable opportunity to approach multiple shortcomings and significantly promote cohesive communities.

UAS, such as skateboarding, BMX, free running, or parkour are non-committal, informal physical activities that are not bound to a set of rules, and rather live of the subversion of rules, and the reinterpretation of the urban environment (Dickinson et al., 2022). Public space, infrastructure, street furniture, construction sites, handrails, or stairs, therefore, become an urban playground of endless possibilities for creative reinterpretation and subversion of their original use to perform manoeuvres, tricks, and stunts. In UAS, participants envision tricks and lines (a juxtaposition of tricks), while passing through an urban environment and search for 'spots' that would suit their skill level and trick repertoire (McDuie-Ra, 2021).

'Spots' in UAS refer to an assemblage of hurdles, material properties, surfaces, objects and architectural artefacts that allow the performance of tricks, lines and manoeuvres, as mentioned by McDuie-Ra (2021). Spots are usually not purpose built for the performance of and urban action sport discipline and often emerge unintentionally in urban and peri-urban landscapes (McDuie-Ra, 2021). Participants, therefore, use public spaces and reinterpret and appropriate the physical environment.

This is, however, not only met with support by government officials and other stakeholders of public space (Shanz et al., 2008). Conflicts with skateboarding, BMX, or parkour often emerge through concerns of bystanders regarding health risks, fear of crime or fear of destruction of (public) property. These concerns can be derived from the fact that participants of UAS were, and still are often portrayed as law-disobedient rascals, troublemakers, and risk seekers (Mikmak, 2014; Dickinson et al., 2022). This otherness in behaviour and subversion of the public order is often seen with disapproval, and authorities tend to react with attempts to regulate and control the engagement of such groups with public space (O'Keefe et al., 2022). Regulation attempts often include the implementation of metal knobs or pieces on ledges or handrails, commonly referred to as 'skate stoppers' to prevent skateboarders or BMX riders from sliding or grinding on these ledges or rails, destruction of rideable surfaces, or elements and objects in the urban environment that allowed the performance of tricks, or, to prevent free running and parkour, anti-climb paint is often applied to walls (De Fine Licht, 2017; Dickinson et al., 2022).

UAS are, thus, often banned from inner cities and frequently pushed to the urban peripheries and left over spaces, and away from public life. Contrary to past approaches of handling UAS, this thesis hypothesizes that integrating UAS in central public spaces holds great potential for increasing social cohesion. Existing literature suggests that there is a connection between sports and community building, social interaction, belonging, and a crime reducing effect with the presence of increased presence and activity (Angner, 2017).

However, literature on integrating UAS facilities in multifunctional public space, and their effect on social cohesion is non-existent.

This research, therefore, aims to generate a comprehensive understanding of the connection between UAS in urban public space, their social life health, crime, and governance processes, assessing the extent to which UAS can be implemented as a planning tool for enhancing social cohesion. To do so this thesis attempts to answer the following questions:

To what extent can promoting and facilitating UAS in public space function as planning tool for social cohesion?

- 1) To what extent can the facilitation of UAS in public spaces affect physical and mental health issues linked to the urban environment?
- 2) To what extent can UAS impact the social life of public spaces?
- 3) How do perceptions of safety and security in public spaces change with the introduction of UAS in public space?
- 4) How can UAS in public spaces influence the relationship between citizens and local authorities?

This research holds profound societal and scientific significance by confronting contemporary urban challenges, offering pragmatic insights for the revitalization of urban spaces, and contributing substantively to the academic discourse on the social and cultural impacts of facilitating UAS in public spaces. The findings could have the potential to shape urban policies, empower local communities, revitalize neglected public spaces, and deepen our collective understanding of the intricate relationship between design interventions and the overall liveability of cities. This research holds not only an academic purpose. It aims to provide insights that could lead to practical enhancements in urban spaces, fostering stronger community ties.

2.0 Literature Review

The literature review discusses the relevant theoretical concepts and planning theories as well as viewpoints and findings from previous literature. This provides a comprehensive framework and context to study the potential of urban action sports (UAS) of planning for cohesive communities by integrating UAS in public space. This is hypothesized to mitigate urban problems related to health, isolation and crime, and provide a compelling basis for increasing citizen participation in governance processes. Aiming to synthesize and analyse the complex perspectives and theories that have contributed to the understanding of this field, this review, therefore, delves into the existing research and literature on the governance and uses of the physical and social environments of public spaces. This intends to provide a nuanced framework for this study to explore their relations and interdependencies.

2.1 The Physical Environment

The physical environment's influence on behaviour has long been in the focus of scientists, and various studies have highlighted an influence of the built environment on behaviour, social relations, wellbeing and social cohesion (Izadi & Hart, 2023; Baird et al., 2023; Montgomery, 2015; Whyte, 1980). Public space in urban environments is, therefore, increasingly in the scope of urban developers and planners, as it is widely understood that urban public spaces are closely linked with, and act as stage of the social, cultural, and political life of cities (Montgomery, 2015; Miller, 2007). Improved quality of urban public space can, therefore, help to increase place identity and attachment by fostering social interactions, social, cultural and political engagement with, and inclusive use of public space (Talen, 1997; Whyte, 1980; Pinto & Remsar, 2015).

Public Space

To further elaborate on social cohesion within urban areas, it is, thus, crucial to understand the concept of public space. While a definition of a public space seems to be straight forward, the concept of it is rather multifaced with a great variety of uses, meanings, access, rules and governance (Miller, 2007; Atkinson, 2003).

“We tend to think of public space as having certain essential and obvious characteristics. We believe it is publicly owned, the opposite of private space. We believe it is open and accessible to everyone, where no one can be turned away. We imagine it as the setting for important civic events where large groups of

people come to celebrate, protest, and mourn. We see it as somehow part of democratic life – a place for speaking out and being heard.”

(Miller, 2007, pg. 9)

Public space, as conceptualised by Miller (2007), holds essential characteristics such as public ownership, accessibility to everyone, and its role in democratic life. It is viewed as a setting for civic events and interactions, playing a fundamental role in urban life. This emphasises the societal importance of public spaces as platforms for democratic processes, encounters, and cultural exchanges. However, Rowland Atkinson complicates this notion by suggesting that the idea of a singular public space, and even the idea of a unified public itself, is challenging to sustain (Atkinson, 2003). Atkinson questions whether any space truly deserves the status of public space, given that public spaces often impose regulations and codes of conduct that control not only what can happen but also who can be present (Atkinson, 2003). These perspectives shed light on the nuanced and dynamic nature of public space, highlighting the tensions between its idealized functions and the practical realities of regulation and governance.

The idea of free and equal access to and use of public space for everyone is frequently challenged in a neoliberal society by commercial land use and zoning policies of public space. As mentioned by Shantz et al. (2008, pg. 40), “privatisation and protection of public space is increasing, and the exclusion of the non-spending public [...] has become the norm, as local authorities optimistically employ consumption- and property-led forms of economic regeneration” (Shantz et al., 2008, pg. 40). Dickinson et al. (2022, pg. 1456) argue that this creates “a clash between a consumption of space that produces surplus value and that which produces only enjoyment and is therefore considered unproductive.” Accordingly, this often leads to the exclusion of parts of the public that is unwilling or unable to consume in public spaces.

Pinto and Remsar (2015) stress that fostering cohesion in urban space is not only related to aspects of its morphology or physical elements, but also strongly connected to the social and economic dynamics in play (Pinto & Remesar, 2015). Therefore, the accessibility to activities, events, and participation in the public life of public spaces, can be argued to be crucial for the success of public spaces. This underscores the importance of promoting uses of public spaces that do not require monetary spending. Additionally, this suggests the consideration of an integrated approach to planning and development processes, as public space and its facilities can be curated and dedicated more directly to the needs and wishes of the local community.

Although the definition of community does not require it to be bound to a specific location, it is argued that public space plays a significant role in social cohesion and urban planning for cohesive urban communities (Pinto & Remesar, 2015). Public spaces play a crucial role in the development of communities by providing a ‘shared living space’, fostering social

interactions, promoting a sense of place and enhancing the overall well-being of residents. As put by Low (2022b), public spaces enable people to “encounter those they would not normally come across and transform ‘others’ into individuals who are recognized and engaged in social interaction and political activities” (Low, 2022a, pg.1). They serve as platforms for numerous activities such as socializing, recreation, sports, and cultural practices (Liu et al., 2022). These showcase an immense importance for the social life of cities, as they foster social capital through networks and meaningful relations (Law, 2022).

Aelbrecht et al. (2023) agree and argue that public spaces play a crucial role in influencing social cohesion by providing settings for cross-cultural encounters and experiences of cohesion in diverse urban contexts (Aelbrecht et al., 2023). The importance of planning for accessible and inclusive public space has, therefore, gained widespread recognition by scholars (Whyte, 1980; Aelbrecht et al., 2023; Chen et al., 2022). While cultural programming, including festivals, performances, exhibitions, or activities, activates public spaces through promotion of interaction and cultural exchange (Whyte, 1980), Chen et al. (2022, pg. 1) indicate that the quality of public spaces, “including attractive natural elements, various amenities, and sufficient space for social interactions, is essential for making relationship-rich and health-promotive urban environments.” Thus, such initiatives can transform underutilized areas into lively, inclusive environments that reflect the values of local communities and reinforce the role of public spaces as crucial sites for communal life and cultural expression.

Talen (1997) further emphasizes in her article that social interaction in public spaces is crucial for enhancing the sense of community as it fosters connections, promotes a feeling of belonging, and encourages a shared identity among residents.

This indicates the importance of a nuanced understanding of the social and cultural context of the urban social scene, and promotes the idea of mixed use, multifunctional public spaces. Pranab and Bansal (2022) argue that the multifunctionality of public spaces helps to rise the number of optional activities, to reduce urban dispersion, to showcase socio-cultural diversity, and to increase the liveliness of public spaces, while making efficient use of the limited space in increasingly densely populated urban areas. Providing facilities for diverse activities in one space can increase the exposure to others, and thus, increase the number and frequency of social interactions in that public space, as mentioned by Mehrota and Yammiyavar (2013). The increased exposure to diverse and cross-cultural encounters leaves a positive influence on community and cohesion and promotes the emergence of belonging and a shared identity, as already mentioned above (Aelbrecht et al., 2023).

Sense of Place

Lively places, events, and the opportunity to engage in activities and social interaction in public space can also increase sense of place for, and place attachment to a public space, through reinforcement of experiences and the generation of meaning of a space. Place, so

Aguila et al. (2019) is defined by “an alignment of mental image, behaviour, and physical setting.” A sense of place, therefore, refers to the meanings of and the attachment to a place that can be held by an individual, a group, or a community (Keong, 2021). The concept can refer to positive bonds of safety, comfort, and well-being, as well as negative connotations with a locale, such as fear, dysphoria, and placelessness, so Foote and Azaryahu (2009). It helps to draw attention to the rather subjective nature of human environmental experience and the perceptual cognitive dimensions of such experiences (Foote & Azaryahu, 2009). Therefore, it is of great importance for discussions on urban public life. Positive sense of place and meaningful use of space in urban environments are essential for a city to be lively, for people to make sense of their world and for increased wellbeing and social cohesion within the city (Maharja et al., 2023).

Planning for a sense of place might sound, however, simpler than it is. Literature suggests that the planning for sense of place within public space is complex, and that building an urban environment with preinstalled meaning is impossible (De Certeau, 1984; Pink, 2008). Michael de Certeau (1984), therefore, states that unless people construct meaning for their built environment, this environment is empty and meaningless, confusing, and unreadable for its inhabitants. The significance and positive meaning of space must, therefore, evolve and grow naturally over time and through human-human and human environment interaction, as memories tie and attach us to a place (De Certeau, 1984).

Place Attachment Theory

This emotional attachment to place is often an integral part of local communities (De Certeau, 1984). Low (2022a) identifies place attachment and cultural identity as important part of public space use. Place attachment theory investigates the emotional and cultural bonds that individuals form with certain places or territories. It includes a symbolic relationship which individuals develop with a particular place by attaching emotional meanings to it. The author defines place attachment as a dimension of total place sensitivity, representing the positive emotional attachment that develops between an individual and a place.

The theory suggests that the positive attachment and emotions to a place stem from positive experiences during interaction with said place, implying that individuals generate a personal meaning for and connection with the place. Mesch and Manor (1998) add that such local attachment is developed over time, meaning that the positive experience must be reoccurring.

Increased place attachment is argued to increase community engagement and initiatives to work towards a common goal (Mihaylov & Perkins, 2014). Attachment to cities, neighbourhoods, or places are crucial motivations for people “to spend more time outdoors in those places, to meet and talk to one’s neighbours, to share concerns about local problems and ideas for solutions, and rather than flee, to stand and fight [...] to preserve,

protect, or improve the community” (Mihaylov & Perkins, 2014, pg. 61). As suggested by Mihaylov and Perkins (2014), place attachment can, therefore, lead to community engagement, common goals, a common identity, increased social interaction, vital places and community building through the formation of a common goal. This suggests that attachment to place can affect many factors that foster social cohesion.

While an increase in place attachment, sense of belonging and consequently a sense of ownership provoke sought after effects, such as community engagement, participation in governance processes, and increased social cohesion, it is worth noting, however, that a strong attachment to place lead to territorial behaviour and exclusion of certain groups (Ueda, 1986). This can lead to exclusion of certain groups, alter the place identity, and perception of safety within that place, and hinder social interaction, and, accordingly, this can be hindering for social cohesion (Ueda, 1986). Additionally, it is crucial for a municipality to consider the consequences on future planning decisions. Increased place attachment can, therefore, motivate civic engagement to protect beloved places from demolition or redevelopment (Anderson & Schirmer, 2015).

2.2 The Social Environment

As discussed, the built environment significantly impacts behaviour and social dynamics. The physical environment of a city is intrinsically linked to its social scene, influencing how people act and interact. Urban planners can guide behaviour through design and governance, but the true success of public spaces depends on how citizens use, perceive, and experience them, as well as the meanings they attach to these spaces. The chapter will delve deeper into the social aspects of urban public environments, exploring topics such as social cohesion, belonging, identity, and community-building practices, like communing, public ownership, and self-governance.

Social Cohesion

According to Friedkin (2004), social cohesion refers to the degree of harmony, solidarity, and interconnectedness within a community or society, where individuals and groups coexist peacefully, cooperate, and support one another. It encompasses the sense of belonging, trust, and mutual respect among members of the community, fostering a shared identity and common values (Friedkin, 2004). In simpler terms, social cohesion means that people get along well with each other, feel like they belong to the same group, and work together towards common goals. It reflects the strength of social bonds and relationships that contribute to a stable and cohesive society. Social cohesion promotes cooperation, inclusivity, and a sense of collective well-being among a society's members (Friedkin, 2004).

As mentioned by Capshaw et al. (2005), social cohesion can also be described as the “glue” that keeps a society together. Thus, it appears obvious that it is in the interest of many scholars, urban and regional planners, and other city officials to analyse factors that influence and affect social cohesion, in order to plan better cities and increased well-being. Previous literature has identified social cohesion as an open concept with cultural, ecological, socioeconomic, and political dimensions, indicating the complexity of influential factors, determining the social dynamics and togetherness in a society (Novy et al., 2012). As defined by Green et al. (2011), these factors include shared values, goals and identity, a sense of belonging, tolerance, trust, cooperation, active participation, and low crime rates.

However, cohesion is absent in the reality of contemporary cities. The urban is characterized by big gaps between rich and poor, or different ethnic groups (Stigendal, 2019). These ‘categories of people’ often live in separated parts of cities, making the lack of social cohesion highly visible, so Stigendal (2019). As mentioned before, contemporary cities are plagued by inequality, intensified by market-driven urban policies that prioritize economic profitability over community relationships (Shantz et al., 2008; Stigendal, 2019). Stigendal (2019) mentions that the EU policy for cohesion goes in line with neoliberal development, with the life of the middleclass as norm to aspire for. The author argues that this current approach is not a solution, as it aggravates and preserves the problems leading to

inequalities (Stigendal, 2019). Instead, efforts should focus on addressing the root causes of inequality. These efforts should involve the recognition of the potential of those who are affected. Potential, such as their experience and knowledge, should then be taken advantage of, so Stigendal (2019). The goal of social cohesion in urban areas should be to collectively empower individuals who are committed to tackling these causes, thereby fostering societal transformation (Stigendal, 2019).

Social Capital Theory

Social capital, built through interactions in urban public spaces, enhances social cohesion by promoting trust, cooperation and a sense of community. By understanding and facilitating social capital, urban planners can design public spaces that foster social networks and community ties, and thus address the root causes of inequality, contributing to a more cohesive and just urban environment.

Social capital theory provides a framework for understanding how social networks, trust, and norms of reciprocity facilitate coordination for mutual benefit within communities. As mentioned by Putnam (2000), social capital emphasizes the value of social connections and the resources that they provide. Bourdieu (2011) defined social capital as the catalyst of actual or potential resources linked to possession of a durable network of more or less institutionalised relationships. Putnam (2000) expanded on this by distinguishing between bonding social capital, which strengthens ties within homogenous groups and bridging capital, which connects diverse groups and fosters inclusivity and social cohesion.

The relevance of social capital to urban environments lies in its potential to enhance social cohesion through the creation of strong, trust-based networks, bridging social divides and combating solitary living. Putnam (2000) illustrated how communities with increased social capital tend to have higher levels of civic engagement, greater trust among citizens, and more robust networks of mutual support, all of which contribute to a cohesive society. The theoretical perspective aligns with the broader discussion on the built environment on social dynamics, as the urban space and its governance can either facilitate or hinder the development of social capital.

Collective Identity

Like the place attachment theory, collective identity also covers the intricate relationship between individuals and their surroundings. While the place attachment theory delves into the emotional and cultural bonds to a place, collective identity explores the shared beliefs and mutual values within a community. Both, however, highlight the importance of positive interactions and engagements with spaces, both, personal or public.

Shared beliefs and shared values form an important building block for social cohesion, fostering a sense of togetherness and belonging. Bhattacharyya (2004) mentions that a shared identity is one of the most important aspects of community. Shared identity is formed through community events, social exchange and mutual identification with community members and space.

Literature suggests a significant correlation between public space and collective identity. Amin (2008), state for instance that urban collective culture and civic affirmation are influenced by the entanglement and circulation of human and non-human bodies in public spaces. The paper argues, in other words, that not only the build and natural environment of public space, but also the social and human non-human interactions shape civic behaviour, sense of community and collective identity in the city (Amin, 2008).

Simone et al. (2022), add that the collective identity in urban areas emerges from mutual witnessing and coordination of heterogeneities, influenced by public space. A heterogeneous agglomeration of urban citizens, with a great variety of social and cultural backgrounds can, therefore, still come together and share experiences, ultimately leading to a collective identity and sense of belonging to a community, if the urban environment allows for it (Simone et al. 2022). The paper further suggests that 'collective identity' is not a final state but rather an ever-evolving concept, and that individuals constantly reevaluate their belonging to this identity. This, again, highlights the importance of continuous positive experiences in and with a public space, as well as a welcoming programming of said space, therefore, understanding the interplay between individuals and their environments is crucial in comprehending the formation and evolution of collective identity.

Sense of Community and Belonging to a Community

A sense of community and belonging is closely associated with enhanced wellbeing, increased feelings of safety and security, active participation in community affairs, and heightened civic responsibility (Francis et al., 2012). According to McMillan et al. (1986, p.9), a sense of community is defined as "a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together." This concept emphasizes the importance of social bonds among individuals and between individuals and their environment, considering the physical, symbolic, political and cultural dimensions of community life.

Moreover, the development of a sense of belonging to a community emerges from social interactions within a public space, highlighting the importance of urban design which facilitates these interactions. As urban planners and designers, the focus is on creating public spaces that encourage social behaviour, which can lead to a stronger sense of belonging and local identity over time (Sakhaeifar & Ghoddusifar, 2016).

The quality and success of public spaces have been shown to significantly correlate with the sense of community in an area. Francis et al. (2012) argue that this correlation is at least as important as, if not more important than, the number and size of public spaces. Their study further concludes that a sense of community is positively associated with the cohesiveness of a community.

Community Building

Community planning is crucial for achieving social cohesion, as it fosters engagement, partnership, and sense of belonging among residents. Effective community planning involves the active participation of community members in the decision-making process that shape their environment. This engagement promotes trust, mutual respect, and a shared vision, which are essential components of social cohesion.

One of the primary ways community planning contributes to social cohesion is by the facilitation of meaningful interactions among community members (Diavua, 2016). Urban planning for cohesive communities emphasizes the design and organisation of urban spaces to promote strong, interconnected, and vibrant neighbourhoods and communities. According to Talen (2012), strategic planning interventions that prioritize inclusive public spaces, accessible amenities and mixed-use, multifunctional public spaces are crucial for enhancing social cohesion and community engagement.

Additionally, Dempsey et al. (2011) highlight the importance of integrating sustainable development principles, equitable access, and participatory planning in creating environments where residents feel a sense of belonging and mutual identity and support. When residents are involved in planning and decision-making, they develop stronger connections with their neighbours and local institutions. The importance of common projects and responsibility, as well as working together towards a shared goal appears to be highly beneficial for stronger community bonds. Participatory planning and an integrated approach to planning can therefore be argued to be an immensely valuable tool to achieve involvement with the local community, increased social interaction, a sense of belonging, collective identity, and therefore increased social cohesion within a community (Nasca et al., 2019; Kocsis, 2022). Citizen participation is widely implemented as means to regain democratic legitimacy and as a way “to make policies more efficient, sustainable and empowering” (Van Holstein, 2018, p. 39). By the involvement of marginalized or underrepresented citizen groups in the planning process, participatory planning aims to shift power dynamics, improve planning outcomes and enhance urban life quality, as mentioned by Anelli and Koury (2022). Moreover, the participatory approach to urban planning can help to ensure that urban spaces are equipped with facilities that meet the needs of diverse users, fostering a sense of responsibility for maintaining a public space (Yang, 2023).

Moreover, community planning that emphasizes inclusivity and diversity helps to address social inequalities and promotes a sense of belonging among all community members. By

ensuring that the voices of marginalized groups are heard, and their needs are met, planners can create more equitable and cohesive communities (Kagan & Duggan, 2011). It is, however, important to note that the success of this planning approach in fostering social cohesion depends on the meaningful engagement of community members and their ability to translate ideas into tangible changes through the exercise of agency: Limited flexibility and tokenistic forms of participation with limited outcomes or limited possible influence can therefore make “citizens feel marginalized and dependent, rather than included and empowered” (Van Holstein, 2018, p. 39). Sivkova and Novgorodtseva (2021) criticize that such tokenistic forms of participation often dominate citizen participation in many contexts, limiting deeper engagement due to institutional structures and neoliberal regimes.

Kagan and Duggan (2011) recognize the difficulty of including citizens in participatory planning processes. The authors mention that this problem becomes especially apparent with low trust in local institutions. They, therefore, suggest innovative planning methods that engage residents in unique ways to break down barriers to participation and encourage broader community involvement, further strengthening social ties and collective identity (Kagan & Duggan, 2011). Successful participatory projects will increase the trust in institutions and motivate nonparticipating citizens to participate in future projects (Kagan & Duggan, 2011).

While scholars like De Certeau (1984) and Pink (2008) argue that installing meaning and a sense of place is not possible, as mentioned above, approaches as presented by Talen (2012) and Dempsey et al. (2011) focus on the facilitation of social interaction and public engagement and ownership, which creates meaning and provides a nurturing ground for the emergence of sense of place, belonging and attachment to place.

Commoning Practices:

Socially sustainable neighbourhoods and communities often involve the sharing of resources. ‘Commoning practices’ in urban studies reimagine the concept of commons within a community, promoting an open-source mentality that includes not just the conventional definition of commons, but extends the concept to resources like infrastructures, tools, public spaces, or knowledge, which leads to increased public responsibility and ownership (Bradley, 2015; Perrotti et al., 2020). Perrotti et al. (2020) argue that these practices are essential for strengthening communal actions, as they consolidate collective knowledge and expertise, fostering interactions that enhance social relations and orient communities towards a common good. By promoting meaningful social relations, commoning practices add to laying the foundation for cohesive communities, as described by Schiefer and Van Der Noll (2016).

Urban commoning can play a significant role in the governance and regeneration of public spaces. These practices facilitate partnerships between citizens and administrations for the

management of urban commons, thus, promoting active community participation and stewardship.

Self-Governance

Bradley (2015) argues that for communing practices to be successful, a self-governance approach can be highly effective. When active participation and public engagement form citizens in governance processes are sufficiently established, they can significantly benefit communities and enhance social cohesion. This approach necessitates trust from governing bodies and foster citizen engagement, collaboration, a sense of ownership, and the development of resilient, self-sufficient communities (Bradley, 2015).

Perotti et al. (2020) further emphasise that common responsibility and self-governance not only encourage social exchange and interaction within communities but also enhance residents' identification with and satisfaction in their local environment. This fosters a common identity and sense of belonging, which Schiefer and Van Der Noll (2016) determine to be crucial for social cohesion.

However, it is important to note that a sense of belonging and community cannot be entirely planned or imposed through physical and conceptual frameworks. While such frameworks can support and nurture community development, the creation of belonging is an organic process that requires time and careful maintenance to evolve and flourish (Pink, 2008; De Certeau, 1984).

Civic control and Policing

Self-governance and increased levels of public ownership can significantly enhance levels of civic control and public engagement in policing. This improves both actual and perceived safety within public spaces. Safety and perceived safety are paramount for wellbeing, vitality, trust and social cohesion within communities. When community members have a stake in the upkeep and regulation of public spaces, it leads to increased vigilance and collective responsibility, which in turn deters crime and anti-social behaviour (De Weger et al., 2018).

The integration of participatory approaches in urban planning can substantially enhance public safety. This involves residents in the management and surveillance of their neighbourhoods, making them active stakeholders in the process. Such involvement not only boosts physical safety but also enhances the perceived safety, which is crucial for the development of social cohesion and resilient communities (Perotti et al., 2020). Effective community planning that emphasizes inclusivity and active participation helps to build trust between residents and local authorities, thereby enhancing the overall sense of security (Talen, 2012).

Safety and civic control in public spaces are fundamental to fostering social cohesion, as they ensure that these areas are welcoming and accessible to all. The presence of a shared sense of ownership and responsibility among community members deters crime and anti-social behaviour, so Carlone et al. (2022). Furthermore, self-governance can empower citizens to take an active role in the policing and management of public spaces, creating a proactive community network that supports both formal and informal safety measures (Bradley, 2015).

The vitality of urban public spaces is closely intertwined with safety and social cohesion. Vibrant public spaces attract diverse groups of people, fostering social interactions and community engagement, which in turn enhances safety through increased natural surveillance and social cohesion (Jacobs, 1961). Jacobs (1961) famously argues that the presence of eyes on the streets effectively helps preventing crime and promoting safety, as a continuous flow of people in public spaces creates a self-regulating environment.

Well designed, lively public spaces encourage higher levels of public interaction and activity, reducing opportunities for crime by ensuring that these areas are consistently monitored by community members (Whyte, 1980). When people feel safe and engaged in their local public spaces, they are more likely to participate in communal activities and take pride in their surroundings. This dynamic creates a positive feedback loop, where vibrant, well used public spaces attract more people leading to greater safety and stronger community bonds (Gehl et al., 2011).

The implementation of communiting practices, where community resources are managed collectively, has been shown to foster a shared sense of ownership and responsibility, as mentioned above, and thereby contributing to safer environments. For instance, well maintained and designed public spaces signal users that the area is cared for and monitored, which can discourage criminal activities (Nemeth & Schmidt, 2011).

Planning for civic control and policing in public spaces thus have great potential for fostering social cohesion and community wellbeing. By involving residents directly in the management and surveillance of their neighbourhoods, public spaces can become safer and more vibrant, and are thereby supporting the overall liveability and cohesion of a community.

2.3 The Active Environment

Public Health & Social Cohesion

While physical activity and sports are often primarily linked to health-related topics, increased access and exposure to and participation in physical activity, can also be linked to increased social cohesion within communities. The following chapter explores the connections between physical activity and mental and physical health and wellbeing. It also examines how exposure to sports for non-participants and the promotion of physical activity in public spaces can lead to higher levels of participation and a more active, engaged public.

The lack of physical activity has been often identified as a widespread problem in urban areas, contributing to various health and social problems. Physically engaging activities, sports and exercise generate multiple, well-known benefits for physical and mental health (Angner, 2017; Davis et al., 2015). Social sciences have begun to provide insights into how physically engaging activities can enhance various dimensions of social cohesion (Davis et al., 2015; Moustakas & Wagner, 2023). Steffansson and Pehkonen-Elmi (2022) conclude, for instance, that physical activity not only improves physical health, but also boosts self-esteem, and wellbeing, which in turn leads strengthened social inclusion. This claim is backed by Davis et al. (2015) who argue that moderate exercise enhances cooperation and social bonding.

Loneliness and social isolation have been recognized as a prevalent and growing problem worldwide (Davis et al., 2023; Morris & Roychowdhury, 2018). As stated by Davis et al. (2023), loneliness and physical inactivity are interrelated, meaning that lonely individuals were found to be less physically active and that less active individuals tend to report increased loneliness and are more socially isolated. The authors, therefore, suggest that “physical inactivity and loneliness can [...] be approached as interlinked problems that require integrated solutions” (Davis et al., 2023, pg. 3).

Community bonds and social environments can motivate individuals to increase their physical activity (Davis et al., 2023; Angner, 2017). Angner (2017) argues, for example that the exposure to sports and physical activities motivates bystanders and non-participants to start engaging in these activities, due to the motivation of being part of the community. Lennard (2019) argues that social health is the foundation of physical health, meaning that the quality and quantity of social interaction, and sense of belonging heavily impact mental and physical health. The author argues that social relations and interactions should be at the forefront of urban planning, as it promotes sustaining physical health as well.

Similarly, Morris and Roychowdhury (2020) argue that the visibility of sports in public space can also be of great importance, due to its power to motivate bystanders to partake in these activities. Integrating sports facilities in public spaces, rather than separating these activities from public life, can thus help to improve public health. Moreover, literature suggests a causal relationship between sporting events and motivation for participation in sports and physical activity (Morris & Roychowdhury, 2020). Therefore, promoting sport events in public spaces can increase physical activity of the public (Morris & Roychowdhury, 2020).

Urban Action Sports

This thesis uses the discussed literature and theoretical context of what entails social cohesion, how urban public space, with its social, political, and physical characteristics can facilitate or hinder social cohesion to analyse to what extent UAS can be used as a tool to increase social cohesion in an increasingly separated and segregated urban environment. Hypothesizing that facilitating and promoting UAS in urban public space can create cohesive,

vibrant urban communities, this thesis aims to discuss to what extent UAS can be considered as valuable planning tool to increase cohesion and wellbeing in cities and make public space more vibrant and livelier. To proceed with the argumentation, it is necessary to understand how UAS fit into the picture. The following chapter discusses existing literature on, and related to UAS, and relates them to the literature and theoretical context as discussed in the previous chapters.

Short Overview of Urban Action Sports

UAS, as conceptualized in this thesis, is used as a collective term for action sports that have their origin in the streets and that are practiced informally in urban environments, primarily for leisure. Disciplines include, but are not limited to, skateboarding, BMX, parkour, and free running. These sports thrive in urban environments, as they evolved through the appropriation of urban infrastructure and architecture without purpose-built facilities (Atkinson, 2009; Borden, 2006).

UAS are characterised by their use of public spaces in creative and non-traditional ways, transforming every day urban features, such as staircases, railings, and walls into playgrounds for athletic expression (Borden, 2006; Angner, 2017). The development of these sports is closely tied to the urban landscape, which offers a variety of surfaces, elevations, ledges and obstacles that facilitate the performance of tricks and manoeuvres unique to each sport, personal style and skill level (Borden, 2006). This utilisation of urban spaces is a fundamental aspect of UAS, influencing their techniques, culture, and community dynamics.

Skateboarding emerged in the 1960s and 1970s when surfers in California began to use streets and sidewalks to mimic wave riding on asphalt, which gradually developed into a sport that exploits and appropriates the architectural elements of cities (Beal, 2013). BMX (Bicycle Motocross), originating from mountain biking and Motocross, and parkour similarly developed as ways to interact dynamically with urban environments, emphasizing creativity, individuality, agility and athleticism in navigating urban landscapes (Kidder, 2012; Atkinson, 2009).

'Spots' in UAS refer to an assemblage of hurdles, material properties, surfaces, objects and architectural artefacts that allow the performance of tricks, lines and manoeuvres, as mentioned by McDuire-Ra (2021). Spots are usually not purpose built for the performance of and urban action sport discipline and emerge unintentionally in urban and peri-urban landscapes (McDuire-Ra, 2021).

As this implied, these sports lack formal regulations and are practiced in an improvised manner, with participants valuing freedom and spontaneity that comes from the engagement with their environment according to their own interpretation and creativity. The informal nature can sometimes lead to tensions with urban authorities, planners and the

public, who may not recognize the legitimacy of such subversion of rules of public space use (Wheaton, 2013).

Participants, therefore, use public spaces and reinterpret and appropriate the physical environment, which is not only met with support by government officials and other stakeholders of public space. While, as previously discussed, public spaces are generally intended to the public as a whole, this promise remains not uncommonly unfulfilled. In our neoliberal society, the idea of free use of public space for everyone, is frequently challenged. As mentioned by Shantz et al. (2008), public space is increasingly protected and privatised. The authors criticize that “the exclusion of the non-spending public [...] has become the norm, as local authorities optimistically employ consumption- and property-led forms of economic regeneration” (Shantz et al., 2008, pg. 40). In increasingly densely populated urban areas with limited public space, this creates a “clash between a consumption of space that produces surplus value, and which produces only enjoyment and is therefore considered unproductive” (Dickinson et al., 2022, pg. 1456). This suggests that in an environment where consumption is the highest good, no-consumption is viewed as deviance, as mentioned by Shantz et al. (2008). As this suggests, UAS are often dismissed in their value and regarded as nuisance when the appropriated space could be used in a more profitable manner.

Further conflicts with skateboarding, BMX, or parkour often emerge through concerns of bystanders regarding health risks, nuisance, noise, fear of crime or fear of destruction of (public) property. These concerns can be derived from the fact that participants of UAS were, and still are often portrayed as law-disobedient rascals, troublemakers, and risk seekers (Mikmak, 2014; Dickinson et al., 2022). This otherness in behaviour and subversion of the public order is often seen with disapproval, and authorities tend to react with attempts to regulate and control the engagement of such groups with public space (O’Keefe et al., 2022). Municipalities developed various hostile architecture strategies to ban UAS from inner cities and public spaces, including the implementation of metal knobs or pieces on ledges or handrails, commonly referred to as ‘skate stoppers’ to prevent skateboarders or BMX riders from sliding or grinding on these ledges or rails, destruction of rideable surfaces, or elements and objects in the urban environment that allowed the performance of tricks, or, to prevent free running and parkour, anti-climb paint is often applied to walls (Nemeth, 2006; Loukaitou-Sideris & Ehrenfeucht, 2009; Iveson, 2013).

The inclusion of various UAS, such as BMX and skateboarding, in the Olympics, however, elevates their status and provides them with formal recognition and legitimacy. Aligning these sports with traditional, established disciplines brings new visibility and credibility to former countercultural, fringe activities, as argued by Thorpe (2014) and Wheaton (2011). Gilchrist and Wheaton (2017) argue that the Olympic inclusion acts as a form of institutional endorsement, recognizing the athleticism, skill, and cultural value of these sports. This can be argued to significantly impact the perception in and acceptance in the broader public (Thorpe & Wheaton, 2011), and thus in urban planning and governance policies.

However, this subversion contributes to their countercultural appeal, fostering a sense of rebellion and independence among participants (Dickinson et al., 2022). The inclusion of UAS into the Olympics is met with criticism from within the community, as many participants reject the institutionalisation, fearing it could limit the free expression, creativity, and non-competitive atmosphere deeply rooted into urban sports cultures (Atkinson & Young, 2008).

Urban Action Sports and Social Cohesion in Public Spaces

Participants of UAS, thus, engage with the urban environment in unique ways. They develop a unique gaze, a perspective that transforms ordinary urban features, such as handrails, walls, curbs, or simply a smooth surface, into potential sites for performing tricks (Borden, 2006; Angner, 2017). This reinterpretation of urban space reflects a subversion of conventional rules, characteristic of the countercultural ethos of these sports (Dickinson et al., 2022).

The physical elements of public spaces, such as street furniture, often gain significant meaning for UAS participants, fostering a strong sense of place and place attachment (Angner, 2017). Emotional attachment and generation of meaning to specific 'spots' encourage participants to develop a sense of ownership and engagement with these places, provoking involvement in local governance and politics. This becomes apparent in multiple examples. Europe's most prominent example is Southbanks in London, which is the oldest still existing skate spot in the world. The brutalist undercroft in the heart of London has been first appropriated by skateboarders in the 1970s and is an epicentre for UAS cultures since then (Maclure, 2017). Despite multiple efforts by the municipality to exclude skateboarders and BMXers from that space and create a space of economic production instead, it was faced with fierce resistance, as the community attached stark meaning to the space (Maclure, 2017).

The example of London Southbank does, however, not only highlight the extent to which UAS can foster sense of place and place attachment, but it also displays the potential that UAS hold for provoking grass roots initiatives, citizen engagement, a sense of ownership and close collaboration between community members, and for fostering citizen participation in local governance processes. A long and intensive campaign over 17 months by the group Long Live Southbank (LLSB) successfully preserved the site from redevelopment, and even resulted in its legal protection and full recognition as an asset of community value (Maclure, 2017). The grass roots campaign further aimed to engage with the public and present their perception and experience of the space to a wider audience and started a fundraising campaign to reconstruct demolished areas of the Southbank undercroft to expand it to its original size (Maclure, 2017).

Participants in UAS often form tightly knit communities that promote meaningful relationships, collective identity, and shared interests and belonging, enhancing social cohesion and resilience (Thorpe, 2014; Glenney & Mull, 2018). These activities this provide a

supportive environment in which individuals are respected for their unique set of skills and expression, fostering a sense of belonging and mutual support (Atkinson & Young, 2008).

Tightly knit communities often serve as foundation for the development of a collective identity that is deeply rooted in the culture of the sport. This shared identity can lead to the formation of informal support networks, where members provide mutual emotional or social support, indicating that UAS communities possess great potential for building strong social networks and improved social capital (Beal & Wilson, 2004).

This also becomes apparent, as UAS, especially in public spaces, serve as platforms for increased social interactions among diverse groups, fostering an environment where people of different ages, genders and cultural backgrounds can encounter, engage and learn from each other. This diversity enriches the community experience while mitigating prejudice and misunderstanding due to segregation (Atkinson & Young, 2008). These sports create inclusive spaces that transcend socio-economic and cultural barriers, promoting diverse social interactions and bridging social divides (Wheaton, 2013). The non-competitive, informal nature of UAS makes them highly accessible. Unlike conventional sports, these activities are not bound by strict rules, allowing for greater freedom and personal expression (Glenney & Mull, 2018). This flexibility in interpretation of what the sport is to each individual, and the low financial barriers to participation make UAS inclusive, appealing to individuals who are not able or willing to engage in traditional sports, or pay fees for participation or access to facilities.

UAS fit well into the contemporary preference of physical activity, as schedules are varying to great extents. Kural (2010) analysed a shift towards growing importance of committal and temporal flexibility in the participation in or execution of physical activities: in a German study, 3,365 people were asked about how they organise their physical activities, and 50.3% of the participants indicated that they would self-organise sports activities in publicly accessible areas, and only 18.2% indicated that they were members of sports clubs (Kural, 2010). This study indicates the importance of a structural change in the approach of planning for physical activity, towards more accessible, low-threshold, informal sporting facilities in public space, which are non-committal, flexible in time-planning, and in relative proximity to participants.

Promoting UAS in urban public spaces thus provides a time flexible, self-organized alternative to conventional sports, that is accessible due to the possibility of practicing it in close by public spaces and urban environments. In combination with the community aspect in UAS, this suggests that promoting UAS in public space can have positive impact on public health and the citizens willingness to partake in physical engaging activities.

As discussed, safety in public spaces is a fundamental factor for social cohesion. And UAS can make public spaces safer by increasing natural surveillance and fostering community engagement. Promoting the presence of skateboarders, BMXers, and traceurs (parkour partitioners) in public spaces adds to the constant flow of people, which enhances the 'eyes

on the street' effect as described by Jacobs (1961). Their continuous activity can, therefore, deter criminal behaviour by ensuring that these spaces are actively monitored by participants and spectators alike. According to Loukaitou-Sideris and Ehrenfrucht (2009), lively public spaces that support diverse recreational activities help self-regulating environments where community members naturally oversee each other's safety. Furthermore, Stevens (2007) notes that UAS attract a wide range of users, including youths who might otherwise engage in less constructive activities. Providing spaces for UAS can thus not only provide positive recreational outlets but also strengthen social bonds and community cohesion. The visible presence of engaged and active individuals in these spaces thus contributes to a safer and more vibrant urban environment.

The power that UAS hold to transform urban public spaces into hubs of activity and social interaction can thereby also address issues of loneliness, social isolation, increasing segregation, as well as physical inactivity prevalent in many cities (Davis et al., 2023; Morris & Roychowdhury). By promoting UAS in public spaces, municipalities can create environments that encourage higher levels of physical activity among residents.

Physical activity is well known to provide numerous health benefits, such as improved cardiovascular health, enhanced mood, and reduced stress levels, as mentioned before (Angner, 2017; Davis et al., 2015). If integrated in public space and exposed to public life, the playful, social and engaging nature of UAS can motivate individuals who might otherwise be inactive to participate in physical exercise (Steven, 2007). As noted by Angner (2017), exposure to sports and physical activities in public spaces can inspire bystanders and non-participants to engage in these activities, driven by the motivation to be part of the community. This is particularly important in urban settings where opportunities and accessibility of physical activity may be limited.

Furthermore, the sense of community and shared identity, fostered in UAS, can be important for mental health and wellbeing, due to increased social inclusion and improved self-esteem (Steffansson & Pehkonen-Elmi, 2022; Davis et al., 2015). Integrating UAS into public spaces can, therefore, significantly contribute to public health by motivating physical activity, fostering social cohesion and enhancing mental well-being.

Literature thus indicates that UAS address multiple dimensions that offer significant potential for enhancing social cohesion in urban environments. By reinterpreting and activating public spaces, these sports foster a sense of place, encourage civic participation, and promote inclusivity (Borden, 2006; Thorpe, 2014; Maclure, 2017). Despite challenges related to safety perceptions and regulatory barriers, the benefits of integrating UAS into urban planning appear to be substantial. As cities seek to create vibrant, cohesive communities, UAS should be considered as valuable tools in achieving these goals.

3.0 Methodology

3.1 General Research Strategy

To uncover the potential of integrating urban action sports (UAS) in public space as planning tool for social cohesion, this study employed a combination of qualitative data collection methods, including participant observation, semi structured interviews (both expert and street interviews), written interviews, and online and media analysis. With written and semi structured expert and street interviews and participant observation, this study aims to a holistic understanding of how UAS influence dimensions of social cohesion, such as community dynamics, social networks, sense of belonging, identity, sense of place, and safety. Online content and media analysis aims to grasp the local context of Eindhoven and Stadhuisplein, and the local UAS scenes. The online content analysis is paramount for a comprehensive understanding of UAS and their cultures and the local context of the case study, as UAS are closely linked to online content creation, especially in the form of video formats on social media platforms, such as YouTube. Newspaper reports were a helpful source to grasp local details, such as opinions on the case study or on governance processes. Policy papers, zoning plans and other municipality documents have been analysed to further understand the local context of previous planning decisions, the planning methods at play and to identify the involved stakeholders.

3.2 Case Selection

Eindhoven, and more particularly Stadhuisplein, serves as an exemplary case study for this thesis due to its unique approach on including and promoting UAS in multifunctional public space. Additionally, the historical context has led to an in the Netherlands unique preadaptation to UAS, which led to thriving UAS communities today.

Eindhoven serves as interesting case study for exploring the integration of urban sports in planning of urban public spaces, and their impact on social cohesion. Following its post-war reconstruction, Eindhoven has been heavily influenced by modernist architecture (Kurby, 2023). This style in architecture and urban planning faced criticism for creating hostile and alienating spaces that prioritize economic efficiency over social interactions, potentially undermining social cohesion (Rodrigues, 2019). This style in architecture did, however, provide a nurturing ground for the emergence of a local skateboarding community (Tromp et al., 2017), which, in the case of Stadhuisplein, has been supported rather than expelled by the municipality. This central urban square is an interesting example for this thesis, as its design has been recognized by the municipality as hostile and uninviting (NvU, 2024). This provides a clear image of how the integration and promotion of UAS within that public space affect social cohesion. By incorporating UAS facilities directly into the fabric of public spaces

such as Stadhuisplein, this research hypothesizes that municipalities can not only reclaim such places from neglect but also foster informal, community-led physical activity, that enhance social interaction, sense of place and participation in governance practices, as suggested by previous literature (McDuijter; Glenney & Mull, 2018).

According to municipal documents, the city incorporated a participatory planning approach by involving the skateboarding and BMX community in designing new obstacles (NvU, 2024), showcasing a model of inclusivity and community engagement, aligning with theories of social capital and collective identity (Moustakas & Wagner, 2023; Bain et al., 2012). These initiatives at Stadhuisplein are a great foundation for exploring the extent to which such initiatives can introduce new liveliness and vibrance to urban public places, counteracting isolation and crime, which are also often associated with modernist planning practices, as laid out by Rodrigues (2019).

Eindhoven's proactive stance in integrating UAS within Stadhuisplein, but also in actively promoting the community and its culture through events, provides insights into the potential benefits of such strategies. By selecting this case study, the research aims to demonstrate how urban design which prioritizes human qualities and community needs can significantly improve social cohesion and the liveability of urban environments, offering a replicable model for other cities, facing similar challenges (Aguila et al., 2019; Montgomery, 2015).

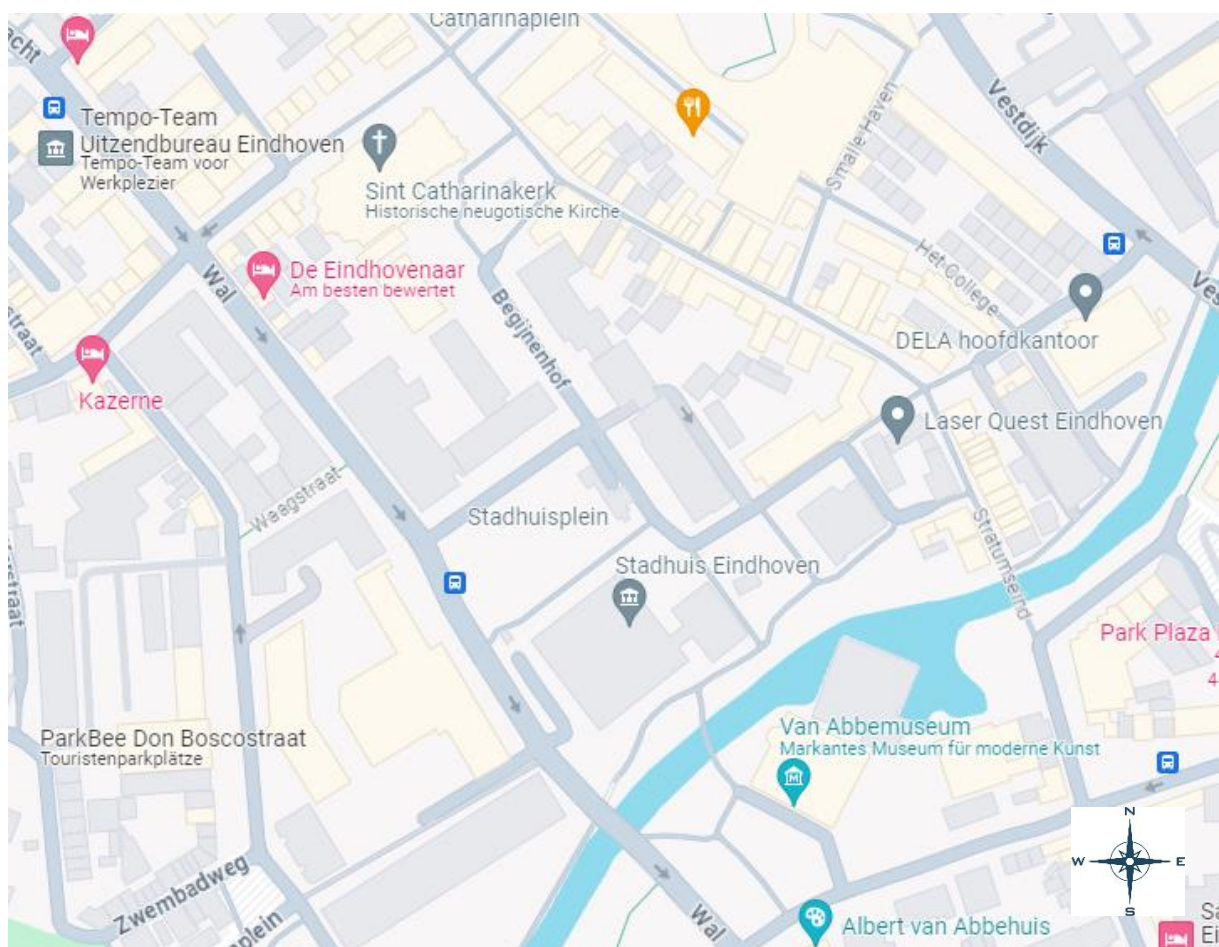
3.3 Case Study: Stadhuisplein

Eindhoven, the fifth largest city of the Netherlands, with approximately 225,000 inhabitants, is the country's main hub of technology and industry (TU Eindhoven, n.d.). The former medieval village is located in the south of the Netherlands and gained great significance for the national and European economy due to the large technology sector that experienced a great boost due to the pioneer and entrepreneur in electric lighting, Gerard Philips, who set up his business in Eindhoven in 1891 (TU Eindhoven, n.d.). With the German occupation of the Netherlands in the Second World War, the industry in Eindhoven gained great importance for Nazi Germany, thus, putting Eindhoven on the target list of the allied forces. The attacks on the industry in 1942 and 1943 left parts of Eindhoven damaged or destroyed, mainly at and around the central Emmasingel, where the Phillips factory was located (Stichting 18 September, n.d.). While war left its marks during its final phase on the built environment, and caused numerous deaths in Eindhoven, the surprise attacks and large-scale bombardment on the 19th of September 1944 by the German Airforce, one day after the people of Eindhoven celebrated their liberation from Nazi Germany, remain unmatched. The attack took almost 200 lives and destroyed large parts of the built environment, as they also caused the city centre to catch fire (Stichting 18 September, n.d.).

In the post war era, Eindhoven faced the mammoth task of rebuilding the city. As in many other western European cities in the post war era, Eindhoven's reconstruction has been

heavily influenced by modernist architecture and city planning (Kurby, 2023). This style in architecture and planning, characterized by clean lines and new materials, such as concrete and steel (Kurby, 2023) was, however, often faced with heavy criticism. Critiques include the obliteration of thriving neighbourhoods, isolation of functions and production of hostile and alienating space. In combination with post-war urban sprawl, this led to a focus on large scale projects, efficiency, and speed over pedestrian-friendly design (Irwin, 2019; Jacobs & Appleyard, 2020; Perrone, 2022). As put by Rodrigues, the modernist model to urban development prioritizes economic relations over social relationships (Rodrigues, 2019).

Such criticisms are also present in Eindhoven, for example towards Stadhuisplein, a square that has been heavily influenced by post-war modernist reconstruction. The city has recognized that this urban square in the centre of Eindhoven has low living quality due to its design, which is uninviting and rather hostile, as further presented in chapter 4 (Gemeente Eindhoven, 2021b). Stadhuisplein is a central urban square that is targeted towards all citizens and serves multiple functions and uses. It acts as an entrance to the city centre for people from the south-west, as a place to rest and sit, as a space for UAS disciplines including skateboarding, BMX and inline skating, and as an event location for up to 17 events per year (Gemeente Eindhoven, 2024). It is located in the south-west of the centre of Eindhoven with access from a park at the river Dommel, and close to the lively bar and restaurant streets in the centre. Despite the central location it is rather isolated from public life.



Eindhoven, Stadhuisplein (Google, n.d.)

While it is difficult to draw a retrospective causal relationship between modernist planning approaches and social cohesion in Eindhoven, the mentioned statements by the municipality, as well as news outlets suggest that there is a significant shortcoming of safety and security at Stadhuisplein, which can be argued to negatively affect the place identity, city image, feeling of safety, social interaction and social cohesion within these spaces. Omroep Brabant, a news channel from the region of Eindhoven, for example, indicates several incidents of violent crimes and stabbings at Stadhuisplein (Verschuren, 2020; Vossen, 2017; Omroep Brabant, 2015)

As early recordings suggest, the skateboarding scene took hold in Eindhoven in the early 1980s (boeieproductions, 2016a). Throughout the 1980s, the local inline skate centre offered dedicated time slots to skateboarders every Friday afternoon, and provided skateboarding specific obstacles (boeieproductions, 2016a). This event facilitated a social network to emerge. In 1988, the Powell-Parelda Bones Brigade, one of the first skateboarding teams from the US hosted an event in Eindhoven. The team consisted of pioneers in skateboarding, such as Tony Hawk who heavily influenced skateboarding in what it is today (boeieproductions, 2016a).

The local skateboarding scene of Eindhoven shortly after appropriated the former skateboarding hotspot in Eindhoven called 'De Piazza', which gained great importance within the skateboarding scene in the 1990s (boeieproductions, 2016b). The square was meeting place for skateboarders and skateboarding interested people, to come and watch, meet friends, and skateboard. In that in the 1990s 'De Piazza' was one of the country's favourite spots, with a reputation reaching beyond the Dutch borders (boeieproductions, 2016b). Popular, sponsored skateboarders came from Amsterdam and Rotterdam and even from other countries, only to skateboard on that square, which led to a sense of pride and fostered a sense of community among local skateboarders. Stadhuisplein also became a popular spot for the skateboard scene to meet and skate, as the smooth floor and the benches that surround the square emerged to be suitable properties for skateboarding (boeieproductions, 2016b). After 'De Piazza' got renewed and integrated in an indoor shopping mall, Stadhuisplein remained as the main spot for the skateboarding community of Eindhoven, and has later been appropriated by other UAS disciplines, such as BMX. At Stadhuisplein, the municipality decided provide obstacles and ramps for BMX and skateboarding, which have been upgraded and redesigned in August of 2023 (Ibanez Matus, 2023).

The redesign has been made by SkateOn in close cooperation with the skateboarding community, indicating a degree of participatory planning and community involvement. As published by the online newspaper 'Groot Eindhoven', and the municipality's LinkedIn page Eindhoven Sport, the planning process for new obstacles included a participatory approach of brainstorm sessions with community members, and the inclusion of stakeholders, to provide a well-designed upgrade, that is well suited to the users wishes (Groot Eindhoven, 2023; Eindhoven Sport, 2023).

3.4 Methods for Data Collection and Data Processing

3.4.1 Participant Observation

Participant observation offers valuable insight into the effects of planning for UAS in public spaces on social cohesion. By actively engaging with the community members involved in these sports activities and users of Stadhuisplein, it is aimed to gain a nuanced understanding of how these initiatives shape social interactions, relationships, and dynamics within the studied space. This method allows researchers to observe daily experiences, challenges and interactions of individuals first hand, allowing for a deeper comprehension of how UAS in public spaces can foster social connections and cohesion (Spradley, 1980; Emerson et al., 2011). Participant observation allows for the understanding of lived experiences of community members and users of Stadhuisplein, facilitating a holistic understanding of the impact of planning for UAS in public spaces on social cohesion.

For this research, the researcher participated in UAS, in the discipline of skateboarding at Stadhuisplein, Eindhoven. This allows for low threshold interaction with other UAS participants, while experiencing the social interactions first hand. Additionally, this method allows for the observation of behaviour of non-participants and their reaction towards and interaction with participants.

The observations were conducted on two weekend afternoons, when public space usage is typically higher due to common working hours. It is crucial to note that the research was conducted in dry weather, as wet and slippery surfaces pose significant risks in UAS, making manoeuvres difficult and increasing injury risk. The observations included detailed notetaking, describing user groups, their activities, and behaviours.

3.4.2 Semi structured interviews

This study utilizes a semi-structured interview design to explore the impact of integrating UAS in public spaces on social cohesion. This approach offers several advantages for investigating this complex social phenomenon:

- 1) **In depth exploration:** Semi-structured interviews allow participants to elaborate on their experiences and perspectives regarding integrated urban sports facilities and social interactions in public spaces. This flexibility is crucial for capturing factors how these facilities influence social cohesion.
- 2) **Uncovering underlying meanings:** the interviewer can probe deeper into participant responses to understand the meanings they attach to their experiences. This helps uncover the underlying factors that contribute to or hinder social cohesion.
- 3) **Capturing individual experiences:** the semi-structured format in interviews allows for individual narratives and perspectives to emerge. This is particularly important for understanding the diverse ways people utilize public spaces and engage in social interaction.
- 4) **Tailoring questions:** The interviewer can adapt questions based on the participants responses, allowing for a more nuanced and focussed conversation. This ensures the interview captures the most relevant information for each participant.
- 5) **Exploring unanticipated themes:** New and unexpected themes and topic may arise during the interview process. The semi-structured approach allows the researcher to follow these new topics, potentially leading to richer insights.

While quantitative methods can provide a broader picture of social cohesion indicators, semi structured interviews offer a deeper understanding of the lived experiences and perceptions of community members. This qualitative approach is particularly well-suited for uncovering the social dynamics at play when urban sports facilities are integrated into public spaces.

Ethical Considerations

- 1) **Informed Consent:** Ensuring that all participations are fully informed about the study's purpose and methods.
- 2) **Confidentiality:** Maintaining the confidentiality and anonymity for participants, if requested.

3.4.2a Street Interviews

Street interviews were conducted with participants selected based on specific criteria, including their involvement or non-involvement in action sports and their presence at the research location during the data collection period. This method aimed to capture a diverse cross-section of the population by including individuals of varying ages, genders, and activities, as well as those alone and in family or groups constellations.

Street interviews are particularly useful for researching how UAS in public spaces affect social cohesion, because they are allowing for the collection of spontaneous, in-situation responses, that reflect the participant's immediate perceptions and experiences. According to Whyte (1980), observing and interviewing people in their natural environments can provide more authentic and reliable data compared to structured settings. This approach ensures that the data collected is grounded in the actual context in which social interactions and community dynamics occur.

Moreover, and most importantly, street interviews facilitate the inclusion of diverse perspectives. This is essential for understanding the multidimensional nature of social cohesion. By interviewing a wide range of individuals, including participants in UAS, bystanders, spectators and passersby, the research can capture and insight in how these activities impact social networks and community bonds. The inclusion of such a wide range of participants is essential for achieving a comprehensive dataset, reflecting diverse opinions and worldviews influenced by personal experiences, needs and uses of public space. Including diverse perspectives, captured in street interviews, helps to ensure that the findings are representative of the broader community. As Flick (2018) mentions, capturing varied experiences through qualitative interviews can provide deeper insights into social phenomena, which are crucial for understanding complex social dynamics involved in social cohesion. Furthermore, Kvale (2007) emphasizes that diverse participant selection enhances the validity of qualitative research by encompassing a broad spectrum of societal segments, thereby offering a richer and more nuanced understanding of the studied phenomena.

Furthermore, street interviews can reveal immediate, realm world impacts of UAS on public spaces, such as changes in the use of space, perceived safety, or the quality of social interactions and relations. According to Flick (2018), capturing such real-time data can lead to more useful insights for urban planners and policy makers aiming to plan for inclusive and cohesive public spaces.

3.4.2b Expert Interviews

Expert interviews have been systematically selected based on the position of the interviewees to ensure a diverse representation of relevant perspectives. This research aimed to include a variety of stakeholders and experts with expertise in urban planning, governance, social work, UAS and community planning. Such diversity is essential for a

comprehensive understanding of integrating UAS in public spaces, and their effects on social cohesion.

To achieve this, in person interviews, written interviews and email conversations were conducted. This included the municipality and key organisations involved in design and planning processes of Stadhuisplein and a Social Worker. Insights from these expert interviews provided valuable perspectives on the decision-making processes in public space planning and development, and the applicability of UAS as tool for creating socially cohesive public spaces.

The use of expert interviews is particularly suitable for this research because they follow for in-depth exploration of complex issues from knowledgeable sources (Bogner et al., 2009). Conducting these interviews in a semi-structured format enabled the researcher to ask to follow up questions and delve deeper into unexpected topics, ensuring a thorough understanding of the subjects discussed (Kallio et al., 2016). This flexible approach is beneficial for capturing the nuanced expertise and insights of interviewees, which is crucial for understanding the process, difficulties and impact of integrating UAS into public spaces.

3.5 Analysis

Thematic Analysis

The qualitative analysis method in this research is the thematic analysis, which is particularly suited for identifying recurring themes and patterns within qualitative data. Thematic analysis was chosen for its ability to provide a structured approach to understanding how UAS contribute to various dimensions of social cohesion, such as fostering a sense of place, community, or belonging, and a shared identity. This method is highly flexible and adaptable to different types of qualitative data, including interview transcripts, participant observations, or online and media content, which makes it very suitable for the diversity of data sources used in this study. The analysis started with transcribing the interviews and observation notes, followed by detailed reading to identify codes that represent reoccurring ideas related to social cohesion. Codes were grouped into themes and then refined based on data and existing literature. Thematic analysis involved reviewing and refining these themes to ensure they are clearly defined and well supported by evidence. Finally, a detailed analysis within each theme has been conducted to explore how UAS influence social cohesion. This approach aims to provide a nuanced understanding of the impact and potential of utilizing integrated UAS facilities in public spaces as a planning tool for social cohesion.

Media Content Analysis

Online media analysis is a critical component of the data collection process for this thesis. This methodology is helpful for understanding local issues and the historical and contemporary contexts of public spaces, urban action sport scenes and social perceptions of public spaces in Eindhoven. According to recent academic literature, media content analysis can uncover the socio-cultural dynamics that influence community behaviour and perceptions (Krippendorff, 2018; Neuendorf, 2017).

Social media platforms, particularly YouTube and Instagram, are integral to UAS communities. These platforms facilitate the cultural exchange of videos showcasing manoeuvres and tricks, which are not only central to identity but also serve as form of communication and community building among participants (Highfield & Leaver, 2016; Van Dijck, 2013). The performance of these activities in specific public spaces can enhance the sense of belonging, place attachment, and community identity, especially when prominent teams, brands, or athletes feature these locations in their content (Lange, 2019).

Analysing online media allows researchers to capture dynamic nature of UAS and their impact on public spaces. It provides insights into how these activities are represented, shared, and celebrated within the community, and thereby offering a nuanced understanding of their social and cultural significance. Given the importance of visual and social media in contemporary UAS culture, incorporating online media analysis is crucial for a comprehensive examination of the role that these sports play in fostering social cohesion in community identity (Burgess & Green, 2018).

4.0 Results

This research aims to understand the potential of facilitating urban action sports (UAS) in public spaces as planning tool for increasing social cohesion. UAS are hypothesized in this study to have the potential of mitigating urban problems such as loneliness, social segregation and physical inactivity, as laid out in chapter 2. For this research qualitative street interviews have been conducted at Stadhuisplein in Eindhoven, to capture diverse and immediate responses that reflect the participant's perceptions and experiences, which are crucial for understanding how UAS in public spaces affect the various dimensions of social cohesion. Additionally expert interviews have been conducted with De Boer, a social worker, and written interviews with Spiller, a representative of SkateOn, the company responsible for the recent redesign and redevelopment of the UAS obstacles, as well as Sültner, a city official responsible for sports matters in Eindhoven. The following chapter, therefore, presents the results based on a thematic analysis approach, categorizing the statements of interviewees in categories that reflect the line of argument of the literature review.

4.1 Participant Observation Results

The research has been conducted on a Friday, starting from 11:30 AM to 7:00 PM, on an early summer day in early June. The weather was dry, sunny, partly cloudy, with warm temperatures around 23°C. Stadhuisplein was scarcely visited, with a few people passing through on foot and by bike. A TV team was recording with the Stadhuis in the background.

Skateboarders present throughout the day. They were mostly present in groups ranging from two to five people. Some skateboarders were practicing alone, some of which wearing headphones. The benches surrounding Stadhuisplein were used occasionally by groups of friends, couples, and families. Two teenage girls were conducting research on the subculture of skateboarding and observing skateboarders. Throughout the day, people used the Stadhuisplein to access the Stadhuis, as a transition space from the bus stop and the south-west of the city towards the centre and vice versa. Friends and couples sat in the sun and watched skateboarders, and multiple families passed by to let their children play on the ramps and obstacles with inline skates and scooters. When UAS participants were taking a break from skateboarding, they were mainly sitting together in groups at the war monument. That was the place where the most interactions took place, within and between friend groups. Throughout the day, some left and new people arrived. Some alone, some in groups or pairs.

4.2 Interview Results

4.2.1 The Physical Environment

Stadhuisplein

Stadhuisplein is one of the most important and biggest squares in Eindhoven, yet it remains relatively quiet and unused outside of event times (Gemeente Eindhoven, 2021b). Despite its status as a main square, the city acknowledges that its primary user groups, when no events are taking place, are skateboarders and visitors seeking a sunny spot on one of the benches (Gemeente Eindhoven, 2021b). The square is also described as an entrance to the city centre for those coming from the southwest (Gemeente Eindhoven, 2021b).

Eindhoven is planning to grow its population to more than 300.000. At the same time, it is aiming to be a liveable city that provides more living space for its residents (Gemeente Eindhoven, 2021b). However, the city has recognized that Stadhuisplein has low living quality due to its design, that is not inviting and rather hostile. The grey, concrete environment, little green, and empty buildings are contributing to the hostile, and distant atmosphere. Accessibility is also described as poor and a parking garage is on the square, leading to increased traffic on the square, and the pedestrian access is cut off by car traffic, further decreasing the accessibility, and walkability of the public space. The city further notes the importance to better integrate the square into the network of public spaces across the city (Gemeente Eindhoven, 2021b).

Interviews revealed that Stadhuisplein is predominantly perceived as a skate spot, closely linked to UAS and especially skateboarding. This was shared among UAS participants, bystanders, and passersby alike. Some interviewees noted that they never considered the square an urban public place but rather saw it as a skatepark. The prominent display of obstacles is adding to this sense of place: “You see the obstacles already, so almost everybody who passes knows it’s for skateboarding” (Interview 3.1) (full interview transcripts of street interviews 1-7 are presented in Appendix A).

Interviewees highlighted several key features shaping their sense of place, such as skateboarding amenities, accessibility and its central location. For instance, interviewee 1.1 mentioned “I go here when I want to skate,” emphasizing the square’s appeal as a convenient local spot. Contrary to complaints about impaired accessibility, as noted above, interviewee 3.1 praised the centrality and ease of access: “A lot of people come here because it’s in the centre and its convenient for them to come here,” and “the accessibility makes it really easy to get there of course.”

The specific features, such as the benches which are well suited to perform slide or grind tricks on, and the smooth floor, as well as its central location, were cited as key attractions. Stadhuisplein has even attracted professional skateboarders internationally, as noted by Interviewee 3.1: “Even pros from different countries sometimes came here specifically to skate and do tricks because this spot was known just as ‘De Piazza’ was known back in the

day.” However, recent reconstructions have led to a perceived loss of uniqueness. Respondents noted that after the city reconstructed popular sports like ‘De Piazza’ and parts of Stadhuisplein, the city’s appeal to UAS participants from outside diminished: “It’s not that special anymore” (Interview 3.1; 3.2). Despite changes to some popular features at Stadhuisplein, it is still popular amongst UAS participants. Today, the square is recognized as a meet-up and warm-up spot for street skating, as stated by interviewee 3.1. The online skateboarding magazine ‘Flatspot Magazine’ has published an article that still described Eindhoven, or ‘Eindje’ as Netherlands’ best skateboarding city, facilitated by the relatively new inner city (Tromp, 2017). Video productions of parkour teams also suggest a pull factor for participants of other disciplines of UAS, such as traceurs and free runners to the public spaces of Eindhoven, including Stadhuisplein (Aspect Stalence, 2024; Storrer, 2022).



Image 1 (right): Obstacles at Stadhuisplein. Photo taken during field research, June 14, 2024.

Image 2 (left): Benches surrounding Stadhuisplein. Photo taken during field research, June 14, 2024.

Sültner (personal communication, June 20, 2024), the sports policy developer for Eindhoven, mentioned the city’s intention to increase participation in sports and physical activity by creating an urban environment where public spaces are perceived as playfields. This approach aims to create low-threshold, accessible spaces for physical activity across the city, and it promotes flexibility in when citizens decide to do sports. Additionally, promoting active use of public spaces alters the sense of place in these spaces and can lead increased participation in physical activity, so Sültner (personal communication, June 20, 2024). Referring to the vision for sports and movement, she highlighted the growing recognition of UAS as legitimate sports, also due to their inclusion in the Olympics, which has increased authenticity, funding, and a professional approach to designing UAS facilities.

Non-participants also share their perspectives. While some acknowledge the presence of skateboarders without engaging themselves – “I never went here to watch or skate here myself” (Interview 2.1) and “I usually don’t go here” (Interview 2.2) – others appreciate the casual and friendly atmosphere by the presence of UAS. One interviewee remarked on the dual nature of the space: “I like how it feels because you



Image 3: Obstacle with holes for forklift. Photo taken during field research, June 13, 2024.

have the Stadhuis right there and then you have the skatepark right here. It doesn't feel like such a serious place" (Interview 4.2). He added that this duality fosters a friendly and open atmosphere: "Everybody is always friendly and open. It comes with the vibe of the place." Some interviewees noted their patterns of use, such as visiting after work or seeing it as a place to relax: "I come here mainly after work" (Interview 6.2) and "I perceive this as just a place to chill and smoke weed" (Interview 6.2).

Stadhuisplein is thus seen as a multifunctional public space serving as a sporting venue, a place to relax, and an event location up to 17 times a year (Gemeente Eindhoven, 2021b). Interviewee 2.1 mentioned that they usually only visit the square for carnival celebrations in February: "Well, there's a big tent right here. So, I usually go here when there was a party." The multifunctionality of Stadhuisplein is also evident in the design of the UAS facilities. Spiller (personal communication, July 5, 2024) mentioned the city's request "to design and build moveable obstacles. The obstacles are moved by forklifts before each event and placed back after."

This multi-use approach to public space planning is helpful for increasing social cohesion through exposure to and interaction between diverse groups, as emphasized by social worker De Boer (personal communication, June 14, 2024): "You bring different people together in the same area. That's why it is important to have multi-use grounds."

A consistent theme from the interviews is that Stadhuisplein is intrinsically linked to UAS, particularly skateboarding, shaping its identity for both participants and non-participants. Many interviewees, including those who do not partake in UAS, view it primarily as a skate sport rather than an urban public space, underscoring its distinct sense of place rooted in UAS, and underscoring the influence that UAS can have on urban public spaces.

Place Attachment

Place attachment at Stadhuisplein varies widely among interviewees, with some expressing strong connections while others feel little attachment. For some, the space is foundational to their personal and social experiences. One interviewee shared, "this place is where it all started for me. So it means a lot to me [...] This will always be a special place because we started skateboarding here" (Interview 3.2). Despite recent changes that have been affected how the spot can be used, the sentiment remains: "I think I do, now a bit less because we can't actually skate the spot like we used to. But we still have this, and it's probably the best place to meet up" (Interview 3.1).

The community's pride in their local skate spot is also evident. Hosting people from other countries, including professional skateboarders, has increased pride of locals: "I think so [*it increased my pride*] because you get to know new people all the time [...] and it shows what you have, so I was proud about the local sports that we have" (Interview 3.1). However, the attachment to Stadhuisplein also became apparent through concerns about potential changes: "Yeah, it's a shame if it will change up" (Interview 3.1) and "It would hurt if they

would prohibit skateboarding here or remove this spot” (Interview 7.1). The interviewee claimed that this feeling is connected to past experiences:

“Actually, in my hometown, when I was a kid, we also had a Stadhuisplein, and they didn’t want us there. It was very popular to skate there, but they just paved over it and made a parking space out of it, and that really hurt. It was almost like being expelled, like they don’t accept you as a skateboarder and they just want to get rid of you” (Interview 7.1).

On the other hand, some individuals do not feel a significant attachment to the space. Interviewee 1.1 stated, “the place is not crucial for me,” and others remarked, “we did not yet develop an attachment to this space” (Interviews 5.1, 5.2). Here it is important to add that the interviewees were younger and started out skateboarding recently. Older and more experienced participants generally reported increased levels of place attachment. Non-participants generally reported lower levels of attachment, with some interviewees - 2.1, and 2.2 - reporting no attachment to this space.

Nonetheless, the place holds some value for relaxation and entertainment through UAS:

“I would not say I have the biggest attachment, but definitely it’s one of the places I think about visiting whenever I just come to Eindhoven, just to relax and chill because it’s a nice spot and there’s always entertainment. So, the few weeks that they took away all the obstacles and everything, the park is empty. It feels kind of sad. It was boring then” (Interview 4.2).

As mentioned by Spiller (personal communication, July 5, 2024), the redesign of ramps was, however, accepted without much resistance and even welcomed by the local UAS community.

4.2.2 The Social Environment

Community, Identity and Belonging

The social network at Stadhuisplein is significantly influenced by the interactions and support within the community. Interviewees frequently described a strong sense of camaraderie and mutual aid within this community. One participant mentioned that he experiences support by other community members and participants of UAS, highlighting the supportive environment (Interview 1.1). The square also facilitated the emergence of connections beyond the local group, UAS participants from other countries visiting and creating opportunities for broader networking: “It was cool to make connections from outside of your city or your usual skate group” (Interview 3.2).

Stadhuisplein serves as a social space for many, offering a reliable place for social interaction and emotional support: “It’s nice to know that if you’re down or something, you can always go to this place and know that there will be people that you can talk to and you can forget about things for a minute” (Interview 3.2). The community’s collaborative spirit is evident in making UAS a shared activity, providing mutual support and sharing knowledge. One

interviewee highlighted this cooperation, stating, “the community is kind of nice because sometimes we don’t get stuff and then they come to us and give us tips and just talk to us” (Interview 5.2). The community thus fosters an inclusive atmosphere where advice and encouragement are freely exchanged.

Many interviewees discussed their experiences and connections as part of a unified group. This could be observed through statements like, “there is a connection between everybody, even though not everyone knows each other” (Interview 1.1).

Skateboarding is seen as a vital link that keeps participants connected with each other and with the city: “Skateboarding keeps us connected with the people and the city” (Interview 3.1).

Interviewees frequently used collective terms like ‘we’ or ‘they’ when referring to UAS participants, indicating a strong group identity distinct from the general public. One participant expressed how skateboarding has shaped their entire social world: “I built my whole world in this city around skateboarding” (Interview 3.2) with another agreeing: “Yeah me too, definitely. Form everyone who I know from outside, being outside” (Interview 3.1). Friendships within this community are often formed through shared experiences in skating: “We are friends because we all skated together at some point, you know?” (Interview 3.2).

The sense of community and belonging was also expressed to be a key aspect of the UAS culture at Stadhuisplein. The public square serves as a hub where people can meet friends and form new social connections. One interviewee mentioned, “It’s a nice place to meet friends” (Interview 1.1) while others agreed to this sentiment by sharing how they met close friends through UAS at this spot (Interviews 1.1; 3.1; 3.2; 5.1; 5.2). The space is commonly seen as gathering point: “Here the community meets” (Interviews 1.1; 3.1) and “This spot, everyone comes here. It’s like a meeting spot” (Interview 5.2).

The openness and friendliness of the community were highlighted by comments such as “everybody is open, you can talk with everybody” (Interview 1) and “Everyone can meet up here and everybody is cool with each other. Even people who do not even know each other, so it’s always nice” (Interview 3.2). Several interviewees mentioned that the community aspect is a key component of practicing UAS (Interviews 1.1, 3.1, 3.2, 5.1, 7.1), and it has been stated that the predictability of social interactions adds to the appeal of UAS and Stadhuisplein: “One of the better things is like you don’t have to tell no one you’re going to skate. There’s probably someone here skating, so that’s always nice” (Interview 3.1). It has also been mentioned in the interviews that the facilitation of UAS at Stadhuisplein fosters long term social relations and friendships. One mentioned that it “makes us more connected, also with other people and the city” (Interview 3.1).

Participants feel a strong sense of belonging, with one stating “I feel part of the community” (Interview 1.1). However, the sense of belonging is more apparent among individuals who have been participating for a longer period of time at this spot. One interviewee that recently started skateboarding mentioned, “I don’t think were part of the community yet. But were making more and more friends who skate as well” (Interview 5.1) and interviewee 7.1 who moved here recently mentioned “I’m not really in the group integrated myself bit I

don't really care about that. Probably I don't come here often enough for that." The sense of belonging is however, not necessarily limited to the physical space of Stadhuisplein, as mentioned by interviewee 1, and also participants like interviewee 7.1 noted that, while he does not yet feel part of the local community at Eindhoven, he still feels as skateboarder, and connected to the community due to shared values.

Non-participants also observe and appreciate the sense of community among participants of UAS. Several observed that participants often arrived individually but then come together to do their sports, highlighting the welcoming nature of the community: "You can really see when skateboarders, or with their BMX, when they come here, they don't necessarily come together, they come individually and then they skate together, or whatever other sports they do" (Interview 2.1). This openness leads to a perception of a cohesive group: "We see a community. If they're skating together, we thought they were all friends. A lot of times the skaters told us, 'I don't know him, but we skate together'" (Interview 2.2).

The local community was widely described as friendly, open, and welcoming (Interview 1.1, 2.2, 3.2, 4.1, 4.2, 5.2 7.1). Although not everyone feels fully integrated in the local community, the sense of community remains strong. Interviewee 7.1 reflected on how their social interactions have changed over time: "I made many social connections and friends through skateboarding when I was younger. These days not so much." Despite this, Stadhuisplein remains a place where "everyone gathers," providing a consistent spot to go to at any time of the day to meet friends and other likeminded people (Interview 7.1).

Community Building

The municipality further states that the demographic composition of Eindhoven is changing from family households to an increasing number of one- and two-person households. This includes the aging population and young couples, students or young professionals. The city, therefore, notes that it is increasingly important to focus on offering opportunities to connect through housing concepts, services, combating loneliness, and social activities. This requires good and intensive collaboration between stakeholders, city officials and residents. It is further important to define the role of the municipality in mediating between the needs and wishes of the residents and stakeholders (Gemeente Eindhoven, 2021a).

The street interviews revealed a high importance of UAS at Stadhuisplein for forming and maintaining social relationships. Interviewees point out that the public square is a central space that serves the formation of new friendships: "It's a nice place for making friends" (Interview 1.1). Also, interviewees who recently started out participating confirmed that they are making more and more friends who are part of the scene (Interview 5.1, 5.2). Interviewee 5.1 mentioned that he appreciates the openness of more experienced participants to teach him tricks and values and give him pointers to improve and progress: "I really appreciate that, because it really helps, and we make friends that way" (Interview 5.1). The potential of UAS for community building becomes apparent with some stating that they built their "whole world in this city around skateboarding" (Interview 3.2).

UAS not only foster interaction between participants but can also increase interaction between participants and non-participants, as well as among non-participants, as stated in the interviews. The presence of UAS in public space and its public display can be perceived as entertainment and spectating adds to the perceived value and liveability of Stadhuisplein, leading to increased interaction between all present parties. A non-participating interviewee mentioned that “it’s a nice place to meet each other” (Interview 2.2) and another non-participant described an observation of the inclusion of bystanders and spectators in UAS: “I have also seen that when there were just slaters, some kids came around, and [...] are interested in the skateboards, and they’ll just like hold them and just like put them on a board and hold their hands [...] Yeah I think it’s quite a community thing” (Interview 6.1). The interviewee added that he also interacts occasionally with the UAS participants, commenting that those interactions always go well and that “everybody is friendly. It comes with the place” (Interview 6.1).

Spiller (personal communication, July 5, 2024) mentioned the importance of the opening event of the new obstacles at Stadhuisplein, for displaying the importance of the availability as it “makes people aware of the hype they didn’t know was there. The local skaters will participate but also the youngsters and their parents will be there.”

De Boer (personal communication, June 14, 2024) stated that effective community building must start with the identification of users of- and communities in public space. Someone must communicate with the communities and ask what they want to do within a provided space, and then it should be facilitated as a collective effort of community members, with help from the local government and social workers. If an authority plans events or activities with the goal of community building, without identification of the needs or wishes of local residents or community members, the goal is likely to be missed.

As the social worker remarks, the success of inclusive and accessible public spaces does not start with facilitating accessibility and consideration of multiple uses in the public space as final product; inclusive public spaces must be built and planned from the beginning with input and ideas from the local community, to ensure that all needs are met, and to ensure that people can see their input being translated in their physical environment. Such steps and methods are crucial for promoting social cohesion on a community level, and increased satisfaction with local authorities (T. De Boer, personal communication, June 14, 2024).

One thing that he values highly in UAS regarding community building is the low threshold for interaction and participation. Having an activity that is lived in a public space, and that outsiders pick up easily, or that they can engage in by spectating is of immense value for the formation of new relationships, laying the basis for cohesive communities.

Vitality and Liveliness

The square is meant to be more inviting to the general public, and should act as a buzzing and vital, multifunctional space for all people from Eindhoven (Gemeente Eindhoven, 2021b).

As mentioned, UAS are perceived to increase the vitality and liveliness, improving the quality of stay of public space. Non-participants were asked if the facilitation and presence of UAS in public spaces like Stadhuisplein affects them, to which one replied: “I would say, in a way, just to see more activity and life in the city, I’d say in that way it affects me as well.” And, “honestly, to have that sort of sports that young kids can come and enjoy is always the best thing. [...] You’re seeing it all the time that kids and skaters just hang out here and meet, it’s nice” (Interview 4.2). Another interviewee responded “Yes absolutely. [...] if there would be no skaters, mostly there would be no one here. It would be empty. [...] so the only thing that we really see here is people who are skating, so yeah I do think that will actually impact the vitality” (Interview 6.2). This observation is shared by interviewee 2.1: “It’s less people then for sure, yeah.”

Spiller (personal communication, July 5, 2024) states that their vision with designing and building UAS facilities, is also that “if you are seeing people from different ages, different sports disciplines and different skill levels interact in a healthy way, all fighting their own ‘trick battle’ and ultimately landing it, is inspirational and will hopefully get non-participants inspired, or at least entertained”, adding to the liveliness of a public space, and benefiting the public life for non-participants.

Commoning Practices

Commoning practices at Stadhuisplein revolve around the shared use, sharing of knowledge, and perceived ownership of the space by UAS participants. Participating interviewees frequently mentioned a sense of collective ownership, though it is not exclusive (Interviews 1.1, 3.1, 3.2). The space was also described as a community clubhouse: “Some people have a clubhouse, we have this” (Interview 3.1). This sentiment is reinforced by the community’s involvement in shaping the spot: “We grew up here, we made the spot what it is today, we spent a lot of time here. So, it’s an important part of our community, I think” (Interview 3.2). This sense of shared ownership and belonging is further evident in statements like, “it feels like it’s ours as well” and “it was maybe like a little home spot” (Interview 3.2).

However, the feeling of ownership varies among participants. One interviewee noted answered to the question if he experiences ownership: “Not really. I mean it just feels a bit less weird to come here and hang out all day. Because in other spaces, I don’t know, they feel a bit led welcoming to me” (Interview 5.1). This sentiment that this space feels more welcoming than other public spaces to just spend time and linger is shared by other participants: “Those shopping streets, they feel a bit more distant, I think. Here I can just stay all day and it feels like I’m not an intruder or something” (Interview 7.1)

It was further mentioned that the community not only shares the physical space but also exchanges knowledge and skills, enhancing their collective experience: “We’re sharing knowledge on how to skate, people doing tricks inspires me to try them as well” (Interview 5.1). Generally, however, the experience of commoning practices, especially a sense of ownership, appeared to be stronger among more experienced participants.

Governance

The densifying vision of Eindhoven's inner city underlines the importance of promoting mixed use environments and meeting places, aiming for increased liveability and social cohesion in public spaces (Gemeente Eindhoven, 2020). From participation focus groups, the youth council of Eindhoven concluded that there is a wish for an increase in meeting places, as well as an increase in well-designed sporting facilities. The sporting facilities are asked to be spread across the city and in areas where people live, rather than in the outskirts of the city. This is mentioned to be a frequently stated wish. The document further mentions the importance of such public sporting facilities, as people choose for increasingly individualistic sporting options over clubs, and volunteers for coaching are getting increasingly scarce.

Concerning governance of UAS at Stadhuisplein, perspectives on self-governance, municipal roles, and community participation were varying. Many believed that the city has a crucial role in providing and managing spaces for UAS. One participant mentioned, "the city must provide space for UAS" and "limit surveillance and should trust us more" (Interview 1.1). Another interviewee also stated that "the government should guard regulations and mediate between stakeholders, and they should finance skateparks, but they should hire skateboarders and professionals to build them" (Interview 7.1).

However, the city's understanding and management of UAS facilities in public spaces were criticized with one interviewee referring to it as "trash, they don't know anything about it", pointing out inefficiencies in spending and project execution: "They don't know how to build things and waste money. They should rather provide money to grassroots projects like mine, or just give us a space where we can build something ourselves, it will be much better", and "they say they don't have money to spend on skateboarding... They just don't want to spend it. It's been bullsh**" (Interview 3.1). That the municipalities often provide UAS facilities without consolidation with participants and the local community has also been criticized by interviewee 7.1: "You've seen it so many times that they build a skatepark and it just doesn't make any sense, obstacles are awkward, they're weird, there's not enough space, there are no lines. They should just stick to the money and regulations" (Interview 7.1).

Some participants, however, also acknowledge the city's efforts in providing facilities: "I think the city is supportive, because the government placed the obstacles here" (Interview 5.1). Spiller (2024) also described the design and planning process of the new obstacles at Stadhuisplein as successful and close collaboration with local participants and mentioned that the city was the main stakeholder providing for the redevelopment of the obstacles at Stadhuisplein. However, it was further mentioned in the interview that the redevelopment made clear that there is a pressing need for further provision of areas and facilities around the city for UAS:

"The fact that the local big indoor facility is not really suited for skateboarders made the local scene seize this opportunity with both hands and together with them we delivered. The enthusiasm with which the locals skated the new features really shows that there is an unanswered need for a decent facility in or nearby Eindhoven. This should not be the only good facility available for skaters in Eindhoven" (C. Spiller, personal communication, July 5, 2024).

Self-governance is evident as participants take care of the space themselves: “We take a bit of care of it, keep it clean, throw away the bottles that others forgot, that kind of things, so that’s nice” (Interview 3.2). Spiller (personal communication, July 5, 2024) further mentioned the importance of participation of locals for designing and maintaining the obstacles at Stadhuisplein: “We rarely (I think never) build skateparks without there being locals involved in sparking the idea with the municipality. In planning the locals keep us informed about planned events and the best period to start building without interfering in these events (if possible). In maintenance the locals keep us updated about damage that has been done to the park which should have our attention.”

Political engagement appears limited throughout the interviews, mostly due to a perceived lack of possible impact and a lack of trust in local institutions, as noted by interviewee 7.1: “I don’t really get politically active, the municipality is not really open to talk.” However, Spiller (personal communication, July 5, 2024) also described bottom-up approaches, citizen initiatives and community led proposals to the local government that started the redevelopment process of the UAS obstacles at Stadhuisplein: “The local community is a very important party when it comes to initiating the project.”

To increase participation in planning processes, De Boer (personal communication, June 14, 2024) stresses the importance of people having a contact at the municipality or the planning authorities: “You have to really go to that community, show your face and make sure they know who you are. And then you have to understand their goals and wishes and try to facilitate them.” Additionally, it is of great importance to “show them from the get-go what your intentions are” to prevent potential frustrations due to misunderstandings, or unclear communication.

The municipality should rather act as a mediator than a rule maker, as stated by De Boer (personal communication, June 14, 2024). Stakeholders should be provided with a platform for dialogue and the common goals and ideas that work for the affected groups should then be facilitated by the municipality.

Non-participants generally view the municipal provision of spaces for UAS positively: “It’s a really good thing that the municipality made this place for sporters, like the BMX or skaters, and it’s a good thing that people can move. And it’s like a place to meet each other” (Interview 2.2), and “I think it should be available anywhere, I mean it’s not really a bad thing. I mean people are doing sports. It’s good for your health and it makes people have fun” (Interview 6.2).

Conflicts

The identification of conflicts and the mitigation thereof, is an integral part of governance of UAS in public spaces. Conflicts surrounding the use of Stadhuisplein for UAS have varied over time with many participants noting a decrease in issues with the general public. Younger interviewees reported little to no conflicts with the public: “Always great, never had a problem” (Interview 3.2), while another mentioned that complaints have reduced over the years: “Not anymore. They used to complain but they’re not that cranky anymore. Like

maybe back in the day they used to scream [...] only because you hold a skateboard” (Interview 3.1). This change in public perception is attributed to the growing popularity and visibility of UAS such as skateboarding: “Those people will always be out there, but I think skateboarding is getting more and more popular, I think a lot of people are a lot more accepting about it” (Interview 3.2).

The inclusion of skateboarding in mainstream media has also played a role in reducing conflicts. As one participant observed, “it’s been on the Olympics now, it’s been on TV, on YouTube, people see that shit everywhere. It is nothing new to them. But I remember when it was, they were like ‘oh this f*****’ or ‘f*** this guy’ or they always had something to [...] complain” (Interview 3.1). Nowadays, participants noted that conflicts typically arise in more residential or mixed-use areas. One explained, “if you skate in public space, like in residential spots, people can definitely go mad, because it makes a lot of noise. So in that sense, you know, making dedicated skate parks and areas to these kinds of sports [...] I think reduces complaints like that and conflicts” (Interview 7.1). This argument was supported by another interviewee: “We didn’t see any conflicts. Probably the ramps also help that it looks like a skatepark, so people know what they’re getting into” (Interview 5.1).

Non-participants viewed UAS participants generally as non-disruptive, especially when activities take place in designated areas. One commented: “I think they are very kind, they don’t bother other people. Because there’s a designated place [...], it’s not like a private property or something” (Interview 2.1). Another reflected on changing perceptions due to increased exposure to UAS, and especially skateboarding, stating, “first my thoughts were that skating and drugs, joints, [...] were closely connected, but now, after knowing and researching into subculture, I think there’s no negative. [...] So, it’s not really linked to each other. And we have only been surprised in a positive way about the culture” (Interviews 2.1; 2.2).

However, some anticipated that older generations may still hold negative views due to concerns about noise, deviant behaviour and destruction: “I think that the older generations, but then we’re talking 50 and up wouldn’t [*think it is positive*] because they probably think that it would be noisy or whatever” (Interview 6.2). This sentiment was echoed in discussion about future residential: “There are going to be living apartments here. And people would probably complain about the noise, but yeah, I mean [*it is also a very busy event location*]. So I mean if you want to ban this, then why not also ban that, you know? There’s going to be noise anyway” (Interview 6.2).

SkateOn stated the importance of events to mitigate conflicts between residents and non-participants and improve the image of the UAS community through exposure (C. Spiller, personal communication, July 5, 2024). Increased exposure through events “shows that there is a big difference between the people hanging around old skateparks (young kids causing trouble I mean) and the skaters that visit our parks. It creates a shift in perception, and we hope it results in more acceptance for these kinds of projects amongst the whole community.”

De Boer (personal communication, June 14, 2024) emphasized the importance of multifunctional public space for increasing discourse and interaction between different

communities and social groups that would not mingle otherwise. This can mitigate prejudice, facilitate social bonds beyond the own social group, facilitate the emergence of a greater neighbourhood or urban community, and facilitate improved social cohesion. However, the social worker also warns that a diversity of groups with varying values and worldviews can also increase points of friction and can therefore act as ground for conflict. A thoughtful moderation of use of space, for example through designated areas, times or physical attributes is thus crucial.

To mitigate conflicts the groups in conflict must be in dialogue, with a social worker as mediator, and as someone who conveys the goal for this public space to its users: “We as social workers must make sure to communicate the goal or plan, for example that this is a mixed-use space, and we can use it all together. But for regulations to be accepted, it works best when the groups come up with solutions themselves.” Referring to the common conflict of nuisance through noise with UAS as an example, he states that it is important to facilitate stakeholders and their concerns to be heard, and that they can come up with solutions themselves, for example no skateboarding past 10pm. If that ground for communication and dialogue is not provided and facilitated, multigroup cohesion, meaning the cohesion between different user groups of a public space could fall apart (T. De Boer, personal communication, June 14, 2024).

Interviewee 1.1 also mentioned the importance of increasing the number of accessible spots throughout the city to mitigate conflicts due to nuisance caused by UAS, as this would help to spread out the participants and prevent overcrowding in one place.

Additionally, interviewees expressed mixed views on the safety and risk of injury associated with UAS at Stadhuisplein. One participant noted the potential dangers in certain areas, particularly for vulnerable populations: “I get it at some places where they don’t want people to skate, because of elderly people walking and living or something because it’s dangerous” (Interview 5.2). Another interviewee highlighted that the perceived safety might depend on the observer’s familiarity with the activity: “I think it depends on who you ask, like for me it doesn’t make any difference because I’m very comfortable with skateboarders and young fellas, but there are [...] people crossing here, I guess it can be intimidating for some people so maybe it makes it unsafe in a sense, or perceived sense” (Interview 7.1).

Non-participants also shared their perspectives on safety. Some observed that while they felt safe, they recognized potential hazards for others: “I think for us it’s not less safe, but we saw a grandma just there before, [...] she looked a bit afraid” (Interview 2.2).

Another non-participant mentioned a specific risk: “I would say it makes it a little bit unsafe. It’s like a deck can go flying in any direction. So, you’d have to stay a bit more cautious, like decks coming your way, but other than that, it’s not too bad” (Interview 6.1). Conversely some felt no threat from UAS participants, with one stating, “I don’t feel unsafe, I’m just sitting here. I’m not the one doing crazy tricks” (Interview 6.2).

Civic Control and Policing

The presence of skateboarders at Stadhuisplein has been associated with informal policing and an increased sense of security among users. One participant shared a personal account of intervening to protect a young girl from a perceived threat: “If skateboarders are around? Yes, of course, bro... Like, for instance, the one time I was here, and like this little girl walks up to me in the evening and she said like, there’s this crazy guy standing behind me all the time [...]. I told him to leave, and then he never came back. [...] We’ve seen weird people all the time here, so I think skateboarding actually keeps this place safe, yeah” (Interview 3.1).

Other interviewees echoed this sentiment, noting that the presence of UAS participants deter illicit actions: “There were definitely fewer sketchy people when there were a lot of skateboarders around” (Interview 3.2). This informal security is appreciated by some users: “I’d rather have some skateboarders here. So you know, you can walk up to them when anything happens”, describing it as “kind of like an informal security network” (Interview 5.2), with another noting, “there is more social control, so in that case I think that could reduce crime” (Interview 7.1).

Non-participants generally recognized the security benefits of having UAS participants present. One pointed out that skaters and other UAS participants tend to stand together and respond to issues collectively: “skaters tend to stand together. So if sh** is going down, they’ll group up” (Interview 6.1). Additionally, the visibility of people in the area was seen as a deterrent to crime: “If there are people around then the likelihood is way less of crimes being committed. If people are around, people see what you’re doing” (Interview 6.2).

Additionally, safety in public space is also due to design choices. As stated by Spiller (personal communication, July 5, 2024), the company SkateOn, therefore, makes sure that most features and obstacles “don’t give people the opportunity to hide behind or keep out of sight. That way there’s no real attraction to people who want to drink and behave badly to our skateparks.” He further stated that “most of these drunks are hanging out around old parks because nobody skates these anymore” and “that our parks are new and attractive for people of all ages makes the bad company want to stay away.”

As mentioned by De Boer (personal communication, June 14, 2024) the perceived safety in public spaces due to stationary user such as UAS participants also lies within the fact that they know their surroundings very well and are more likely to notice if things go wrong. The continuous and repetitive use of a space also fosters a sense of familiarity among users, which on one hand fosters trust and on the other hand makes it easier to walk up to someone if something happens. Additionally, the social worker mentioned “it is way safer if there are many people until late on the streets than in a neighbourhood where everyone just closes their curtains and where streets are empty.”

4.2.3 The Active Environment

Eindhoven states that its public space is used intensively. People and their habits also influence their health (Eindhoven Sport, 2021). The city wants to stimulate that people do sports and are physically active. It wants to maintain a good distribution of sports facilities throughout the city and design public spaces in a way that invites active movement, social interaction, play, and relaxation. This way, the living environment can contribute to reducing overweight, lowering blood pressure, and improving mental health. The living environment can make a significant contribution to enhancing the health potential of vulnerable groups.

The city emphasizes that the physical and social environment plays an important role for public health. Moreover, the city highlights that health does not only have a physical-, but also a social dimension. Eindhoven, therefore, strives for liveable and safe living environments in new developments, while counteracting loneliness and promoting physical activities (Eindhoven Sport, 2021).

The document further mentions the importance of such public sporting facilities, as people choose for increasingly individualistic sporting options over clubs, and volunteers for coaching are getting increasingly scarce. From participation focus groups, the youth council of Eindhoven concluded that there is a wish for an increase in meeting places, as well as an increase in well-designed sporting facilities. The sporting facilities are asked to be spread across the city and in areas where people live, rather than in the outskirts of the city. This is mentioned to be a frequently stated wish (Gemeente Eindhoven, 2021a).

Interviewees frequently highlighted the mental health benefits of UAS (Interview 1.1; 3.1; 3.2). The social aspect of these activities also plays a critical role in sustaining mental wellbeing, especially during challenging times like the COVID-19 pandemic. As one participant described,

“It brings people together which I’m very happy about because in the corona time like all these people were socially detached and each at our homes and shit, but they had a place to like go and skate and be outside, and not be afraid of things. But I think that’s like a positive thing. I think that’s what kept us sane and still keeps us sane, more connected also with other people and the city” (Interview 3.1).

For some, the physical exercise provided by UAS is the main draw. One interviewee noted, “it’s not so much the social aspect anymore, but the physical exercise” (Interview 7.1). Another participant emphasized the general health benefits: “People are doing sports, it’s good for your health and it makes people have fun” (Interview 6.2).

The community around UAS served as a significant motivator for both starting and continuing participation. Many interviewees mentioned being inspired by watching others perform. “I used to watch people here at Stadhuisplein, that made me want to start as well”, and “I think what motivated me was just looking at skaters and getting hyped because they are landing tricks” (Interview 3.2). Seeing skilled individuals was particularly inspiring for beginners: “Everyone was already super good when I started. So it was an inspiration to get some tricks they also did and then push myself more” (Interview 3.2).

Personal connection also played a crucial role. Interviewee 7.1 explained how his social circle influenced his involvement: “I was exposed to skateboarding. My brother was doing it, his friends, you know, a lot of people in the local neighbourhood.” Similarly, another mentioned, “my boyfriend is doing it and we both started out two months ago which really helps motivating. We motivate each other a lot” (Interview 5.1). The community aspect was repeatedly emphasized, with one stating, “the community motivated me to start participating” and “the community motivated me to continue participating” (Interview 1.1).

Even non-participants observed positive effects of UAS. One noted the calming influence of watching skaters: “It’s more relaxed you know? Most of the time you go to Stadhuis, you’re stressed and it’s something important. Now you pass, you see everybody is chilling, it’s kind of relaxing” (Interview 4.2). Others pointed out how these activities could inspire new participants: “But I think that this [*facilitation of UAS in public space*] is actually good because this can also motivate other people to pick up the skating or whatever people do here. So, I actually think that it’s a positive influence” (Interview 6.2). This inspiration is evident in personal stories like of one interviewee who was motivated to start skating after seeing others: “It was what got me into the idea of going to skate [...]. You could say [*Stadhuisplein*] brought my inspiration [...]. When I came here, I got the inspiration from seeing everybody skate” (Interview 4.2)

This thought was also picked up by Spiller (personal communication, July 5, 2024), stating that SkateOn also recognizes the potential benefit of well-designed public UAS facilities for the non-participating public, as these activities inspire and motivate non-participating users of that public space to partake in activities.

This idea was echoed by Eindhoven Sport (2021), who states that the city aims for an environment in which users of public spaces are stimulated, for example through facilities, to play, do sports and become physically active. To target specifically the younger generations, Sültner (personal communication, June 20, 2024) stated that the city increases investments in urban sports facilities. The city of Eindhoven suggests improving these facilities for urban sports regarding their design, as well as their accessibility, as this could increase the popularity among younger generations (Eindhoven Sport, 2021).

5.0 Discussion

This research aims to understand the potential of facilitating urban action sports (UAS) in public spaces as a planning tool for increasing social cohesion. UAS were hypothesized to have the potential to mitigate urban problems such as loneliness, social segregation, physical inactivity and perceived unsafety, as discussed in chapter 2. The study involved expert interviews, media content analysis, and participant observation and qualitative street interviews conducted at Stadhuisplein in Eindhoven. This discussion chapter interprets and analyses the findings presented in the results chapter critically and examines how the findings support or challenge the initial hypothesis. Additionally, the chapter considers the broader context, limitations, future research directions and recommendations based on the findings. After a short summary of the key findings, the chapter discusses the results by categorizing them according to the research sub-questions.

5.1 Summary of Key Findings

Stadhuisplein is a successful example, serving as a communal space that supports mental wellbeing and creates strong, trust-based networks among UAS participants. Interviewees described it as a meeting place, emphasizing its role in sustaining mental health and promoting community bonds. UAS facilities support civic engagement and social cohesion by providing safe, supportive environments. The relaxed atmosphere also benefits non-participants by reducing stress. Exposure to UAS through spectating and events motivates promotes increased physical activity amongst citizens. Predominantly community bonds, rather than health benefits, drive UAS participation. Low threshold, accessible sporting facilities align with lifestyle trends of temporal and committal flexibility in physical activities.

UAS promote social interaction and cross-group encounters, increasing place attachment and pride among participants. Stadhuisplein exemplifies how UAS can revitalize public spaces, making them lively and attractive to a diverse range of users. Some users also prefer to engage in UAS solely as a physical activity without social involvement. Conflicts predominantly concern safety and noise. Clear indications of UAS through design and better understanding of the UAS community can mitigate these issues.

The research found that UAS at Stadhuisplein positively impact perceived safety, reducing crime and anti-social behaviour through informal surveillance by participants. Despite past violent incidents, interviewees reported that such events have become rare. The UAS community fosters a sense of security and deters crime, aligning with theories of 'eyes on the street'.

Participatory planning at Stadhuisplein involves local participants enhancing a sense of ownership and stewardship among users. While these efforts promote social cohesion, a lack of trust in the local authorities persists, highlighting the need for better communication and a dedicated mediator to bridge the gap between UAS participants and the municipality.

Improved communication could enhance participation in governance and maintenance, further facilitating UAS to boost social cohesion.

5.2 Discussion of Research Questions

1) To what extent can the facilitation of UAS in public spaces affect physical and mental health issues linked to the urban environment?

Eindhoven states that its public space is used intensively. People and their habits also influence their health. The city wants to stimulate that people do sports and are physically active. It wants to maintain a good distribution of sports facilities throughout the city and design public spaces in a way that invites active movement, social interaction, play, and relaxation. The living environment can make a significant contribution to enhancing the physical and mental health. Eindhoven, therefore, strives for liveable and safe living environments in new developments, while counteracting loneliness and promoting physical activities. (Gemeente Eindhoven, 2021b).

As laid out in the results, interviewees referred to Stadhuisplein as a meeting space, a club house, or as extended living space. This indicates a sense of wellbeing among participants with other people and their surroundings (Interview 1.1; 2.2; 3.1; 3.2; 5.2). Especially in difficult times, the community and familiarity with a place and its regular users has been described as supportive in sustaining mental wellbeing. This finding underlines Low's (2022) argument, how public spaces provide a 'shared living space' and thus play a crucial role in the development meaningful relations. Interviewees noted that places that promote UAS bring people together. Such places can offer a refuge when individuals feel segregated, lonely or down, and provide a safe space (Interview 3.1; 3,2). This suggests that UAS provide a network of mutual support among community members. It indicates that UAS can be linked to the creation of strong, trust-based networks which have the power to bridge social divides and combat solitary living (Putnam, 2000). It can, therefore, be argued that promoting UAS in public spaces such as Stadhuisplein, can help to create cohesive communities through their potential for civic engagement and increased trust and strong social support networks that can be linked to the social capital theory (Putnam, 2000).

UAS also influence the health and wellbeing of non-participating users, through a more relaxed atmosphere which helps to relieve stress (Interview 6.1). This finding indicates the potential of UAS of fostering positive bonds with-, and positive experiences in public spaces, which is essential for increased liveliness, wellbeing and social cohesion within cities, as discussed in chapter 2.1 (Foote & Azaryahu, 2009; Maharja et al., 2023).

This study examined the motivations for starting and continuing UAS at Stadhuisplein, and a majority of interviewees stated that spectating and exposure to these activities was the initial motivation (Interview 3.1; 3.2; 5.2; 7.1). SkateOn, also aims to motivate bystanders to participate become active themselves (C. Spiller, personal communication, July 5, 2024). This suggests that opposed to previous approaches of governing UAS facilities, promoting such

activities, can have the effect of motivating citizens to increased physical activity (Morris & Roychowdhury, 2020; Lennard, 2019).

Exposure of sports to the public can also be increased through the organisation of events (Morris & Roychowdhury, 2020). As mentioned by Spiller (personal communication, July 5, 2024), SkateOn has organized opening events for the introduction of the redesigned obstacles. He further states that this provides participants with a fun community event, and non-participants with a platform to get to know the sports and the connected culture. As mentioned above, this motivates for participating in physically engaging activities and can be helpful for motivating for continuous participation (Davis et al., 2023; Angner, 2017).

Continuing participation appears to be greatly dependent on community bonds and social relationships, as indicated in the interviews (Interview 1.1; 3.1; 3.2; 5.1; 5.2). Physical activity for the sake of increasing health was rather uncommon, with only interviewee 7.1 mentioning it as reason for participation. Most respondents described participation predominantly as enjoyable social event (Interview 1.1; 3.1, 3.2; 5.2). This goes in line with the arguments of Davis et al. (2023) and Angner (2017), who say that community bonds and social events motivate to physical activity.

Additionally, it can be argued that UAS are particularly well suited for recent developments in participation and organisation of physical activity. Kural (2010) analysed a shift towards increasing significance of temporal and committal flexibility regarding physical activities.

City documents indicate a similar trend in Eindhoven, stating the increasing need for individual and self-organized sporting facilities as result of focus group discussions (Gemeente Eindhoven, 2021a). This indicates the importance of altering the approach in urban planning towards increasingly low threshold and accessible sporting facilities (Kural, 2010). This has also been reflected in the interviews, with participants implying that going outside and partaking in UAS is often a spontaneous idea. They often just go for quick session to Stadhuisplein after or before work or school, since the square is central and not far from their home (Interview 1.1; 7.1). UAS facilities in public spaces can thus be argued to be a well-suited approach to provide non-committal and accessible sporting opportunities that motivate to increase physical activity.

2) To what extent can UAS impact the social life of public spaces?

Public spaces are often lacking a reason to initiate social interaction with other users. Open spaces without inviting features or design elements become transit spaces. To program a space and fill it with meaning to its users is thus creating a reason for their extended stay.

Stadhuisplein is a public, wide open square that gives room to the city hall and underlines its importance. The square is open for all citizens, and intends to host a wide range of users, functions and activities. It is regularly used as event location, for national and regional celebrations.

If no events are taking place, it is often perceived as a skatepark with opportunity for other users to sit and spectate (Gemeente Eindhoven, 2021b; Interview 1.1; 2.1; 2.2; 6.2). This indicates that the square's sense of place is closely linked to UAS. Events organised around UAS spots can also act as a platform for encounter. Events, so Spiller (personal communication, July 5, 2024) can promote cross-group interaction, introduce non-participants to the subculture and disciplines, motivate for participation, and increase the pride and place attachment among the participants.

UAS in public spaces, therefore, increase social interaction by facilitating encounters among diverse groups. Stadhuisplein exemplifies this dynamic. It is perceived as a social hub where people from various backgrounds come together. Its multifunctionality enhances the space's vitality and attractiveness, drawing both participants and spectators, which promotes social interaction (T. De Boer, personal communication, June 14, 2024). The city mentioned its wish to make public spaces in Eindhoven lively, vital and well visited (Gemeente Eindhoven, 2021c). Municipal documents indicate the wish, especially of young people to increase opportunities of encounter and social interaction in public spaces (Gemeente Eindhoven, 2021a). Findings suggest that promoting UAS in public spaces can be a valuable tool for increasing the sustainable use of public space, increase the time spent in, and attractiveness of a space.

Reoccurring interactions foster a strong sense of community and common identity among participants. Especially for the UAS community, Stadhuisplein functions as a community hub providing opportunities for social interactions and community building (Interview 1.1; 3.1; 3.2; 5.1). This role of the urban square thus creates a less segregated environment and promotes a sense of belonging. This aligns with scholars like Putnam (2000) and McDuie-Ra (2021), who argue that community identity increases cohesion through trust and social interaction.

UAS have been found to be specifically successful in revitalizing underutilized public spaces, transforming them into lively areas. Increased vitality and liveliness are one of the most appreciated benefits that UAS bring to public spaces. Interviewees generally welcomed the life that UAS add to public spaces, particularly in rather mundane and hostile environments. The increased usage of spaces by UAS participants are, as findings show, also attracting non-participants. Many indicated spectating as enjoyable and entertaining activity that improves the quality of stay at Stadhuisplein (Interview 3.2; 4.2; 6.1; 6.2). Some even mentioned that

the place felt rather sad and empty, when the obstacles were removed for a period of time (Interview 2.1; 2.2; 4.2).

One of the key benefits of UAS is the low threshold for participation. Many interviewees describe the ease of getting into contact with others at Stadhuisplein, attributing it to the inclusive nature of the UAS community. However, participation in the social life of UAS is not obligatory. Some participants mentioned that they do not wish to participate in the social aspects and merely see UAS as a physical activity. This indicates that social interaction in UAS is very low threshold.

Firstly, individuals have the freedom of choice to decide whether to interact or not, making the interactions easier and more natural. Secondly, one does not need social contacts to start participating in UAS. This flexibility is attractive to new participants. Thirdly, some UAS participants have been observed using headphones, indicating that they do not anticipate or desire social contact while engaging in the activity. These aspects further prove the committal and temporal flexibility in social involvement.

A distinct separation of participants and non-participants in 'we' and 'they' has been used repeatedly throughout the interviews from the perspectives of both parties alike. This can be argued to be another indicator for a strong collective identity and sense of community among participants in UAS at Stadhuisplein. De Boer (personal communication, June 14, 2024) remarked that such group dynamics can, however, also be counterproductive for social cohesion by fostering social exclusion, for example.

Some people, especially elderly have been stated, and observed to be insecure with crossing Stadhuisplein, and uncontrolled sporting devices have been mentioned to be a safety concern (2.2; 6.1; 6.2). However, knowing that a space is used for UAS has been reported to increase the alertness for potential risks. A clear indication of UAS activity in public space, for example through the obstacles at Stadhuisplein, or signs, increases the understanding and helps mitigating potential risks and points of conflict. Similarly, the strong sense of place linked to UAS, as present at Stadhuisplein, further settles the expectation that users have for that space and limits unwanted conflicts.

Noise has also been mentioned as common point of conflict and participants have shown understanding. However, it has been stated that conflicts are usually used as an excuse to quickly get rid of UAS in central urban public spaces without providing suitable alternatives. Interviewee 1 mentioned that there is often a conflict because of nuisance, while providing more accessible spaces to UAS could spread out the people over a larger area, mitigating nuisance.

However, most respondents emphasized that they experienced interactions as pleasant and that conflicts are rare to non-existent. Exposure has been linked to the positive experiences. It has been stated in the interviews that better understanding of the subculture and the UAS community altered the respondent's negative prejudice and perception towards UAS participants, who the interviewee initially linked to drug abuse and criminal behaviour (Interview 2.1). This indicates the importance of exposure to other citizen groups and

emphasizes the importance of multifunctional public space that promotes encounter and social interaction.

3) How do perceptions of safety and security in public spaces change with the introduction of UAS in public space?

Besides the risk of injury through participation in UAS and accidents or collisions with participants, this question discusses the perception of safety and security regarding the fear of criminal or anti-social behaviour.

The city recognizes the importance increasing safety in public space (Gemeente Eindhoven, 2021b). However, it has remarked a lack of safety and a certain hostility at Stadhuisplein due to the built environment and low quality of stay at Stadhuisplein (Gemeente Eindhoven, 2021b). News outlets reported of violent crimes at Stadhuisplein, which contributed to the square's negative image (Vossen, 2017; Verschuren, 2020; Omroep Brabant, 2015). Interviewees mentioned that crimes happened at Stadhuisplein, but that such incidents became very rare (Interview 3.1; 3.2; 6.1; 6.2). Younger individuals reported that they have never seen any incidents (Interview 1.1; 5.1; 5.2). As hypothesized, some interviewees noted an increased perceived safety through the presence of UAS (Interview 1.1; 3.1; 3.2; 5.1; 5.2; 6.1; 6.2).

The UAS community was generally perceived as people who can be approached and who stick together in dangerous situations (Interview 3.2; 5.2; 6.1; 6.2). This indicates an informal 'force' or security network that self regulates and deters crime and anti-social behaviour through informal surveillance and civic policing. These results are in line with Jacobs (1960) and Bain et al. (2012), who discuss the effect of 'eyes on the streets' and civic policing in vital public spaces as successful mechanism for increasing perceived safety and thus vitality, liveliness and social cohesion in public spaces. The results unveiled that UAS indeed have a positive effect on the perception of safety at Stadhuisplein. The continuous activity and presence of people providing natural surveillance, as argued by Weger et al. (2018), also helps reducing opportunities for anti-social behaviour and crime at Stadhuisplein.

However, civic control is not the only deterrent of the perception of safety, as argued by Whyte (1980). The thoughtful design of facilities with consideration of local and professional input in design choices of UAS facilities increases the acceptance of participants and prevents neglect or misuse of public spaces, which increases vitality and promotes safety in those spaces. This has been stated by Spiller (personal communication, July 5, 2024), who emphasized the commitment of SkateOn to prevent criminal behaviour through environmental design. At Stadhuisplein, for example, the obstacles have been designed to maximize the overview over the square and prevent the possibility of hiding behind them (C. Spiller, personal communication, July 5, 2024).

Interestingly, UAS, such as skateboarding, often find essence in such modernist urban mentality, reinterpreting the hostile concrete environment as playground for their activity, as mentioned by Kazi-Tani (2014). This seems to apply for Eindhoven as well. While streets surrounding Stadhuisplein are perceived as hindering for its accessibility for pedestrians and

the general public (Gemeente Eindhoven, 2021b), the smooth floor, central location and the benches have attracted UAS participants (Interview 3.1). It is interesting to note that participants have generally rated the square very accessible and named the central location as one of its most important attributes (Interview 1.1, 3.1, 3.2, 7.1). The case of Stadhuisplein, therefore, highlights that UAS hold immense potential for reviving underutilised and neglected public spaces, and increase liveliness and vitality in such spaces. This suggests that UAS hold striking value for municipalities and reclaiming neglected public space that struggles with perceived lack of safety and security.

4) How can UAS in public spaces influence the relationship between citizens and local authorities

The city of Eindhoven aims to expand to over 300 thousand residents (Gemeente Eindhoven, 2021b). To increase the liveability and social cohesion at the same time the city follows a strategy of compact city planning (Gemeente Eindhoven, 2020). This also entails promoting mixed use environments and places of encounter, as stated in the document. Regarding citizen participation, Eindhoven has stated clear intentions of involving the public in planning decisions and processes of public space development (Gemeente Eindhoven, 2021c).

Participants in UAS had the concurring opinion that the city must provide funds and space for UAS, but that the design and construction of facilities should be outsourced (Interview 1.1; 3.1; 3.2; 7.1). Lack of expertise in the sport, obstacle design and skill levels has been commonly criticized (Interview 3.2; 7.1). This may lead to lack of acceptance and neglect of the facilities (C. Spiller, personal communication, July 5, 2024). Badly designed and built facilities in neglected urban public spaces have been common in the past decades (Angner, 2017; Interview 7.1). Such spaces were often abandoned by urban action sporters and appropriated by troublemakers, contributing its part to a negative perception of participants of UAS (C. Spiller, personal communication, July 5, 2024). He emphasized the necessity of professional design and construction companies for such facilities, and a close collaboration with local participants to ensure their acceptance. This argument has also been supported by participants, such as interviewee 7.1.

In the past years Eindhoven has altered its policies regarding UAS, which are now more in line with the participants' suggestions. The municipality has changed its regulations towards UAS and sees them now as sport rather than play or nuisance. That BMX and Skateboarding have been added to the list of Olympic disciplines has also contributed to these recent developments (M. Sültner, personal communication, June 20, 2024). It led to greater authenticity of these disciplines, increased funding, and changed the approach for planning and building the facilities and infrastructure for UAS, including the providence of space, and increasingly professional approach to design and construction (Eindhoven Sport, 2021). This effort did not go unnoticed, and many users of Stadhuisplein have expressed their perception of an increasingly supportive municipality (Interview 1.1; 2.1; 2.2; 4.2; 5.1).

The municipality mentions the existence of focus groups for decision making and planning of Stadhuisplein. The youth council, for example, has organized focus groups and asked for wishes, needs and remarks about public space in Eindhoven (Gemeente Eindhoven, 2021b). Spiller (personal communication, July 5, 2024) also confirmed the use of participatory planning and design for the new obstacles at Stadhuisplein. He mentioned the inclusion of local participants, professionals and spokespersons of the community to ensure the provision of well adapted obstacles for the local users. He further mentioned that SkateOn sees this design and planning process as success, and that the redevelopment of these obstacles at least partly covers a pressing need for good UAS facilities in Eindhoven (C. Spiller, personal communication, July 5, 2024). This participatory approach was also implemented in the maintenance Stadhuisplein, where users are encouraged to report damages to SkateOn.

Thoughtful incorporation of opinions and input of experts and locals alike, as well as showing trust to local communities by giving them increased responsibility, sets an important foundation for social cohesion (Schiefer & Van Der Noll, 2016): The involvement in governance processes provides the public with knowledge and power, fosters communal actions and social interactions, and orients communities towards a common goal (Perotti et al., 2020).

As the results indicate, facilitating UAS at Stadhuisplein also promotes a sense of ownership and stewardship among participants for the square. Interviewees reported increased engagement in the maintenance of the square and willingness in taking ownership and responsibility for its physical state: “It feels like ours as well”, “It was maybe like a little home spot” (Interview 3.1), and “we take a bit of care of it, keep it clean, throw away the bottles that others forgot, that kind of things” (Interview 3.2). The upkeep and maintenance of Stadhuisplein thus appears to be a common goal of urban sports participants. Such notions of self-governance where citizens take communal action due to increased stewardship can be highly beneficial for social cohesion.

While the potential for greater community involvement is evident, a significant number of interviewees, however, voiced their lack of trust and perceived lack of impact in the responsible institutions, resulting in inaction and passivity concerning participatory governance processes (Interview 3.1; 3.2; 6.2; 7.1). De Boer (personal communication, June 14, 2024) explains this stark contrast in perception of local governance with the lacking presence of a contact person, or a platform of communication. To improve communication, the city should show presence through a schooled social worker, for instance, who is familiar with the field of UAS and can understand the needs and wishes of participants and can translate them to the local authorities. This mediator must make sure that the community knows about their presence and the city’s willingness to provide support. Additionally, the way how municipalities approached UAS in the past decades (Interview 3.1), and still common practices of hard measures in governance, such as the destruction of spots through hostile architecture without providing high quality alternatives (Interview 1.1; 7.1) may explain the contrast between how the municipality portrays the citizen participation processes (M. Sültnner, personal communication, June 20, 2024; C. Spiller, personal communication, July 5, 2024), versus how some citizens describe their involvement and influence in public space design (Interview 1.1; 3.1; 3.2; 7.1).

Interviewees perceived the municipality as a distant and rather unknown institution that does not know the needs and wishes of users of Stadhuisplein. The city is viewed as a rule making authority that frequently lacks commitment to community participation and community projects in public space (Interview 3.1; 3.2; 7.1). Interviewees insinuate a preference for profitable use over community wishes (Interview 1.1; 6.2; 7.1). Municipality documents and expert interviews, however, imply a willingness to promote a UAS in public spaces. Nevertheless, a certain sense of powerlessness and marginalisation among members of the UAS community has been evident in the findings.

These partly contrast the hypothesis of this research and indicate that there is still a gap in the perception of reality between UAS participants and the local authority. It can be argued that this resembles a perceived tokenistic form of community involvement in planning processes, as discussed by Van Holstein (2017) and Sivkova & Novgorodtseva (2021) (Ch. 2.2). This may lead to a lack of trust in governance processes, and thus impact social cohesion negatively.

However, these findings provide a valuable opportunity, as they show that better communication and the presence of the municipality, could significantly increase the perception of and trust in local authorities. This could increase participation in governance, maintenance and decision-making processes, which could ultimately further improve UAS as a tool for increasing social cohesion within urban communities.

5.3 Limitations

Despite the insightful findings, this research has some limitations and risks that must be acknowledged. One key limitation is the potential bias introduced by the selection of case studies, which may not fully represent the diverse range of urban environments and cultural contexts where UAS are practiced. It is important to note that each city and each public space has a unique character with a unique physical and social context. While this study incorporates vast bodies of existing literature and theories to form a comprehensive background to contextualize the primary research conducted, it is crucial to take the unique character and contexts at play into consideration when applying the results of this study to other cases. Moreover, scale and time frame of the research are clear limitations of the study, as more time and a greater sample size would have increased the amount of data and insights. Additionally, the research relies heavily on qualitative data, which, while rich in detail, may lack generalisability of quantitative data. Furthermore, the evolving nature of UAS and public spaces means that findings may become less relevant over time as trends and urban dynamics shift. Finally, the study is conducted within a limited time frame, which could lead to unintentional underrepresentation of certain citizen groups. These limitations and risks highlight the need for ongoing research and an adaptive planning to fully understand and optimize the integration of UAS in public spaces.

5.4 Recommendations

Based on the findings of this study, it is recommended that urban planners and policy makers consider integrating UAS into public spaces as a strategic approach to mitigating various urban challenges such as loneliness, physical inactivity, social segregation, and crime, particularly in neglected areas. The promotion of these sports in public settings offers a cost-effective and low maintenance solution to revitalizing urban environments, enhancing perceptions of safety, promoting mental and physical health and well-being. By promoting vital and cohesive communities, UAS can significantly increase social interaction, encourage cross-group engagement, and enhance community participation. This innovative approach not only addresses immediate urban issues but also builds a foundation for long-term social and community resilience. Ensuring representation of all stakeholders is essential, and future studies should employ inclusive research methodologies that seek out and incorporate the voices and experiences of diverse community members. By addressing these areas, future research can provide a more comprehensive understanding of how UAS projects can be optimized to enhance urban life, promote social cohesion and contribute to the sustainable development of urban spaces. Research on best practices for improving communication between citizens and local authorities can be highly supportive in mitigating low trust and potential conflicts. To enhance the generalisability of findings, future research should also include a broader and more diverse range of case studies from different urban environments and cultural contexts. Longer-term studies with larger sample sizes can provide a more robust dataset, allowing for a deeper analysis of social relations and citizen-authority interactions over time. Complementing this qualitative research with quantitative methods can enhance the generalizability of findings.

5.5 Concluding Summary

This thesis explores the potential of integrating urban action sports (UAS) in public spaces to increase social cohesion, using Stadhuisplein in Eindhoven as a case study. Initially deemed hostile and low of living quality by the municipality, Stadhuisplein has been revitalized by UAS participants, transforming it into a vibrant, communal area that promotes mental wellbeing and creates strong, trust-based networks. Participants have infused the space with meaning and added value beyond the UAS community. Promoting UAS has led to the development of a healthy, open, and engaging community. Increased social interaction, perceived safety, and a relaxed atmosphere benefit all users of this square. Interestingly, community bonds, rather than health benefits, primarily drive UAS participation, aligning with contemporary trends in temporal and committal flexibility of physical activities.

UAS promote social interaction and cross-group encounters, through low threshold participation in community activities. The platform of encounter in a multifunctional space, such as Stadhuisplein, offers great opportunities for mitigating prejudice and promoting social bonds and a strong social network. This is a valuable asset for increasing public mental and physical health and wellbeing, and for fostering an increased social cohesion through a shared identity and a sense of belonging to a community.

The local authority of Eindhoven shows willingness and initiative to provide UAS facilities and increase participatory planning. Findings suggest that promoting UAS in public spaces increases a sense of ownership and stewardship among participants, which shows to be helpful for motivating participants for increased social engagement and participation in maintenance processes. However, a persistent lack of trust in the local authorities underlines the need for better communication. This could enhance participation in governance and maintenance, which can further improve social cohesion in urban communities.

The presence of UAS also increases perceived safety at Stadhuisplein, reducing crime and antisocial behaviour through informal surveillance and fostering a sense of security. This self-regulating effect increases the quality of stay for all users of Stadhuisplein. While conflicts related to safety and noise are present, findings suggest that they can be mitigated through clear design indications and better understanding of the UAS community.

Concluding this research found that integrating UAS in public spaces can significantly increase social cohesion, with inner city spots playing an important role for UAS communities. Stadhuisplein shows how UAS can reclaim underutilized or neglected public spaces, fostering a sense of community, safety, civic engagement, and healthy communities.

6.0 Bibliography

- Aelbrecht, P., & Arefi, M. (2023). UDI editorial: resilience, well-being and urban design. *Urban Design International*, 28(2), 95-96.
- Aguila, M. D., Ghavampour, E., & Vale, B. (2019). Theory of place in public space. *Urban Planning*, 4(2), 249-259.
- Amin, A. (2008). Collective culture and urban public space. *City*, 12, 24 - 5. <https://doi.org/10.1080/13604810801933495>.
- Angner, F. (2017). Skateboard urbanism.
- Anderson, C., & Schirmer, J. (2015). Why and How Urban Residents Resisted a Proposed Gas-Fired Power Station. *Urban Policy and Research*, 33(3), 324-339.
- Anelli, Renato, Koury, Ana Paula. (2022). Social Movements and Participatory Planning. doi: 10.1002/9781119331360.ch8
- Aspect Stalence. (2024, April 3). *Bart van der Linden & Endijs Miscenko - Street Bangerz* [Video]. YouTube. <https://www.youtube.com/watch?v=2zooNTjCU-E>
- Atkinson, M. (2009). Parkour, anarcho-environmentalism, and poiesis. *Journal of sport and social issues*, 33(2), 169-194.
- Atkinson, M., Young, K. (2008). *Deviance and social control in sport*. Human Kinetics.
- Bain, L., Gray, B., & Rodgers, D. (2012). *Living streets: Strategies for crafting public space*. John Wiley & Sons.
- Baird, A., Candy, B., Flouri, E., Tyler, N., & Hassiotis, A. (2023). The association between physical environment and externalising problems in typically developing and neurodiverse children and young people: A narrative review. *International Journal of Environmental Research and Public Health*, 20(3), 2549.
- Beal, B. (2013). *Skateboarding: The Ultimate Guide*. Greenwood.
- Beal, B., & Wilson, C. (2004). 'Chicks dig scars': Commercialisation and the transformations of skateboarders' identities. In *Understanding lifestyle sport* (pp. 43-66). Routledge.
- Bhattacharyya, J. (2004). Theorizing community development. *Journal of the Community Development Society*, 34(2), 5-34. <https://doi.org/10.1080/15575330409490110>
- boeieproductions. (2016a, November 1). "Eindje" deel #1 [Video]. YouTube. <https://www.youtube.com/watch?v=AVgmZclDtZo>
- boeieproductions. (2016b, November 6). "'Eindje'" deel#2 [Video]. YouTube. <https://www.youtube.com/watch?v=-kSvIXHNOzw>

- Bogner, A., Littig, B., & Menz, W. (2009). Introduction: Expert interviews—An introduction to a new methodological debate. In *Interviewing experts* (pp. 1-13). London: Palgrave Macmillan UK.
- Borden, I. (2006). *Skateboarding, space and the city : architecture and the body* (Paperback reprint). Berg.
- Bourdieu, P. (2011). The forms of capital.(1986). *Cultural theory: An anthology*, 1(81-93), 949.
- Bradley, K. (2015). Open-source urbanism: Creating, multiplying and managing urban commons. *Footprint*, 91-107.
- Bradshaw, T. K. (2008). The Post-Place Community: Contributions to the Debate about the Definition of Community. *Community Development*, 39(1), 5–16.
<https://doi.org/10.1080/15575330809489738>
- Brehm, J., & Rahn, W. (1997). Individual-level evidence for the causes and consequences of social capital. *American journal of political science*, 999-1023.
- Burgess, J., & Green, J. (2018). *YouTube: Online video and participatory culture*. John Wiley & Sons.
- Capshaw, N. (2005). The Social Cohesion Role of the Public Sector. *Peabody Journal of Education*, 80, 53 - 77. https://doi.org/10.1207/S15327930pje8004_5.
- Carmona, M., Heath, T., Oc, T., & Tiesdell, S. (2010). *Public Places - Urban Spaces: The Dimensions of Urban Design*. Routledge.
- Chen, S., Sun, Y., & Seo, B. K. (2022). The effects of public open space on older People's well-being: from neighborhood social cohesion to place dependence. *International journal of environmental research and public health*, 19(23), 16170.
- Cilliers, E., Cilliers, E., Timmermans, W., Goorbergh, F., & Slijkhuis, J. (2015). Designing public spaces through the lively planning integrative perspective. *Environment, Development and Sustainability*, 17, 1367-1380. <https://doi.org/10.1007/s10668-014-9610-1>.
- Community. (n.d.). In *Cambridge Dictionary*.
<https://dictionary.cambridge.org/dictionary/english/community>
- Crow, G. (2002). Community Studies: Fifty Years of Theorization. *Sociological Research Online*, 7(3), 82–91. <https://doi.org/10.5153/sro.742>
- Davis, A., Taylor, J., & Cohen, E. (2015). Social bonds and exercise: Evidence for a reciprocal relationship. *PLoS one*, 10(8), e0136705.
- De Certeau, M. (1984). Walking in the City. Beyond the body proper: Reading the anthropology of material life, 249-258.

- De Fine Licht, K. P. (2017). Hostile urban architecture: A critical discussion of the seemingly offensive art of keeping people away. *Etikk I Praksis-Nordic Journal of Applied Ethics*, (2), 27-44.
- Dempsey, N., Brown, C., & Bramley, G. (2012). The key to sustainable urban development in UK cities? The influence of density on social sustainability. *Progress in planning*, 77(3), 89-141.
- De Weger, E., Van Vooren, N., Luijkx, K. G., Baan, C. A., & Drewes, H. W. (2018). Achieving successful community engagement: a rapid realist review. *BMC health services research*, 18, 1-18.
- Diavua, S. (2016, January 1). Resident Engagement: Effective Strategies for Community building. <https://www.philadelphiafed.org/community-development/housing-and-neighborhoods/resident-engagement-effective-strategies-for-community-building>
- Dickinson, S., Millie, A., & Peters, E. (2022). Street skateboarding and the aesthetic order of public spaces. *The British Journal of Criminology*, 62(6), 1454-1469.
- Eindhoven Sport. (2021). Sport- en bewegvisie 2021-2025 'Heel Eindhoven beweegt!'. <https://www.eindhovenosport.nl/sites/default/files/2021-03/Sport%20en%20beweegvisie%202021-2025.pdf>
- Eindhoven Sport. (2023, August 28). Eindhoven Sport on LinkedIn: De skatevoorzieningen op het Stadhuisplein in Eindhoven waren aan. . . . https://www.linkedin.com/posts/eindhoven-sport_de-skatevoorzieningen-op-het-stadhuisplein-activity-7101964153258430464-Q4x9/?trk=public_profile_like_view&originalSubdomain=nl
- Emerson, R. M., Fretz, R. I., & Shaw, L. L. (2011). *Writing ethnographic fieldnotes*. University of Chicago press.
- Finlay, J., & Kobayashi, L. (2018). Social isolation and loneliness in later life: A parallel convergent mixed-methods case study of older adults and their residential contexts in the Minneapolis metropolitan area, USA.. *Social science & medicine*, 208, 25-33 . <https://doi.org/10.1016/j.socscimed.2018.05.010>.
- Flick, U. (2018). *An introduction to Qualitative Research*. Sage Publications.
- Foote, K. E., & Azaryahu, M. (2009). Sense of place.
- Francis, J., Giles-Corti, B., Wood, L., & Knuiiman, M. (2012). Creating sense of community: The role of public space. *Journal of environmental psychology*, 32(4), 401-409.
- Friedkin, N. E. (2004). Social cohesion. *Annu. Rev. Sociol.*, 30, 409-425.
- Gilchrist, P., & Wheaton, B. (2017). The social benefits of informal and lifestyle sports: A research agenda. *International Journal of Sport Policy and Politics*, 9(1), 1-10.

- Gearin, E., & Hurt, C. S. (2024). Making Space: A New Way for Community Engagement in the Urban Planning Process. *Sustainability*, 16(5), 2039.
- Gehl, J., Svarre, B. B., & Risom, J. (2011). Cities for people. *Planning News*, 37(4), 6-8.
- Gemeente Eindhoven. (2020). Verdichtingsvisie Binnenstad Eindhoven. https://www.openeindhoven.nl/sites/default/files/2021-04/Verdichtingsvisie%20definitief_0.pdf
- Gemeente Eindhoven. (2021a). Integraal Gebiedskader Stadhuisplein. <https://www.openeindhoven.nl/sites/default/files/2021-09/Integraal%20gebiedskader%20stadhuisplein%20-%20september%202021.pdf>
- Gemeente Eindhoven. (2021b). Integraal Gebiedskader Stadhuisplein.
- Gemeente Eindhoven. (2021c). Handboek Openbare Ruimte. <https://www.eindhoven.nl/sites/default/files/2021-11/Handboek%20Openbare%20Ruimte%202021-%20november.pdf>
- Giles-Corti, B., Foster, S., Koohsari, M. J., Francis, J., & Hooper, P. (2015). The influence of urban design and planning on physical activity. In *The Routledge handbook of planning for health and well-being* (pp. 121-135). Routledge.
- Glenney, B., Boutin, M., & O'Connor, P. (2023). The sonic spectrums of skateboarding: from polarity to plurality. *The Senses and Society*, 18, 207 - 222. <https://doi.org/10.1080/17458927.2023.2245232>.
- Glenney, B., & Mull, S. (2018). Skateboarding and the ecology of urban space. *Journal of sport and social issues*, 42(6), 437-453.
- Google. (n.d.). [Stadhuisplein, Eindhoven]. Retrieved July 15, 2024, from <https://www.google.de/maps/@51.4355269,5.4800476,19z?entry=ttu>
- Green, A., & Janmaat, J. (2011). Defining Social Cohesion. , 620. https://doi.org/10.1057/9780230308633_2.
- Groot Eindhoven. (2023, October 2). Skateboardvoorzieningen op Stadhuisplein zijn up to date. Groot Eindhoven. <https://www.grooteindhoven.nl/skateboardvoorzieningen-op-stadhuisplein-zijn-up-to-date-6.3.482990.e18627271a>
- Henning-Smith, C., Moscovice, I., & Kozhimannil, K. (2019). Differences in Social Isolation and Its Relationship to Health by Rurality.. *The Journal of rural health : official journal of the American Rural Health Association and the National Rural Health Care Association*. <https://doi.org/10.1111/jrh.12344>.
- Highfield, T., & Leaver, T. (2016). Instagrammatics and digital methods: Studying visual social media, from selfies and GIFs to memes and emoji. *Communication research and practice*, 2(1), 47-62.

- Ibanez Matus, I. A. (2023, September 3). Skaters gaan los op nieuwe betonblokken Stadhuisplein: 'Kunnen weer twintig jaar mee.' Eindhovens Dagblad. Retrieved July 25, 2024, from <https://www.ed.nl/eindhoven/skaters-gaan-los-op-nieuwe-betonblokken-stadhuisplein-kunnen-weer-twintig-jaar-mee~a0e87013/?referrer=https%3A%2F%2Fwww.google.com%2F>
- Immonen, T., Brymer, E., Orth, D., Davids, K., Feletti, F., Liukkonen, J., & Jaakkola, T. (2017). Understanding Action and Adventure Sports Participation—An Ecological Dynamics Perspective. *Sports Medicine - Open*, 3. <https://doi.org/10.1186/s40798-017-0084-1>.
- Irwin, Brian. (2019). Abstract City: The Phenomenological Basis for the Failures of Modernist Urban Design. doi: 10.1080/20539320.2019.1587963
- Iveson, K. (2013). Cities within the city: Do-it-yourself urbanism and the right to the city. *International journal of urban and regional research*, 37(3), 941-956.
- Izadi, M., & Hart, R. (2024). The influence of the physical environment on social behavior, school climate, and bullying in schools. *Children's Geographies*, 22(1), 66-81.
- Jacobs, J. (1961). *The Death and Life of Great American Cities*. Random House.
- Jacobs, Allan B., Appleyard, Donald. (2020). "Toward an Urban Design Manifesto" : Journal of the American Planning Association (1987). doi: 10.4324/9780429261732-68
- Kagan, C., & Duggan, K. (2011). Creating Community Cohesion: The Power of Using Innovative Methods to Facilitate Engagement and Genuine Partnership. *Social Policy and Society*, 10(3), 393–404. doi:10.1017/S147474641100011X
- Kallio, H., Pietilä, A. M., Johnson, M., & Kangasniemi, M. (2016). Systematic methodological review: developing a framework for a qualitative semi-structured interview guide. *Journal of advanced nursing*, 72(12), 2954-2965.
- Karmakar, M., & Raychaudhuri, D. (2015). Loneliness & Depression: An Urban Syndrome?. . <https://doi.org/10.25215/0204.074>.
- Kazi-Tani, Tiphane. (2014). Le skateur comme designer : des possibilités d'expériences modernes dans les nappes urbaines et de l'exemplarité de la pratique du skateboard. doi: 10.7202/1027738AR
- Keong, C. Y. (2021). The nexus of environmental ethics and environmental sustainability: An empirical assessment. In *Global Environmental Sustainability* (pp. 253–288). <https://doi.org/10.1016/B978-0-12-822419-9.00005-9>
- Kidder, J. L. (2012). Parkour, the affective appropriation of urban space, and the real/virtual dialectic. *City & Community*, 11(3), 229-253.
- Kocsis, Jonanna. (2022). '¡Eso no se dice!': Exploring the value of communication distortions in participatory planning. *Planning Theory*, doi: 10.1177/14730952221124824

- Krippendorff, K. (2018). *Content analysis: An introduction to its methodology*. Sage publications.
- Kural, R. (2010). Changing spaces for sports1 . *Sport in Society*, 13(2), 300–313. <https://doi-org.utrechtuniversity.idm.oclc.org/10.1080/17430430903523002>
- Kurby. (2023, November 11). Kurby. From Past to Present: The Evolution of Eindhoven, Netherlands's Architecture. <https://blog.kurby.ai/from-past-to-present-the-evolution-of-eindhoven-netherlandss-architecture/#post-war-rebuilds-and-modernist-influences>
- Kvale, S. (2007). *Doing interviews*. SAGE Publications, Ltd, <https://doi.org/10.4135/9781849208963>
- Lange, P. (2019). *Thanks for watching: an anthropological study of video sharing on YouTube*. University Press of Colorado.
- Law, James. (2022). Why Public Space Matters. doi: 10.1093/oso/9780197543733.001.0001
- Lennard, S. H. C. (2019). Livable cities: Concepts and role in improving health. *Integrating Human Health into Urban and Transport Planning: A Framework*, 51-71.
- Liu, Fu, Li, Xun, Cheng, WanYing. (2022). Optimization Strategy of Community Public Living Space Based on Emotional Interaction. AHFE international, doi: 10.54941/ahfe1002719
- Loukaitou-Sideris, A., & Ehrenfeucht, R. (2009). Conflict and Negotiation over Public Space.
- Low, Setha. (2022a) 'Place Attachment and Cultural Identity: Monuments, Parks, and Neighborhood Public Space in San José, Costa Rica, and the Statue of Liberty and Battery Park City in New York City', *Why Public Space Matters*. <https://doi-org.proxy.library.uu.nl/10.1093/oso/9780197543733.003.0008>, accessed 25 May 2024
- Low, Setha. (2022b). 'Why Does Public Space Matter?', *Why Public Space Matters* <https://doi.org/10.1093/oso/9780197543733.003.0001>
- Maclure, S. (2017, November 15). Why the Restoration of the Southbank Undercroft Is a Landmark for Both Architecture and Skateboarding. ArchDaily. <https://www.archdaily.com/883405/why-the-restoration-of-the-southbank-undercroft-is-a-landmark-for-both-architecture-and-skateboarding>
- MacQueen, K. M., McLellan, E., Metzger, D. S., Kegeles, S., Strauss, R. P., Scotti, R., ... & Trotter, R. T. (2001). What is community? An evidence-based definition for participatory public health. *American journal of public health*, 91(12), 1929-1938.
- Maharja, C., Praptiwi, R. A., Richter, I., Crummy, A., Devine, D., Gajardo, L. J. A., ... & Wulandari, P. (2023). The people of the seas and the seas of the people. In *Oceans and Human Health* (pp. 499-530). Academic Press.

- McDuie-Ra, D. (2021). Skateboarding and the Mis-Use Value of Infrastructure. *ACME: An International Journal for Critical Geographies*, 21(1), 49–64. Retrieved from <https://acme-journal.org/index.php/acme/article/view/2167>
- McMillan, D. W., & Chavis, D. M. (1986). Sense of community: A definition and theory. *Journal of community psychology*, 14(1), 6-23.
- Mehrotra, N., & Yammiyavar, P. (2013). Facilitating Social Interaction in Public Space. In *International Conference on Intelligent Interactive Technologies and Multimedia* (pp. 89-101). Berlin, Heidelberg: Springer Berlin Heidelberg.
- Mesch, G. S., & Manor, O. (1998). Social ties, environmental perception, and local attachment. *Environment and behavior*, 30(4), 504-519.
- Mihaylov, N., & Perkins, D. D. (2014). Community place attachment and its role in social capital development. *Place attachment: Advances in theory, methods and applications*, 61.
- Mikmak, W. (2014, December 18). Stadträume: Skateräume - Handlungsempfehlungen zum Umgang mit Skateboarding in der Stadtplanung (thesis). issuu. SOLO Skateboard Magazine. Retrieved January 4, 2023, from https://issuu.com/skateboardmsm/docs/wm_30.07.2014_masterarbeit_stadtra.
- Miller, Kristine F. (2007). Introduction. In *Designs on the Public* (NED - New edition, p. ix). University of Minnesota Press. <https://doi.org/10.5749/j.ctttv5pg.4>
- Montgomery, C. (2013) *Happy City: Transforming our lives through urban design*. Penguin *Sociology*
- Morris, Tony, and Dev Roychowdhury. (2018). Physical activity for health and wellbeing: The role of motives for Warin, R. Long Live Southbank: skateboarding, citizenship and the city. *The Journal of Public Space*, 3(3), 149–158. <https://doi.org/10.32891/jps.v3i3.1138>
- Moustakas, L., & Wagner, J. (2023). Conceptualisation and Measurement of Social Cohesion within the Sport and Physical Activity Context: A Scoping Review. *Sports*, 11. <https://doi.org/10.3390/sports11120231>.
- Nasca, Tessa, F., Changfoot, Nadine, Hill, Stephen, D. (2019). Participatory planning in a low-income neighbourhood in Ontario, Canada: building capacity and collaborative interactions for influence. *Community Development Journal*, doi: 10.1093/CDJ/BSY031
- Németh, J. (2006). Conflict, exclusion, relocation: Skateboarding and public space. *Journal of urban design*, 11(3), 297-318.
- Thorpe, H., & Wheaton, B. (2011). 'Generation X Games', action sports and the Olympic movement: Understanding the cultural politics of incorporation. *Sociology*, 45(5), 830-847.

- Németh, J., & Schmidt, S. (2011). The privatization of public space: modeling and measuring publicness. *Environment and planning B: Planning and Design*, 38(1), 5-23.
- Neuendorf, K. A. (2017). *The content analysis guidebook*. sage.
- Novy, A., Swiatek, D., & Moulaert, F. (2012). Social Cohesion: A Conceptual and Political Elucidation. *Urban Studies*, 49, 1873 - 1889. <https://doi.org/10.1177/0042098012444878>.
- O’Keeffe, P., & Jenkins, L. F. (2022). Keep Your Wheels Off the Furniture”: The Marginalization of Street Skateboarding in the City of Melbourne’s “Skate Melbourne Plan. *Space and Culture*, 12063312221096015.
- Omroep Brabant. (2015, October 11). Schedelfractuur na zware mishandeling Veldhovenaar (23). Retrieved July 25, 2024, from <https://www.omroepbrabant.nl/nieuws/2181762/schedelfractuur-na-zware-mishandeling-veldhovenaar-23>
- Perrone, Camilla. (2022). Critical Planning and Design: Walking Through Roots and Dissenting Imaginations. doi: 10.1007/978-3-030-93107-0_1
- Perrotti, D., Hyde, K., & Peña, D. O. (2020). Can water systems foster commoning practices? Analysing leverages for self-organization in urban water commons as social–ecological systems. *Sustainability Science*, 15(3), 781–795. <https://doi.org/10.1007/s11625-020-00782-1>
- Pink, Sarah. (2008). An Urban Tour. *Ethnography* 9 (2): 175-196. doi:10.1177/1466138108089467.
- Pinto, A., & Remesar, A. (2015). URBAN COHESION: A PUBLIC SPACE NETWORK ASSESSMENT. *On the W@terfront*, 39, 7-25
- Portacolone, E. (2017). Structural Factors of Elders’ Isolation in a High-Crime Neighborhood: An In-Depth Perspective. *Public Policy & Aging Report*, 27, 152–155. <https://doi.org/10.1093/ppar/prx025>.
- Pranab, P., & Bansal, V. (2022). Investigating the Idea of Multifunctional Public Spaces for Sustainable Communities. *ECS Transactions*, 107(1), 18923.
- Rodrigues, Luiz. (2019). Choques morfológicos e crises de sociabilidade no espaço universitário e no espaço urbano. doi: 10.47235/RMU.V7I1.53
- Sameeh, R., Gabr, M., & Aly, S. (2019). Reusing lost urban space. *New Cities and Community Extensions in Egypt and the Middle East: Visions and Challenges*, 181-198
- Sakhaeifar, A., & Ghoddusifar, S. (2016). Impact of Location-Behavior on Sense of Belonging to Place. *Mathematical Models and Methods in Applied Sciences*, 10, 57. <https://doi.org/10.5539/MAS.V10N5P57>.

- Schiefer, D., & Van der Noll, J. (2017). The essentials of social cohesion: A literature review. *Social Indicators Research*, 132, 579-603.
- Seibert, S., Kraimer, M., & Liden, R. (2001). A Social Capital Theory of Career Success. *Academy of Management Journal*, 44, 219-237. <https://doi.org/10.5465/3069452>.
- Shantz, B. M., Kearns, R., & Collins, D. (2008). Intolerance for Noise and Disorder: Questioning the 'Publicness' of Auckland's Lower Queen Street. *Urban Policy and Research*, 26(1), 39-55.
- Simone, A. (2022). No common cause? The spaces of urban collective identity. *Urban Geography*, 43, 895 - 903. <https://doi.org/10.1080/02723638.2022.2036927>.
- Sivkova, Nadezhda Ivanovna, Novgorodtseva, Anastasia. (2021). Forms of public participation in the sustainable development of the city (on the example of the city of Yekaterinburg, Russia). doi: 10.1051/SHSCONF/20219401039
- Sport- en bewegvisie 2021 - 2025. (2024, June 19). Eindhoven Sport. <https://www.eindhovensport.nl/actueel/projecten/sport-en-bewegvisie-2021-2025#>
- Spradley, J. P. (1980). *Participant Observation*. Holt, Rinehart and Winston.
- Steffansson, M., & Pehkonen-Elmi, T. (2022). P08-13 Physical activity increases social inclusion. *European Journal of Public Health*, 32(Supplement_2), ckac095-126.
- Stevens, Q. (2007). *The ludic city: Exploring the potential of public spaces*. Routledge.
- Stichting 18 September. (n.d.). Belangrijke gebeurtenissen voor Eindhoven 1940-1945 | Stichting 18 September. Retrieved May 16, 2024, from <https://stichting18september.nl/belangrijke-gebeurtenissen-voor-eindhoven-1940-1945/>
- Stigendal, M. (2019). Aiming at social cohesion in cities to transform society. *Integrating Human Health into Urban and Transport Planning: A Framework*, 501-514.
- STORROR. (2022, September 5). Crazy Parkour Street Competition - Netherlands NL [Video]. YouTube. <https://www.youtube.com/watch?v=UPzDyeQEFXs>
- Talen, E. (2012). *City rules: How regulations affect urban form*. Island Press.
- Thorpe, H. (2014). *Transnational mobilities in action sport cultures*. Springer.
- Tromp, M., Tromp, M., & Tromp, M. (2017, April 4). Musthave: "Eindje" skateboard History Eindhoven | Flatspot Magazine. Flatspot Magazine | Skateboarding From the Lowlands! <https://www.flatspot.nl/2017/03/musthave-eindje-skateboard-history-eindhoven/>
- Trotter, R. T. (2001). What is community? An Evidence-Based Definition for Participatory Public Health. *American Journal of Public Health*, 91(12), 1929–1938.

- TU Eindhoven. (n.d.). About Eindhoven: a brief impression of the city and its history.
<https://www.tue.nl/en/our-university/library/resources/academic-heritage/vabout-eindhoven-a-brief-impression-of-the-city-and-its-history>
- Ueda, G. (1986). The Concept of Territoriality and Attachment to Place a Meta-geographical Investigation. *Japanese Journal of Human Geography*, 38(3), 193-211.
- Van Dijck, J. (2013). *The culture of connectivity: A critical history of social media*. Oxford University Press.
- Van Holstein, Ellen. (2018). Experiences of Participatory Planning in Contexts of Inequality: A Qualitative Study of Urban Renewal Projects in Colombia. *Planning Theory & Practice*, 19(1):39-57. doi: 10.1080/14649357.2017.1406981
- Verschuren, C. (2020, July 31). Afgesproken vechtpartij op Stadhuisplein in Eindhoven in de kiem gesmoord. Omroep Brabant. Retrieved July 25, 2024, from <https://www.omroepbrabant.nl/nieuws/3237675/afgesproken-vechtpartij-op-stadhuisplein-in-eindhoven-in-de-kiem-gesmoord>
- Vossen, E. (2017, October 7). Man (20) neergestoken bij vechtpartij in Eindhoven. Omroep Brabant. Retrieved July 25, 2024, from <https://www.omroepbrabant.nl/nieuws/2574880/man-20-neergestoken-bij-vechtpartij-in-eindhoven>
- Watson, B., & Ratna, A. (2011). Bollywood in the park: thinking intersectionally about public leisure space. *Leisure/Loisir*, 35, 71 - 86.
- Wheaton, B. (2013). *The cultural politics of lifestyle sports*. Routledge.
- Whyte, W. H. (1980). *The Social Life of Small Urban Spaces*. Project for Public Spaces.
- Yang, Di. (2023). Case Study Analysis of Unified and Non-Unified Planning of Urban Public Space. *Lecture Notes in Education Psychology and Public Media*, doi: 10.54254/2753-7048/6/20220788
- Zebracki, M., Vaart, R. J. F. van der, & Aalst, I. van. (2010). Deconstructing Public Artopia: Situating Public-Art Claims within Practice. *Geoforum*, 41(5), 786–795.