

## **RESEARCH REPORT**

# **Decoding urban narratives: Unveiling landscape design informants through place stories in the City of Tshwane**

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## DECLARATION OF ORIGINALITY

I declare that the mini-dissertation, *Decoding urban narratives: Unveiling landscape design informants through place stories in the City of Tshwane*, which has been submitted in fulfilment of part of the requirements for the module of DIT 802, at the University of Pretoria, is my own work and has not previously been submitted by me for any degree at the University of Pretoria or any other tertiary institution.

I declare that I obtained the applicable research ethics approval in order to conduct the research that has been described in this dissertation.

I declare that I have observed the ethical standards required in terms of the University of Pretoria's ethic code for researchers and have followed the policy guidelines for responsible research.

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## **ABSTRACT**

In pursuit of contemporary and representative design informants for green open space in the City of Tshwane (CoT), this research paper examines three distinct green open spaces namely Burgers Park, Moja Gabedi, and Muckleneuk Commons. The primary objective is to uncover the place stories associated with each space. The study investigates the influence of Eurocentric ideals on the development of green open spaces in CoT and examines recent adaptations and approaches to addressing socio-ecological challenges in their management and design. The research emphasizes the need for change in landscape design discourse, shifting the focus towards social-ecological considerations and design principles that are grounded in a regional and contextual understanding of an African city. By conducting interviews and observations, the study delves into the narratives, sense of place, and human-nature relationships present in these green open spaces. The findings highlight the crucial role of these spaces in fostering place identity, establishing connections with nature, and promoting overall well-being among Tshwane's residents. The research advocates for designing interfaces that facilitate ecological interaction, promote stewardship, and meaningful connections with nature. Additionally, it underscores the importance of nature education as a means of sustaining ecology and life. Understanding the values, perceptions, and needs of users in these green open spaces can lead to improved connections and adaptability, resulting in the creation of more accessible and inclusive environments. Ultimately, these efforts contribute to a more connected and integrated social-ecological ecosystem that enhances socio-ecological interactions. Incorporating these elements into urban planning and landscape design strategies can enhance the liveability and resilience of CoT.

**Keywords:** landscape design, landscape architecture, urban nature, urban green spaces, nearby nature, human-nature relationships, place narratives, perceptions, values, local design response, Afrocentric

## TERMINOLOGY

### **Urban nomad:**

People without a formal dwelling, who experience homelessness, constantly migrate within the city in search of the best options to meet their basic needs (Njobe 2018).

### **Human-nature relationships:**

Human-nature relationships refer to how people establish connections, interactions, and interdependence with their surroundings, including innate, natural, cultural, psychological, and social dimensions (Seymour 2016, 1-4).

### **Afrocentric design:**

Knowledge systems, cultural, science and experience from African origin and identity that influence the creative development process (Correa & Holbert 2020).

### **Eurocentric design:**

Design trajectories, principles and practices originating from Western or European knowledge systems that have an impact on the product of the design process (Utoh-Ezeajugh 2021).

### **Urban metabolism:**

Urban metabolism encompasses the diverse inputs and outputs that drive movement and growth within a city, like living organisms. It involves the flow and transformation of energy, resources, and waste systems within the urban environment (Kennedy et al. 2011, 1965).

## 1. INTRODUCTION

It has been acknowledged amongst landscape and urban planning professionals that spaces of nearby nature provide health and well-being benefits to urban citizens (O'Hara 2016). According to O'Hara (2016), residing in proximity to high-quality green spaces has been demonstrated to promote physical activity and yield favourable health outcomes, fostering emotional connections to local communities, encouraging community involvement, boosting economic prospects, and decreasing crime rates. Parks and open green spaces also potentially contribute to ecological diversity and social benefits (Russel et al. 2013). As such, public green spaces have become crucial elements for contributing to an adaptable and resilient environment (Venter et al. 2020), particularly in South Africa where vulnerable communities are most affected by urban decay and the degradation of natural resources (Mphambukeli 2020). Public green space use is heavily influenced by social-spatial patterns (Byrne & Zang 2009; Alshafei & Righelato 2022), highlighting the need for landscape architects in South Africa to ensure social and ecological well-being in green open space creation (Breetzke & Breed 2013; Breed 2022; Breed et al. 2022).

As the built environment industry moves towards ecological and social justice landscape architects and planners question whether this shift will impact landscape design responses and emergent landscape typologies (Breed 2022; Carmona 2015). Nature holds cultural, social, aesthetic, and recreational value for people (Knight et al. 2022). Muller (2008) argues for an anthropological approach to South African landscape design that holds intangible stories of the landscape at its core. Landman (2022) describes the role of the designer in transforming the city in three parts. One is the developer of public space, and the second is a mediator that manages these spaces, and lastly, a facilitator that uses the lens of the community to design responsively (Landman 2022, 84).

Globally researchers are undertaking investigations to comprehend human perceptions of urban green spaces (Hofmann et al. 2012, Tansil et al. 2022; Canedoli et al. 2017). To achieve a culturally representative design response past and present narratives of space must be integrated into data analysis (Grunewald & Breed 2013). A study by Stålhammar & Pedersen (2017) advocates for a valuation of the ecosystem service benefits related to places of urban nature. Intangible and abstract values related to perception were found to have inherent value. Planning for urban resilience requires learning from past mistakes. In South Africa, we require peeling back layers of history and narrative to fully understand a space (Yumagulova 2017).

Research conducted in the Global South emphasizes the significant role of narratives in shaping policies and enhancing decision-making processes regarding urban environments (Breetzke & Breed 2013; Bachi et al. 2021; Ho et al. 2005). While some studies have examined the perception of nearby natural areas to understand the social-ecological context (Young 2015; Tauoatsoala 2017), there is a dearth of qualitative engagement focusing on the perception of urban nature spaces specifically in Tshwane. Conducting such studies is crucial for developing contextually appropriate design responses. Further research is needed to explore people's perceptions of the existing conditions, elements, and typologies of CoT parks, providing insights into new developmental opportunities (Malette et al. 2022).

In addition to outdated Eurocentric park styles, landscape architecture is grappling with creating more ecologically sound and socially just open spaces, which have stylistic and aesthetic implications, as well as programmatic and ecological intentions (Makakavhule & Landman 2020). It is essential to emphasize the significance of urban parks in promoting the overall resilience and inclusivity of the CoT (Landman & Nel 2022, 466). Public spaces



should reflect the needs of the public and have effective systems in place to govern these spaces to foster a sense of place and a shared identity (Polat & Dostoglu 2016, 2).

In South Africa, there is a growing interest in integrating "Afrocentric" considerations into the design of green open spaces (Shackleton & Gwedla 2021, 9), as well as an interest in how nature can be differently interpreted in terms of meaning for individual and cultural representativeness (Cocks et al. 2016). The decolonization of public spaces involves recognizing the existing elements that contribute to spatial injustices, imagining an alternative reality, and ultimately transforming the current urban environment (Landman & Makakavhule & Landman 2020, 545; Landman & Makakavhule 2021). By incorporating human-nature relationships alongside culturally representative landscape design, urban residents, and most specifically, marginalised communities can reap ecological, economic, and cultural benefits (Patterson 2015, 15).

According to Young (2021), during white governance, the creation of public spaces lacked significant meaning for most of the population. However, there has been a noticeable shift in recent years within landscape architectural discourse towards creating more meaningful public spaces that are responsive to the cultural, social, and ecological context (Young 2021, 86-87). The understanding of meaning and value associated with public spaces is not static but evolves over time. In the quest for a new Afrocentric identity, new meanings and values are generated, contributing to the redefinition and reinterpretation of public spaces (Young & Vosloo 2020, 89). This evolution reflects the dynamic nature of public spaces and the continuous negotiation of their significance within broader socio-cultural contexts.

Landscape architects in South Africa are advocating for more locally appropriate design and designers need to be equipped to create culturally representative green open spaces (Shand 2022). To achieve this, landscape architects can incorporate sustainable and ecologically sound design principles, Afrocentric considerations, and indigenous knowledge systems, thereby creating public open spaces that are both culturally representative while also benefiting both people and the greater urban ecosystem. To create socially and ecologically just public spaces, there is a need for additional research into human-nature relationships and interactions in the CoT.

### **1.1. Research objectives and research question**

Research Question: What design-informants can be identified from an investigation into the stories of three public nearby nature places – for contributing to a locally appropriate landscape design response?

- An illustrated description of the typical 'Eurocentric' local community park in the inner suburbs of the CoT, as a baseline for further interrogation.
- Investigate place stories of three selected urban, public open spaces in the CoT to determine how the design, and use, of these three spaces align with or deviate from the typical 'Eurocentric' local community park described above.
- Describe potential considerations that could be appropriate for future, place-based development of public open spaces in the CoT.

## **2. BACKGROUND AND CONTEXT**

The following section interrogates pertinent literature and provides insight into the background of the study. The importance of narratives and human experience of place is introduced first, before the history of POS in SA and the CoT is described. Finally, the historic and contemporary trends that form the basis of this interrogation are introduced.

## **2.1. Narratives of place as design informants for green open space design.**

Public open spaces, and for this study, green public open spaces are types of places in which people live everyday (Shand, 2022). The concept of "place" is a complex and multifaceted one, encompassing a culmination of memories and experiences that are influenced by aesthetics and senses (Kaufman 2009, 26). Rather than being something created anew with each generation, places carry with them embedded stories and histories that shape the narratives associated with them (Kaufman 2009, 29). It is important to note that the interpretation of a place can vary significantly depending on the personal narratives and perspectives of individuals (Kaufman 2009, 27). A South African approach to storytelling requires an understanding of the local environmental, economic, and community context (De Beer 2014, 1496-1497).

According to Kaufman (2009), urban environments in modern society often exhibit a tendency to disregard the stories associated with a place by constructing physical barriers that promote exclusivity. These barriers serve as physical divisions within the landscape, delineating boundaries and controlling access to spaces (Kaufman 2009, 25). According to Boehi (2021), places of nearby nature that have failed to acknowledge and address their historical stories can become stagnant, perpetuating a dominant Western epistemology. By addressing historical stories, we can challenge dominant perspectives, embrace diverse voices, and foster a more holistic and equitable understanding of these places (Boehi 2021). Therefore, it is important to celebrate places that embrace narratives deeply rooted in their specific context, fostering more inclusive environments.

Carmona (2015) underscores the significance of public spaces in their role as democratic arenas. In the CoT studies have found that public open space is important for people to express their collective identity openly (Landman & Makakavhule 2021). These spaces must prioritize principles of equity and inclusion, enabling the integration of new narratives and catering to diverse user profiles (Carmona 2015, 399).

The design of public space should be an iterative process involving stakeholders as well as community members to create a locally appropriate design (Kumar Nair & Landman 2022 14-15). According to De Beer (2014), stakeholders play a crucial role in communal storytelling by bringing together various role players and facilitating successful integration within the community (De Beer 2014, 1496-1497). In this context according to de Beer (2014), stakeholders are individuals or groups who hold authority or have a vested interest in the communal storytelling process. The role players, on the other hand, typically consist of community members who actively participate in the storytelling process. Stakeholders have a significant role in environmental governance, particularly in ensuring that diverse voices and knowledge are acknowledged (Boehi 2021).

There remains a dearth of research specifically focused on employing an interdisciplinary approach to the creation of narratives within the public realm. Young (2019) underscores the importance of narratives in the design of landscapes and public open spaces as part of the quest for a new representative identity of a place (Young 2019, 19). Thus, landscape design assumes a critical role in crafting inclusive place stories that encompass diverse perspectives, histories, and cultural dimensions. By adopting an interdisciplinary approach, designers can draw on insights from various fields and collaborate with stakeholders to create public spaces that reflect and embrace the multiplicity of narratives within a community, thereby promoting a sense of belonging and shared ownership (Kumar Nair and Landman, 2022).

## 2.2. Public Open Space manipulation in South Africa and the City of Tshwane

Fourie's (1993) comprehensive study on the history of landscape architecture in South Africa highlights its evolution and cultural significance. Early landscape design in the region emerged from the practical needs for resources such as food and shelter (Fourie 1993). In later centuries, landscape design became influenced by the architectural styles of the time (Fourie 1993, 140). The rapid urbanization and industrial progress in the 1950s led to a demand for environmental planning and conservation, shaping modern landscape architecture in response to growing environmental concerns. The American Conservation Act of 1970 had an impact on South African landscape design, although it had to adapt to the unique socio-cultural context of the country (Fourie 1993, 141-142). However, it is essential to note that the existing literature often adopts a Eurocentric or Western perspective, neglecting indigenous communities' engagement with the landscape during the same historical period. Consequently, the historical account of public open spaces in South Africa may be one-dimensional, lacking inclusivity and perspectives from indigenous sources of information after the 17th century.

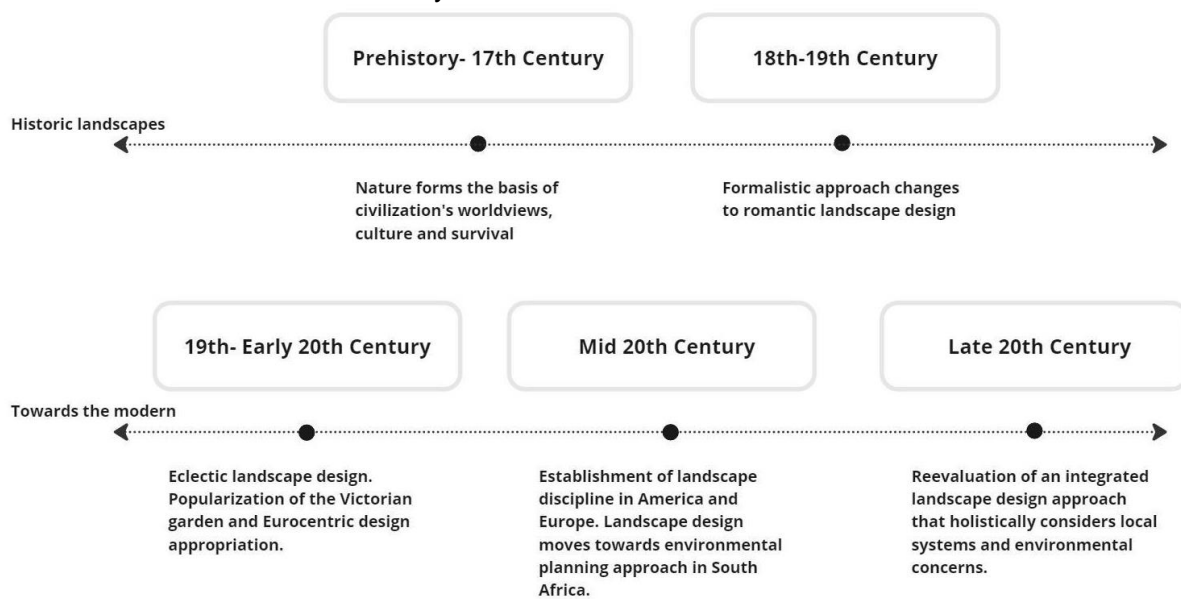


Figure 1: An overview of the evolution of landscape design from pre-history up until modern times in South Africa, adapted from Fourie (1993, 145), (Author 2023).

The emotional connection and meaning associated with a place are influenced by the visual aesthetics, elements, design strategies, and experiences fostered by intentional landscape design (Kara 2013, 290). Throughout history, public open spaces have played a crucial role in urban environments as landmarks that provide orientation within cities (Landman 2022, 82). It is important to recognize that the significance and symbolism of landscapes can evolve over time, reflecting changes in users' perceptions and societal values (Landman 2022, 82). An illustrative example of this phenomenon can be found in CoT, South Africa. According to Landman (2022, 82), the hills surrounding CoT encompass a variety of heritage sites, monuments, and public open spaces. The Union Building, originally representing colonial heritage, underwent a transformative change with the installation of a statue honouring Nelson Mandela. This alteration in the physical landscape resulted in a shift in the significance and appeal of the surrounding gardens to a wider user group. However, it remains the case that there are enduring legacies associated with how public open space

was used as a mechanism of exclusion, rather than inclusion (Venter et al. 2020; Makakavhule & Landman 2020; Shackleton et al., 2015).

To address these negative legacies of apartheid planning in South Africa, local municipalities have attempted to address the backlog in park provision (Makakavhule & Landman 2020). It is crucial to examine whether the existing design and landscape strategies truly reflect the diversity of the city's population and effectively meet their needs.

The following sections utilize existing literature to illustrate the conventional and historical Eurocentric concept of a park within the context of the CoT. This is done to emphasize additional patterns that need to be critically examined in relation to the historical development of public open spaces in the city. These sections contribute to the analysis of the data gathered for this study, which aims to explore contemporary design influences for public open spaces in the CoT.

### **2.3. The Eurocentric Park in the City of Tshwane**

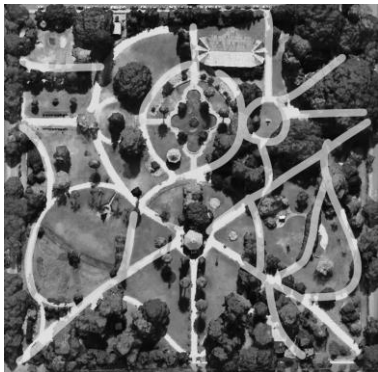
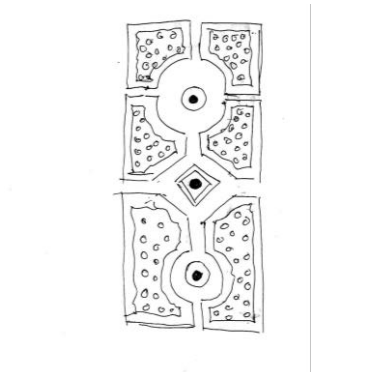


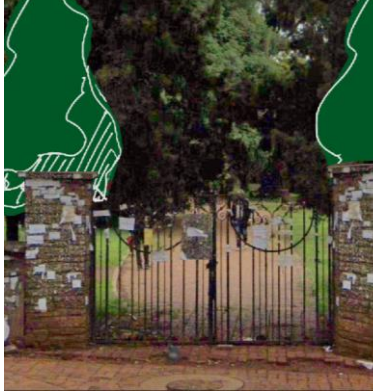
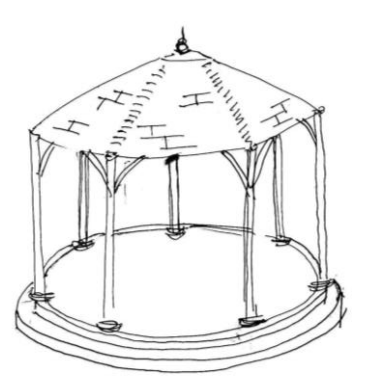
According to Turner (2005), the Victorian and eclectic gardens of the 20th century incorporated diverse styles and plants from across the globe. The past was often romanticized and appropriated, resulting in the inclusion of various design elements. The hierarchy and organization of space were predominantly influenced by European garden design, which was promoted by the leading landscape architecture institutions of that era (Turner 2005, 397-398).

In South Africa during 1600-1950 landscape design was largely an extension of the stylistic tendencies of buildings of the time (Fourie 1993, 140). Colonial countries appropriated trends that originated from Europe like the picturesque style pioneered by Capability Brown (Ignatieva & Steward 2009, 409).

As noted by Taylor (1995), Victorian parks were primarily designed to provide space for leisure activities, adorned with various features such as kiosks, pavilions, bandstands, and ornamental elements like artificial rocks and sculptures. The landscape featured carefully arranged ornamental plants from different regions in symmetrical layouts, reflecting a preference for control and order. Aesthetics played a central role, with a focus on colourful, cultivated flowers displayed in expansive planting beds. Winding paths were often lined with low mounds and shrubs to enhance the park's visual appeal. The 19th-century fascination with botanical collections continued into the 20th century, with glass houses used as repositories for a diverse range of plant specimens, particularly those of tropical origin (Taylor 1995, 211-215).



**Table 1: Table indicating Eurocentric features and elements associated with Victorian Park:**

<p>Serpentine walkways e.g., Burgers Park. Image, Author 2023.</p>	<p>Geometric arrangement and mass planting of ornamentals. Drawing, Author 2023.</p>	<p>Exotic Hedges and trees along Path. Image, Author 2023.</p>
		
<p>Statues (Photo, Author 2023)</p>	<p>Ornamental entrance gate. Image, Author 2023.</p>	<p>Folly. Drawing, Author 2023.</p>
		

## 2.4. Contemporary Trends in public open space development in the City of Tshwane

The establishment of the institute for landscape architects in South Africa is a relatively recent development. According to Stoffberg et al. (2012), the institute was only established in 1962. However, despite this progress, there is still a notable absence of Afrocentric considerations and priorities in the landscape architecture industry in South Africa. After 1994 the focus of landscape architecture shifted towards addressing previously disadvantaged areas and memorialisation within the landscape (Stoffberg 2012, 8).

This paradigmatic shift marks a significant departure, with landscape architects now prioritizing experiential and site-specific considerations, to emulate the lived experiences of the user, at the core of their design process (Young & Vosloo 2020, 90-91). Spatial planners recognize the importance of integrating place identity, as it fosters a stronger bond between individuals and their surroundings (Dewar & Louw 2021).

Following the advent of democracy in 1994, discussions in South Africa have centred on the relevance and identity of public spaces, with an emphasis on the crucial role they play in accurately representing the collective identity of the nation (Young 2019, 15). Currently, in

South Africa, heritage landscapes frequently contain cultural artefacts associated with commemorating past historical events, often from the perspective of the dominant white colonial ruling parties of the time (Marschall 2009, 1-2). Public elements and spaces were commonly utilized to reinforce the legitimacy of power and assert ownership of historical narratives (Marschall 2009, 1-2). However, tensions persist in South Africa due to the homogeneity of these narratives, leading to ongoing disputes over historical interpretations (Marschall 2009, 1-2). Young (2019) stipulates that these debates recognize the significance of public spaces as platforms for fostering social cohesion, promoting inclusivity, and reflecting the diverse cultural, historical, and social narratives of the South African population.

The creation of public spaces in South Africa has thus become intertwined with broader efforts to shape a collective identity that is representative, inclusive, and reflective of the nation's diverse heritage and aspirations. In the context of the CoT, green public open space, which bear the historical imprints of colonialism, have now transformed to tell a new narrative of adaptive culture that accommodates informal activities supporting the livelihoods of citizens (Landman 2019, 135-136). However, as Landman (2019) observes, informal activities often face negative perceptions, and the culture of exclusion and marginalization persists due to authoritarian practices and physical barriers (Landman 2019, 135-136). Thus, understanding how a democratic narrative is genuinely supported by various role players is crucial in shaping public spaces (Makakavhule & Landman 2020).

## **2.5. Place-based development and place identity in the local context**

In the South African context, studies that focus on the Afrocentric perspective and cultural identity within landscapes emphasize the importance of locally responsive design (Coates et al. 2006; Shackleton & Gwedla 2021). The landscape is intertwined with the personal identity of South African people, and ecological conservation efforts in the country must consider the cultural context (Coates et al. 2006). Both peri-urban and urban environments in South Africa continue to experience the evolution of bio-cultural diversity (Coates et al. 2006, 186).

The spatial distribution of green infrastructure plays a significant role in shaping human-nature relationships, and the legacy of apartheid has resulted in limited access to green public spaces for historically disadvantaged communities (Venter et al. 2020). It is crucial to recognize that natural resources in peri-urban areas are essential for the livelihoods of many individuals (Shackleton et al. 2015).

In the context of South Africa, Makakavhule and Landman (2020) highlight the importance of creating connective, accessible, diverse, and representative public open spaces. These spaces should prioritize visual and pedestrian access, as well as well-connected public transport systems (Makakavhule & Landman 2020, 285). Landman (2022) provides further insights by highlighting those public spaces in CoT, South Africa, serve not only as places for leisure but also as means of survival, which can be categorized into two distinct types. The first category consists of hard spaces that are oriented towards economic survival and rely on pedestrian activities. The second category includes soft public spaces like Burgers Park, which provide vegetated areas where individuals can seek privacy and retreat from the public eye (Landman 2022, 80).

To address the diverse needs of individuals and communities, Landman (2022) advocates for more flexible and less rigidly organized public spaces that can accommodate various activities driven by the necessity for survival and adaptation (Landman 2022, 80). This approach acknowledges the dynamic nature of public spaces and the importance of designing them to be adaptable to changing requirements and circumstances. Providing

diverse opportunities within the landscape and allowing for adaptation and participation by the community further fosters a sense of belonging and ownership (Dewar & Louw, 2021).

Urban open spaces are vital components of urban socio-environmental ecosystems (du Toit et al. 2018). They provide opportunities for individuals to reconnect with nature and foster a sense of place within the urban environment (Coates et al. 2006). Municipal-owned open land can serve as valuable platforms for expressing local traditions and cultural practices (Atkinson 2006). By incorporating the unique character and history of a landscape, maintaining consistency in design across different scales, and striking a balance between natural elements and built structures, spatial planners in South Africa can create environments that enhance spatial identity and orientation (Dewar & Louw, 2021).

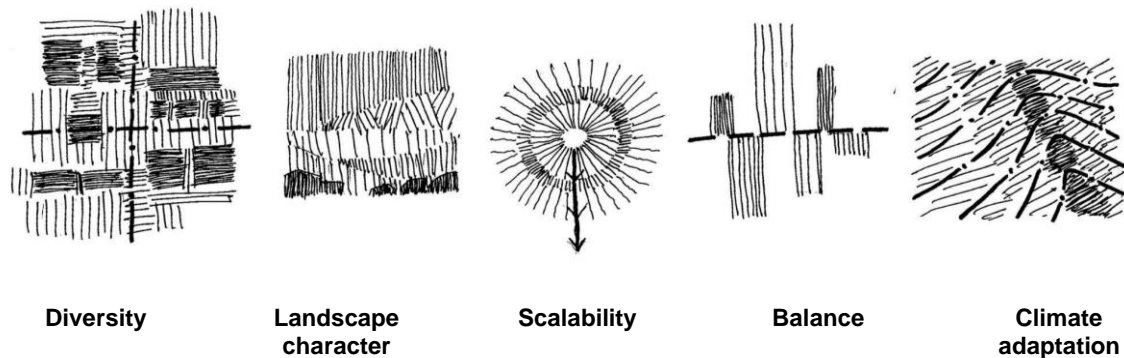


Figure 2: Elements that promote sense of place within landscape design according to Dewar and Louw (2021), (Author 2023).

## 2.6. Human nature relationships in green open space

Human-nature relationships have been linked to human health, as natural settings facilitate social cohesion and promote overall well-being (Leavell et al. 2019, 303; Seymour 2016; Landman 2019, 138). Humans are an integral part of a larger socio-ecological network, and their interactions and connections with nature significantly impact human-nature relationships (Kluger et al. 2020, 1108). These relationships are influenced by the intrinsic needs and values humans associate with nature, as well as the socio-economic benefits it provides (Seymour 2016, 1-3). By ensuring equal access and promoting development in these spaces, communities can enjoy the various health and well-being benefits associated with nature, regardless of socio-economic factors (Allen & Balfour 2014, 5; Gelarmino et al. 2015).

Kondo et al. (2018) highlight the importance of green spaces for individuals for those residing in areas with high levels of violence. Public open spaces in the CoT vegetation in public spaces serve as havens for solace for urban poor (Landman 2022, 80). It has been found that education and increased awareness of nature have overall health and spiritual well-being benefits (Tozer 2020,7). Tozer et al. (2020) emphasizes the need for nature-based stewardship in South Africa to address inequalities created by past injustices by creating accessible engaging environments.

The quality of green space has been found to improve overall well-being benefits of the space (Kondo et al. 2018, 16). Open green spaces in the CoT are also often sanitised for the sake of health and safety by authoritarian bodies, however this impacts the equity of green space well-being benefits (Makakavhule & Landman 2020, 251). The presence of diverse

natural environments and elements within urban settings has the potential to positively impact individuals' mental health and well-being (Wang et al. 2019, 11; Deng et al. 2020, 8). The presence of diverse vegetation and plant communities within urban green spaces also influences individuals' aesthetic preferences and their appreciation for the natural environment (Tomitaka et al. 2021, 8; Li et al. 2019, 9). Incorporating cultural elements aimed at fostering harmonious environments for both humans and nature enhances the perceived restorative qualities of urban nature (Deng et al. 2020, 10).

In the CoT, stakeholders play a crucial role in creating natural environments that offer a connection to nature and opportunities for social interaction (Landman 2019, 136). Landman (2019) further argues that public green spaces attract people from diverse backgrounds, fostering inclusive spaces for social interactions. Participants in nature-based programs report increased opportunities for social interactions within these spaces (Landman 2019, 136). Open green spaces contribute to healthier lifestyle narratives and provide a means to address social issues (Shand 2022). Responsible management of public open spaces and active social engagement are essential for fostering social cohesion and positive connections to nature.

### **3. MATERIAL AND METHODS**

This section establishes the three study focus areas of green open space within the context of the CoT. Burgers Park being the largest of the three located in Pretoria Central, Moja Gabedi a productive landscape located in Hatfield and lastly Muckleneuk Commons a small pocket Park located in the higher income residential area of Muckleneuk. The three green open spaces differ in size, style, function as well as user profiles and the sections preceding the focus areas will unpack the associated place stories.

#### **3.1. Study Focus Areas**

This study examines three urban green spaces located within the CoT, each possessing a distinct profile. One of the sites is a conventional Eurocentric Park in Pretoria Central that predates the democratic era. Another site is an innovative urban agriculture project that forms a component of the University of Pretoria's broader social and local initiatives. Finally, Muckleneuk Commons Park is a product of a community-driven effort to take ownership of their local public space, aimed at improving the quality of their surroundings.





Figure 3: Diagram of location of Parks within the City of Tshwane (Author 2023).

### 3.1.1. Burgers Park, Pretoria Central

Burgers Park, which is named after President T.F. Burger was initially proposed in 1874 but only underwent development in 1890 under the guidance of George Hays (Kusel 2000, 70). The park, near the centre of the city, is characterised by Victorian structures (Landman, 2022).

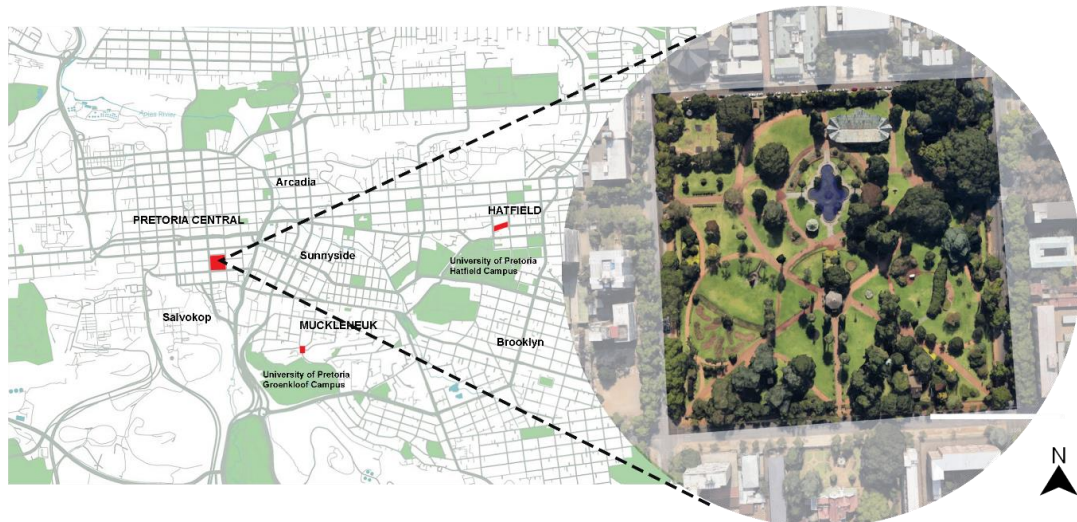


Figure 4: Diagram of location of Burgers Park within Pretoria Central (Author 2023).

Historically, the park was reserved exclusively for white citizens until the 1990s. However, De Beer (2014) notes that by the early 2000s, the demographics of the park had changed significantly, with primarily black African individuals utilizing the space. The park has become a community hub, hosting events such as the Feast of the Clowns, which is one of the

largest community-based events in the area (De Beer 2014). However, the park is also associated with illicit activities such as substance abuse and urban nomads using the space during the night, giving the park a reputation for being unsafe at certain hours of the day (De Beer 2014, 219). The three churches surrounding the park had various programs to assist with the improvement of social issues (De Beer 2014). Victorian structures such as follies, bandstands, pergolas, fountains, and statues are found within the park (Landman 2022).

### 3.1.2. *Moja Gabedi, Hatfield*

Moja Gabedi is an urban agriculture initiative by the University of Pretoria that aims to promote a circular food economy in Hatfield (Cooper 2018). This project is an example of the changing roles of public open space in the CoT. According to the University of Pretoria (2022), university students are engaged from various departments with curriculum-specific activities that are either aimed at contributing to infrastructure or engaging with residents from Reliable House who are recovering from substance abuse. Moja Gabedi offers on-site therapy as well as opportunities for residents of Reliable House to work in the gardens and eventually reintegrate into the community. Efforts to improve the community stretch beyond Moja Gabedi and informal vendors across the street have also received street furniture (University of Pretoria 2022).

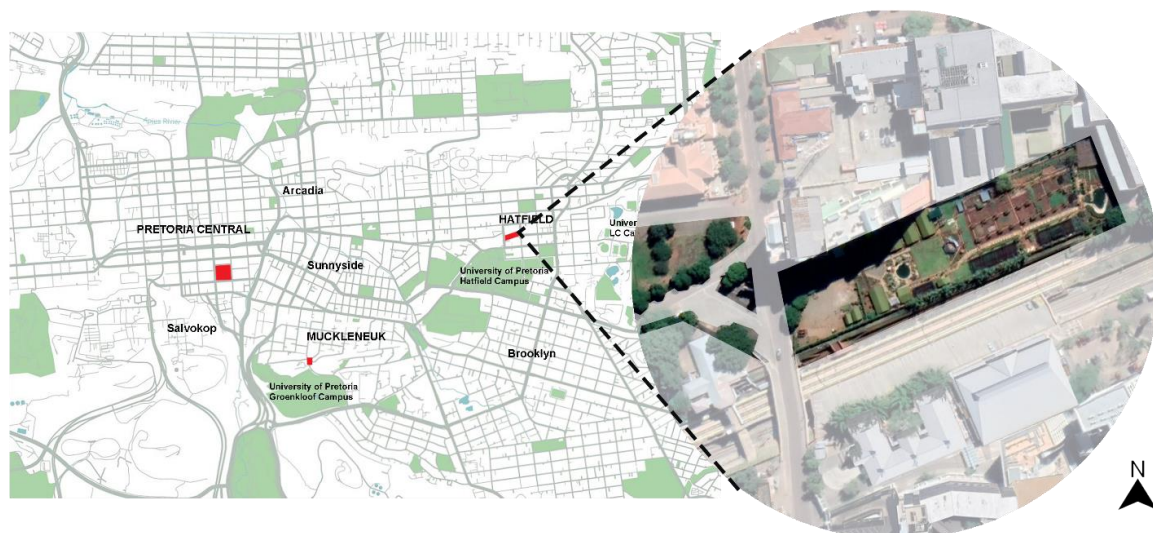


Figure 5: Diagram of location of Moja Gabedi within Pretoria (Author 2023).

### 3.1.3. *Muckleneuk Commons, City of Tshwane*

Muckleneuk commons is a small community park situated between the residential neighbourhoods of Lukasrand and Muckleneuk. Ngobeni (2017) explained that as part of this initiative, the residents of Muckleneuk participated in a community engagement process to design a park. These efforts have improved the accessibility and quality of green spaces in the community (Ngobeni 2017).



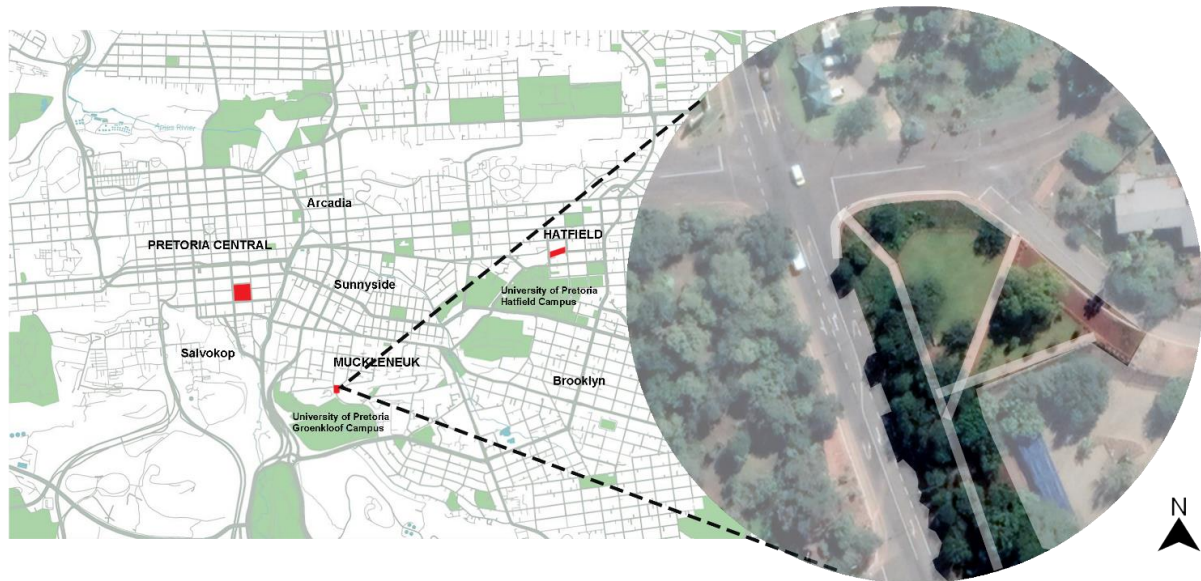


Figure 6: Diagram of location of Muckleneuk Commons within Pretoria (Author 2023).

### 3.2. Data collection and analysis

This study adopts a pragmatic approach that incorporates ethnographic methods. In socio-ecological scientific research, utilizing an ethnographic approach involves understanding human perceptions and observations of activity (Blomberg & Karasti 2012). Responding to the urban condition through ecologically and socially conscientious design requires considering people's perceptions and existing interactions with urban nature (Campbell et al. 2016). Conducting interviews and making observations helps comprehend context-specific values and conditions in the urban environment, contributing to the enhancement of urban systems or design solutions (Cocks et al. 2016).

This study analyses human-nature relationships in urban green spaces in the CoT. Data is collected on the behaviour and interactions of individuals within these spaces, as explained by (Rosenbaum 2005). Observation is a common tool when analysing human-nature interactions that can inform more mindful design practices in the urban realm (Brown & Corry 2011; Klemm 2017). The study follows a cross-sectional design, which means data is collected at a single point in time (Rosenbaum 2005, 2).

To collect data on the three sites and describe their spaces and phenomena, various ground-truthing methods are employed, including written observational logs, photographs, and sketches. Background interviews are also conducted in different parks to support the data collection process. The data collection takes place over four weeks, covering both weekdays and weekends or public holidays, during morning and late afternoon visits to each park. A total of four visits are made to each park. Following the precedent set by Campbell et al. (2016), the data is collected using a triangulation approach, involving observing the signs of human use, observing activities, and conducting interviews with park users.

Data captured from observations were characterized as follows; park condition and character included observations on biophysical conditions as well as the physical conditions of elements to understand the usage patterns associated with the element. The revealed preference technique involves the observation and analysis of patterns of use and engagement in the everyday environment to comprehend user preferences for landscape elements (Gross 1995). The investigation started by looking at general park activities and preferences of users regarding typical park elements.

Activities within the parks were categorized into typical and atypical patterns based on the data collected.

Pham (2018, 3) proposes that recording individuals' life experiences can reveal diverse truths about their lived experiences. Photo elicitation was utilized in this study to interpret personal and social values and meanings evoked through visual imagery of 6 different parks, serving as prompts around preferences, rituals, use, and values. Participants were given photos of various landscape environments and asked to arrange them in order from most to least preferred, providing insight into their overall perception of different open green spaces. This method helped develop a framework for understanding social and cultural practices, as noted by Bignate (2010, 1-10).

The study employed a "tree node" coding strategy to systematically organize the data into overarching themes. The research aimed to identify specific emerging patterns within the data through deductive analysis (Habib et al. 2012, 518). Qualitative data analysis software, Atlas.ti, assisted in the initial categorization and sorting of data from observations and interviews. The process of the coding and theming process used to analyze the data is illustrated in the following figure, ensuring a logical organization of the findings.

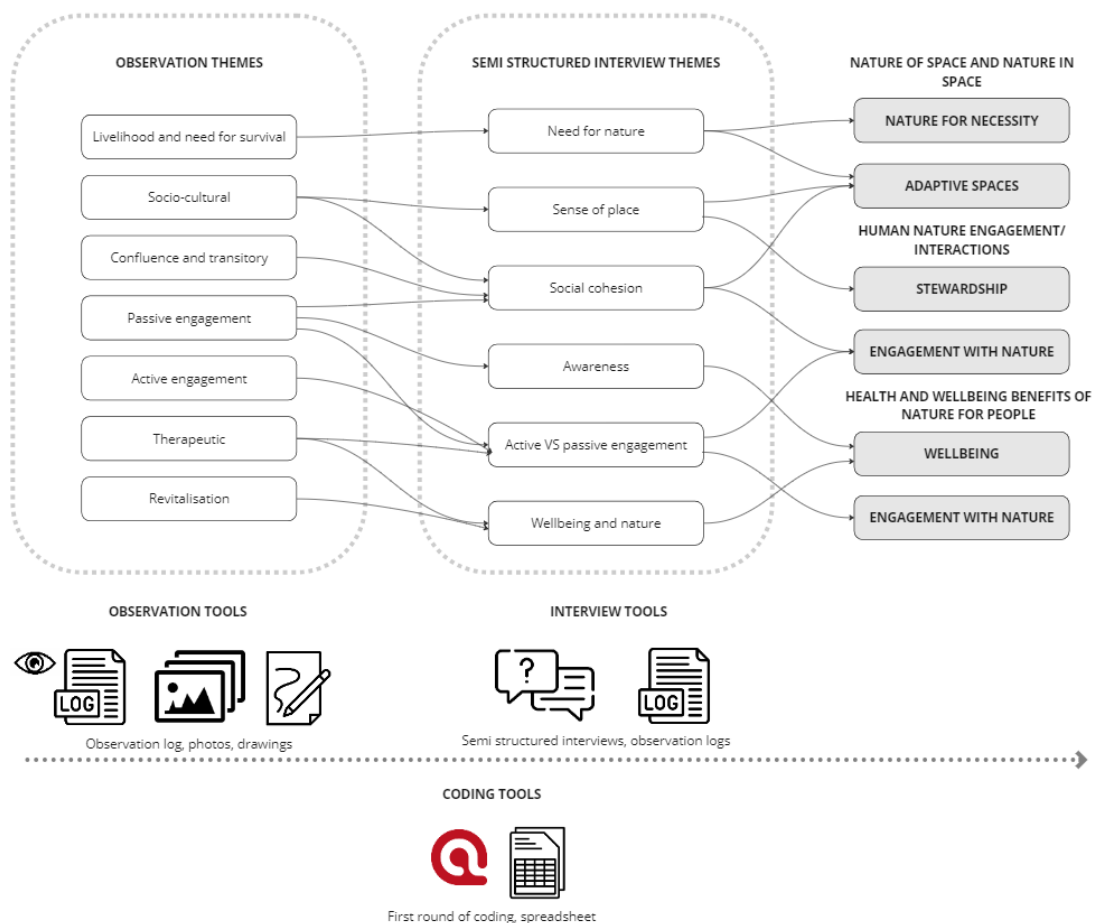


Figure 7: Diagram showing the process of evolving themes with observational and interview tools (Author 2023).

Interviews were used to supplement observational findings. Most of the interviewees in Burgers Parks and Muckleneuk Commons were approached randomly, and according to who was available in the parks during the site visits, but there was a reluctance among

female participants to be interviewed, thus the interviews taking place with male park users only. In keeping with the demographics of the CoT, most park users are likely to be black African (StatsSA 2011; Shand 2022), which is seen in the sample selection, with six out of seven interviewees being black African. The participants from Moja Gabedi were primarily associated with the on-site nature-based healing program, which may have influenced their responses and perceptions.

**Table 2: Table showing the selection and profile of interview participants:**

Open green space	Total interviews	Gender	Selection
<i>Burgers Park</i>	2	Males	Randomised
<i>Moja Gabedi</i>	3	Males	Participants from reliable house and management
<i>Muckleneuk</i>	2	Males	Randomised
<i>Total</i>	7		



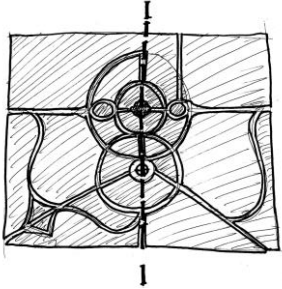


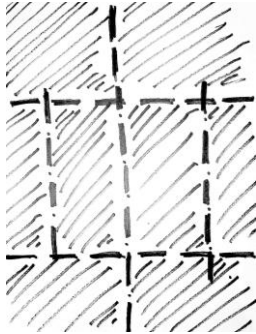


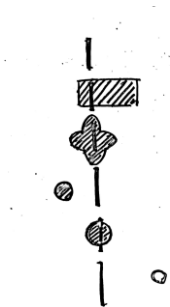
## 4. FINDINGS

In the subsequent section, an analysis and outcomes related to the conditions and characteristics of each park within the context of the CoT will be provided. The study also investigates usage patterns and perceptions of these spaces to uncover further meaning. Observations and interviews were conducted to gain insights into the overall utilization and preferences regarding park environments and elements.

### 4.1.1. Observations about Park attributes: Burgers Park

Burgers Park embodies the quintessential features associated with Victorian parks, primarily designed for aesthetic purposes with ornate characteristics. The park's vegetation primarily comprises exotic plants chosen for their visual appeal, necessitating extensive maintenance to maintain geometric arrangements, as evidenced by the shaped hedges lining certain pathways. The placement of elements within the park serves the purpose of guiding visitors. The trees are primarily evergreen exotic trees that create deep shade.

**Table 3: Table of photographic and drawn documentation from Burgers Park of vegetation, elements, and form of the Eurocentric Park.**

Vegetation	Elements	Arrangement/ Form
		
<p>Exotic ornamental planting. Photo, Author 2023.</p>	<p>Follies and bandstands. Photo, Author 2023.</p>	<p>Serpentine path. Diagram, Author 2023.</p>
		
<p>Walkways lined with hedges. Photo, Author 2023.</p>	<p>Statues. Photo, Author 2023.</p>	<p>Geometric arrangement and sectioned space. Diagram, Author 2023.</p>
		
<p>Tropical plants in a greenhouse. Photo, Author 2023.</p>	<p>Pergola. Photo, Author 2023.</p>	<p>Focal elements along the axis. Diagram, Author 2023.</p>



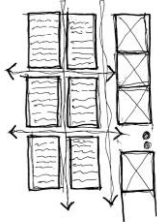


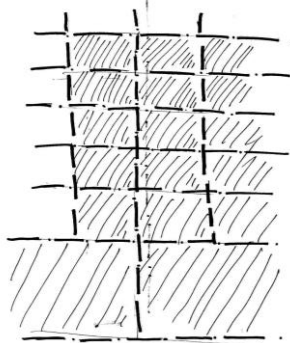


This formalistic design approach aligns with the leisurely strolling typically associated with Victorian parks. The winding serpentine path lined with benches most accommodates sitting, viewing, and strolling. Notably, the strategic positioning of the bandstands, pond, and greenhouse along a central axis contributes to the overall orientation of the park when on a stroll. The layout of the park adheres to a formal and geometric composition, reflecting a deliberate approach to spatial arrangement focused on geometry rather than user-specific requirements. This intentional design choice is reminiscent of Eurocentric gardens found in Victorian parks.

**4.1.2. Observations about Park attributes: Moja Gabedi**

At Moja Gabedi, the vegetation serves multiple purposes and exhibits a practical and functional approach. For instance, the archways not only possess aesthetic appeal and design qualities by covering the arches but also serve as a structure for edible plants and support the ecosystem by providing for the local bee farm. This multifunctionality is consistent with the site's agrarian nature.

**Table 4: Table of photographic and drawn documentation from Moja Gabedi of vegetation, elements, and form of the eclectic and agricultural activity-based park.**

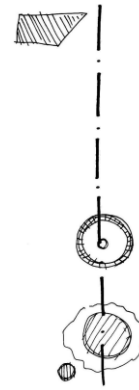
Vegetation	Elements	Arrangement/ Form
		
<p>Edible planting (mix of indigenous and exotic). Photo, Author 2023.</p>	<p>Pond irrigation system. Photo, Author 2023.</p>	<p>Right angle walkways. Diagram, Author 2023.</p>
		
<p>Exotic Eurocentric useful plants (for beehives and honey production). Photo, Author 2023.</p>	<p>Sculpture by local artists. Photo, Author 2023.</p>	<p>Rectangular allotment gardens. Diagram, Author 2023.</p>



Vegetation at wooden huts and on archways for climate regulation. Photo, Author 2023.



Gathering areas aligned along the axis of the park. Photo, Author 2023.



Focal elements along the axis. Diagram, Author 2023.



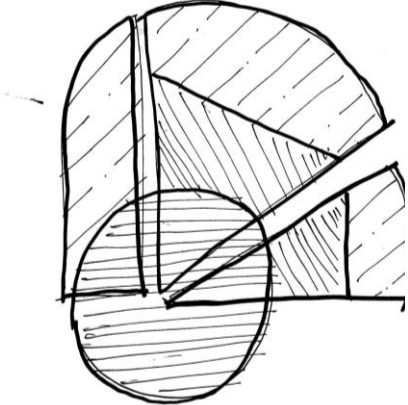


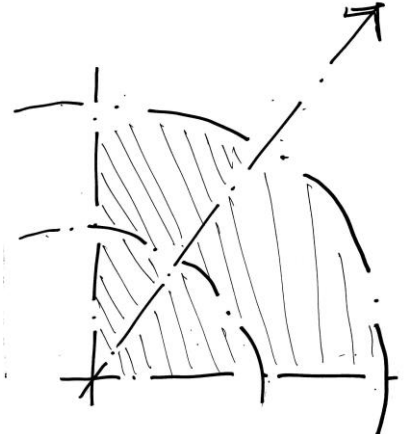
The elements within the site showcase versatility and serve multiple functions. For instance, the pond at the entrance not only adds aesthetic value but also functions as an irrigation system, displaying its practical purpose. The gathering spaces feature adaptable loose elements that can be shifted and adjusted to meet users' needs, offering flexibility and customization. The sculptural head, created by local artist Angus Taylor using local materials, exemplifies the integration of art into the site. While the geometric composition along the central axis hints at Eurocentric design principles, the elements, vegetation, and arrangement are employed in an eclectic manner to suit the site's specific purpose. The incorporation of a contemporary adaptation of Eurocentric elements is evident in the park's geometric layout.

#### 4.1.3. Observations about Park attributes: Muckleneuk Commons

The vegetation at Muckleneuk Commons primarily consists of indigenous plants. This suggests that the selection of vegetation may have been based on their resilience and suitability for the conditions found in CoT. The park features predominantly indigenous evergreen and semi-deciduous trees, which provide ample shade. However, there is a small section of the park across the street that displays signs of neglect, including by various grasses, aloes, and weeds. Water is supplied from the grounds of Telkom and indicates the overall responsibility by surrounding community and even companies to upgrade green open space.



**Table 5: Table of photographic and drawn documentation from Muckleneuk commons of vegetation, elements, and form of the contemporary park.**

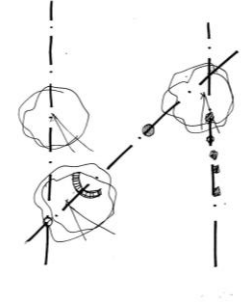
Vegetation	Elements	Arrangement/ Form
		
<p>Indigenous plant mix along road verges. Photo, Author 2023.</p>	<p>Concrete bench with art inlay. Photo, Author 2023.</p>	<p>Areas zoned according to program. Diagram, Author 2023.</p>
		
<p>Large indigenous evergreen trees. Photo, Author 2023.</p>	<p>Sculpture by local artists. Photo, Author 2023.</p>	<p>Radial arrangement of space due to walklines. Diagram, Author 2023.</p>



Wild unkempt grassy extension of park across from street. Photo, Author 2023.



Drinking Fountain. Photo, Author 2023.



Arrangement of elements along paths of movement. Diagram, Author 2023.

The site's design and construction follow a contemporary approach, featuring a paved pathway, a water fountain, and indigenous succulents and evergreen trees (Ngobeni 2017). Local materials, like rock inlays and balustrades made of rocks, are integrated into the park design. The combination of contemporary materials, artistic elements, and local materials results in a diverse aesthetic. Mosaic and hand-painted tiles in elements like the drinking fountain and concrete bench suggest community involvement in the design's finer details. Muckleneuk Commons' design lacks a specific geometric pattern and appears to have been influenced by emergent desire lines, evident in old Google Earth imagery. Strategic placement of sculptures, benches, and the drinking fountain along walkways makes them focal points for activities and interactions. The site incorporates natural elements, such as rocks and trees, as design elements or spaces for various activities, like sitting under a tree.

#### 4.2. Park conditions described from observations

From observations it is evident that amenities, vegetation, and park elements that exhibit regular signs of use tend to experience overall degradation. Elements that endure more wear and tear over time may necessitate more frequent maintenance. However, when maintenance is neglected, these elements begin to deteriorate. Gathering areas beneath trees, benches, and playground equipment are particularly susceptible to degradation and foot traffic.





Figure 7: Photo of trafficked area under tree, Burgers Park (Author 2023).

Figure 8: Photo of group gather under tree, outside Moja Gabedi (Author 2023).

The presence of vegetation in parks serves purposes beyond mere aesthetics. Observations indicate that in certain instances, vegetation has been degraded or altered to fulfil the basic needs of park users like providing refuge and places to cook. Primarily by those seeking shelter and sustenance within the park environment.



Figure 9: Photo of aloe leaves picked, Muckleneuk Commons (Author 2023).



Figure 10: Photo of fire under trees, Burgers Park (Author 2023).

#### 4.2.1. Park users' perceptions of conditions

As highlighted by Pham (2018), photo elicitation has proven helpful in provoking meaning and value from interviews. The condition and maintenance level of a park significantly influence the perception of its users. Moja Gabedi and Muckleneuk Commons are generally well-maintained and cared for, resulting in a positive perception among visitors. However, Burgers Park has experienced some maintenance efforts, but overall neglect has led to its deterioration, resulting in a less favorable perception by park users.

*“Like right now, currently, what I don't like is that it looks littered, yeah, it's not as nice as before. Before it was clean, you know, like the grass was level. It was always trimmed.”* **Interviewee Male, Burgers Park interview 2**

Degradation of vegetation is observed in areas where sports and gathering activities take place. In an interview, it was mentioned that the open piece of land opposite Moja Gabedi is utilized as a soccer field by the residents of Reliable House, displaying how green open space is valued despite conditions.

*“We play football at a park so there's nothing I don't like around here. I enjoy being here because normally accommodation is expensive. So, it's just a privilege to be here.”* **Interviewee Male, Moja Gabedi interview 3**

However, activities indicating greater needs are also noted from interview 2 at Muckleneuk Commons, such as the presence of toilet holes in the lawn that have resulted in an uneven surface and a less hygienic environment.

*“There are potholes, those guys, I don't know, some they just dig here. Why do they dig here?”* **Interviewee Male, Muckleneuk Commons interview 2**

“Then just take better care of the park, you know, like picking up the litter. Keep it looking fresh. Trim the trees you know.” Interviewee Male, Burgers Park interview 2

### 4.3. Park uses as indicators of preferences from observations and user perceptions

By observing usage patterns, it becomes evident that users in the park have preferences for certain elements. This highlights the varied ways in which individuals engage with the park, tailoring their experiences to align with their preferences and needs.

#### 4.3.1. Park user activities & functions

In each of these parks, designated areas for social engagement are prominent but exhibit unique characteristics. Burgers Park's gathering spaces revolve around trees, offering shade and a comfortable environment. Moja Gabedi emphasizes versatile spaces adaptable to various activities, especially for institutional purposes. In Muckleneuk Commons, benches serve as central points for social gathering, meetings, or quick rests, acting as focal points for communal interaction and providing convenient spots for people to gather and connect.

**Table 6: Table indicating recurring elements in three different parks and different associated activities:**

	<b>Movement corridors</b>	<b>Benches</b>	<b>Trees</b>	<b>Vegetation</b>
<b>Burgers Park</b>	-Corridors for movement and informal activities -Thoroughfare -Play/ exercise	-People watching -Passive viewing -In sun (discomfort) -Sleeping -Reading	-Gathering points -Sleeping -People watching -Refuge	-Refuge/ retreating -Illicit activity
<b>Moja Gabedi</b>	-Utility corridor -Conveyor of produce	-Meeting -Shifting to fit activity	-Edible trees	-Harvesting and processing -Therapy
<b>Muckleneuk Commons</b>	-Thoroughfare -Play/ exercise	-Main social point -Music -Gathering -Playing	-Main refuge point -Revitalisation -Shade for pedestrians	-Medicinal/ cosmetic use -Support native ecosystems

Burgers Park showcases activities associated with basic survival needs. The park serves as a place for both residing and food preparation within its planting beds. However, due to the historic ornamental nature of the plants, the planting beds may be degraded over time, possibly because of picking and foot traffic. Moja Gabedi and Muckleneuk Commons also display a trend of harvesting, albeit for more utilitarian purposes. These parks accommodate activities aimed at fulfilling practical needs, such as gathering resources or utilizing the natural elements for functional purposes.

#### 4.3.1.1. Social and cultural use

Burgers Park stands out as the most active among the three parks, with a range of socio-cultural and economic activities throughout the week. During the morning hours, the park serves as a convenient thoroughfare, with people passing through on their way to other destinations. It is a suitable spot for individuals engaging in exercise or physical workouts. School children also utilize the park as a quick stop or meeting point before heading to school. Burgers Park is active at all times of the day with people partaking in recreational activities at most times of the day and on weekdays. Sidewalks are also active because of pedestrians and informal activities are also found within these corridors vendors as well as informal recyclers.



Figure 11: Photo of people sitting in Burgers Park (Author 2023).



Figure 12: Photo of street vendor selling good with child at her side (Author 2023).

As the day progresses into the afternoon, both Burgers Park and Muckleneuk Commons see an increase in leisurely activities. Burgers Park becomes a popular spot for people to sit, relax, and spend time with their partners or children, earning it the nickname "Lovers Park." In contrast, Muckleneuk Commons remains relatively quiet, but recreational activities pick up during weekends. The park serves as a convenient thoroughfare in the mornings and later afternoons, offering rest stops for travelers going to and from different destinations. The presence of shade and water access allows for quick revitalization. Muckleneuk Commons' strategic location as a transit zone between work, the University of Pretoria Groenkloof campus, and residential areas makes it a central point in the movement patterns of individuals in the vicinity.



Figure 13: Photo of young boys drinking at a water fountain (Author 2023).



Figure 14: Photo of women crossing the street (Author 2023).



In Muckleneuk Commons and Burgers Park, the primary use does not revolve around children but emphasizes adult recreation and revitalization activities for youth. In Burgers Park, walkways and trees play a dual role in promoting social engagement and physical activity, serving as through passes for commuters and avenues for recreational strolling, while the abundance of trees creates a cooler microclimate, making them focal points for gatherings and social interactions. Moja Gabedi provides a space for social connection and interaction among people from diverse backgrounds. Meanwhile, Muckleneuk Commons acts as both a thoroughfare and a space for recreational activities, with its distinctive feature being its role as a transient space for quick revitalization, attracting visitors seeking a momentary escape.

#### 4.3.1.2. Productive use

Moja Gabedi primarily centres around institutional activities, particularly related to the productive landscape, with University of Pretoria's role players conducting therapy with residents of Reliable House frequently observed within the park. However, there is a noticeable disconnection between the external context surrounding the park and its internal activities, with the park being quiet and mostly occupied by maintenance staff. The movement of youth along the North-South route, likely on their way to the university, and adults commuting to work creates a separate dynamic from the activities within Moja Gabedi. The presence of a fence creates a disconnect between the park and the public. Along the streets, informal vendors selling seasonal goods and operating in pop-up structures, as well as food vendors, can be found, and some vendors store items within Moja Gabedi, showing a connection between informal and formal activities.



Figure 15: Photo of residents and Occupational Therapy students engaging in activity (Author 2023).



Figure 16: Photo of four women walking down street (Author 2023).

Seasonal activities related to the productive landscape are tied to specific times of the year, involving planting, and harvesting cycles, enhancing productivity and sustainability. These activities offer residents opportunities to engage in agricultural practices and cultivate their own food sources. In contrast, more frequent activities involve general maintenance tasks to ensure the park's ongoing upkeep and functionality. This includes cleaning, repairs, and managing the overall appearance of the space.

#### 4.3.1.3. Illicit use

The usage patterns of Burgers Park are influenced by visual boundaries and where people from different genders tend to gather. The visual access in certain areas is often limited due to the presence of Eurocentric elements (follies and fences) vegetation, characterized by dense, homogeneous evergreen planting arranged in rigid lines. This type of vegetation restricts visual access throughout the year, impeding sightlines and views.

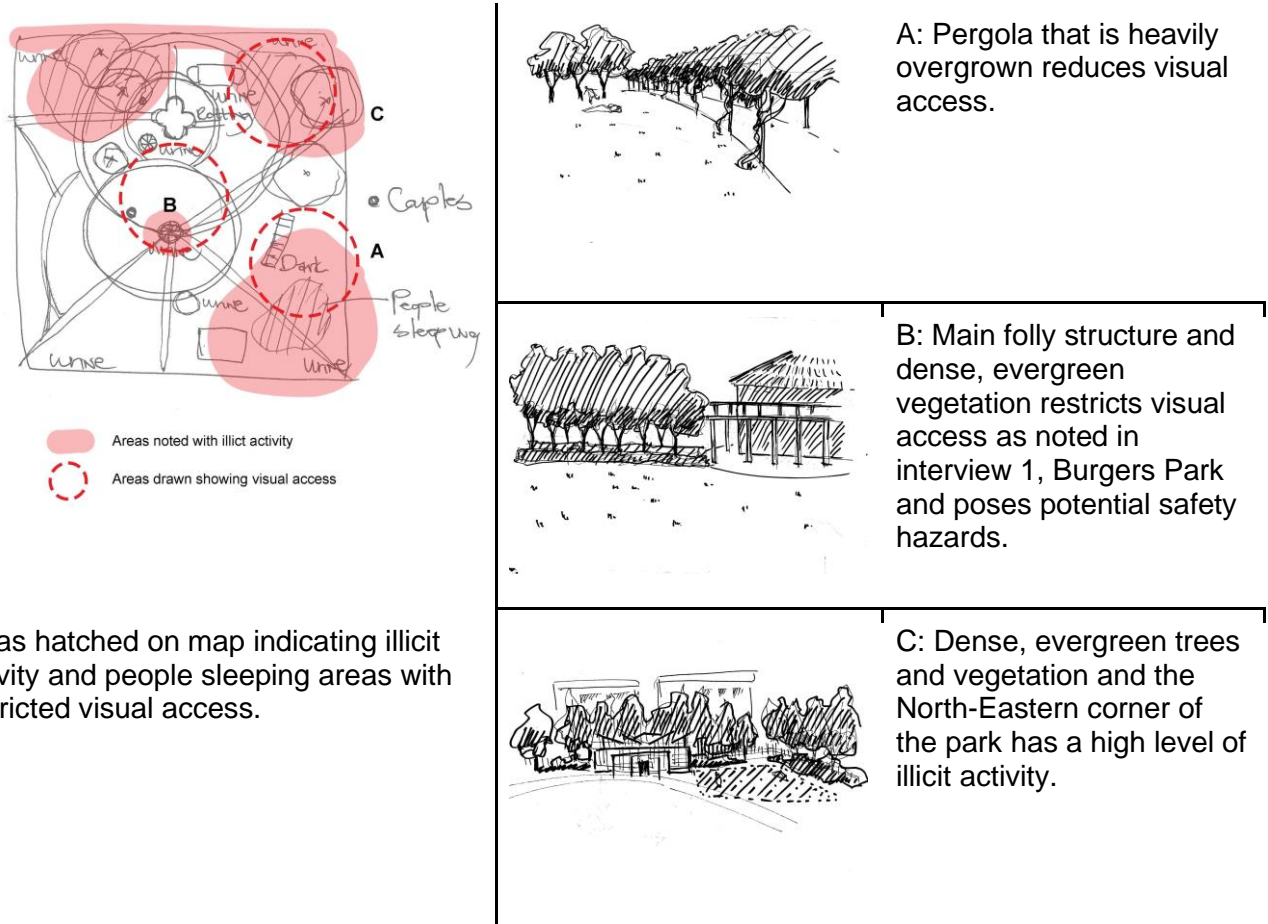


Figure 17: Observation drawings from Burger Park indicating users' correlation between illicit use and visual access to the site (Author 2023).

Observations indicate that female pedestrians tend to move in pairs, often walking together, but on the contrary, more men are observed walking alone and lingering in public spaces. This difference in behaviour could be influenced by various factors, including social norms, perceptions of safety, and personal preferences.

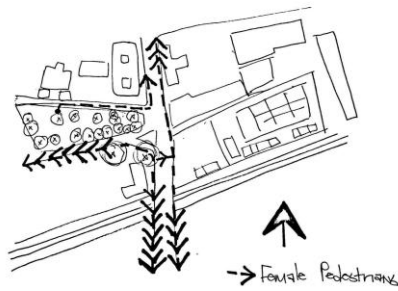


Figure 18: Diagram showing female pedestrian movement on sidewalks adjacent to Moja Gabedi (Author 2023).

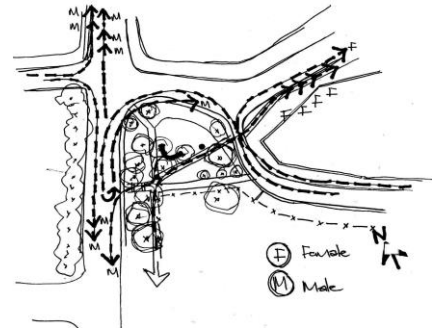


Figure 19: Diagram showing female and male pedestrian movement (Author 2023).

### 4.3.3. Adaptations, alterations and meaning

Adaptations and alterations to park elements offer valuable insights into usage patterns and user preferences in green spaces, with potential positive and negative impacts on the park environment. Studying stylistic approaches and their correlation with adaptations helps understand their contribution to the overall park experience.

#### 4.3.3.1. Adaptations, alterations and meaning: Burgers Park

Adaptations within the space often involve the physical removal or modification of elements. Structures such as fences, follies, and the greenhouse serve as refuge within the site. However, the presence of unplanned activities, such as digging holes in the grass and the presence of urban nomads, along with the odour of urine, highlight the need for facilities that cater to basic needs.

Table 7: Table indicating adaptations in Burgers Park relating to style and elements adapted:

	ELEMENTS	STYLE	ADAPTATION
PARK ELEMENTS	Follies, low steel fence, greenhouse, steel benches, play area	Primarily Eurocentric features	Mostly negative associations and illicit activity, adaptations are indicative of the need for shelter, basic amenities, maintenance facilities and access
VEGETATION	large lawns, decorative planting beds, hedges, evergreen exotic trees	Primarily Eurocentric vegetation	Mostly negative associations and illicit activity, adaptations benefit either illicit activities or social cohesion
PATHWAYS	Outside walkway, Serpentine path	Primarily Eurocentric features	Mostly negative associations and illicit activity, adaptations are



			centred around pedestrian activity that benefits overall access and safety
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The prevalence of these illicit activities and undesirable features can be attributed, at least in part, to Eurocentric design elements that may not resonate with the cultural context or preferences of the users. Additionally, limited visual and physical access to the space mostly caused by vegetation can also contribute to the space being adapted for illicit activities.

*“I can give you one like here and (points at avenue of trees in front of central folly). Maybe you cannot see someone strangling another.” Interviewee Male 1 Burgers Park 1.*

“Big trees like the way there's big trees, you. Can't see anything.” **Interviewee Male 2, Burgers Park 1.**

The main walkways and the sidewalk along the outer boundary of the space create areas conducive to spontaneous activities such as street vendors and gatherings. This is likely due to the walkways accommodating pedestrian activity and serving as hubs for social interaction and commerce.

#### 4.3.3.2. Adaptations, alterations and meaning: Moja Gabedi

In Moja Gabedi, elements primarily serve to support activities related to the productive landscape, and adaptations are made to improve these functions. These modifications demonstrate a sense of ownership and an interest in evolving the landscape to suit the users' specific needs. The adaptations are aimed at enhancing the efficiency of activities conducted on the site, such as creating small pathways and using porch spaces for drying and storage to optimize the functionality of the space.

**Table 8: Table indicating adaptations in Moja Gabedi relating to style and elements adapted:**

	ELEMENTS	STYLE	ADAPTATION
<i>PARK ELEMENTS</i>	Wooden houses and porches, Ponds, fence, meeting area, playground, sculpture	Eclectic, some Eurocentric elements as well as community engagement	Mostly positive as adaptations pertain to adding person interpretations of space
<i>VEGETATION</i>	Edible crops and vegetables, lawn, indigenous vegetation along some edges, ornamental flowers	Eurocentric edible plants and ornamentals, planting mostly associated with agriculture	Mostly positive and to benefit the functional landscape
<i>PATHWAYS</i>	Allotment gardens, rectilinear walkways	Eurocentric layout adapted in a contemporary way in sections	Mostly positive as adaptations are mostly for efficiency and ease of access

Moreover, these adaptations are closely aligned with the site's agricultural nature. The presence of small pathways and the reuse of plots for stockpiling suggest a need for

efficiency and the creation of an environment that is conducive to human-scale agriculture. By customizing the space in such a manner, the users demonstrate a practical approach to maximizing productivity and creating an environment that is well-suited for agricultural activities.

#### 4.3.3.3. Adaptations, alterations and meaning: Muckleneuk Commons

Muckleneuk Commons features elements, such as benches, along its pathways that suggest utilization for resting purposes. Visitors can pause and rest during their walks. Seating areas are observed, and the drinking fountain provides opportunities for hydration. Wet wipes found near the fountain indicate a possible washing practice, which may not be its intended use.

**Table 9: Table indicating elements and their functions in Muckleneuk Commons relating to style and elements adapted:**

	ELEMENTS	FUNCTION	USE OR ADAPTATION
<i>PARK ELEMENTS</i>	Bench, sculpture, water fountain, rock bed, rock bollards	Support respite activities within the park	No extensive indication of alteration to elements, adaptations to use evident
<i>VEGETATION</i>	Lawn, indigenous planting beds, aloes, indigenous evergreen trees	Aesthetic and supports local biodiversity	Mostly positive adaptations that potentially beneficial to the park users
<i>PATHWAYS</i>	Pathway at Southern edge of park, pathways at North end of park	Thoroughfare and	Pathways mostly associated with common use eg. walking and running

Connective routes within the park are mainly used by pedestrians, particularly men. However, parking space within the park is limited, leading some visitors to improvise parking by using flattened ropes suspended between bollards, highlighting the need for more designated parking spaces. There are instances of vegetation being broken or altered, suggesting that plants may be harvested for medicinal, cosmetic, or aesthetic purposes. The breaking or alteration of leaves and plant parts indicates specific parts of the plants hold value for these purposes. Additionally, urination next to the bin has been observed, possibly due to the dense vegetation cover in the surrounding area, providing some level of privacy or cover for such activities.

#### 4.4.1. Nature of space and nature in space

The identified meanings from observations and interviews revolve around the relationships between place and nature, encompassing the connection between the physical environment shaped by nature and people's interactions with it, varying levels of engagement from active to passive, and the motivation of individuals to interact with nature due to its health and well-being benefits.

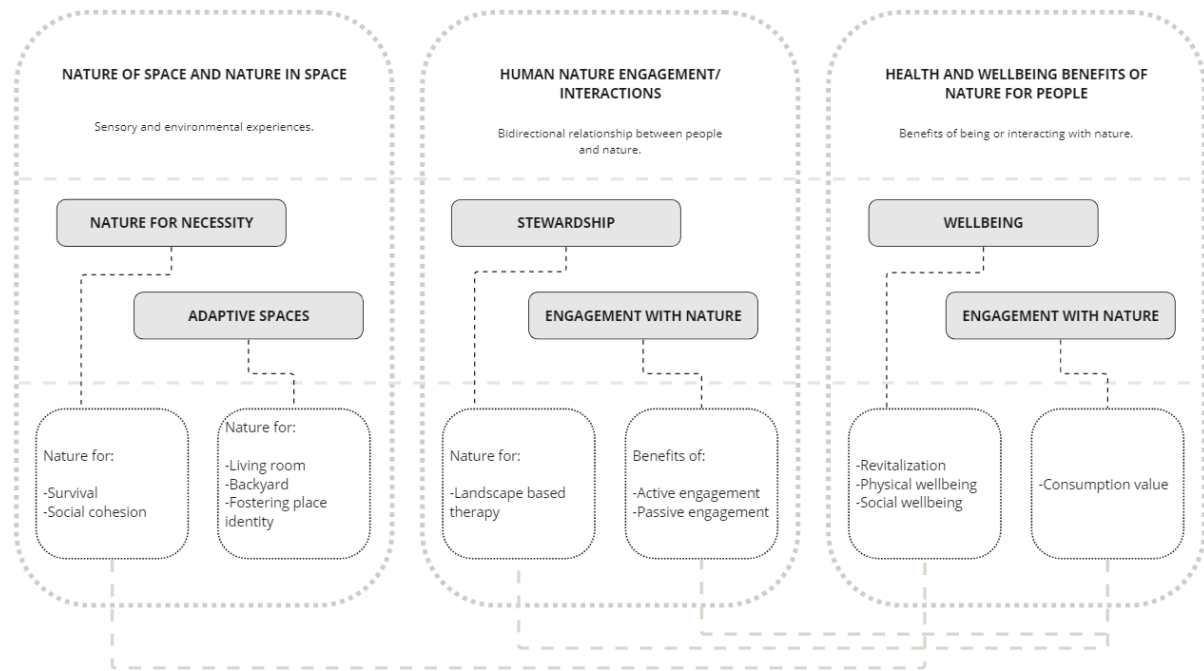


Figure 20: Diagram indicating nature relationships themes (Author 2023).

In urban environments, nature often provides the backdrop for daily life, enhancing the aesthetic appeal of the surroundings. Trees, for instance, offer shade and contribute to the creation of enclosed environments that can serve as retreats or refuges for people seeking solace. These green spaces can be likened to natural rooms, utilizing vertical and horizontal planes to accommodate a range of activities.

Nature in urban environments fulfils essential survival needs and serves as an important resource for urban nomads, as exemplified in places like Burgers Park. However, it is important to acknowledge that there can be negative aspects within the park that can impact the overall user experience. Nature in these spaces acts as a metaphorical home or living room, where private life intersects with public spaces.

Recreation and relaxation can also be facilitated by nature, contributing to the fostering of social cohesion. In this context, a backyard typology that offers more open spaces is preferred. It is important to consider climate adaptation elements, such as shaded areas, to ensure the comfort of park users. Open areas provide ample room for activities like sports and playing, while a single tree can serve as both a refuge and a vantage point.

#### 4.4.1.1. Social Cohesion

Burgers Park and Muckleneuk Commons stand out as public spaces that foster leisure and social connections within the broader community. These parks attract diverse users engaging in cultural activities, artistic expressions, and informal performances, promoting social cohesion. Despite some safety concerns in specific areas or at certain times, spaces encouraging social cohesion are inclusive across genders and age groups, often attracting people in groups. Burgers Park exemplifies this trend, with activities that encourage interaction and unity. Confluence nodes and visible park centres serve as preferred gathering spots, drawing people together. High-activity areas, like walkways, cater to diverse users, contributing to a vibrant and inclusive social environment. Muckleneuk Commons'

distinct confluence area creates an appealing environment for communal interactions and various recreational pursuits.

#### 4.4.1.2. Place identity fostered through nature

Living in a similar environment can foster a sense of connection to a particular space, particularly open green areas. When individuals reside in a community characterized by similar surroundings, such as a Moja Gabedi that exhibits a specific character, it often engenders a feeling of belonging and a stronger affinity for those open green places. This shared living environment cultivates a sense of connection and attachment to the natural surroundings, leading to a deeper appreciation and connection to the open green spaces within that community.

*“I’m referring to Moja Gabedi because this is my home if I can be taken to another environment. Which is. By far. Not like this one. It can be. I can begin to have consequences. So, if I can be in this environment I’m seeing in this picture and then I cannot even have sickness, yeah. I mean, it’s far better compared to what I’m seeing.” Interviewee Male, Moja Gabedi interview 1.*

Natural elements, particularly vegetation, have the power to forge a connection between individuals and a specific place. The presence of indigenous vegetation can evoke a sense of familiarity and serve as a reminder of one's place of origin. The use of native plants and vegetation in an area contributes to a distinct identity rooted in the local environment. It reinforces a sense of belonging and attachment to the place, as the natural elements reflect the unique ecological characteristics and history of the region. The presence of indigenous vegetation not only enhances the aesthetic appeal of the area but also fosters a deeper connection and appreciation for the ecological heritage and cultural identity associated with that place.

*Interviewee: “So yeah, there’s a bit of, I don’t know. Let’s say a pure breed of this plant, aloe Vera. Alice: OK. Interviewee: This aloe Vera there, but it’s not the right one.*

*Interviewer: “Oh do you use the aloe Vera for something?”*

*Interviewee: “No, I just got to see it, cause I’m mostly from the eastern cape. And so now I get to see it.” Interviewee Male, Muckleneuk Commons interview 1.*

The perception of nature and its significance for individuals is closely tied to the specific conditions and composition of natural elements as concluded from the photo elicitation process demonstrated in the following interviews. Nature is often associated with an unregulated environment, characterized by its inherent qualities of wildness. It is in this unregulated state that nature is most authentic and genuine, providing a sense of connection to a specific place within nature.

*Interviewee: “Place. Yeah, the shrubs, the. And the big trees that combine there, I love the whole.”*

*Interviewer: “OK. Why do you think you like the combination of it?”*

*Interviewee: “Yeah, this combination it, it indicates that. In nature, yeah, because you need not have one type of tree. No, there must be this combination. And I’m seeing.”*

*Interviewer: “Is there something specific that you don’t prefer or don’t like?”*

Interviewee: *“Generally, there is nothing specific. Yeah, it's as I'm looking at this feature and it appears you have taken me from this environment. To another environment of this nature. Then I begin to introduce myself. My mind is there, but I'm here.”* **Interviewee Male, Moja Gabedi interview 1.**

The composition of natural elements within a particular environment contributes to the unique character and identity of that place. Boundaries or barriers play a role in shaping accessibility and influencing the perception of place, and they can also impede potential connections to nature.

*“There's no freedom, it's too solid, too still, you see cause where I want to enjoy where I want to enjoy. When I look around, I want to see that you are free. There's nothing to... we see like you see all the parks there like free. Even though maybe there is a fence somewhere, we can't see when we are in. So, the time I'm in here, the time I see the fences is around me. It's declined. My desire for freedom. It's yeah, it's declined. My desire for freedom.”* **Interviewee Male, Moja Gabedi interview 3.**

#### **4.4.2. Human-Nature engagement/ interactions**

Landscape stewardship involves symbiotic interactions and relationships between people and nature, leading to reciprocal well-being benefits for individuals who actively care for the environment. Landscape-based therapy, exemplified at Moja Gabedi, demonstrates the healing and revitalizing benefits residents experience during their path to recovery through engaging with nature. Plants play a significant role in this relationship, offering opportunities for direct and active engagement, highlighting the concept of stewardship. Additionally, natural spaces provide consumer benefits, such as harvesting and nature-based therapy, making stewardship vital for preserving nature-based benefits.

##### **4.4.2.1. Stewardship**

Routes within a city that support the flow of activities can also promote stewardship. Informal activities following pedestrian flow can catalyze metabolic processes, involving the movement of products or materials within the urban environment. Stewardship in places like Burgers Park and Moja Gabedi is closely linked to self-support and sustainability, with users engaged in activities striving to meet their basic survival needs. Activities promoting livelihoods and subsistence play a crucial role in these spaces, reflecting the necessity for self-sustainability. Institutional role players, as seen in Moja Gabedi, can facilitate community engagement. Designing areas with the intention of supporting stewardship and community involvement, as exemplified by Moja Gabedi, can encourage meaningful community engagement.

##### **4.4.2.2. Engagement with nature**

Passive activities involve individuals passively immersing themselves in the environment without engaging in specific activities. Spontaneous activities can be facilitated by certain conditions, such as the presence of informal vendors or recyclers, attracting gatherings of people. The occurrence of these activities is influenced by pedestrian flow and may vary with time of day.

Locations around these spots benefit from passive surveillance, as onlookers informally monitor and observe, enhancing safety and community engagement.

Public open spaces significantly influence environmental interest and awareness, serving as platforms for nature interaction and appreciation. Accessible and inviting settings in these spaces create opportunities for various activities that promote environmental understanding and appreciation.

Interviewee: "I like gardening, gardening in the pink picture. Yeah. This one? Yeah. I love gardening. They're doing what I'm doing, of which I'm, I'm greatly motivated by this picture."

Interviewer: "OK. Yeah. What motivates you or a particular element that motivates you?"

Interviewee: "*The fact is that they are growing vegetables. Which in turn are going to feed the people. So, they are dealing with food security really motivating them? People are no longer getting hungry as I can say what the people are saying.*"

**Interviewee Male, Moja Gabedi interview 1.**

Urban nature spaces play a role in revitalizing the connection between individuals and their surrounding environment, thereby promoting a heightened awareness of their surroundings. These spaces provide opportunities for individuals to engage with nature within urban settings, enabling them to reconnect with the natural world and appreciate its presence amidst the built environment.

*"Basically, I am awake here and notice a few things that you wouldn't usually get on my side in Sunnyside."* **Interviewee Male, Muckleneuk Commons interview 1.**

#### **4.4.3. Health and well-being of nature for people**

Various places and environments can inherently provide well-being benefits through their composition and natural attributes. Stewardship of these spaces also requires direct interaction with nature, further enhancing the positive effects on well-being. The fundamental concept is that nature holds value for the health and well-being of individuals.

Mental well-being is closely connected to both social and physical well-being. Nature has revitalization benefits for mental well-being. Simply being aware of and present in a natural environment can provide mental relief, a sense of calmness, and an escape from the stressors of daily life. Additionally, nature offers revitalizing benefits through biological processes such as physical cooling in shade or drinking water. These aspects contribute to the overall mental well-being of individuals.

##### **4.4.3.1. Individual well-being**

Spaces that prioritize well-being can be categorized into two types. Firstly, there are spaces like Moja Gabedi that are intentionally designed to support specific activities aimed at enhancing well-being. These spaces are purposefully created to provide an environment conducive to well-being practices, such as meditation or relaxation.

Secondly, there are spaces that offer a range of conditions that contribute to revitalization and well-being, such as shaded areas and access to drinking water, as observed in Muckleneuk Commons. These spaces are designed to accommodate various activities associated with revitalization and provide amenities that promote well-being.



#### 4.4.3.2. Quality of nature spaces as an indicator of community well-being

Moja Gabedi offers residents the opportunity to partake in therapeutic experiences, particularly through engaging in agriculture-based therapy. By actively participating in such activities, individuals can experience the benefits of physical exertion within a natural environment, thus promoting physical well-being. Additionally, immersing oneself in nature can provide solace, tranquillity, and a sense of connection to the natural world. This engagement with nature not only contributes to physical and mental well-being but also nurtures a deeper appreciation and connection to the broader ecosystem.

*“Oh, that makes me feel very nice because I used to. To be on crystal meth and then I said I want to stop and then someone put me here and it helped me because it's therapeutic. So yes, that first month and it helped me. Yeah. Just you know, it's just really to work and plant things. And yeah, it's just therapeutic and it's a cool place. There's it's a like relaxation or it feels like it's in the middle of nowhere, or not nowhere in the middle of all this chaos is this park. I mean, yeah, it just relaxes me so.”* **Interviewee Male, Moja Gabedi interview 2.**

Muckleneuk Commons serves as a tranquil refuge and offers individuals a respite from their daily routines. Providing a quiet space for relaxation and rejuvenation, the park creates a positive perception among its users. This peaceful environment contributes to the promotion of mental well-being, offering individuals an opportunity to unwind, de-stress, and revitalize themselves mentally.

*“Yeah. And this place is, as you can see, this place is quiet. It's very nice this place. You can chill you can chill there sitting down. Drinking beer? Yeah, it's nice. OK, play music.”* **Interviewee Male, Muckleneuk Commons interview 2.**

### 4.5. Place stories

This section delves into the place stories found in each park, elucidating how users, activities, and setting contribute to the everyday interactions within these spaces. Through a combination of interviews and observations, themes specific to each park were identified using coding techniques.

#### 4.5.1. Burgers Park

Burgers Park was originally designed and built in the Victorian style, reflecting its intended purpose as a leisure park. This aligns with the ideals of traditional Victorian parks, and its primary usage remains centred around leisure activities. As the busiest among the three parks mentioned, Burgers Park serves as a crucial source of accessible green space in an urban environment.

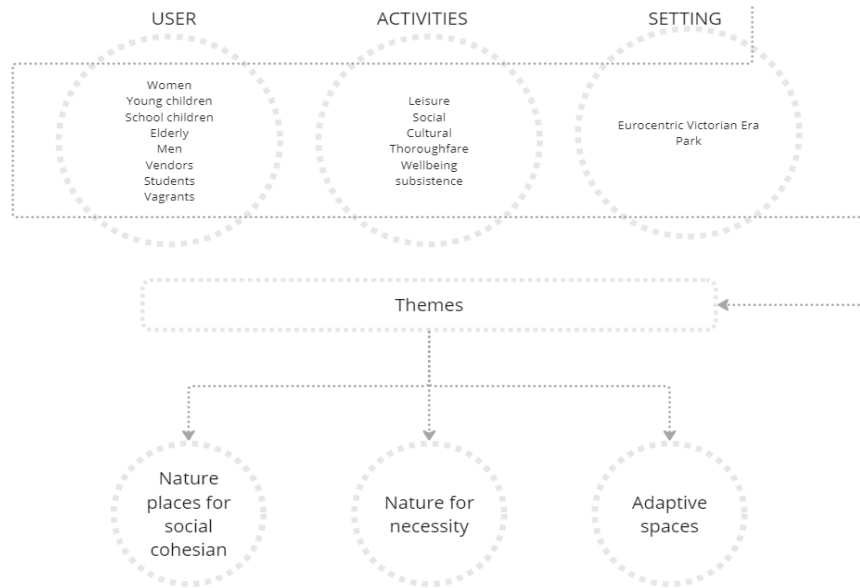


Figure 21: Diagram indicating place story factors relating to Burgers Park (Author 2023).

The park attracts a diverse range of users, including both surrounding community members and individuals experiencing homelessness. While community members view the park as an extension of their own backyard, homeless individuals face more pressing basic needs that must be addressed. Despite different motivations and circumstances, both groups find value in the park as a space for various nature-based activities.

The social issues present in the park are further exacerbated by certain design factors that did not adequately consider the current patterns of use. One significant concern is the creation of areas with low visual accessibility, which raises safety concerns. This lack of visibility within certain sections of the park can contribute to a perceived or actual risk to personal safety. The impact of this lack of consideration is reflected in the park's usage patterns, particularly among female users, children, and women with small children. To mitigate safety concerns, female users tend to gravitate towards areas with visible access points and high levels of pedestrian activity.

#### 4.5.2. Moja Gabedi

Moja Gabedi primarily functions as an urban agricultural green open space, where agricultural activities serve as nature-based therapy for individuals in recovery from drug abuse. The site offers opportunities for both active and passive engagement with nature, leading to an overall increase in the well-being of residents.



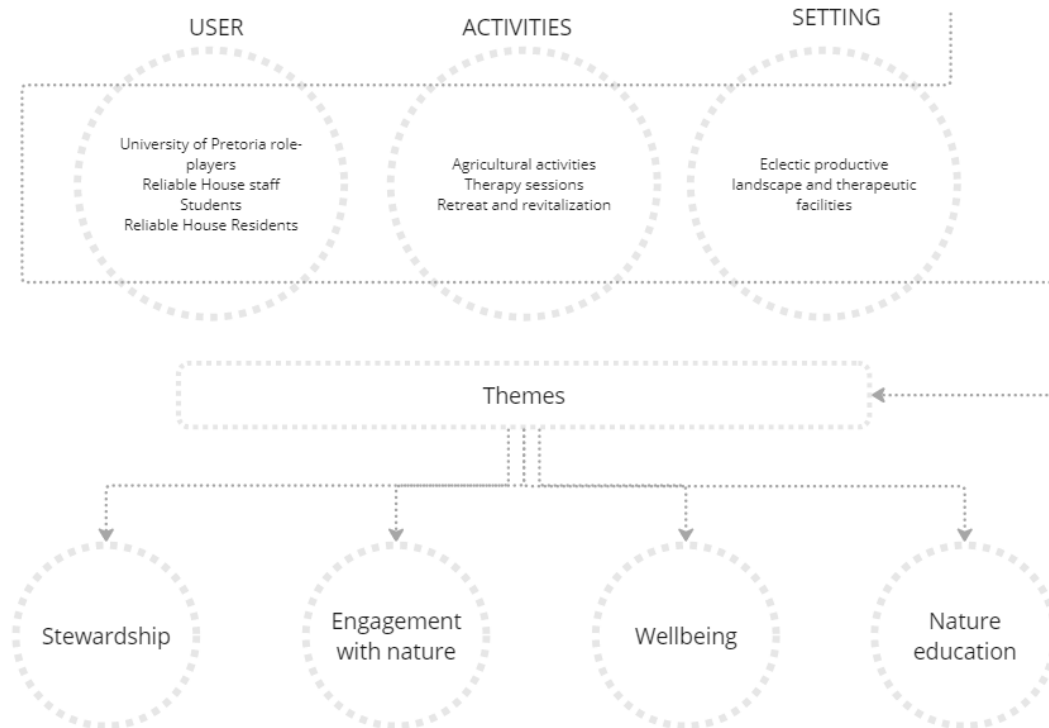


Figure 22: Diagram indicating place story factors relating to Moja Gabedi (Author 2023).

The landscape has a utilitarian nature as a productive landscape, however there is opportunity for nature-based well-being activities. Engaging in nature-based activities not only provides skill development opportunities but also fosters a heightened awareness of the significance of nature in one's life.

Community engagement plays a vital role at Moja Gabedi, with various stakeholders facilitating opportunities for residents and University of Pretoria students to be involved in the garden to contribute their input on an intimate scale. The site exhibits a distinct sense of stewardship, which is evidence of community engagement and the active involvement of residents, who also serve as maintenance staff.

Moja Gabedi is somewhat disconnected from external activities, resulting in a relatively quiet atmosphere within the site. In contrast, the surrounding streets exhibit a higher level of activity with spontaneous activities taking place. The controlled environment as well as the fence of Moja Gabedi limits its accessibility to all community members in Hatfield.

#### 4.5.3. Muckleneuk Commons

Muckleneuk Commons serves as an important thoroughfare and convergence node, facilitating movement and interaction. Several factors contribute to its role as a park that offers refreshment to visitors. The presence of shaded areas, access to water, seating opportunities, and abundant vegetation create a sense of refuge and retreat within the park. The use of indigenous vegetation and natural materials sourced from the site grounds the park within its context, evoking a sense of place and connection. It has been observed that the park's identity resonates with individuals, reminding them of their own place of origin.

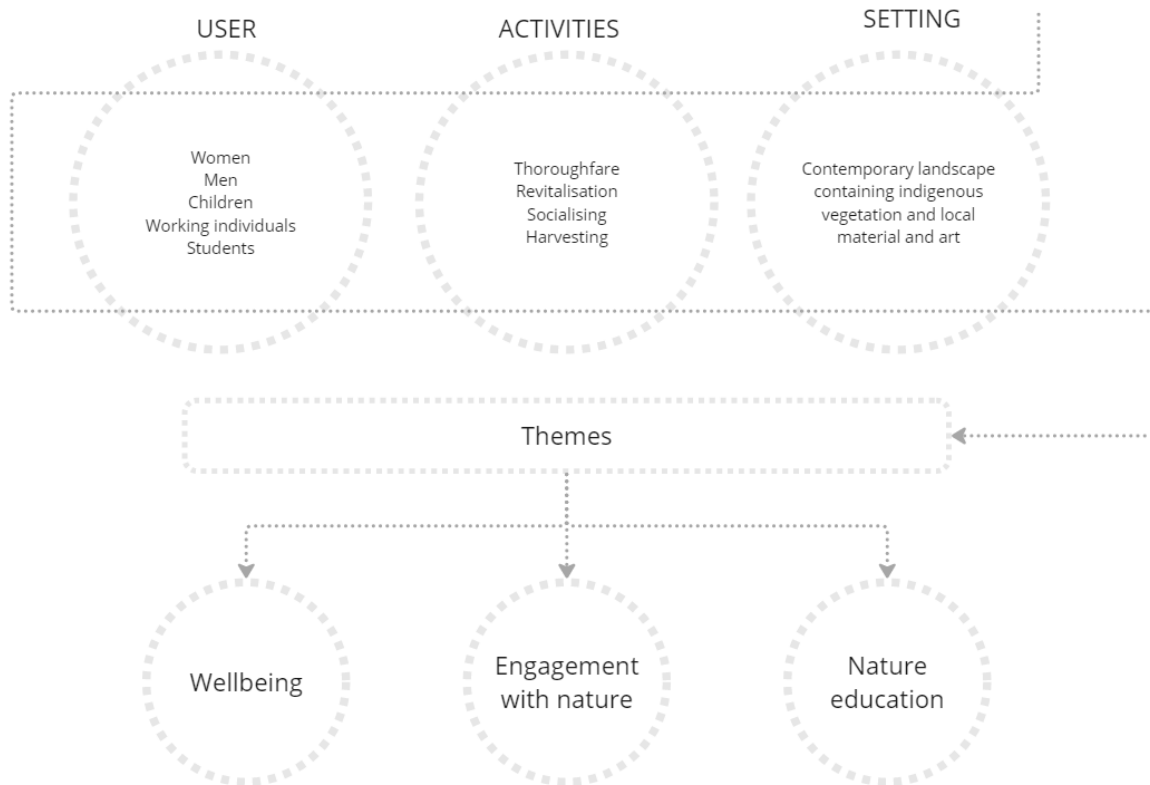


Figure 23: Diagram indicating place story factors relating to Muckleneuk Commons (Author 2023).

Community involvement in the park's creation has resulted in elements that embody a distinct character of place. The park tells the story of people in transit, whether they are commuting to work, university, or school. Located atop a hill, the park offers people the opportunity to take a quick rest in a natural environment. It is notable that individuals travel a considerable distance to access this pocket park, indicating a demand for more tranquil open green spaces in the area.

Moreover, the park exhibits evidence of additional purposes, particularly relating to its vegetation. The vegetation serves multiple functional roles, actively engaging people with nature in various ways. This demonstrates the park's capacity to cater to diverse needs and provide opportunities for active interaction with the natural environment.

## 5. DISCUSSION

The conditions and utilization of the park reflect daily patterns and shape user perception, which, in turn, may impact the restrictions or nature relationships within open green spaces in keeping with Campbell (2016). Finally, the identified place stories can lead to the identification of possibilities for a user-centred design that is responsive to the needs and experiences of the park users also demonstrated by Shand (2022).

### 5.1. Park conditions

Park elements and design can significantly influence users' perceptions and use, either positively or negatively (Kara 2013, 290). The presence of Eurocentric park features has been associated with illicit activities. While originally intended to provide hierarchy and

orientation, these features now seem to have the opposite effect, creating a sense of visual disjunction and reduced safety, particularly for youth and women due to dense evergreen vegetation and underutilized structures. The eclectic use of Victorian park elements in places like Burgers Park has resulted in an inharmonious mix of landscape elements (Turner 2005). While Eurocentric design itself isn't inherently negative, improper adaptations and uses can degrade the park environment. Neglect and unregulated activities have led to vegetation depletion in certain areas, underscoring the need for regulated stewardship and involvement from stakeholders beyond the municipality for the park's upkeep and responsive design informants.

Moja Gabedi and Muckleneuk Commons both exhibit evidence of Eurocentric features, but there is a clear eclectic approach to their implementation. These features serve more specific functions compared to Burgers Park, where the main objective is leisure. The current trajectory of park design leans towards a more community-focused approach that promotes environmental stewardship, overall better conditions, and utilitarian influence.

Degradation can serve as an indicator of use, but it can also signify a lack of community involvement in shaping and contributing to their own space. Green open space can contribute to social and ecological well-being (Breetzke & Breed 2013; Breed 2022; Breed et al. 2022). To truly align with a democratic discourse, public open spaces must be democratized, becoming spaces that embody the voices and aspirations of the people (Makakavhule & Landman 2020).

## **5.2. Park use**

As user profiles and park use change, so do meanings in the landscape (Landman 2022). The traditional role of Victorian Parks was to create temporary spaces for recreational and aesthetic purposes. The investigation of open green spaces in the three parks reveals that parks fulfil a wider range of needs than their intended purpose, often resulting in the degradation of certain features that provide natural resources. These public open spaces, are typically associated with child's play, are serving youth and adult users more frequently in this instance.

Burgers Park, despite displaying the most physical attributes associated with a Victorian park for many members of the surrounding community, this space acts as a backyard and living area. Although the park still serves its intended purpose of leisure and recreation, it also provides features that are popular among users, such as spaces for refuge and retreat. The refuge is sought at the park's outskirts, while the vast central area provides visual access.

The removal of physical and psychological boundaries supports a more inclusive environment (Carmona 2015). Burgers Park is the most heavily used among the three green open spaces. This can be attributed to its central location and still fulfilling the need for social cohesion. Moja Gabedi is well kept however is the least used of the three although it is also in a central location. Indicating that physical boundaries like fences also foster a sense of exclusion. Muckleneuk Commons lacks physical boundaries, but mental boundaries can arise in terms of access to the park. The absence of women walking through the park, and instead walking around it, highlights this phenomenon.

## **5.3. Nature and place relationships**

Nature can create a democratic, accessible space that contributes to place identity (Allen & Balfour 2014; Gelarmino et al. 2015). To comprehend the future trajectory of urban green

spaces, it is crucial to explore the embedded place stories within them (Young & Vosloo 2020). History plays a significant role in shaping these spaces and their sense of identity. It is through these adaptations and alterations that individuals express their needs and desires, actively shaping the spaces they inhabit.

Historical narratives of place often create a disconnect between people and place (Marschall 2009, 1-2). The user profile as well as the values and meanings associated with Burgers Park has changed from its original intentions. However, it continues to play a vital role as a natural space that attracts socio-cultural activities and serves as a venue for social gatherings, enhancing social cohesion and community well-being (Landman 2019).

Preexisting need for engagement must exist within the community to foster long term stewardship (Kluger et al. 2020). Stewardship and facilitation are crucial for maintaining parks, as evident in Moja Gabedi, where green spaces foster nature engagement to improve the environment. Various members of the community contribute their unique inputs to regenerate both the landscape and the people, extending the function of the park beyond its boundaries (The University of Pretoria 2022).

The spaces created by plants also contribute to nature engagement, as the environment they create offers opportunities for well-being and social cohesion. Points of intersection within urban green spaces foster social cohesion by creating spontaneous nodes of activity. Nature spaces that are visibly accessible and offer various scenarios for visual engagement can create inclusive and climatically regulated environments.

Green open space provides benefits associated with its intrinsic value (Seymour 2016). Well-being benefits can be derived from physically engaging with nature or simply being in its presence. However, in urban environments the well-being of nature itself is also dependent on human activity. Stewardship practices create mutually beneficial outcomes for humans and nature, leading to the development of sustainable nature interfaces. Nature education plays an important role in fostering awareness, natural resource management, and promoting nature stewardship.

Nature serves as a means of creating interfaces for engagement within the CoT. These interfaces can take on passive forms, where nature is incorporated into spaces to promote awareness and a sense of connection. They can also be more physically engaging, allowing people to interact with nature on a human level. The concept of human-centered design aligns closely with the idea of nature interactions, as demonstrated in the case of Moja Gabedi.

#### **5.4. Place stories**

Burgers Park has become a place for social activities and events (De Beer 2014). The current relevance of Burgers Park's Victorian era structures has been called into question (Landman 2022). Illicit activities have jeopardised the perception of the park (De Beer 2014). Despite the adaptation and changing dynamics observed in urban parks, there is a notable tendency for these spaces to exhibit a sense of rigidity due to the infrastructure in place, which often fails to cater to their dynamic nature.

As seen in Muckleneuk commons and Moja Gabedi various stakeholders contribute and participate in creating the landscape (The University of Pretoria 2022; Ngobeni 2017). Eurocentric ideals of public spaces have deemed certain activities associated with the need for nature and nature interaction as inappropriate as the harvesting of useful plants. However, excessive regulation can render these spaces sterile and limit public participation,



as seen to some extent in Moja Gabedi. This raises questions about the democracy of green spaces and the role they play as platforms for social cohesion (Makakavhule & Landman 2020; Landman & Makakavhule 2021).

Nature can serve as an interface that generates interest and promotes participation in the stewardship of natural resources and nature engagement. Moja Gabedi supports the rehabilitation and reintegration of previously marginalised members of society (The University of Pretoria 2022). However, such initiatives should not exist in isolation. Approaches centered around the necessity of natural resources and social reintegration have proven useful in achieving these goals.

In the case of Muckleneuk Commons the need for creating a mutually beneficial space to improve accessibility and quality of the environment was addressed by the community (Ngobeni 2017) This emphasizes the importance of transient spaces and the design of spaces that support movement and activities within the city. Safe, accessible, and inclusive spaces require connections to movement systems (Landman & Nel 2022).

### **5.5. Interpreting place stories to identify Afrocentric design informants for the City of Tshwane**

Landscape design can contribute to place identity by implementing scalability and continuity in design (Dewar & Louw 2021). Scalability means extending the project's intention beyond the site boundaries to create an integrated network that supports cohesion between people and nature.

Accessibility and inclusivity are important in creating democratic green open spaces (Makakavhule & Landman 2020). Permeable verges increase accessibility and engagement, while flexible spaces propose behaviour rather than imposing it. Spaces should be adaptable and transformable to meet the needs of people. Creating rhythmic patterns in verges and providing spaces for activities facilitated by nature can support this adaptability. This can be achieved through diversifying trees by size and type, including deciduous and evergreen species that allow for climate adaptation as well as visual accessibility and biodiversity.

Green open space can potentially have ecological, economic, and cultural benefits for marginalised communities (Patterson 2015, 15). Diversity in nature is important to create environments that support the well-being of the community and biodiversity (Wang et al. 2019; Deng et al. 2020, 8). To provoke engagement with nature, plant selection is important. Plants with ecological, economic, and cultural benefits to people are commonly utilized.

Incorporating elements rooted in the identity of a region contributes to the perceived well-being benefits of green open space (Deng et al. 2020). Place identity is fostered by adopting a regional lens in the creation of spaces (Dewar & Low 2021) This entails utilizing regional materials, vegetation, and art to root the design in the local context. The selection of park elements and their composition influence how people relate to and engage with the space (Kara 2013). While stylistic elements may not directly impact people's preferences, they can hinder interaction and result in "white elephants" in the landscape. This contributes to an identity that does not accurately represent the local environment or the current users of the space.

The socio-economic systems in the CoT are characterized by their dynamic nature, influenced by various forms of informality (Landman 2019). These systems play an important role in supporting the urban metabolism of the city. Spaces and infrastructure should be created to accommodate informal dynamics. To accommodate this dynamic and adaptable

nature, it is essential to create spaces that are multifunctional and capable of generating multiple interpretations for their use and meaning.

Green open spaces create opportunities to foster social connections and require stakeholders to facilitate these opportunities (Landman 2019). Involving community members and stakeholders in the integration of design features and elements fosters a sense of ownership and authorship in spaces. Shared functions for spaces are important in decision-making processes, with a focus on prioritizing the needs of the most vulnerable individuals to mitigate social issues effectively (Patterson 2015, 15).

The study achieved its objectives by providing an illustrated description of a typical 'Eurocentric' local community park, investigating three urban public spaces for alignment or deviation from this baseline, and offering potential considerations for future place-based development of public open spaces in the CoT.

## **5.6. Limitations**

This study's focus on perceptions of green space may have been limited in scope. Most participants interviewed were men, and thus, the potential impact of green spaces on women's experiences and their perceived benefits and safety within these spaces may not have been adequately explored. Examining gender-specific perceptions and considerations can provide valuable insights into how green spaces can be designed and managed to address the specific needs and safety concerns of women, ensuring inclusivity, and promoting equitable access and enjoyment for all individuals within urban environments.

## **6. CONCLUSION**

The investigation of urban green spaces in the City of Tshwane highlights the changing role of parks beyond their traditional functions. These spaces have adapted to meet a wider range of needs. However, the Eurocentric influence on park design and regulations has limited public participation and hindered social cohesion to an extent. Areas with Eurocentric features often experience illicit activities, emphasizing the need for a more dynamic and inclusive approach to park design.

The open green spaces in the CoT require adaptation to enhance their resilience and responsiveness to the existing challenges faced by the city. In this regard, both the spaces and structures within them should be designed to be flexible and adaptable, accommodating multiple functions, purposes, and meanings. At the same time, they should maintain an identity deeply rooted in the South African context.

To achieve this, a place-based approach is recommended, which involves viewing the design through a local lens and utilizing local craftsmanship, materials, and vegetation in the landscape. By embracing local resources and practices, the design can foster a sense of place identity that is specific and appropriate to the local context, promoting a stronger connection between the community and the open green spaces.

Narratives and history play shape urban green spaces and their sense of identity. Parks have adapted to reflect the emerging post-apartheid identity and have become venues for social gatherings, promoting social cohesion and nature-based well-being. Understanding the stories associated with parks is essential in shaping their future trajectory and tailoring the spaces to the needs and desires of the community.

Nature plays a vital role in creating interfaces for engagement within the city. Human-nature relationships are fostered through sensory experiences and interactions with plants.

Engaging with nature and being in its presence contribute to well-being, highlighting the importance of stewardship and education. Nature interfaces should be designed to support human well-being while promoting the conservation of natural resources.

To create representative and inclusive spaces, community involvement is crucial in decision-making processes. Parks should be scalable, accessible, and inclusive, accommodating the dynamics of informality and diverse user profiles. Points of intersection within green spaces foster social cohesion, and permeable verges and flexible spaces enhance accessibility and adaptability. Nature serves as an interface for generating interest and participation in environmental conservation, and indigenous knowledge can inform planting selections and enhance the sense of place.

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## APPENDIX

### Park User Interviews | Interview Guide

#### Questions:

1. What is your main reason for visiting this park:

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2. What attracts you to this park?

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3. Is there anything that makes you not want to come here?

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4. What do you feel about the way the park looks?

a. What do you like most, why?

b. What do you like least, why?

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5. Does this park meet your needs, why / why not?

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6. What other parks do you go to and why?

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7. What do you think about the way this park is looked after?

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8. What do you know about the history of this park? How did it come to be, who was involved?

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Photo elicitation discussions:

[Note preferences, aversions, commentary on aesthetics, human-nature relationships, emotive responses, stories or memories, IKS / Ritual aspects etc.]

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For researcher to complete: Note the following (from observation ONLY, do not ask / prompt this in the interviews):

Age:

Youth:		Adult:		Pensioner:	
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Gender:

Male:		Female:		Self- identifies differently during interview:	
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Other notes: (note down any specifics offered in the interviews in terms of language, culture, socio-economic status etc., again, *do not* prompt in the interviews)

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Researcher notes / reflections:

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Researcher name:

**OBSERVATION LOG:**
**Record info:**

Researcher name:		Park:		Date & Day:	
Arrival time:		Departure time:		Weather:	

**Bio-physical conditions:**

Physical condition	Degraded, very poor condition	Well-used, but fairly good condition	Newly upgraded / very good condition
Describe the park's physical features & style:			
Vegetation condition	Overgrown, wild, unmaintained vegetation	Maintenance evident, but perhaps not regular	Clearly well-maintained
Describe the type of vegetation:			
Level of maintenance	Poor, to non-existent	Fair, maintenance evident, but not manicured	Very well and regularly maintained
Describe the level of maintenance (evidence)			

Additional notes on biophysical conditions:

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**Atmosphere / level of activity:**

Atmosphere: (Describe the atmosphere, provide evidence)	Eg. peaceful, noisy, music etc.			
Level of activity in park:	Almost deserted	Quiet, but people evident	Active	Busy to very busy
Surrounding context:	Almost deserted	Quiet, but people evident	Active	Busy to very busy

Additional notes on atmosphere and activity levels (note changes over time):

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**Socio-cultural observations:**

Observations about gender:	
Observations about socio-economics:	
Observations about age:	
Cultural observations (eg. religious activities, cultural activities, stokvel etc).	

Comments:

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Park elements and preferences:

Where are people gathering? (who?)	
What are they doing? (who is doing what?)	
How busy are the various parts of the park? (who is gathering where?)	
What park elements (physical attributes) are most busy, attractive, well used?	
What park elements (physical attributes) are most degraded or damaged?	
Where do you see adaptations to the parks, and what are they?	
What particular social / economic / cultural relationships or endeavours are facilitated in the park?	
What particular HNRs do you notice in the park?	

Unusual or noteworthy aspects in terms of park conditions, design, aesthetics or use patterns:

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## Faculty of Engineering, Built Environment and Information Technology

Fakulteit Ingenieurswese, Bou-omgewing en  
Inligtingtegnologie / Lefapha la Boetšenere,  
Tikologo ya Kago le Theknolotši ya Tshedimošo

16 March 2023

Reference number: EBIT/24/2023

Miss AM du Plessis  
Department: Architecture  
University of Pretoria  
Pretoria  
0083

Dear Miss AM du Plessis,

### **FACULTY COMMITTEE FOR RESEARCH ETHICS AND INTEGRITY**

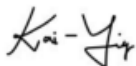
Your recent application to the EBIT Research Ethics Committee refers.

Approval is granted for the application with reference number that appears above.

1. This means that the research project entitled "Interpreting place stories to identify design-informants for landscape praxis in urban landscapes " has been approved as submitted. It is important to note what approval implies. This is expanded on in the points that follow.
2. This approval does not imply that the researcher, student or lecturer is relieved of any accountability in terms of the Code of Ethics for Scholarly Activities of the University of Pretoria, or the Policy and Procedures for Responsible Research of the University of Pretoria. These documents are available on the website of the EBIT Research Ethics Committee.
3. If action is taken beyond the approved application, approval is withdrawn automatically.
4. According to the regulations, any relevant problem arising from the study or research methodology as well as any amendments or changes, must be brought to the attention of the EBIT Research Ethics Office.
5. The Committee must be notified on completion of the project.

Where applicable, no data is to be collected without first obtaining permission letter(s). The permission letter(s) from the organisation(s) must be signed by an authorized person and the name of the organisation(s) cannot be disclosed without consent.

The Committee wishes you every success with the research project.



**Prof K.-Y. Chan**

Chair: Faculty Committee for Research Ethics and Integrity  
FACULTY OF ENGINEERING, BUILT ENVIRONMENT AND INFORMATION TECHNOLOGY