

"Recreation is not a secondary CONCERN FOR A DEMOCRACY. It is a primary concern, for the KIND OF RECREATION A PEOPLE MAKE FOR THEMSELVES determines the KIND OF PEOPLE THEY BECOME and the KIND OF SOCIETY THEY BUILD."

Harry Allen Overstreet

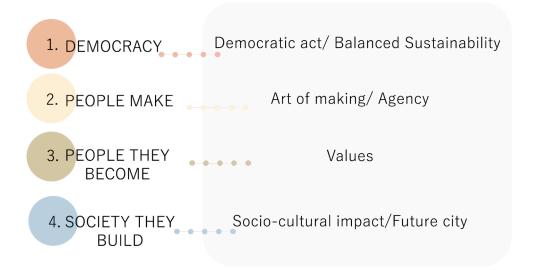


Figure 1.1: Quote on recreation broken down into concepts showing recreation's agency (Author 2021)



INTRODUCTION: POSITION AND SITUATION

//Nuanced Recreation

The term 'recreation' is a vast and complex notion that varies dependent upon individuals and cultures (Cordes 2013: 7; Metin *et al.* 2017: 556). While 'play' and 'leisure' are rather conceptual in nature, 'recreation' seems to be more tangible as it is attached to activities that people can easily picture (McLean & Hurd 2015: 46). As such, recreation transcends the idea of leisure and steps into the realm of self-improvement by using the concept of 'free-time' going beyond relaxation and even moving towards goals achievements(McLean & Hurd 2015:40; Metin et al. 2017: 549). Recreation can, thus, be considered "socially institutional" (McLean & Hurd 2015: 44) when it is provided by entities with less conspicuous ties to recreation, such as: hospitals, correctional facilities or even markets (Cordes 2013: 8; Watson 2009: 1589).

//Background and Significance

The researchers noted in the preceding section all previously aimed to define and emphasise the idiosyncrasies of recreation. However, several other studies have also delved into the spatiality of recreational spaces by relating to their benefits and the characteristics that lead to their success or their demise (Pinto & Remesar 2015, Project for Public Space c2020). Although, both realms of enquiry investigate the same topic, less emphasis has been and areas wherein which placed on the ways these two portions meet. In addition, the complex plethora of identified recreation has been met with a lower focus on possible approaches available to contextually achieve these polyvalent spaces. Addressing these current research gaps is of relevance to the South African urban fabric, and particularly for townships, where public spaces are not regarded as main priorities (). Although some researchers have already proposed ways to approach the design of such spaces by tapping into spatial agency and/or social network analysis to name a few (Casakin & Valera 2020; Dascalu 2013; Schneider & Till 2012). These perspectives deserve further exploration as a contribution to the creation of contextual public spaces that are representative both of Overstreet's quote that introduced this chapter (Figure 1. 1) and the extracted interpretations thereof, as presented in this current work.

Of note is that there tends to be a certain polysemy, unpredictability and even playfulness that emerges from the idea of 'making' recreational spaces, This is particularly evident when considering all the possibilities of activities and city dwellers' individual endeavours that take place within South African townships. The current project, therefore, acknowledges these realities throughout the structure of this document as well as its relevance to the methodology depicted later in Figure 2.10. Indeed, this project takes on a narrative and empirical approach to its research as opposed to adopting a stricter methodology. As a result, this paper begins by building a case for recreation in relation to the South African context. This presentation is then followed by the theoretical implications that internalise the four extracted principles from Figure 1.1 . The project then culminates into a research-led design methodology, with findings forming the basis for the proposed design development.

1- THE CASE FOR RECREATION

1.1 DEMOCRATIC RECREATION: A CASE OF SUSTAINABLE BALANCE

As a democratic act, recreation suggests choice and the rights to something or to do something, which are all fundamental to urban dwellers.

Recreational spaces belong to the overarching category of public space and according to Human Habitat (2015: 4, 127), these encompass the following: streets, open public spaces and public facilities. Studies show that these spaces bring several benefits to people's well-being, and create areas to pause, socialise and linger (UN-Habitat 2015: 62, United Nations c2021). They are also the sites for the daily "flâneurs" (Leff 2019: 1).

The United Nations Sustainable Development Goals-2030 Agenda include "Goal 11" (c.2021) (Figure 1.2); promoting the good planning of public spaces around the world to allow people to access their right to healthy, safe, resilient and sustainable environments.

According to Sang-Chuel Choe (2007: 135), as cities thrive for sustainability, a balance between economic, environmental and socio-cultural principles should be achieved. However, often when aiming for the attainment of sustainability, the heavier focus on environmental and economic factors leaves the socio-cultural sphere -involving people and their networks- lagging

3 Position & Situation



THE WORLD'S URBAN Population has

CONVENIENT ACCESS

TO PUBLIC TRANSPORT

500-1000 METERS DISTANCE

ΝΝΙ Υ ΗΔΙ F

(2019)



AIR POLLUTION CAUSED 4.2 MILLION PREMATURE DEATHS 2016



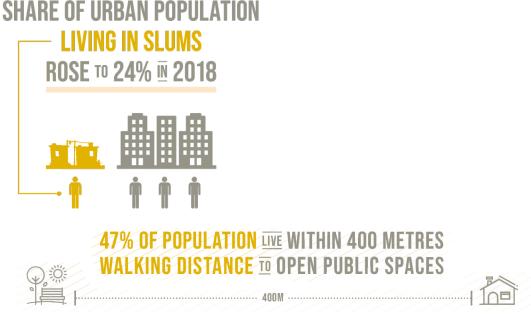
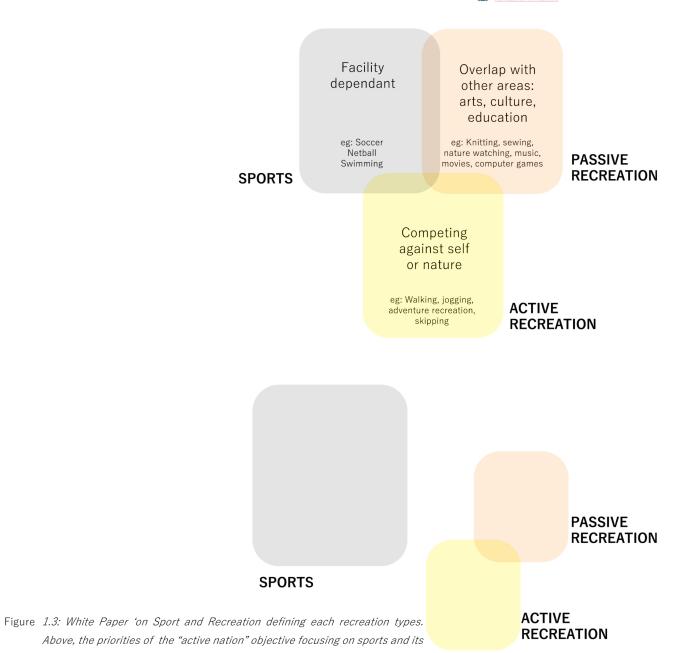


Figure 1.2: Infographics of goal 11, the environment and public spaces (United Nations c2021)





monofunctional approach (Author 2021).

behind (Choe 2007: 135; Memmott & Keys 2015: 276).

This situation is also present in the built environment where the tendency to produce highly effective 'green infrastructures' sometime results in well-functioning ecological singular 'objects' with little connections to their surroundings; the architecture in isolation is sustainable, but as part of a bigger whole is less effective (Mostafavi 2010: 1,7). Similarly, Serge Salat *et al.* (2011: 18) and David Leatherbarrow (2002: 14) argue that the whole and the parts should have a level of synergy; emphasizing the inadequacy of highly monofunctional and disconnected parts in relation to the greater city.

In South Africa, the government recognises recreation as a benefit to the nation, however, while the White Papers on Sports and Recreation (2012: 15-16) follows suit (Figure 1.3), its heavy focus on sports as recreation also undermines the potential of active, passive and even hybrid recreation; risking monofunctional space perpetuation.



1.2 RECREATION AND THE CITY: A CASE OF VALUES, PRIORITIES AND SERVICE PROVISION

In the city of Tshwane, in South Africa, public space planning remains an issue yet to be solved.

Due to apartheid's legacy, the current urban condition of Tshwane remains fragmented with a disparity between the wealthy suburbs and the townships (City of Tshwane 2005a: 18, 26). The scars of the regime's spatial planning are still present as seen by the segregating grain and lack of cohesion between spaces in the townships (Figure 1.4).

As a post-apartheid remedial phase, rapid RDP housing was provided with priorities for service provision focused on housing (Figure 1.5), which left public spaces to be neglected in the planning and maintenance process (McConnachie & Shackleton 2010: 244). Research has shown that the percentage of public open space in RDP schemes were even significantly lower than the ones in older townships (Denoon-Stevens & Ramaila 2018: 434; McConnachie & Shackleton 2010: 247). Hence, while the RDP scheme helped people in need of permanent homes, this monofunctional development fails to reach a good balance of spatiality for urban living.

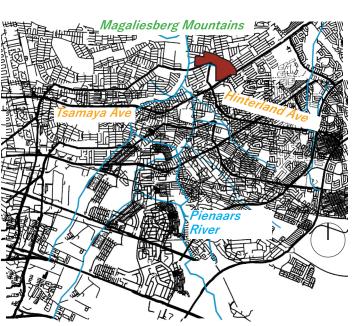
Furthermore, public space is also lost as the city experiences population growth- the provision of housing cannot keep up with the demand for urban dwellings, culminating in urban sprawl and the proliferation of informal settlements on the peripheries and in-between spaces of the city (City of Tshwane 2005a: 7; Moreleta Park Integration Project 2020)

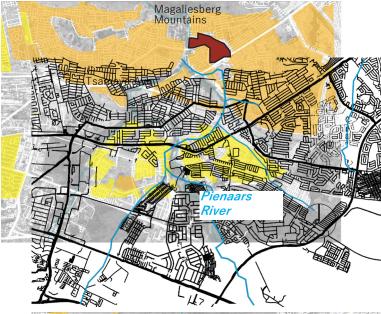
Existing public facilities in townships also run the risk of becoming 'lost space'. Karina Landman (2016, 2018: 41) and Lebogang Lancelot Nawa (2018) emphasize the issue of neglect and maintenance. A high focus on specific monofunctional spaces is problematic, but spaces lacking any definition or connection to communities (Figure 1.6- "undetermined" zones) are equally inadequate (Barac 2013: 50). When these are not used to their full potential or left vacant, the likelihood of crime and other dangerous activities to take place arises (Landman 2018: 43). Moreover, some areas become subject to dumping and pollution (Figures 1.7 and 1.8) (City of Tshwane 2005a: 56; Landman 2018: 120).

- Figure 1.4: (Above) Example of Tshawne's region 6 segregating organisation pattern (Author 2021)
- Figure 1.5: (Bottom) Example of Nellmapius and Mamelodi housing zoning adapted from Tshwane RSDF 2018 (Author 2021).
- Residential 1

Buffer Zone

Residential 2





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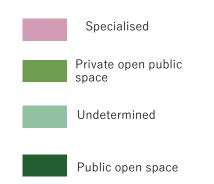


Figure 1.6: Unspecified, public open space zoning in Mamelodi adapted from Tshwane RSDF 2018 (Author 2021)

Figure 1.7: Dumping and glass recycling pile at Khalambazo, Mamelodi (Author 2021)

Figure 1.8: Dumping in the Pienaars River, Mamelodi (Author 2021)



1.3 RECREATION TO THE PEOPLE: A CASE OF AGENCY, PERCEPTION AND TYPOLOGY

In this section, the plurality of the physical embodiment of recreation in relation to people will be discussed. Jan Gehl (2010: 134) proposes that there are two types of activities in public spaces: moving and stationary. These are closely linked to context, cultural values and economic levels. In developed countries, stationary activities are an indicator of good quality spaces searching to invite people to linger (Gehl 2010: 135). Meanwhile, in developing countries, many activities are deemed a necessity -for income generation or survival- therefore, stationary activities such as street trade occur regardless of the quality of the city space (Gehl 2010: 134). This "negotiation between place and practice" (Barac 2013: 48), transcends into African cities dwellers' recreation choices.

Through different research studies on South African townships, it was found that home-based activities, attending stoke fares, church, shebeen or washing cars were considered recreational (Figure 1.9) (Magi 1999: 298; Wilson & Hattingh 1992: 478-482). These examples highlight the grey area between work, leisure, play and even spirituality. Furthermore, the type of recreation preferred were often influenced by distance, availability, cost of recreation or the lack of awareness of other activities (Figure 10) (Magi 1999: 298-299).

The popularity of home-based activities, proves that despite the lack of service provisions in townships and

informal settlements, people become resourceful by providing and maintaining services themselves from their own homes (Figure 1. 9) (Charman *et al.* 2020: 105-107, Urban Citizen Studio 2019). These are basic instances of "people as infrastructures" (AbdouMalig Simone 2004 in Exploratory Notes on African Urbanism 2009: 8) and an exploration of social economies which African Urbanist deem an important contextual phenomenon for urban design (Pieterse 2009: 8).

The house is also synonymous with refuge, comfort and safety (Hertzberger 1991: 48-49; Landman 2016: 82). Studies in South Africa have shown that people's perceptions of public spaces are conflicted. Many voiced that they did not feel safe especially in public parks (Denoon-Stevens & Ramaila 2018: 433; Landman 2018: 5). Similarly, the fear of 'undesirables' occupying public space has long been debated, and areas are avoided due to them being drug hubs or homeless people having appropriated them (Tosi 2007: 226; Touludi 2016).

While drug usage is considered a morally wrong recreational practice in many cultures, the presence of the homeless is a different social matter (McLean and Hurd 2015: 43; Tosi 2007: 229). The latter do not turn to public spaces out of free time but rather out of necessity; raising the debate around people's rights to public space and how these should be designed for different space usage through amenities provision in the space created. (Groff & McCord 2011: 3; Tosi 2007: 228; Touludi 2016). Hence placemaking has to take into consideration ingrained social disparities, including gender, ages, cultural and ethnic backgrounds which influence the overall typology, functionality and accessibility of public recreational spaces (Breed 2012: 23; Nawa 2018: 260; Kowaleski 2014: 173, 178).







Figure *1.9:* Collage sequence of Home-based activities observed in Mamelodi Ward 23. Extension of services through wall breach, generational lending of spots near houses, paving appropriation, moving and stationary activities (Author 2021)







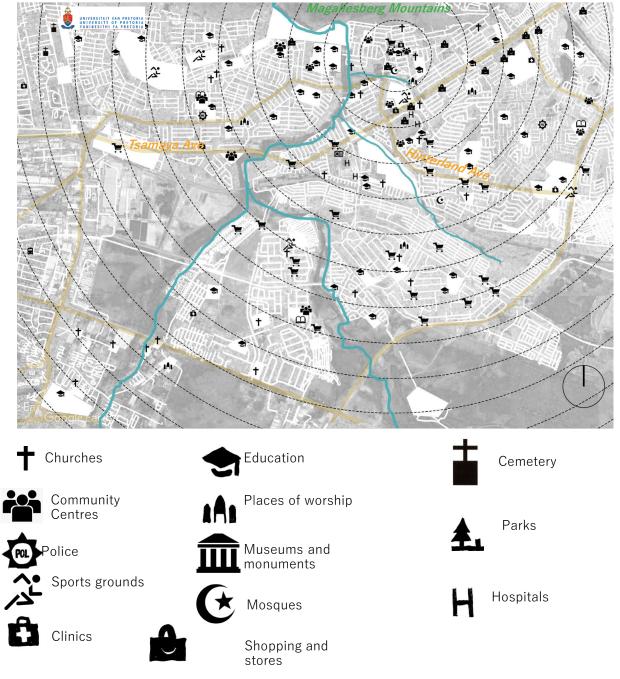


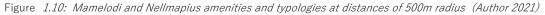
Position & Situation













1.4 THEORETICAL FRAMEWORK: towards an architecture that facilitates recreation

The parameters that recreation encompasses but are not limited to: cities and population well-being, societal needs, safety and diversity. These are closely knitted with cultural norms and economic activities. Recreational spaces are used by a myriad of different demographics and are the sites for "spontaneous and unexpected social interactions" (Casakin & Valera 2020: 9). Sections 1.1-1.3 presented various literature around the ways recreation is provided in the complex setting of South Africa- by whom, the different foci and consequences. All these interconnected intricacies between procedures, people and sites, point to the notion that public spaces are made out of networks (Pinto & Remesar 2015:7; Casakin & Valera 2020: 11).

//Architecture as 'Dispositif':

When networks are involved in space making, the notion of the "dispositif" comes into play (figure 1.11).

Adapted from Michel Foucault's writings, the concept of the "dispositif" or apparatus/device is used in space production to shift power-scaling (Daly & Smith 2011: 23). It blurs the lines between what produces and what is being produced. The aim is not to create a utopia through architecture but rather to augment or supplement existing situations or actions; it becomes an enabler, a system of relation, not simply an object (Dascalu 2013: 207; Daly & Smith 2011: 27). Similarly, the concept of "dispositif"-architecture is closely related to the affordance theory which discusses design

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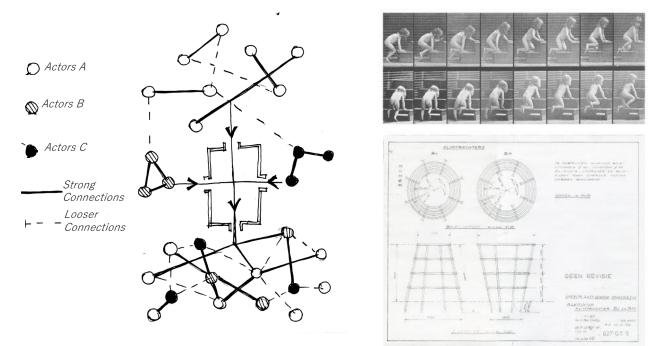


Figure 1.11: The function of the "Dispositif" in relation to networks Figure 1.12: The affordance of Aldo van eyck's playgrounds (With-(Author 2021) agen & Calijouw 2017). The number of ways to interpret

interventions' "affordance" where design either allows or denies freedom of use and interpretation of objects or spaces (figure 1.12-1.13) (Withagen & Calijouw 2017: 5-6). Therefore, a good level of understanding of physical sites, associated networks and "flow" avoids for subsequent designs to restrain the positive flux of people's activities or values (Barac 2013: 47; Swilling 2013: 66).

With these statements, it is possible to visualise the following networks of relations: people to people (social interaction), place to place (physical relations) and people to place (activities or events). The designer then has to build a strategy to manoeuvre these networks of informants resulting in interventions (Dascalu 2013: 209-216).

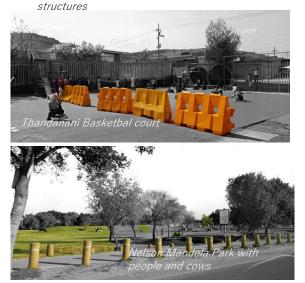


Figure 1.13: (Collage) Affordance of everyday elements in Mamelodi (Author 2021)

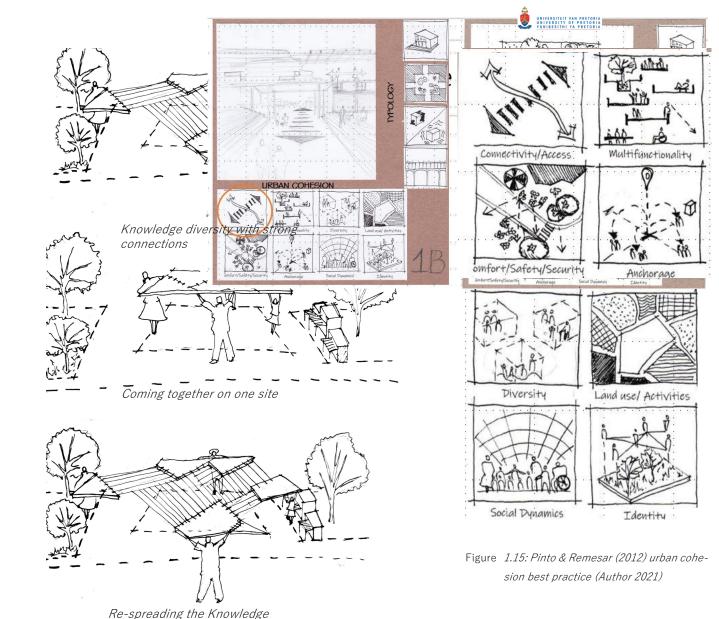


Figure 1.14: Spatial Agency, beyond the site, collaborations, epistemic diversity (Author 2021).

//Spatial Agency and African Urbanism

The three previous sections constantly presented the South African situation in regards to public spaces conforming to and challenging international literature, thus evoking the need for contextual responses which can be found in the theories of spatial agency and the paradigm of African Urbanism.

Spatial agency is a placemaking mindset about the plethora of ways to design rather than a strict universal design guideline (Awan *et al.* 2011: 26-27). It also questions authorship and highlights different bottom-up approach to design. Actions such as "expanding the brief" (Awan *et al.* 2011: 69-70) or "initiating" (Awan *et al.* 2011: 72) among others, present experimentations that challenge the limits of site boundaries and relying on epistemic diversity for when to act and define spaces in the city (figure 1.14).

By extension, public spaces cannot fully exist in isolation. They exist beyond their boundaries as streets and boulevards extending into squares or parks and active social networks; potentially "weaving" the city together, especially when integrated with best practice principles (figure 1. 15, to be elaborated in the next portion of the dissertation) (Pinto & Remesar 2012: 10-11, 2015: 9). This cohesion demarch can incorporate large-scales communities focused on public works programmes which encompass the provision of economic, ecological and socio-cultural services while maintaining and repairing infrastructures (Pieterse 2011b: 4). The "beyond" of a site (Awan *et al.* 2011: 70) and its synergy with the interventions thus becomes a design concern instead of an obsolete.

2- THE SEARCH FOR RECREATION

2.1 THE "MAMELODI-SCAPE"

The established case for recreation sets the premises for the general basis of public spaces' situations and perspectives. Onwards, to support the importance of contextual enquiry, the paper further delves into the township of Mamelodi as a site for investigation.

Mamelodi is full of history and culture (Figure 2.1-2.5). Its name meaning 'Mother of melodies', it is nestled at the foot of the Magaliesberg mountain ridge (Breed 2012: 8, Van der Waal 2000: 1). The timeline (Figure 2.5) recalls many historical events contributing to the current character of Mamelodi. Many of these moments have ties to recreation; from the establishment of infrastructures to the allocation of open spaces and sports facilities.

Moreover, it is through walking the site that one begins to latch onto the smaller grain- human scale moments of recreation (Figures 2.1-2.2 and 2.4). Each scenario presents a type of 'dispositif' which spontaneously begins to reduce Mamelodi 's physical scale (on a map) to a rather human-sized one. These nuances require further investigation due to their potential to influence the making of future public spaces.

In the case of Mamelodi East, NPOs (Non-Profit Organisations) and CBOs (Community-Based Organisa-



tions) were identified as major actors and influencers in the community (Urban Studio 2020). Their various endeavours paired with their anchorage into the neighbourhood set them as relevant informants for the projects. Therefore, the study will focus on Mamelodi East's Ward 23 (Figures 2.6-2.9), sitting at the intersection between Mamelodi West (i.e., the older portion of the township) and Mamelodi East (i.e., the later portion) chosen for its NPO activity, its spatial location and diverse population (Breed 2012, Urban Studio 2020, Wazimaps 2011).





Figure 2.1-2.2: People agencies in the Public realm (Author 2021). Tent used for events between houses and small garden along Tsako Thabo School' fence.

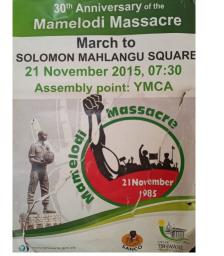


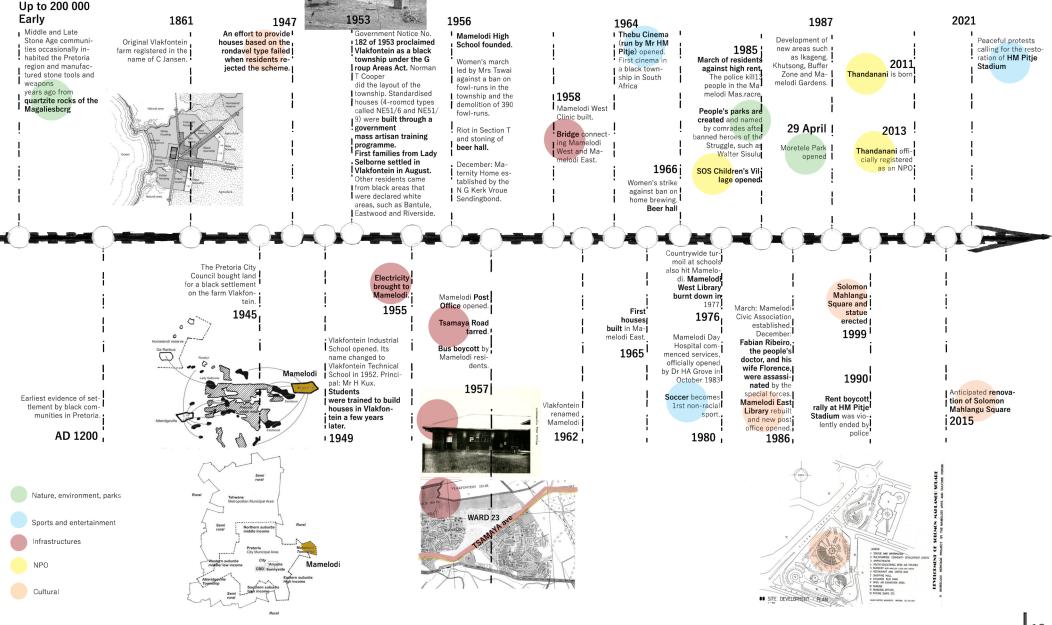
Figure 2.3: Poster of cultural and community events in Mamelodi (Author 2021). Mamelodi is well known for its recreational endeavours such as its annual jazz festival, dances and its famous soccer team Mamelodi Sundown's (Breed 2012: 28). It is also home to heritage sites such as Solomon Mahlangu Square and the rondavels and hosted several important freedom struggle role-players.



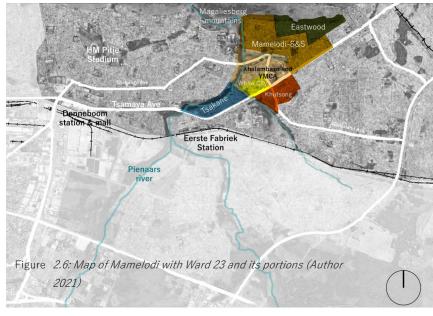
Figure 2.4: Housing , decorated fences and streetscape (Author 2021)

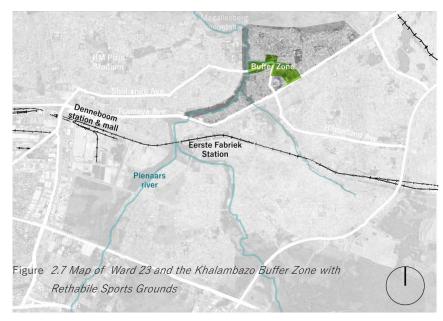














Tshedza Projects SOS Children's Village Tsamaya Ave

Thandanani Drop Inn Centre

Railway

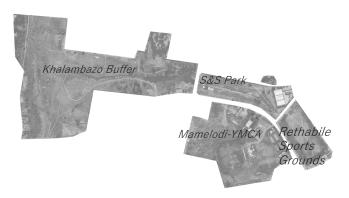


Figure 2.8: Map showing the NPOs' locations in Ward 23 a (Author 2021) Figure 2.9: Buffer Zone portions (Author 2021). The totality of the above will be referred to as the Buffer Zone.



2.2 PROBLEM STATEMENT AND RE-SEARCH QUESTION

The paper has established the importance of recreational spaces in cities as areas that should be sustainably balanced, economically and physically accessible, contextually integrated and diverse; where people benefit from infrastructure provision and opportunities while themselves contribute to city living.

However, the disparate provision of public space with a heavy focus on monofunctional parts of the city and less holistic forms of sustainability, create a 'domino effect' where recreational spaces are less efficient, valueless, lost or negatively perceived.

One can begin to look at people's small acts of agency as a network (the use of space as a necessity leading to the spontaneous creation of recreation opportunities) as a starting point towards a subsequent investigation aiming at answering the following question:

"How can recreational spaces in the township of Mamelodi East be designed as devices to contribute towards a socio-culturally sustainable and cohesive urban environment?"

2.3 AIM AND OBJECTIVES OF THE STUDY

The aims of the study would be to find a way to design sustainably-balanced and multifaceted recreational spaces in Mamelodi East, which would allow people to exercise a sense of agency in placemaking while strengthening their sense of values and belonging in public space. Furthermore, it would necessitate these hybrids spaces to contribute towards an ease of movement and access across the township, thus improving interfaces with the existing recreational spaces. Lastly, the dissertation should produce a well-documented and expandable methodology capable to contribute to the space-planning discourse and aid future recreational spaces development approaches in Tshwane's townships.

Therefore, the objectives of the research are as followed:

- assess the nature, use and values attributed to current and aspiring recreational sites in Ward 23

- explore the meaning and situation of "people as infrastructure" in Ward 23

- discover and interpret the possible networks related to recreation in Ward 23 and test social network analysis as a tool for public space design (in terms of its efficiency in identifying community relationships and needs, programmes towards hybridity and the synthesis of adequate recreation and informants) (inspired by Casakin & Valera 2020: 12)

- undertake a typology study for a spatial understanding of public spaces' best practice characteristics and idiosyncrasies (locally and internationally)

- propose a design development to answer the research question.



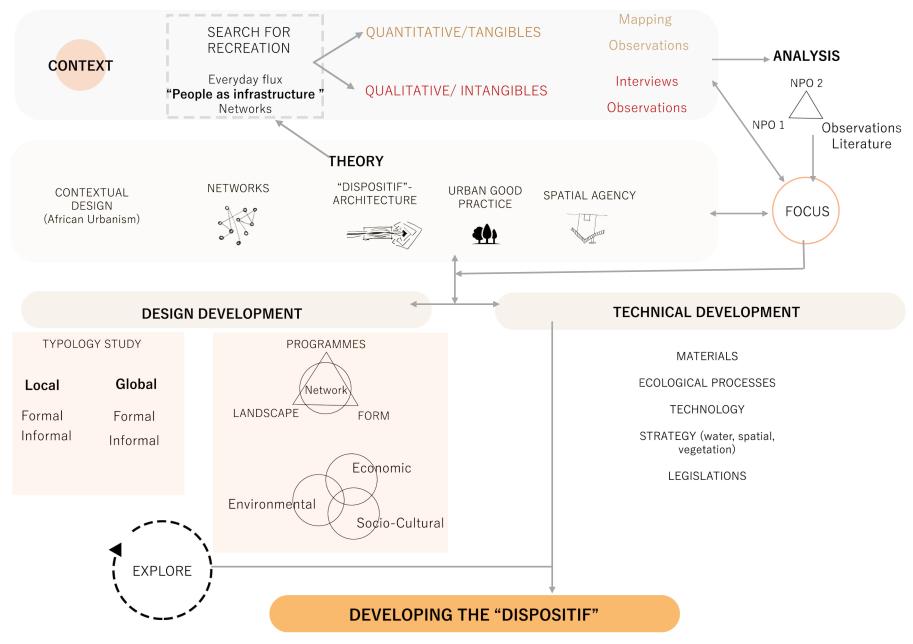


Figure 2.10: Design by research methodology employed (Author 2021)



2.4 METHODOLOGY

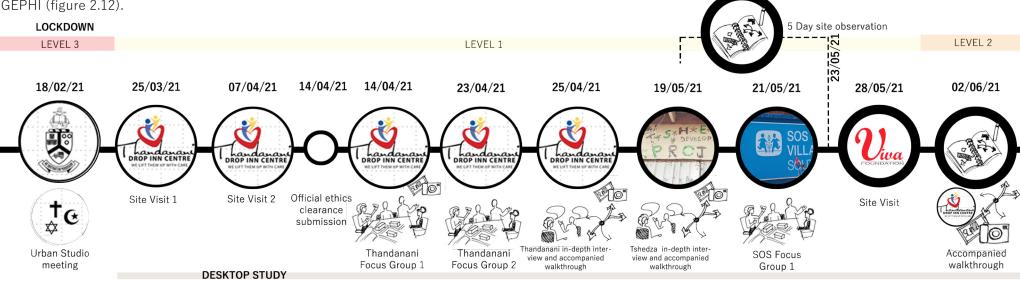
The research adopts a pragmatic view of the uncovered situation, an acceptance of multiple interpretation towards a layered understanding of a place, leading to a case study of Ward 23 as a research design (Figures 2.10-2.13) (Wang & Groat 2013: 442). A mixed-method of enquiry was used (figure 2. 10) encompassing: qualitative data and quantitative data collection, a typology study and data analysis.

The process for the extraction of data and analysis involves the classification of the results into emerging themes and the categories proposed for urban cohesive public spaces, the triangulation of data between the different sources of information and finally the tabulation of the results followed by a subsequent social networks diagram generated through the program GEPHI (figure 2.12).

2.5 DELIMITATION AND LIMITA-TIONS

The field research is delimited to the boundaries of Mamelodi-S&S, Mamelodi-YMCA, Khalambazo (Figure 2.6-2.9) and the two NPOs, Thandanani Drop Inn Centre and SOS Children Village (figure 2.8) as 'microsites'. As a research-led dissertation, the work was divided between field visits, desktop studies and design development (Figure 2.11). It is further noted that due to the availability of many NPOs in Mamelodi, only two were able to participate. Additionally, the focus of the interviews was placed on the quality rather than the quantity of the information as part of the qualitative side of the study.



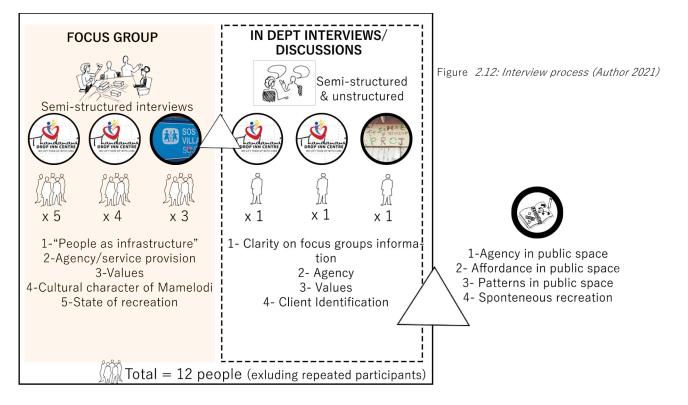


TYPOLOGY STUDY & ANALYSIS & DESIGN DEVELOPMENT

Figure 2.11: Research timeline (Author 2021)

LEGEND





QUALITATIVE/ INTANGIBLES

Systemic and descriptive observation of Ward 23 focus area public space.

QUANTITATIVE/TANGIBLES

Mapping of routes, behaviour patterns, landscape, cultural artefacts and entertainment.

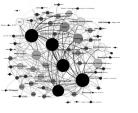
TYPOLOGY STUDY

Global and Local examples analised through Pinto and Remesar (2012) public space principles for urban cohesion.



ANALYSIS

1-Analysis of qualitative date through framework method (Smith and Firth 2011, Srivastava and Thomson 2009), see Appendix
2- Social networks analysis (Caskin and Valera 2020)





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Figure 2.13: Instruments and data analysis (Author 2021)

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2.6 ETHICAL CONSIDERATIONS

As this dissertation's data collection relies heavily on the observation and mapping of everyday practices of recreation it is essential the due process is followed in terms of ethical considerations. Therefore, the researcher takes on the precaution to adhere to the University of Pretoria's research rules and regulation, plagiarism and data accuracy protocol as per the codes of the Faculty Committee for Research Ethics and Integrity of the EBIT faculty (Faculty of Engineering, Built Environment and IT c2021). Additionally, the current pandemic measures were internalised as part of the scheduling for fieldwork (Figure 2.11) (South African Government c.2021).

The researcher acknowledges that any work produced will form part of the intellectual property of the University of Pretoria; nonetheless in the case that the information gathered highly benefits the community, arrangements will be made to deal with privacy in order to make the work more accessible.

The use of interviews solicitating particular ethical procedures, the researcher has aimed at fulfilling all the necessary criteria and documentation (see appendices A-D) involving:

- Application for ethical clearance through blanket ethics

- No involvement of minors nor vulnerable groups

- Informed procedure and consent, including

the use of recording, note-taking and disclosure about the storage of information.



3- FOUND RECREATION

3.1 INITIAL INSIGHT INTO FINDINGS: the value of recreation

Through the site visits undertaken at the two NPOs, it was possible to draw a primary understanding of the state of recreation in the area.

//Perspectives and Values

Firstly, it is important to note that both Thandanani (along with its affiliate Tshedza Project) and SOS provide services related to social matters (Figures 3.1-3.3). However, it is in their multifunctional character that one can start to experience the notion of "people as infrastructure" (AbdouMaliq Simone 2004 in *Exploratory Notes on African Urbanism* 2009: 8).

It was found that due to the number of schools in the vicinity and the percentage of young adults, a great focus was placed on providing programs for children, teenagers and the youth (Figure 3.1-3.5). Additionally, the concept and value of family was also prevalent, either as an aspiration for future programmes (Thandanani) or as a current conceptual organisation system (SOS) (SOS focus group 1 2021; Thandanani focus group 1 2021). One can also note a high regard for the value of unity despite some recognised tensions among ethnic groups (especially in schools) (Niebuhr 2021; SOS Children's village Mamelodi focus group 1 2021; Thandanani focus group 1 2021; Thandanani focus group 2 2021).

Each organisation provided a variety of recreation (Figures 3.2-3.3). In both instances, the inclusion of recreation was not only considered as a mean for leisure and play but was found to be rooted in the NPOs' values and perspectives of recreation. Indeed, this service provision was highly tied to the improvement of societal endeavours such as: education, self-improvement, self-discovery, self-value, relationship building, and a way to help the community in solidarity. Programmes to aid the homeless and substance abusers were also knitted into sports and skills development amongst others (Mr J, verbal communication 2021; Mrs K Verbal communication 2021; SOS focus group 1 2021; Thandanani focus group 1, 2 2021).

//Skill Developments through Recreation

Skills development seemed to form a crucial component of the NPOs services and values (for all demographics) along with their acceptance for change and constant interest in trying to introduce new activities and programmes such as: multiple awareness campaigns and interests in the outdoors and environmental endeavours (Figures 3.1-3.3). One can sense the commonalities in recreation and a sense of agency of NPOs despite them often facing the limitations of funds and physical space (site boundaries and economic opportunities) (Mr J , verbal communication 2021; Mrs K, verbal communication 2021; SOS focus group 1 2021; Thandanani focus group 1, 2 2021).

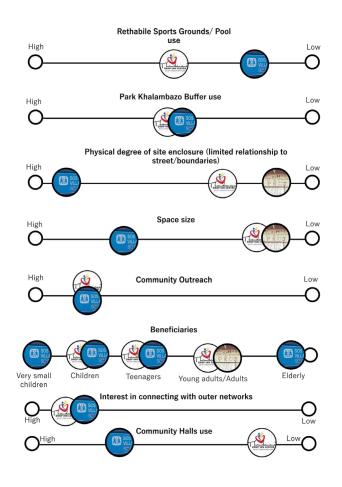


Figure 3.1: NPO comparisons (Author 2021)

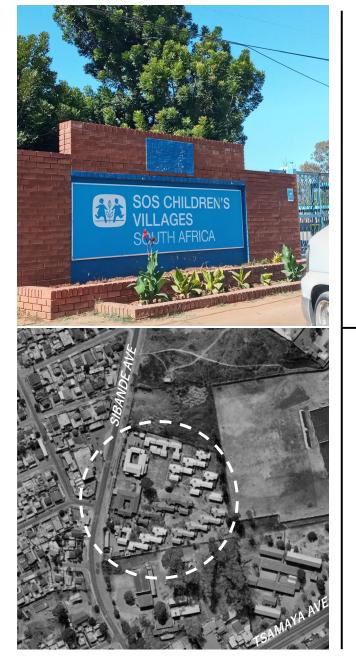






Aerial photograph (Google Earth 2021)

Figure 3.2: Thandanani Drop Inn Centre , matrix collage of activities and site and assets



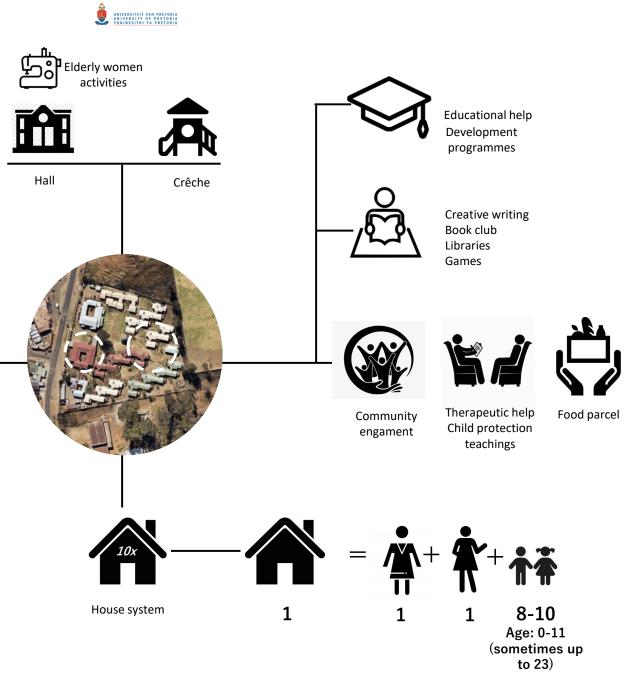
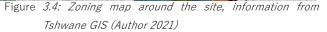


Figure 2.3: Thandanani Drop Inn Centre , matrix collage of activities and site and assets









//Perspectives on the Provision of Formal Recreation

The dereliction, lack of appeal and maintenance status of cultural and public spaces in Mamelodi has been confirmed by all parties (Mr J, verbal communication 2021; SOS focus group 1 2021; Thandanani focus group 2 2021). As responses, Thandanani's adapted basketball court and SOS's small libraries and hall become substitute facilities to further away well-maintained sites. Nonetheless, while Thandanani attempts to still make use of the surroundings to an extent, SOS resorts to 'insourcing' (i.e., within their own premises) or 'outsourcing' recreational facilities at a greater scale (Mamelodi West's and the University of Pretoria's sports grounds) (SOS Children's village Mamelodi focus group 1 2021; Thandanani Focus group 1 2021).

3.2 DISCUSSION

The above findings confirm the idea that public spaces "are never finished products" (Casakin & Valera 2020: 11) regardless of scale. They can be re-appropriated, changed, and reinterpreted or form a network of actors, activities and sites. Elements and resources that do not appear to correlate may in reality share inconspicuous connections such as groups of people from different parts of the neighbourhood finding themselves together due to similar objectives at various points in the environment.

The much-needed diversity of recreational infrastructure in the township is found in its smaller grain with "invisible" agents (NPOs) in need of opportunities to fully act as catalysts for infrastructure provision (Pieterse 2011a: 313; Urban Studio 2020: 44). As suggested by Salat *et al.* (2011) this fine grain phenomenon should be scalable. Scaling this found multifunctionality would tackle people's agency limited by space (size), distance and specified structures (figure 3.1 -3.5).

The variety of programmes presented by the organisations are in fact contextual responses to immediate social needs. The emphasis on sports was always paired with other forms of programmes and objectives (outdoor excursions, post-rehab programmes, cultural activities such as music and dance) making sports more polyvalent in nature, thus, adding diverse layers to the monofunctional focus of the White Papers. These varied expressed interests provide clues for better holistic, hybrid and ecological direction and responses in the design phase (Figure 3.6).

From here onwards one can decipher that the term 'people as infrastructure' seems to be assimilated to the manner in which community members impact and iterate their environments through their connections and actions while aiming for the betterment of each other's lives. As a result, this phenomenon can be suitably restated as 'social fabric or networks as infrastructure'.

Tatjana Schneider and Jeremy Till (2012:41) argue that creating something that was not needed is a waste of resources and advocate for the careful observation of the present situation to redefine the problems in other ways. Following on this statement it was only natural to view the Buffer Zone spine as a chosen block for further investigation to draw links between the finer grain of NPOs, daily users of the sites and the greater scale of the neighbourhood. The potential of the zone's character unpacked in the following section should later influence the design development.



"A child must play, rest, work hard but be careful of the word "play". How do they play? " (Ms K, verbal communication 2021)

"Yes, they vandalise [Solomon Mahlangu]. But now there is no security in place. […] a tourist attraction site, people coming in would be educated about the history of Mamelodi." (Ms K, verbal communication 2021)

"So, we also invite the government to come and see what we are doing here every day. They will be shocked. They will be shocked." (Mr A, verbal communication 2021)

"Family support is very very important." (Mr A, verbal communication 2021)

"You know someone who knows someone, you take him with the hand, "there's a job for you there", at least you give him a direction in life." (Mr S, verbal communication 2021)

"An idle mind is the devil's playground." (Mr S, verbal communication 2021)

"So, most of the time there are children who play soccer most of the time. Whether it is in the morning or in the afternoon. Even after 5 o'clock, they still want to play soccer there." (Mr L, verbal communication 2021)



Figure 3.5: Voices from the volunteers (Thandanani focus group 1,2 2021)



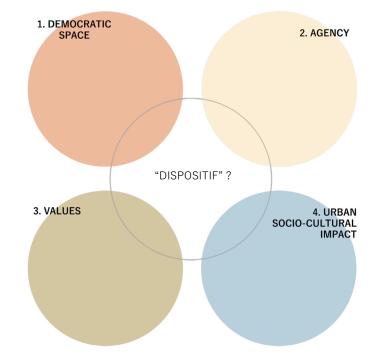


Figure 3.6: Finding the dispositif (Author 2021)