

Figure 4.1: Roadmap to the brief  
(Author 2021)

## FROM NETWORKS TO BRIEF

In line with what has been presented in the prior sections, recreation can be understood as a flexible and layered concept as well as an important component for urban living. However, in townships such as Mamelodi, the loss of public spaces resulting from the apartheid era's spatial planning, issues of housing, and/or lack of maintenance has led to issues in achieving proper urban cohesion.

As a mitigation strategy, residents of such townships have often resorted to making use of smaller sites in a bid to exercise various agencies and relations. However, these attempts can and have been met with some limitations, with connections not being fully realised. It is in these situations that the notion of 'dispositif' architecture, introduced in this paper, is investigated as a device to anchor networks into space as an initial conceptual design enquiry.

Firstly, this paper delves into the understanding of 'flow' as established relations (i.e., as networks) in terms of recreation, which can then be used to formulate and comprehend clients, programmes, sites, and, ultimately, the physical form of the intervention.

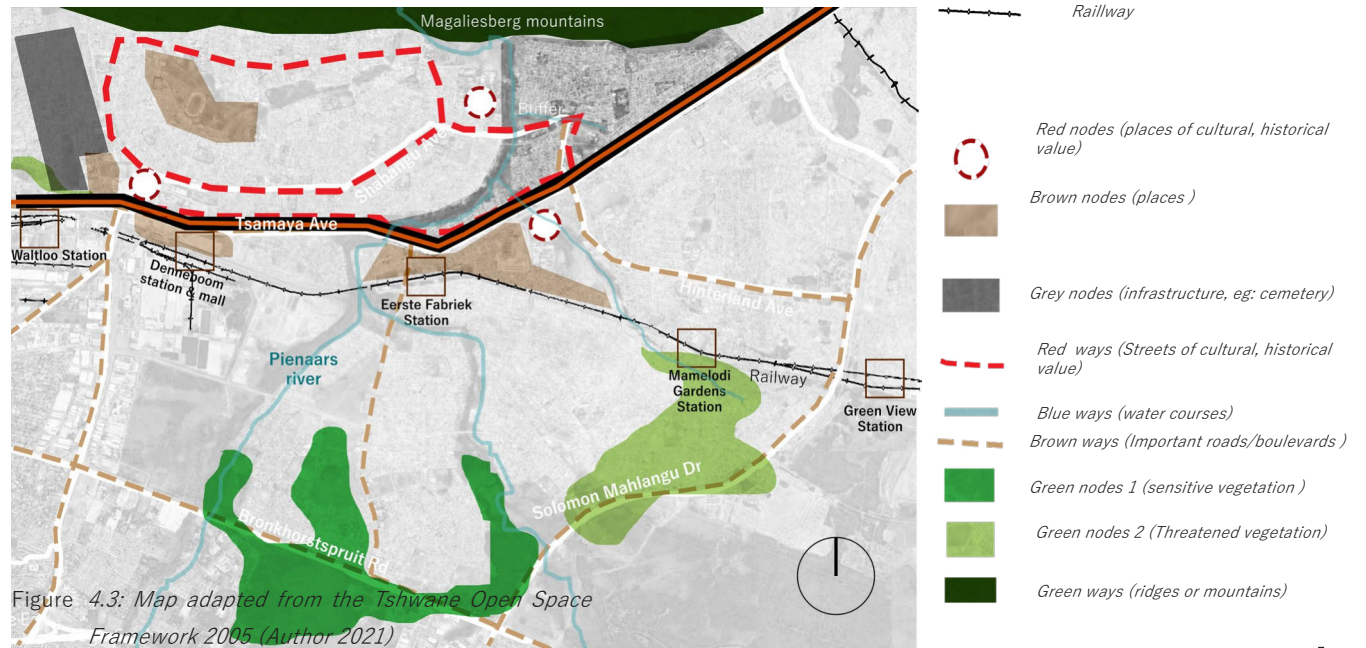
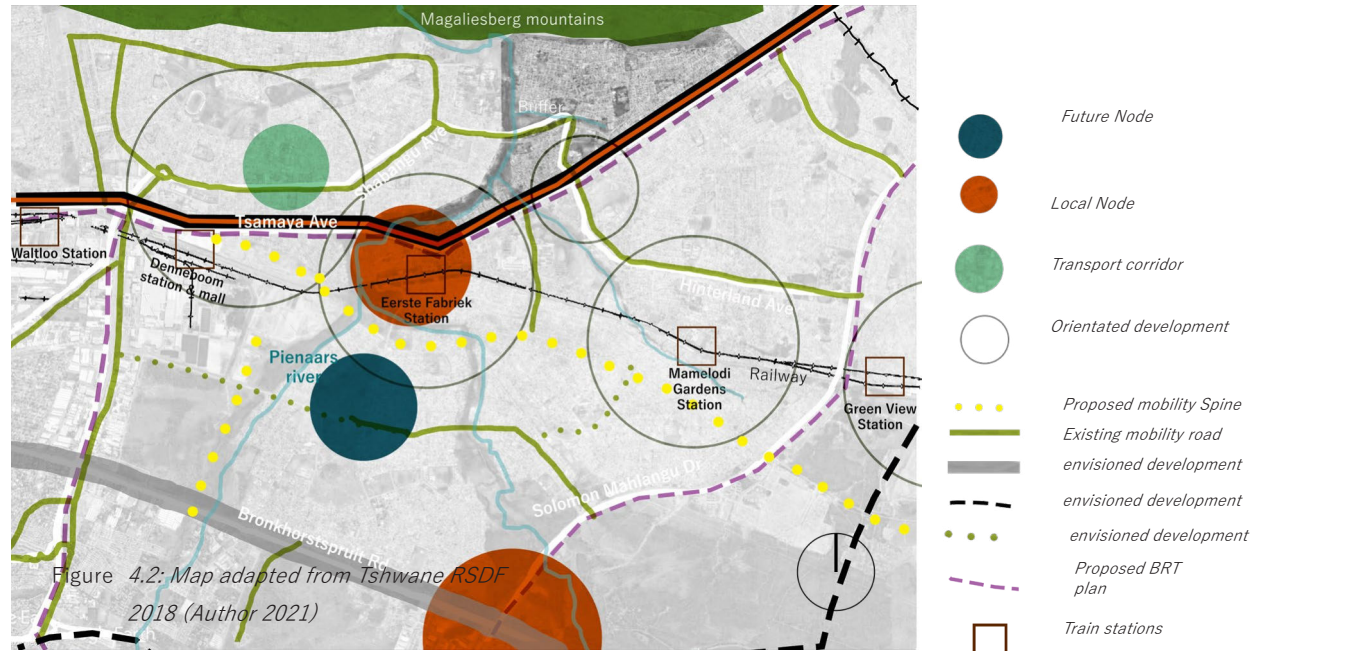
Deliverables such as the social network analysis procedure, along with a thorough typology study, form part of this section, and act as tools towards internalising common public spaces benchmarks. This approach, in turn, provides a deeper dive into 'social fabric as infrastructure', leading to a design approach that incorporates networks while simultaneously considering related physical representations, narratives, and options. The uncovered relationships of people-to-people, places-to-places, and people-to-places are also examined. Figure 4.1 presents a road map for the investigations detailed in this portion of the paper – from analyses to conceptual prototyping.

# 4- PUBLIC SPACE PLURALITY OF MA- MELODI

## 4.1 SITE ANALYSIS AND INFORMANTS

As iterated previously, the chosen site encompasses the Buffer Zone and Rethabile Sports Grounds (i.e., that form a spine of public open spaces, a mundane but spontaneous area with the exception of a static and barren portion of the YMCA). The overall site investigation, thus, presents multiple opportunities from the site's position, environmental characteristics, and daily relevance (i.e., cultural, historical, and economic); thereby recognising the 'extraordinary' in the 'everyday' through a recreational lens.

The mapping (Figures 4.2 to 4.8) here involves the flux of people and vehicles, places of pause, and importance of significant routes present throughout the site. This is inclusive of the City of Tshwane's RSDf 2018 and the green, red, brown, grey, and blue routes and nodes from the City of Tshwane's Open Public Space Framework (OPSF) (Figure 4.3 – legend) (City of Tshwane 2005b: 23, 70). The landscape itself is also a major recreational agent and permanent actor; therefore, it has been recorded with all its forms and behaviours, both dependent and independent of people (Figure 4.8) (SANBI c.2021). Sites in close proximity to one another have further provided clues about relations, activities, and safety (or lack thereof) (Figures 4.7-4.8, 4.10).



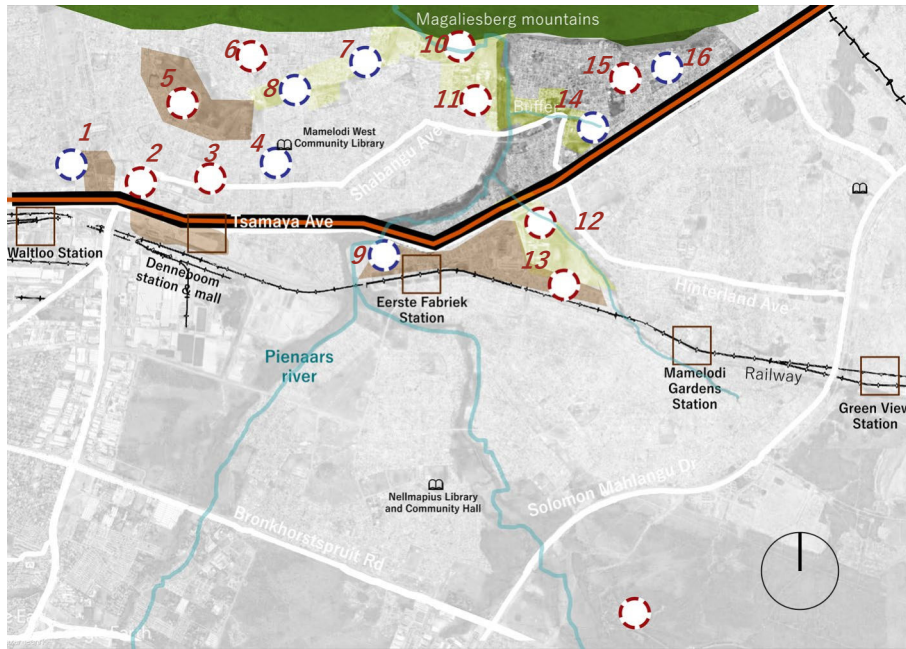
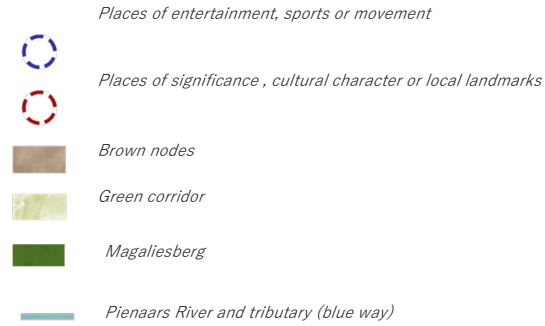


Figure 4.4: Cultural mapping generated from interviews and photographs of sites (Author 2021).



- 1: Denlyn Shopping Centre and sports fields
- 2: Solomon Mahlangu Square
- 3: Dr Fabian Riebero's house
- 4: T-section, Jake Budha, "Skener Boom"
- 5: HM Ptje Stadium
- 6: Mothong Heritage Precinct
- 7: Polar Park
- 8: Cricket Oval
- 9: Eerste Fabriek
- 10: Moretele Park
- 11: Rondavels
- 12: Nelson Mandela Park
- 13: That's It Art gallery
- 14: Rethabile Sports Grounds
- 15: "Kanada House"
- 16: Monaco

*Rethabile Sports Grounds' assets*

- Swimming Pool
- Netball courts,
- Soccer fields,
- Tennis courts,
- Caretaker's old building
- Buildings in pool area

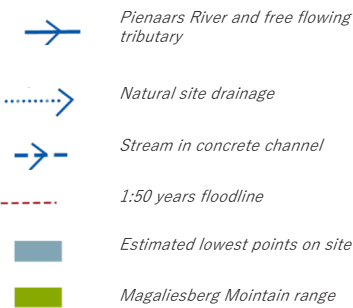


Figure 4.5: Site hydrology, information from SANBI c2021 and Open street maps c2021 (Author 2021)





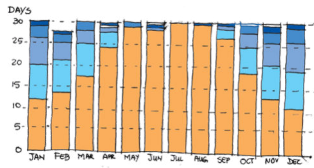
Figure 4.6: Map of movement and transport around the site (Author 2021)

- ..... Desired lines
- - - - - Busiest North-South route
- - - - - Busiest East-West axis
- - - - - Very pedestrian-friendly North South route
- Entry points into the Buffer Zone (small to largest)
- ..... 500m radius
- Zone dominated by private cars and "small business" (residents using private cars as taxis)
- Zone dominated by "Quantams" (Kombi/minibus) including Tsamaya
- Most natural zone



Figure 4.7: Map of activities, unsafe zones and boundaries around the site (Author 2021)

- Street vendors
- Bus stops
- Unsafe zones (observations; interviews;) Niebuhr 2021
- Zones with the homeless/ substance abusers
- Very active zones and gatherings
- - - - - Dominant fences with public access
- - - - - Dominant fences with controlled access
- - - - - Dominant fences breached
- Abandoned children's park
- Glass recycling
- Car wash
- Mechanics



## //Themes and Cohesion

Figure 4.9 indicates the relationship between the interview results (i.e., themes) and their possible urban cohesion factors. It is possible to observe sites of significance in these cases, as well as ideas and objectives for recreation programmes. Similarly, the cultural map (Figure 4.12) is indicative of local landmarks, transport corridors, and recreational sites (used or neglected) that have been deemed part of Mamelodi's cultural experience (SOS Children's Village Mamelodi Focus Group 1 2021; Thandanani Focus Group 2 2021).

It should be noted that most of these sites are found adjacent to Tsamaya Avenue or the Hinterland Avenue-Mamelodi West loop corridor via Tsomo Street – both instances include historically significant routes and nodes (van der Waal 2000). When paired with the information provided by the municipality's frameworks, these places of significance have been translated into Figure 4.12, and all ultimately form part of a greater ecological network of open spaces, historical routes, and major axes of circulation, despite the distances between each and/or their individual characteristics. It is also worth noting that most of the sites only specific to Figure 4.12 originate from the daily experiences of people living and/or working in the neighbourhood, along with their own aspirations.

## // Public Realm

Actors and activities observed on five consecutive days at differing times along Tsomo Street – as a sequence of spaces appropriated to various degrees – are depicted in Figure 4.10. This documentation serves as a partial triangulation for the interviews and mapping, as well as a primary source of qualitative information aimed at better understanding the patterns of recreation unique to the Buffer Zone. Furthermore, the map presented in Figure 4.13 has been bisected and annotated to more easily identify different activities' locations.

Through this graphical representation, it is possible to conclude that various patterns of occupation are visible, with some repeated along the site, while others remain exclusive to certain portions. Although some activities and users tended to change throughout the days and hours, others were found to remain constant (i.e., permanently present). This phenomenon highlights the importance of the landscape as an actor in and of itself, as well as the ways in which its language resonates with users for different uses and interpretations. All this reveals a spectrum of 'affordance' (i.e., elements such as paving for a car wash, water for tent washing, trees for shade, or grass for grazing). The in-between nature of recreation has also been confirmed through the comparison table (Figure 4.13), which reveals a balanced number of binary activities. Of further note is that the movement of actors – such as the stream flowing, or children playing across multiple zones – forms an interesting, intangible connection in the area across both space and time.

Figure 4.8: Zoomed-in site analysis and opportunities (Author 2021)

	PROBLEMS & CHALLENGES	STORIES & CULTURE	VALUES & INITIATIVES	IDEAS & CONCEPTS	PLACES, SITES & FACILITIES	OCCUPATION
ACCESSIBILITY/ CONTINUITY/ MOBILITY/ CONNECTIVITY	<ul style="list-style-type: none"> <li>Convoy/traffic</li> <li>Distances to sport facilities</li> </ul>	<ul style="list-style-type: none"> <li>Digital posters for events</li> <li>"small business"</li> <li>Foot</li> <li>PuTco bus</li> <li>Train</li> <li>Areyeng</li> <li>Kombis</li> </ul>	<ul style="list-style-type: none"> <li>Junior laptops</li> </ul>	<ul style="list-style-type: none"> <li>Mobile truck</li> <li>Smartphones</li> <li>Bicycles</li> </ul>	<ul style="list-style-type: none"> <li>Moretele Park</li> </ul>	
LAND USE/ ACTIVITIES	<ul style="list-style-type: none"> <li>No soccer fields on site</li> <li>Lack of well maintained recreational activities</li> </ul>	<ul style="list-style-type: none"> <li>Jazz Festival</li> <li>Motsepe Foundation</li> <li>Pubs/ clubs/ shinsanyamas</li> <li>Popular sport soccer</li> <li>Mobile bus library</li> <li>Dinho Café</li> <li>"sneker corners"</li> <li>Local street tournament</li> </ul>	<ul style="list-style-type: none"> <li>Keep busy</li> <li>Feeding scheme</li> <li>After school care</li> <li>Homework, puzzles, reading, soccer</li> <li>Music/ dance/ sing "Amapiano"</li> <li>Educational tours</li> </ul>	<ul style="list-style-type: none"> <li>Skill hub</li> <li>Youth day event</li> <li>Computer literacy</li> <li>Aftercare for addicts</li> </ul>	<ul style="list-style-type: none"> <li>Monaco</li> <li>Jack Buda</li> <li>Tsweu Street</li> <li>Moretele Park</li> <li>Community hall</li> <li>Sianza Bopape library</li> <li>Mutunzini</li> <li>Rethabile sports grounds</li> </ul>	<ul style="list-style-type: none"> <li>S&amp;S Mosque</li> <li>Jack Buda</li> <li>Homes</li> <li>Basketball court</li> <li>S&amp;S Park</li> <li>Tsweu Street</li> </ul>
SOCIAL DYNAMICS		<ul style="list-style-type: none"> <li>"Skener tree"</li> <li>Local street tournament</li> <li>Good relations with spazas and foreigners</li> <li>S'piton</li> </ul>	<ul style="list-style-type: none"> <li>Unity</li> <li>Area lit up at night</li> <li>Reinforcing parent-child dynamics</li> </ul>	<ul style="list-style-type: none"> <li>Support groups</li> <li>Aftercare for addicts</li> <li>Skill Hub</li> </ul>	<ul style="list-style-type: none"> <li>Monaco</li> <li>Moretele Park</li> <li>Muzutani</li> <li>S&amp;S Park</li> <li>Rethabile Sports ground</li> <li>Jack Buda</li> <li>Tsweu Street</li> </ul>	<ul style="list-style-type: none"> <li>Pubs and corner gatherings</li> <li>Homes</li> <li>Basketball court</li> <li>S&amp;S Mosque</li> </ul>
COMFORT/ SAFETY	<ul style="list-style-type: none"> <li>Xenophobic attacks</li> <li>Abandoned buildings occupation</li> </ul>	<ul style="list-style-type: none"> <li>S&amp;S constant streets activity brings safety</li> <li>History of gangsterism (past)</li> </ul>	<ul style="list-style-type: none"> <li>Relationships create safety</li> <li>Area is lit up at night</li> </ul>	<ul style="list-style-type: none"> <li>Aftercare for addicts</li> </ul>	<ul style="list-style-type: none"> <li>Solomon Mahlangu</li> <li>Rondavels</li> <li>HM Pitje</li> <li>Rethabile sports ground</li> </ul>	<ul style="list-style-type: none"> <li>Occupation of degrading/abandoned facilities</li> </ul>
ANCHORAGE	<ul style="list-style-type: none"> <li>Denlyn mall taking over sports ground</li> </ul>			<ul style="list-style-type: none"> <li>Heritage sites for children's excursions</li> </ul>	<ul style="list-style-type: none"> <li>Village Park</li> <li>Polar Park</li> <li>Cricket oval</li> <li>Rondavels</li> <li>Solomon Mahlangu's house</li> <li>S&amp;S Clinic</li> <li>Fabian D Ribeiro's house</li> <li>Rethabile sports ground</li> <li>HM Pitje</li> <li>Nico Smith's house</li> <li>"Kanada House"</li> <li>Moretele Park</li> <li>Monaco</li> <li>Jack Buda</li> <li>Tsweu street</li> <li>S&amp;S park</li> </ul>	<ul style="list-style-type: none"> <li>Jack Buda</li> <li>Rethabile sports ground</li> <li>S&amp;S Park</li> <li>Basketball court</li> <li>Thandanani's buildings</li> </ul>
MULTIFUNCTIONALITY			<ul style="list-style-type: none"> <li>3 programmes simultaneously</li> </ul>	<ul style="list-style-type: none"> <li>Skill Hub</li> <li>Aftercare for addicts</li> </ul>	<ul style="list-style-type: none"> <li>Rethabile sports ground</li> <li>Moretele Park</li> <li>Jack Buda</li> <li>Tsweu Street</li> <li>S&amp;S park</li> </ul>	<ul style="list-style-type: none"> <li>Thandanani's buildings</li> <li>Basketball court</li> <li>Homes</li> </ul>
DIVERSITY	<ul style="list-style-type: none"> <li>Xenophobic attacks</li> <li>Homeless coming from other provinces with no ID</li> <li>Lack of diverse evening recreational activities</li> <li>Skills</li> <li>Girls (homeless/substance abusers)</li> </ul>	<ul style="list-style-type: none"> <li>Local street tournament</li> <li>S&amp;S active streets</li> <li>Ethnic groups and Mamelodi sections</li> </ul>	<ul style="list-style-type: none"> <li>3 Programmes</li> </ul>	<ul style="list-style-type: none"> <li>Aftercare for addicts</li> <li>Bricklaying, carpentry, welding, car wash, computer, electrical services, sewing</li> </ul>		
IDENTITY	<ul style="list-style-type: none"> <li>Sequence trend for facility degradation</li> </ul>	<ul style="list-style-type: none"> <li>Mobile truck library</li> <li>Dinho café</li> <li>Jazz festival</li> </ul>	<ul style="list-style-type: none"> <li>De-stigmatisation</li> <li>Keep busy</li> <li>Use what we have</li> <li>Thandanani's library</li> </ul>	<ul style="list-style-type: none"> <li>Heritage sites for children's excursions</li> </ul>	<ul style="list-style-type: none"> <li>Solomon Mahlangu square</li> <li>Moretele Park</li> <li>S&amp;S park</li> <li>Fabian D Ribeiro's house</li> <li>HM Pitje</li> <li>"Kanada House"</li> <li>Monaco</li> </ul>	<ul style="list-style-type: none"> <li>Jack Buda</li> <li>Tsweu Street</li> <li>Homes</li> <li>Thandanani's buildings</li> </ul>

Figure 4.9: Tabulated interview (information according to emergent themes and urban cohesion principles (Author 2021)

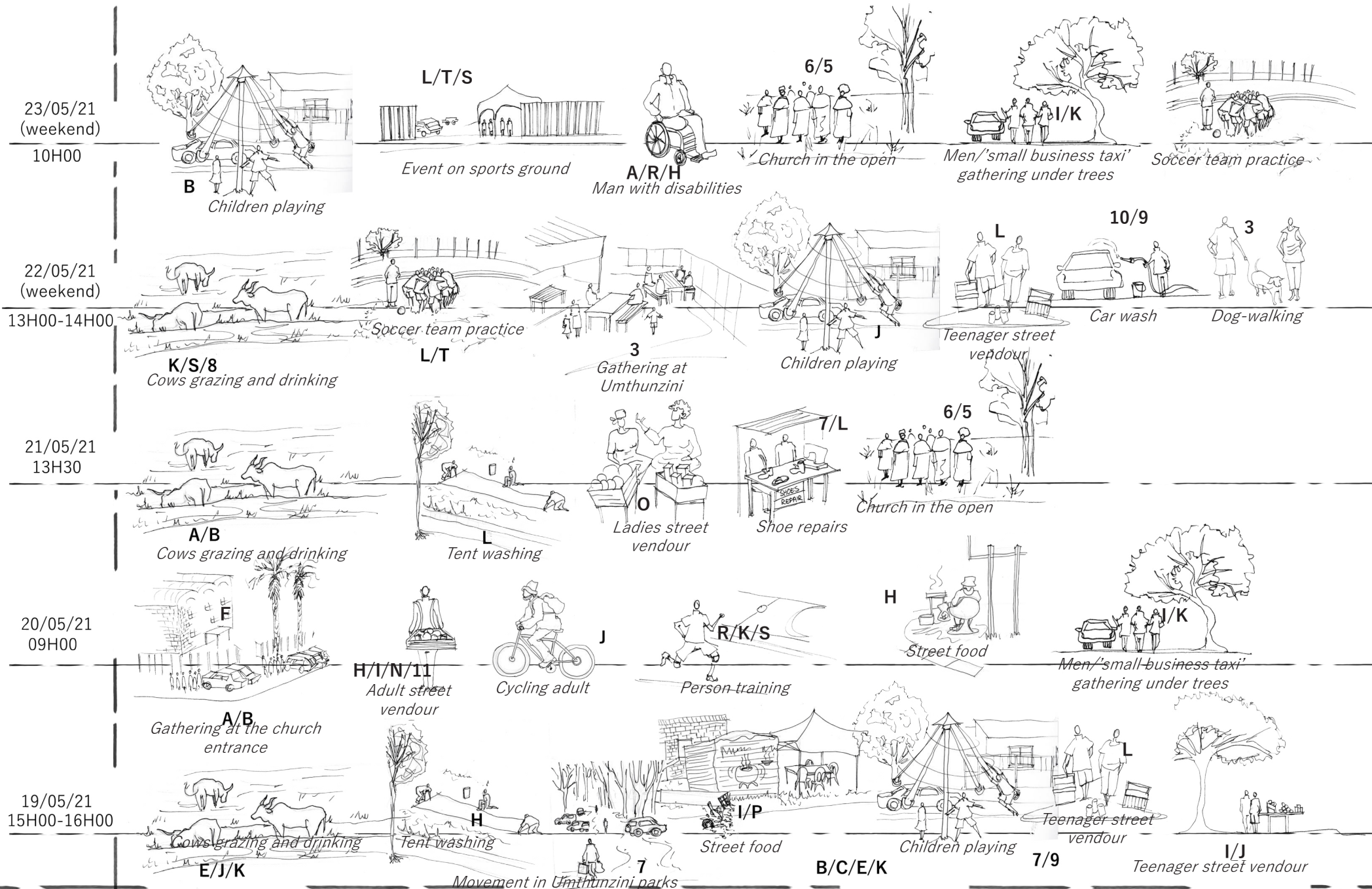
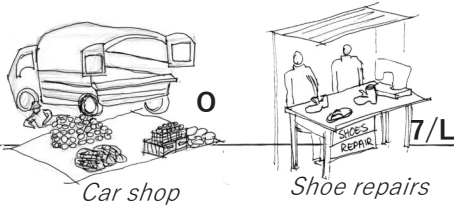
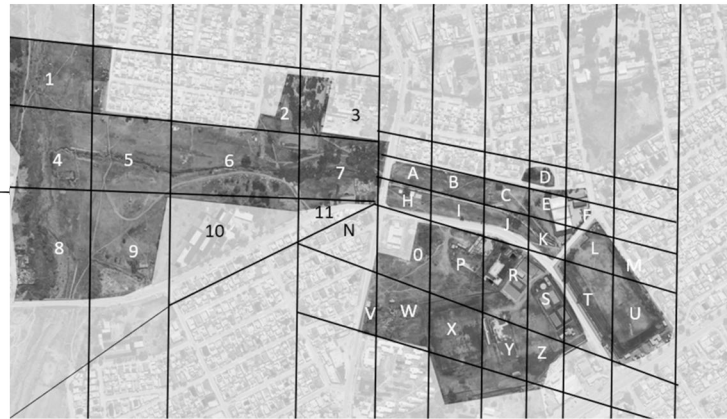
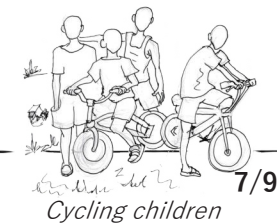
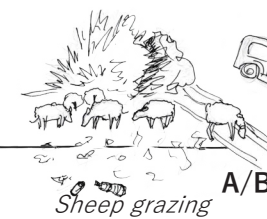
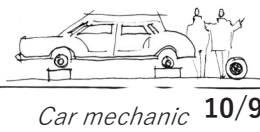
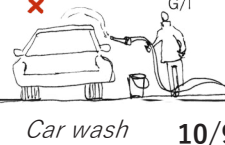


Figure 4.10: Activity mapping of the Buffer Zone (Author 2021)



Activity	Moving	Stationary	Group (G)/ Individual (I)	Economic (E)/ Recreational/- cultural (R)
Car wash		X	G/I	E/R
Jogging	X		G/I	R
Mechanics		X	G/I	E/R
Waiting after school			G	
Dog walking	X		G	R
Sheeps and cattle grazing	X	X	G/I	R
Sitting in grass		X	G	R
Street vendors (adults)		X	G	E/R
Street vendors (teenagers)		X	G	E/R
Shoe repairs		X	G	E/R
Team soccer	X		G	R
Children playing	X		G	R
Church outdoors	X		G	R
Street food		X	G/I	E/R
Tent washing	X		G	E
Men gathering		X	G	E/R
Church gathering		X	G	R
Mobile street vendors	X		I	E
Soccer field event with tents		X	G	R
Cycling	X		G/I	R
Transit and parking	X		G/I	
Umthunzini gathering	X	X	G/I	





## 4.2 NETWORK ANALYSIS AND DESIGN IMPLICATIONS

Intrinsic to their research on public space, Hernan Casakin and Sergi Valera (2020) investigated the use of social network analysis to aid the design of cohesive public spaces. The relevance of this tool lies in the way that the final graphic can aid the designer to quickly identify the people with the most influence, those in need of attention, the most common resources, the networks shared, underused resources or networks, emerging resources, and the cross-generational use of common spaces or places (Casakin & Valera 2020). It is then possible to speculate reasons for the results gained and use the information gleaned as informants that are complimentary to site analyses. Based on these understandings, from this point on, identified entities, groups of people, and environmental components are referred to as ‘actors’ in this work.

The graphic in Figure 4.11 presents the generated product using this approach, and encompasses all the actors gathered through the full data collection process. This figure also includes the relevant actors and connections established beyond the boundaries of NPOs or Ward 23 (such as the municipality or the University of Pretoria). Factoring ‘outer’ networks into the analysis is not only better representative of reality, but it is also a point worth considering in terms of stakeholders and design due to the way in which space is used and perceived (i.e., differing from and between visitors and daily users of and within the area). The perception from the ‘outside’ as well as the space provided for these networks is also, then, important to the overall cohesion of the milieu. Indeed,

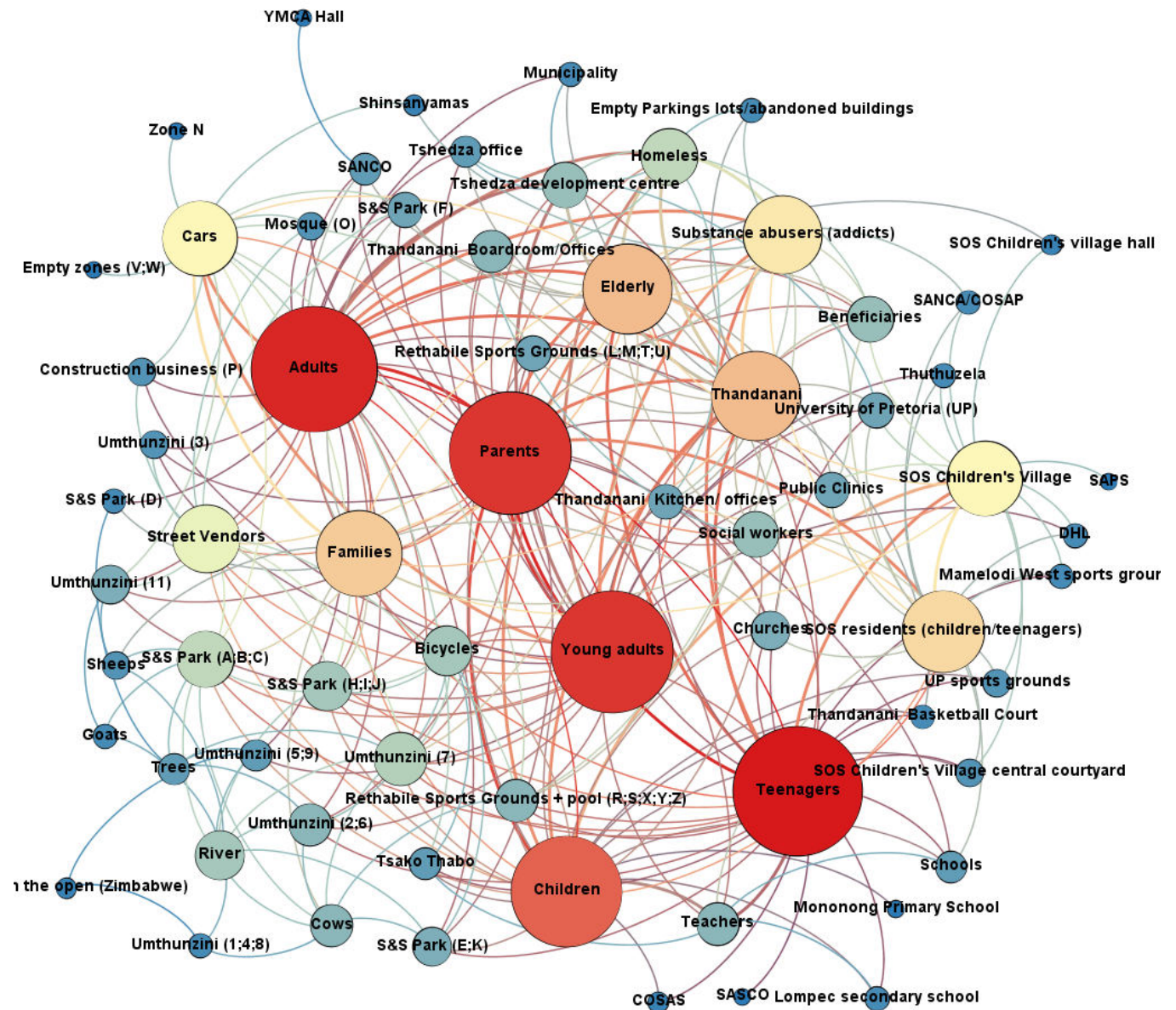
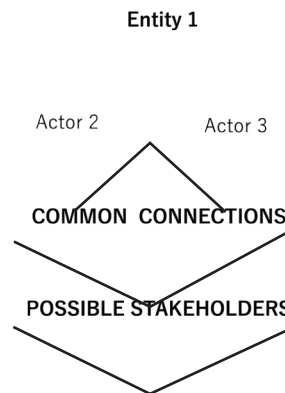
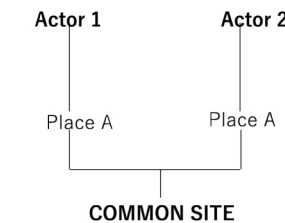
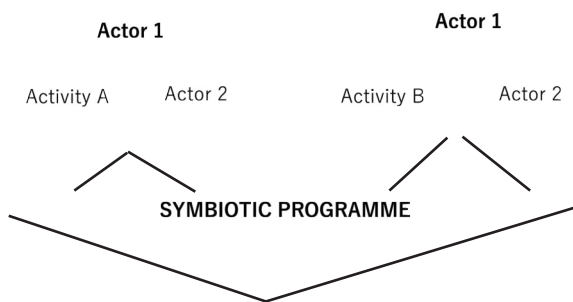
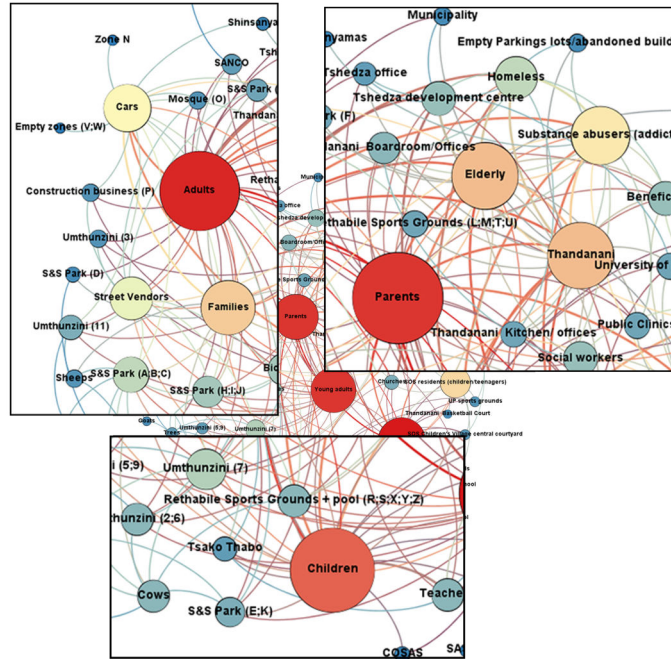
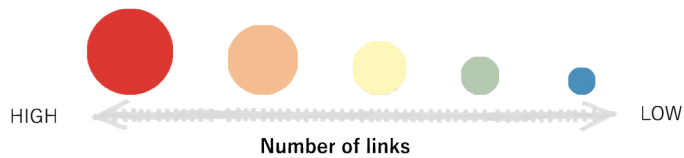


Figure 4.11: Social network analysis of gathered data (Author 2021)



the character of the intervention as a place can, furthermore, repulse or attract people by igniting their curiosity or attachment.

Although not fully representative of Ward 23's totality, the graph has been deemed useful enough to surface important relationships. Similarly, Figures 4.12 provides additional insight into the possible ways in which to read and extract information from the graph for the purpose of interpretations as well as for the upcoming design process. The figure, in particular, presents the set of actors and resources that project some of the most dominant connections and potential; concluding with the significance of such information.

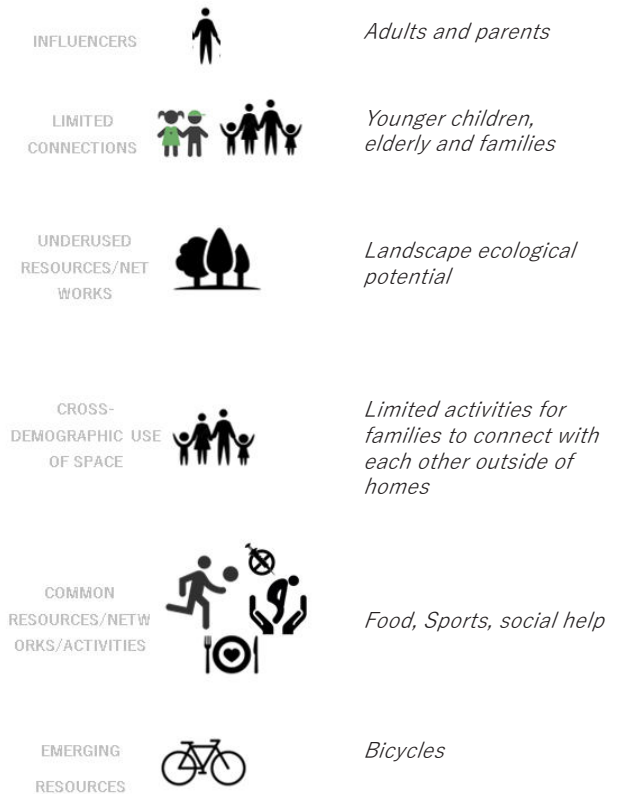


Figure 4.12: Extracting data from diagram (Author 2021)

# 5- FACES OF RECRE- ATION: A TYPOLOGY STUDY

Due to the multifaced aspect of recreation, a typological study has been designed in this paper as a comparative ‘game’ to unearth the maximum information from a group of precedents. A range of artefacts have been chosen, depicting various ways in which recreation manifests architecturally – from programmatically conspicuous examples to more subtle interventions where certain gestures afford recreation to occur by the articulation of certain parts. The sheer number of precedents presented in this study sustains the argument that public spaces come in numerous typologies and complexities but that, ultimately, they all require certain criteria to be fulfilled in order to be functional and contextually relevant (Pinto & Remesar 2012, 2015). Both local and global examples are, thus, analysed, in this work, including the places in Mamelodi observed for this study’s interviews as well as for site visit purposes (e.g., the SOS Children’s Village Mamelodi, Thandanani, and Mamelodi RDP housing).

The game takes the form of a deck of cards (Figures 5.1 and 5.2 – see Appendices E-K), where each precedent is fragmented into its parts so as to better understand its whole. All parts were then analysed according to the principles for urban cohesive public spaces, as explored by Ana Júlia Pinto and Antoni Remesar<sup>1</sup>

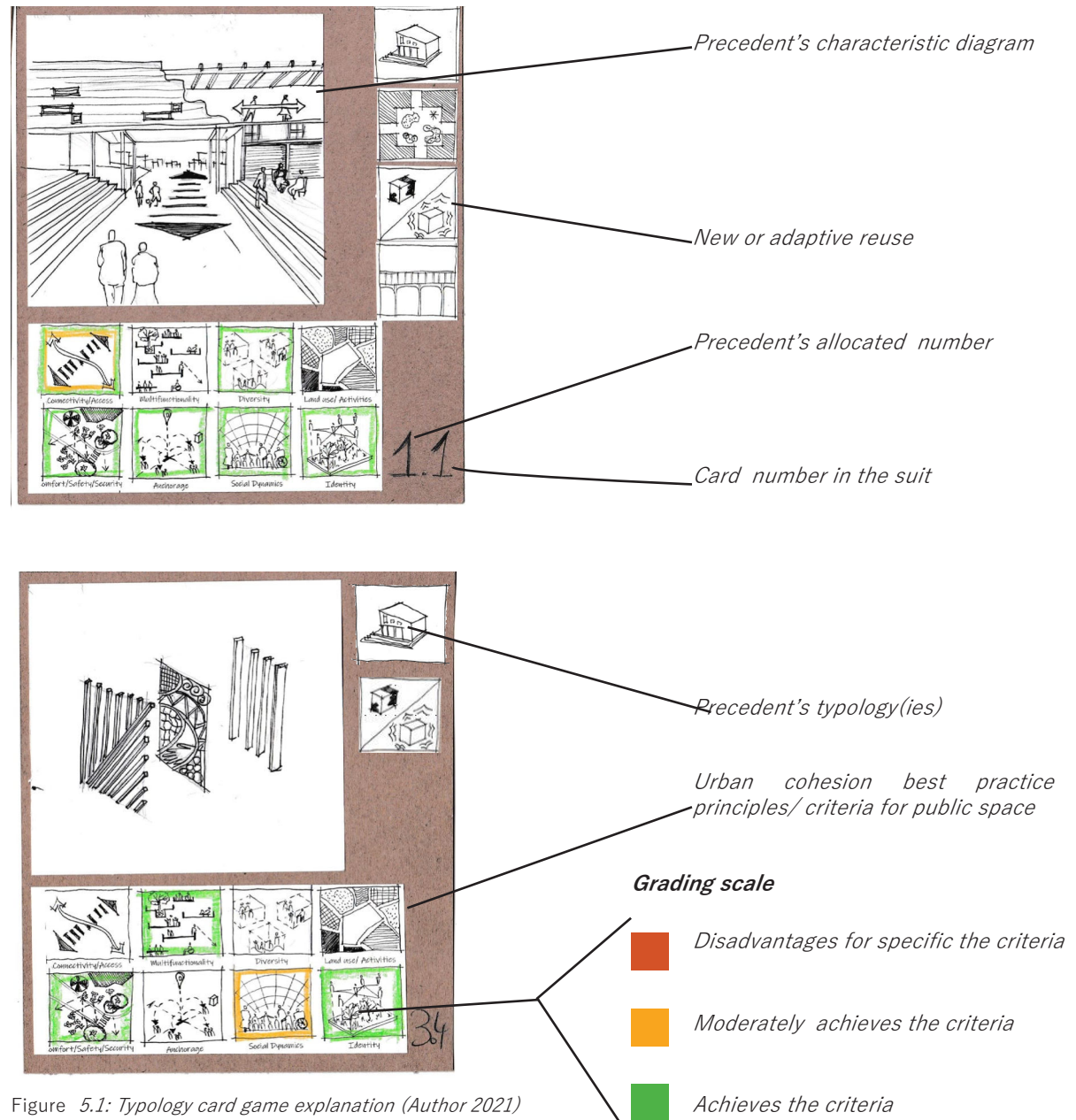


Figure 5.1: Typology card game explanation (Author 2021)

<sup>1</sup> See for definition of terms for all upcoming urban cohesion concepts (From Pinto & Remesar 2012: 10-11, 2015: 7)

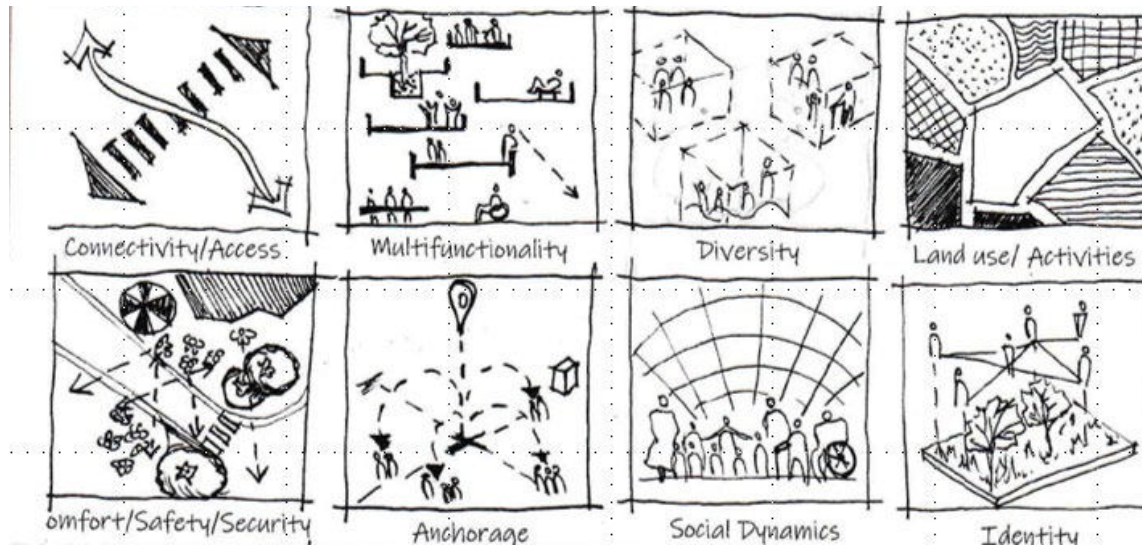


Figure 5.2: Urban cohesion characteristics diagrams (Author 2021)

(Pinto & Remesar 2012: 10-11, 2015:7) (Figure 5.2). Upon completion of the deck, the analysis was tabulated (Appendices E-F), with additional commentary included relating to the types of agencies, networks, 'dispositifs', and affordance exercised by the precedents. It should be noted that Figures 5.3 through 5.20 only present a curated version of the game by extrapolating the most prevalent information.

## 5.1 ACCESSIBILITY, SAFETY & SECURITY

### //Recreation in Movement and Connections

Open public spaces, such as Superkilen (Figure 5.3) and the High Line (Figure 5.4), are likely the most straightforward in terms of continuous, accessible spaces, as they are ultimately urban passages that become places (e.g., urban rooms and event spaces). As such, these spaces function as a type of open-air recreation, with a certain agency, diverse entry points, and a distinctive character (Architecture for Humanities c.2012). The UVA el Paraiso (Figure 5.5) project, the Education Centre (Figure 5.6), the Friends Centre (Figure 5.7), SESC Pompeia (Figure 5.8), and the Writers Theatre (Figure 5.9), for example, all blur the lines between street interface and entrances, where the street ultimately becomes the real entrance to the 'place' (Architecture for Humanities c.2012: , ). Therefore, pedestrians passing by are instantly able to become part of the space without any need to formally enter into it. Some houses in Mamelodi (Figures 1.7 and 5.10) adopt this same principle as a means to connect with street life for business purposes, for leisure in the form of an extension of services (e.g., food, shops, and a car wash), the 'greening' of the pavement

(e.g., playfully contributing to the street similarly to parklets), or the appropriation of the space between rows of houses as playgrounds.

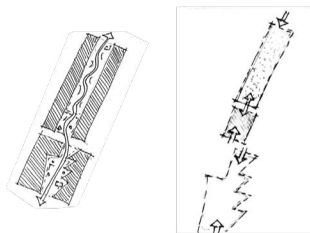
### //Comfort and Safety Characteristics

Both the Maggie's Centres (Figure 5.11) and the Friends Centre pavilion (Figure 5.7) articulate space that exhibits close attention to comfort by using light and transparency as mediums to welcome users, along with inner partitions (i.e., spaces within spaces) to increase levels of privacy (Architecture for Humanities c.2012: , ). The VPUU Active boxes (Figure 5.12), SOS Centre in Lavezzorio (Figure 5.13), and Connect Community's projects (Figure 5.14) all similarly embrace 24-hour occupation, eyes on the street, and scale (e.g., watch towers) to foster safety (Architecture for Humanities c.2012 ). These cases are further linked through a continuity of the street, moments, transportation routes, and mobility spines; thereby supporting the previously noted outcomes (Architecture for Humanities c.2012).

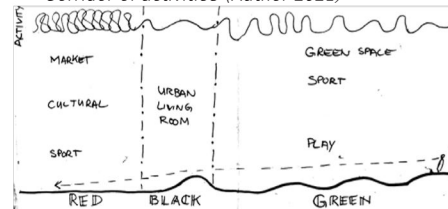
### //Blending security

In comparison to the aforementioned cases, the Nike Football Training Centre (Figure 5.15), due to its function and context, retains its enclosures for security purposes ( ). However, the design and materials of these enclosures become art, and displays of local artists' workmanship are presented in a manner where those barriers no longer feel hostile but rather become "invisible security" ( ). Similarly, UVA el Paraiso (Figure 5.5) adopts a very light meshed front fence and recreational promenade that are directly accessible from the street ( ).

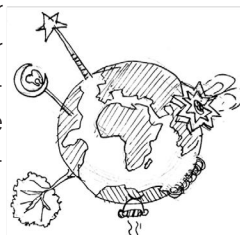
Figure 5.3: SUPERKILEN, Copenhagen, Topotek 1 + BIG Architects + Superflex, 2012 ( Baan 2012)



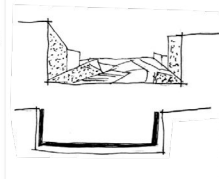
Corridor of activities (Author 2021)



Three parks, different terrain, different themes (Author 2021)

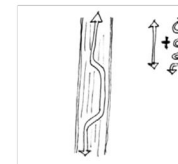
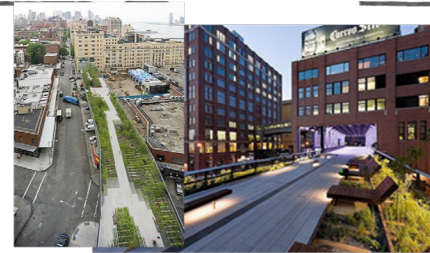


Eclectic aesthetic (Author 2021)



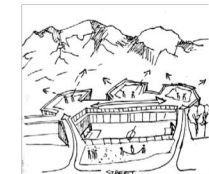
Urban room (Author 2021)

Figure 5.4: HIGH LINE, New York, Diller Scofidio + Renfro, JamesCorner Field Operations ,1999-2011 (Baan 2009)

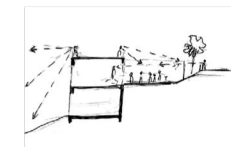


Promenade, ecological corridor, urban room and bridge (Author 2021)

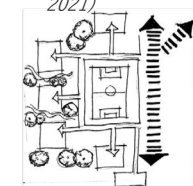
Figure 5.5: UVA EL PARAISO, Colombia, EDU - Empresa de Desarrollo Urbano de Medellin, 2015 (Arango et al. 2015))



Street as entrance and promenade (Author 2021)



Passive surveillance (Author 2021)

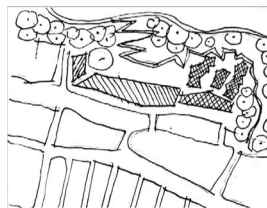
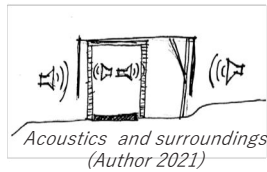


Promenade around the core of the intervention (Author 2021)

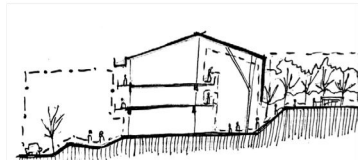


Diversity through terrain and activities (Author 2021)

Figure 5.6: EDUCATIONAL CENTER 'MONTE-CARLO GUILLERMO GAVARIA CORREA', Colombia, EDU - Empresa de Desarrollo Urbano de Medellín ,2012 (Arango 2012)



Anchored in landscape (Author 2021)

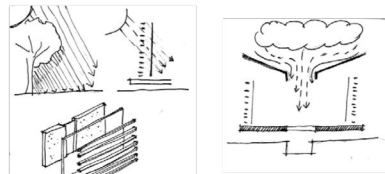
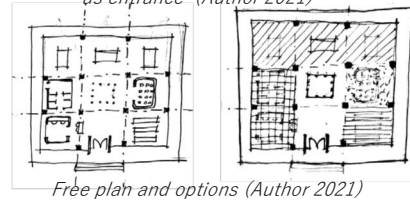
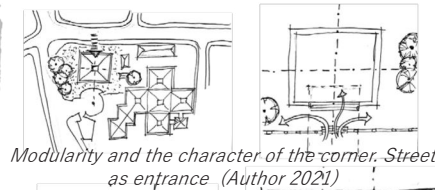


Multifunctionality and the street as a first step (Author 2021)

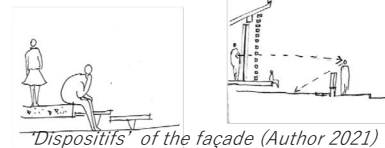


Anchored in site (Author 2021)

Figure 5.7: FRIENDS CENTRE AT ANGKOR HOSPITAL FOR CHILDREN, Cambodia, Cook + Fox Architects, 2008 (Cookfox 2008)

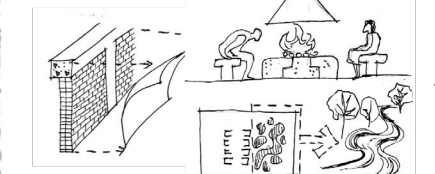
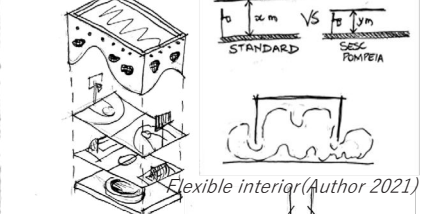
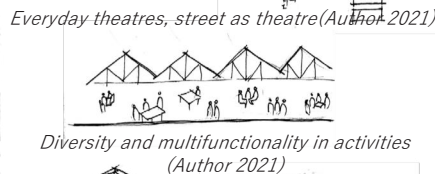
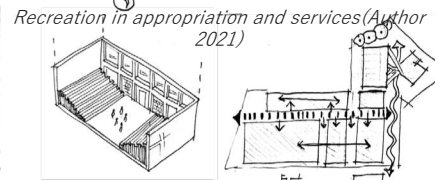
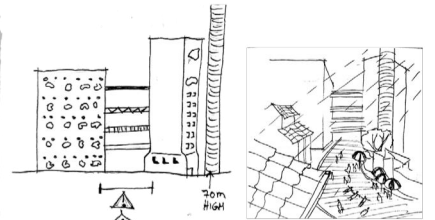


Materiality, rainwater harvesting, ecology and environmental response (Author 2021)



Diverse materials including nature (Author 2021)

Figure 5.8: SESC POMPEIA, São Paulo, Lina Bo Bardi, 1986 (Finotti & Kon S.a.)



By comparison, Thandanani (Figures 5.16) exhibits an interesting situation between its two main buildings, where the space (i.e., street) unofficially becomes part of Thandanani itself. This phenomenon has been created through the paving having been transformed through a volunteer's greening scheme, children's playing and gathering/waiting to enter, and music played within the premises that reaches out to the streets and, thereby, activating the space. This somewhat unintentional turn of events portrays a simple but effective way of extending human presence, comfort, and safety into the street.

## 5.2 MULTIFUNCTIONALITY, DIVERSITY & ACTIVITY

### //Multifunctionality through Scale

Often, multifunctionality is addressed in a vertical manner due to space constraints or for sustainable reasons (see Gymnasio Vertical or SESC Pompeia – Figures 5.8 and 5.17). However, it is also possible to mitigate both horizontal and vertical use of space (see UVA el Paraiso, the Education Centre, VPUU, and Alexandra Interpretation Centre – Figures 5.5-5.6, 5.12, and 5.18). In certain situations – especially in respect to open spaces – a linear approach to multifunctionality can be appropriate, where negative sustainable impacts are minimal. Interventions in such cases (see Superkilen – Figure 5.3) often cover a lot of ground; thereby creating a promenade of multiuse and recreation (). In the case of the RDP housing (Figure 5.10), and SOS Centre in Mamelodi (Figure 5.19), horizontal developments are preferable due to their affordability and easier construction.

Inspiration through the existing (Author 2021)

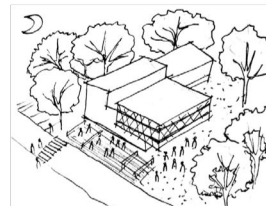
## //Characteristics for Multifunctionality

The Friends Centre accommodates intimacy and spatial multifunctionality through a free plan using modules and partitions that serve to accommodate spatial modification and a variety of activities (Figure 5.7) (). Free plans are also employed for adaptive reuse purposes at SESC Pompeia for similar reasons (Figure 5.8). In comparison, the Connect Community's hall is composed of convertible classrooms permuting into a cafeteria, gymnasium, and auditorium, respectively, in addition to the hall's capacity to accommodate further programmes in the future (Figure 5.14). Thandanani's (Figure 5.16) most multifunctional space is its basketball court (previously noted), which has been adapted to host simultaneous recreational activities, since basketball is not yet a popular activity in the area.

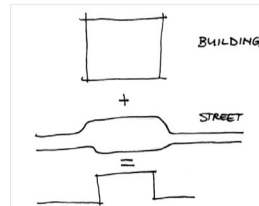
## //Social and Ecological Diversity

The Friends Centre (figure 5.7), UVA El Paraiso (figure Of note is that UVA el Paraiso (Figure 5.5), the Friends Centre (Figure 5.7), the Educational Centre (Figure 5.6), and Maggie's Centres (Figure 5.11) all incorporate ecological principles and/or nature as a core aspect of their designs. Furthermore, the Connect Community achieves diversity through its community's spatial arrangement and sharing of physical resources in the neighbourhood, such as schools offering their gardens as parks (Figure 5.14 ). In the same light, although the Writers Theatre only offers one main programme, it presents this programme in more than five different experiential performance spaces (i.e., both informal and formal), along with a relation to the outdoors, which encourages another type of performance (Figure 5.9). These variations aid to engage audiences

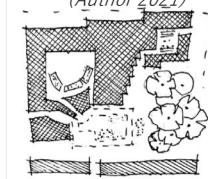
Figure 5.9: WRITERS THEATRE, United States, Studio Gang, 2016 (Studio Gang 2016)



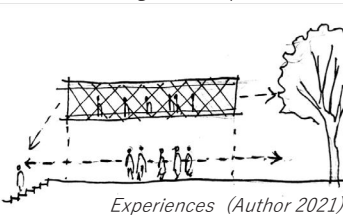
Street entrance (Author 2021)



Theatre presence on the street and merge (Author 2021)

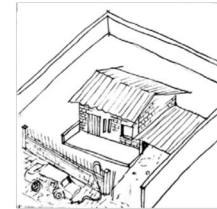


Diverse stages and experiences (Author 2021)



Experiences (Author 2021)

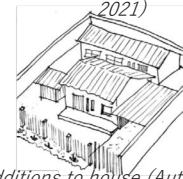
Figure 5.10: RDP HOUSING, Mamelodi, South African Government, c. 1994 (Author 2021)



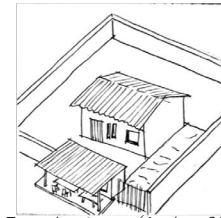
Car wash in front (Author 2021)



Private garden and public 'greening' (Author 2021)

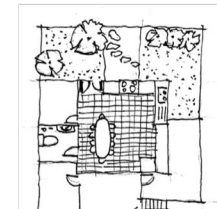


Additions to house (Author 2021)



Front business (Author 2021)

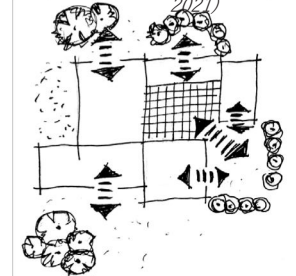
Figure 5.11: MAGGIE'S CENTRES, Multiple architects, Europe and China, c1996 (Maggies S.a.)



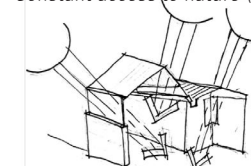
Central kitchen (Author 2021)



Privacy through partitions and/or atmosphere (Author 2021)

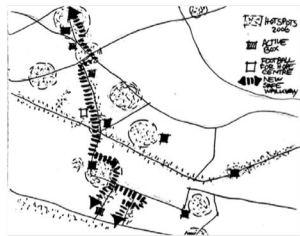


Constant access to nature (Author 2021)

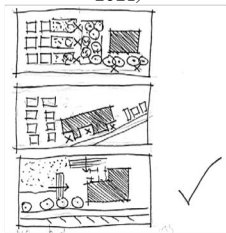


The importance of light (Author 2021)

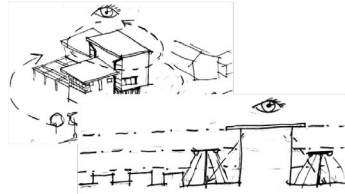
Figure 5.12: VPUU ACTIVE BOXES , West-ern Cape, VPUU, 2006-14 (VPUU 2017)



Danger zones and paths with activities (Author 2021)



Visibility (Author 2021)

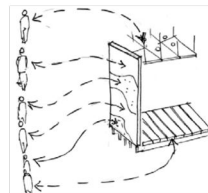


All-a-round passive surveillance (Author 2021)

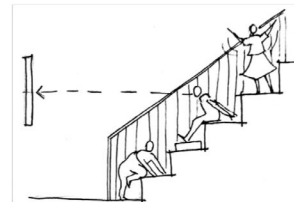
Figure 5.13: SOS CHILDREN'S VILLAGES LAVEZZARIO COMMUNITY CENTRE, Illinois, Studio Gang Architects, 2008 (Studio Gang 2008)



'Opened' corner, visibility and relations (Author 2021)

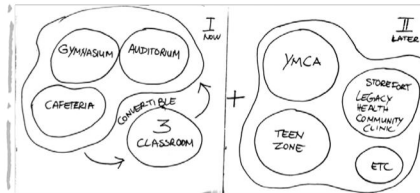


Unity through materiality. Materials donated by several people becomes the identity of the place (Author 2021)

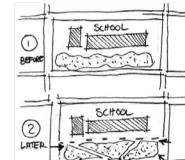


Circulation as play and meeting area (Author 2021)

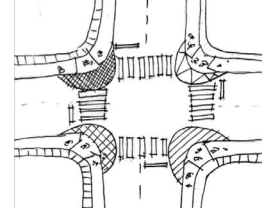
Figure 5.14: CONNECT COMMUNITY , Houston, Gulfton, Sharptown, Purpose Built Communities (Connect community S.a.)



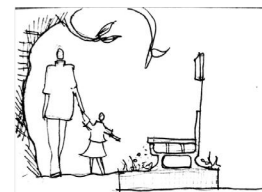
Polyvalent rooms with possibility of extension (Author 2021)



Sharing resources. School lending garden as park to community (Author 2021)



Traffic intersections as community spaces. Paintings etc (Author 2021)



Parklets as mean of creating small places and/or moments in big spaces like streets (Author 2021)

and performers in different atmospheres and levels of intimacy.

The Educational Centre (Figure 5.6), in turn, plays with acoustics, where sound becomes an intangible material mediating inside and outside, water and nature. The diversity of activities undertaken through the senses further increases people's awareness of the place's parts and whole. Similarly, the notion of 'genius loci' and performance are also present in SESC Pompeia's outdoor and indoor spaces (Figure 5.18), where the articulation of 'moments' attracts cross-generational users, with some areas even becoming unexpected theatres.

### //Transcending activities

SESC Pompeia's design (Figure 5.18) immortalises the cultural and recreational appropriation of an historic space (i.e., in the form of a drum factory). The current set of activities are a blend between the community's recreational endeavours that have been projected onto an abandoned industrial space, with new activities added to complement these endeavours (i.e., mainly sports and water services). This change of land use and activities over time is similar to both the RDP housing depicted in Figure 5.10 and Than-danani in Figure 5.16, where services such as food, information, and leisure programmes have gradually been incorporated. The focus on the possibility of space use rather than the buildings' forms further allows for such flexibility. Similarly, Superkilen's three squares (Figure 5.3) open up such opportunities by suggesting many activities without dictating specific behaviours, while their colour coding and articulation provide a type of 'umbrella' that groups similar actions ().



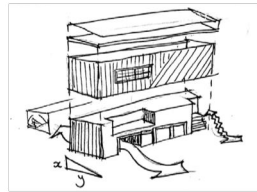
## 5.3 ANCHORAGE, SOCIAL DYNAMICS & IDENTITY

### //Recreation as Various Anchors

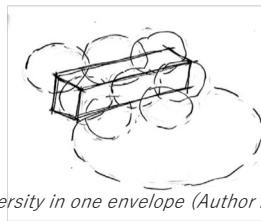
The Friends Centre's pavilion (Figure 5.7) offers a gateway for visitors into the Angkor Hospital for Children without necessarily having to enter the healthcare facility; thereby acting as an information middleman (Architecture for Humanities c.2012). The pavilion's placement and modularity also relate to the healthcare facility and is further enhanced by its integration into the site's corner as a landmark. In addition, the pavilion's materiality alludes to the culture of Cambodia in celebration of the greater context (Architecture for Humanities c.2012).

Of similar note is that the Alexandra Interpretation Centre (Figure 5.18) reflects the culture and character of the township of Alexandra as part of its design and materiality. SESC Pompeia's anchorage (Figure 5.8) also lies in its site's historical context (i.e., the adaptive reuse of a drum factory into a cultural centre, which was inspired by the community's appropriation of the vacant space) and its meaning for and within the community (). Similarly, the LEA Mobile Library (Figure 5.20) is an example of establishing a new space in an existing space as a temporary anchor. Such a space cannot, however, successfully exist on its own, although its mobility can influence the area in which it is placed by changing the surrounding's atmosphere throughout the day ().

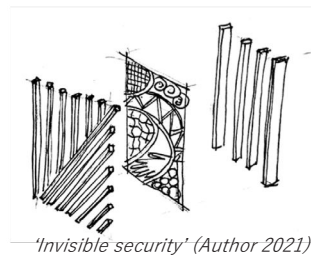
Figure 5.15: NIKE FOOTBALL STADIUM, Johannesburg, RUF-Project & Luyanda Mpahlwa DesignSpaceAfrica, 2010 (Living Space 2013)



Materiality and identity of places (Author 2021)

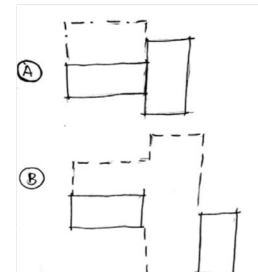


Diversity in one envelope (Author 2021)

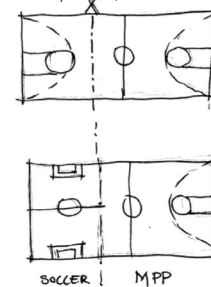


'Invisible security' (Author 2021)

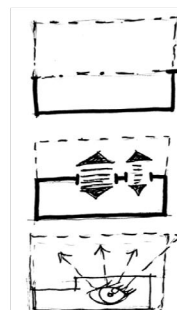
Figure 5.16: THANDANANI DROP INN CENTRE, Mamelodi, 1970 (buildings)/ 2011 (current function) (Author 2021)



The in-between street becomes part of the place (Author 2021)

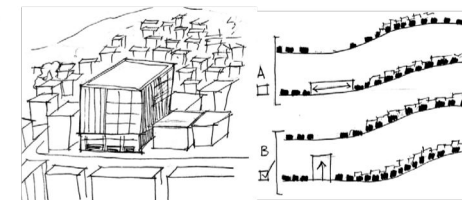


Adaptable basketball court; now soccer and multipurpose (Author 2021)

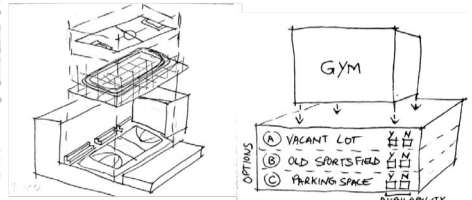


Passive surveillance (Author 2021)

Figure 5.17: GIMNASIO VERTICAL (Vertical gyms), Venezuela, Urban-Think Tank c2001



Verticality and anchorage into the surroundings (Author 2021)

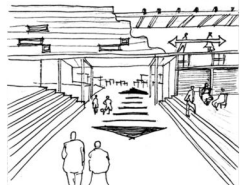
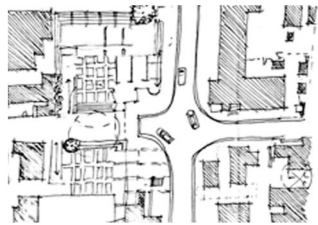


Multifunctional and diverse space. Recycling of vacant lot (Author 2021)

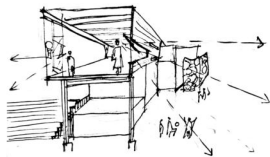


Contextual materiality (Author 2021)

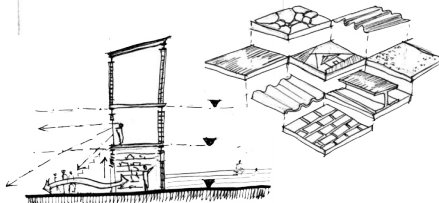
Figure 5.18: ALEXANDRA INTERPRETIVE CENTRE, Johannesburg, Peter Rich Architects, 2010 (Peter Rich Architects 2010)



Anchored into context (Author 2021)



Passive surveillance (Author 2021)



Diversity, multifunctionality and contextual response through materiality and community involvement (Author 2021)

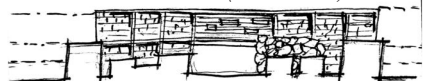
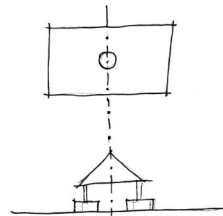
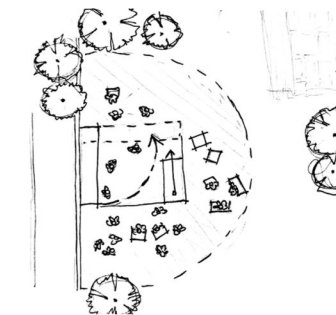


Figure 5.19: SOS CHILDREN'S VILLAGE, Mamelodi, 1985 (Author 2021)



Central point of gathering and event, the rondavel (Author 2021)

Figure 5.20: MOBILE LIBRARY, Foro Lindbergh (Parque México), Project for Public Spaces + Lugares Públicos, 2015 (Project for Public Space c2020)



A space within a space (Author 2021)

## //Articulating Parts for Social Interaction

Based on the previously presented information, in terms of social dynamics, paths and nodes are often used as mediums. For example, both SESC Pompeia (Figure 5.8) and Superkilen (Figure 5.3) employ the crossing of paths and space diversity, while the Writers Theatre focusses on intimacy through proximity for social experiences (Figure 5.9). The SOS Centre's (Lavezzorio) main atrium similarly becomes a 'dispositif' for social encounters through the main circulation space, which acts as an indoor playscape as well as a landmark (Figure 5.13).

With regard to the SOS Centre in Mamelodi (Figure 5.19), the rondavel in the courtyard acts as an 'axis mundus' for social interaction. This is a very simple space with a complex connection with and to outside networks during social events and gatherings (see the SOS Children's Village Mamelodi Focus Group 1 2021). In comparison, Thandanani's basketball court (Figure 5.16) forms the equivalent of the SOS Centre's (Mamelodi) rondavel, while the Maggie's Centres (Figure 5.11) articulate kitchens as their core (i.e., where various interactions occur). The Friends Centre's patio 'skirt' (Figure 5.7), in turn, also invites sitting and, thus, offers an activation of the façade.

## //Cohesive space identity through making

Identity is often the realm where multiple agencies operate; thus, in several of the precedents, such as the Alexandra Interpretation Centre (Figure 5.18), Superkilen (Figure 5.3) (although a very eclectic approach), SOS Centre in Lavezzorio (Figure 5.13), Nike Football Training Centre (Figure 5.15), and RDP houses (Figure 5.10), some materials are given, as-

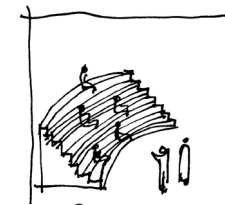
sembled, or made by the future users of the space or close affiliates. In this way, it is possible to create a sense of attachment and connection with the space and people as an additional layer to the inherent social dynamics. The artefacts also become displays of the communities' skills and identity and, through this process, the people are connected to each other – either by working together or by gaining awareness of other's contributions and presence.

### //Cultural identity

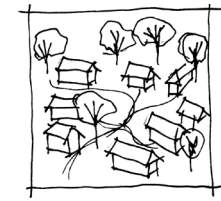
Cultural identity is intrinsic to the Friends Centre (Figure 5.7) – as seen in its local construction methods – while other precedents, such as SESC Pompeia (Figure 5.8), UVA el Paraiso (Figure 5.5), Gymnasio Vertical (Figure 5.17), the Education Centre (Figure 5.6), and Maggie's Centres (Figure 5.11) all build identity through the use of simple cues or principles such as forms, atmosphere, or materials that are familiar to their users.

## 5.4 FINDINGS

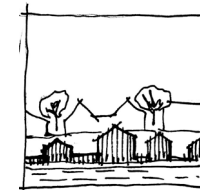
Each recorded precedent can be categorised in at least one of the following typologies, namely 1) centres (i.e., sports, care, leisure, interpretive, drop-in, community, or village); 2) plazas; 3) parks; 3) infrastructures; 4) houses; 5) mobile libraries; 6) precincts or neighbourhoods; 7) bridges 8) theatres; 9) schools; and 10) pavilions. Each category offers different possibilities. The duality of the presented spectrum of typologies against the realities found in Mamelodi further suggest that perhaps the most appropriate response would not be to choose one specific typology and modify it to suit the situation but rather to look at a combination of different typologies. Additionally, it can be confirmed that in different circumstances, the street reoccurs as a 'dispositif'; thereby expressing the polyvalence and efficacy of streets as urban cohesion agents (Figure 5.21).



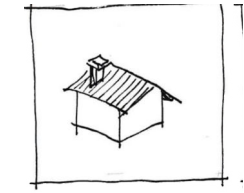
*Centre*



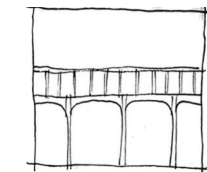
*Precinct*



*Neighbourhood*



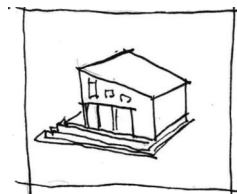
*Homes*



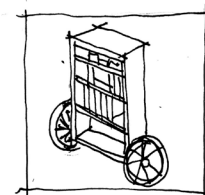
*Bridge*



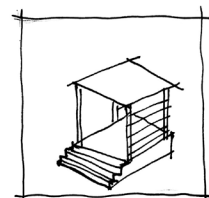
*Park*



*Centre*



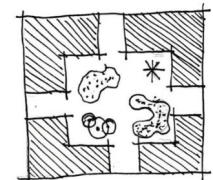
*Mobile library*



*Pavilion*

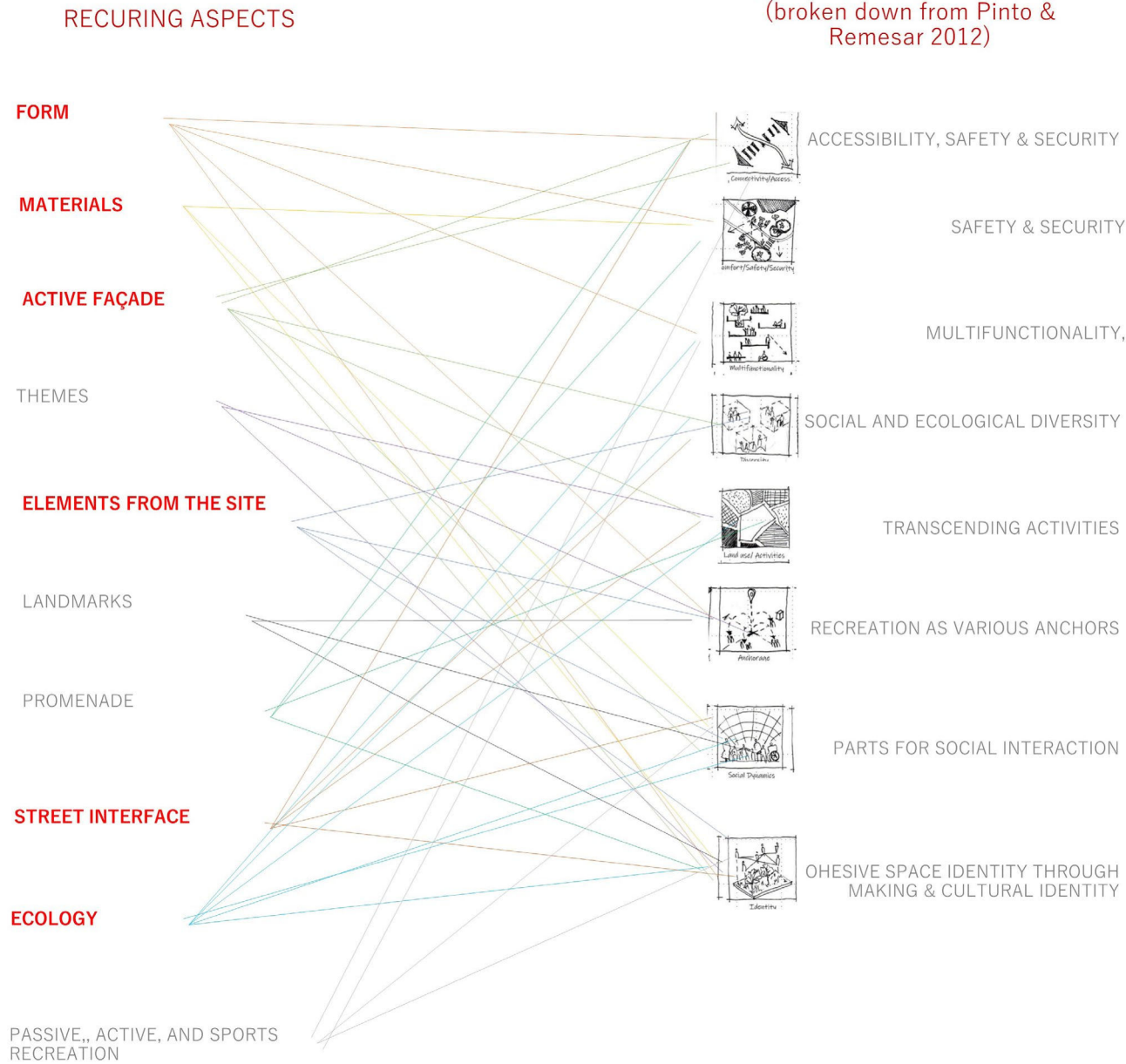


*School*



*Plaza*

URBAN COHESION THEMES  
(broken down from Pinto & Remesar 2012)



*NB: Red writing highlights portions taken into consideration for both design and technology. Black is mainly design*

# 6- CONCEPTUAL INVESTIGATION

## 6.1 PLACE WHERE THE NETWORKS CONVERGE: THE MEETING POINT OF CITY AND HOUSE

The precedent studies presented in the previous section suggest ways to ground networks into physical solutions while still considering urban cohesion. However, it is still possible to notice that a portion of the information to move from networks to form remains slightly broad. As such, in order to move forward in this current project, it was necessary to, despite the preceding information, find a common thread between all the pieces analysed.

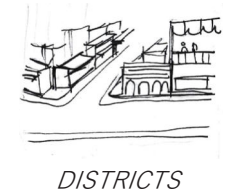
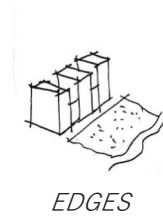
In order to achieve this end, it was important to deal with networks involving many ‘moments’ across both larger and smaller sites. It was also important that, for a cohesive intervention to be realised, these networks be relative to a cohesive city. When these reflections are paired with the plurality of recreational public spaces, it then becomes possible to refer to the following:

“A city is a city because it is also a large house. A house is a house because it is also a small city.”<sup>1</sup>

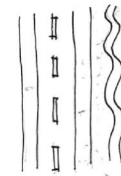
And

“I am concerned with twin phenomena, with unity and diversity; part and whole; small and large; many and

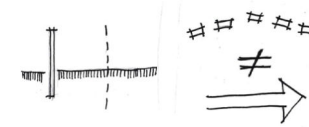
Lynch's principles



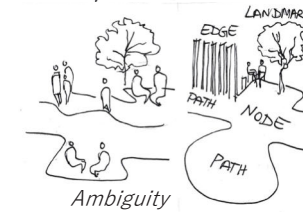
Use



Circulations, channels of movement, streets walkways, transit lines, canals, railroads

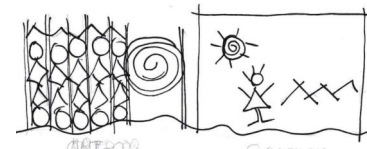


Linear elements excluding paths, boundary



Use duality

Shortcomings and Complimentary considerations



More than circulation, moments, occasion

few; simplicity and complexity; change and constancy; movement and rest; open and closed; inside and outside — with why they too are ignobly halved and the halves hollowed out, and why they are withheld from opening the windows of the mind.”<sup>2</sup>

In both these statements, van Eyck acknowledges that the city and its artefacts are made out of relations that can be perceived in various ways. Built form can, thus,

be treated and explored like a city, while a city, in turn, can be explored as if it were an extension of one’s own home (Figure 6.1). It is a particular kind of design that recognises the importance of interfaces and connectivity, which places itself somewhere between architecture and urban design (Hertzberger 1991: 57, 61). One may even include interior and landscape design. These ideas about how space is experienced and made opens up possibilities of what a built form could be (e.g., a building as a series of urban rooms and a square as a series of free plans) as well as how one might imagine their points of con-

<sup>1</sup> Aldo van Eyck (1962), as presented in Georges Teyssot (2011: 62): Aldo van Eyck and the Rise of an Ethnographic Paradigm in the 1960s.

<sup>2</sup> Aldo van Eyck (1962), as presented in Harm Lammers (2012: 47): Potentially Unravelling and Reconnecting Aldo van Eyck in Search of an Approach for Tomorrow.

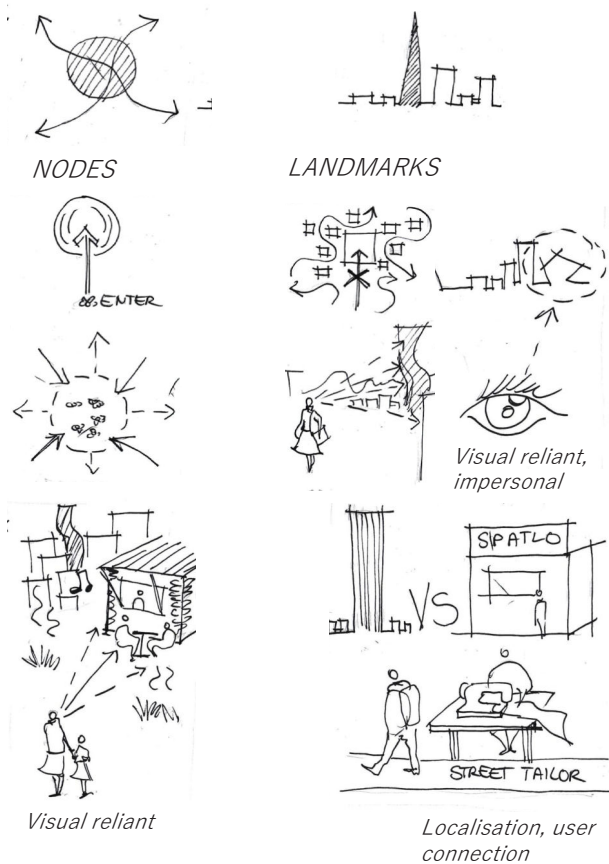


Figure 6.2: Corner shoe tailor {Author 2021}

vergence (e.g., as recreation).

Building on the argument that public spaces can act as connectors in the city, it was deemed appropriate in this paper to pursue the idea that architecture as a ‘dispositif’ can be articulated as a small and accessible city. This understanding then allows for the grounding of networks, multifunctionality, hybridity, and a diversity of processes within the current project’s broader frame. Thus, identifying the right set(s) of parts as well as how they all come together as a complex and legible integrated whole is crucial.

As a departure point to understand the physical legibility of a city, then, it is possible to turn to Lynch’s research on how people read the city through the principles of paths, edges, districts, nodes, and landmarks (Figure 6.2) (Dalton & Bafna 2003; Damayanti & Kosak 2016). Although these elements form a good basis for a general urban navigation, they are still limited by 1) their heavy reliance on visual characteristics or very distinct form, 2) the ambiguity of interpretation of the principles, 3) the lack of inclusion of people, and 4) consideration for contextual idiosyncrasies (Figure 6.2) (Dalton & Bafna 2003: 59.14-59.18; Dalton *et al.*

2019: 4). Therefore, Lynch’s findings, which can essentially be understood as ‘wayfinding principles’, can be complimented by the additional layers of social wayfinding, twin phenomena, the in-between, and the inclusion of a diversity of users (Dalton *et al.* 2019; Farhady & Nam 2009; Farr *et al.* 2012; Gommel 1995; Hertzberger 1991: 54 ).

Since nothing exists in isolation, the presence of people (i.e., social trails) as well as their past activities (i.e., traces) influence the perception of space, safety, navigation, and even landmarks (Figure 6.3) (Dalton

*et al.* 2019: 9; Gommel 1995: 391). Additionally, wayfinding devices can form part of people's everyday lives (e.g., daily shopping, children drawing on pavements, art, tourism displays, etc.) without initially being designed as semiotic elements (Figure 6.3) (Dalton *et al.* 2019: 11; Farr *et al.* 2012: 718-719). This reality is supportive of the twin phenomena, which assert that ambiguities, oppositions, and constraints of elements can elevate design. Furthermore, the in-between considers the many relationships between interfaces and streets, and deems these to be 'thresholds' where the human is made visible (Hertzberger 1991; Lammers 2012; Teysso 2011). The principles of the street and city are, thus, yet again prevalent and can be permuted while also considering orientation, visual fields, and even sensory experiences (Figure 6.4) (Gommel 1995; Lammers 2012: 47).

Contextually, in Mamelodi, a particular shop on the corner can be a local landmark, an edge, and/or a wayfinding device (Figure 6.5). In a series of essays in *Rogue Urbanism, Emergent African Cities* (2013), several authors have set reminders of what makes the African city 'whole'. Of note is that they address African historical and urban realities such as scale, the phenomenon of streets and culture, township economies, public art, and site-specific performance (Barac *et al.* 2013). On the topic of ecology and urban systems integration, authors in the various aforementioned essays have also enticed city makers to "be ambitious" (Makeka 2013: 445) for an equitable world, and to find what 'inspires' in a city in order for it to retain its attributed identity as a platform for continuous networking (Barac *et al.* 2013).

## 6.2 URBAN FRAMEWORK & BLOCK VISION: VISIONS FOR MAMELODI AND WARD 23

By internalising the previously presented ideas of a 'small city', the aim of this paper is to, firstly, create a vision for the area, which involves establishing a system capable of reconnecting existing recreational places in need of enhancement, publicity, maintenance, growth or, simply, regeneration. This attempt occurs as both formal and spontaneous recreational insertions that form 'activators' in or near these spaces. The acupuncture strategy then, secondly, aims to celebrate the richness as well as the actors forming part of the 'social fabric as infrastructure' as well as the public open spaces networks.

Based on prior research, it was found that by exploring the notion of an ecomuseum (Figure 6.6) as a conceptual urban scheme, there lies the possibility to tie this current project together with both present and future recreational spaces as a continuously evolving framework. An ecomuseum can best be defined as "a dynamic way in which communities preserve, interpret, and manage their heritage for sustainable development" (Simeoni & De Crescenzo 2018: 1), which emphasises a "sense of place" (Borrelli & Davis 2012: 31) through the idea of a "museum as place" instead of a "museum as building(s)" (Doğan and Timothy 2020: 137). Hence, this approach opens dialogues for and between a multitude of processes occurring in a community into places that could preserve their essence (i.e., their social and cultural heritage, as presented in this study of Mamelodi). Similarly, with respect to this dissertation's argument on public space,

ecomuseums can form part of networks across a larger area that is never truly 'finite' (Borrelli & Davis 2012: 33).

The framework proposal for this ecomuseum (Figures 6.7 and 6.8), therefore, incorporates two visions, namely "Elke[Bitso]" (i.e., exploring the urban interior and talent library) (Niebuhr 2021) and the 'small city for recreation'. This collaboration with an interior architecture researcher imagines a cultural spine in Mamelodi that focusses on the diversity of recreation as well as the showcasing of children's and adolescents' talents while promoting safety. Each place's created or regenerated aims are focussed on involving different levels of people-participation; thereby providing a platform for the community's advertisement while also engaging with the environment, different cultures, and the broader Tshwane community.

A system of anchors and satellites forms the basis of the framework, in conjunction with relevant heritage and movement corridors. The created gradual spine further allows people to travel safely while also experiencing various stimuli representing the nature of Mamelodi. Figure 6.9 presents the final chosen site for the dissertation's intervention.

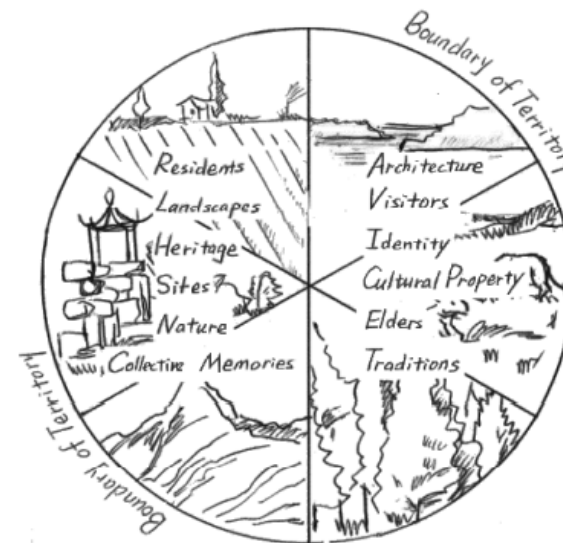
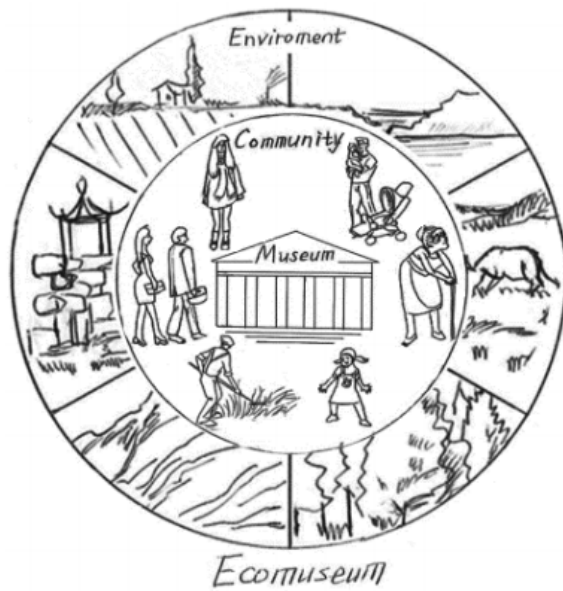
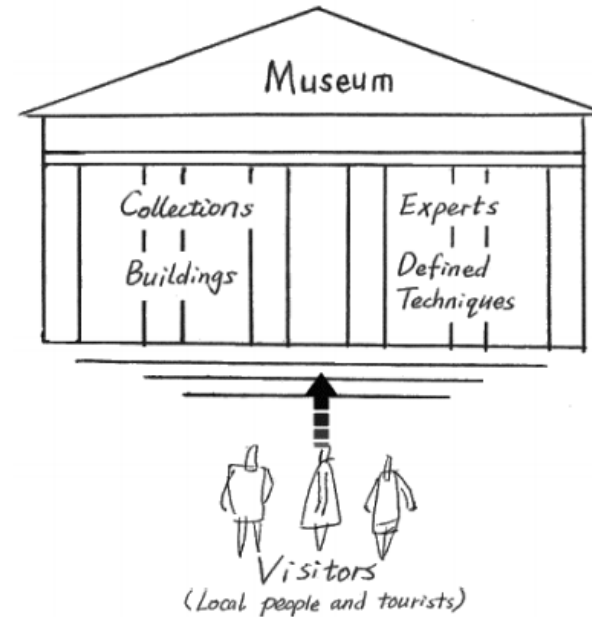
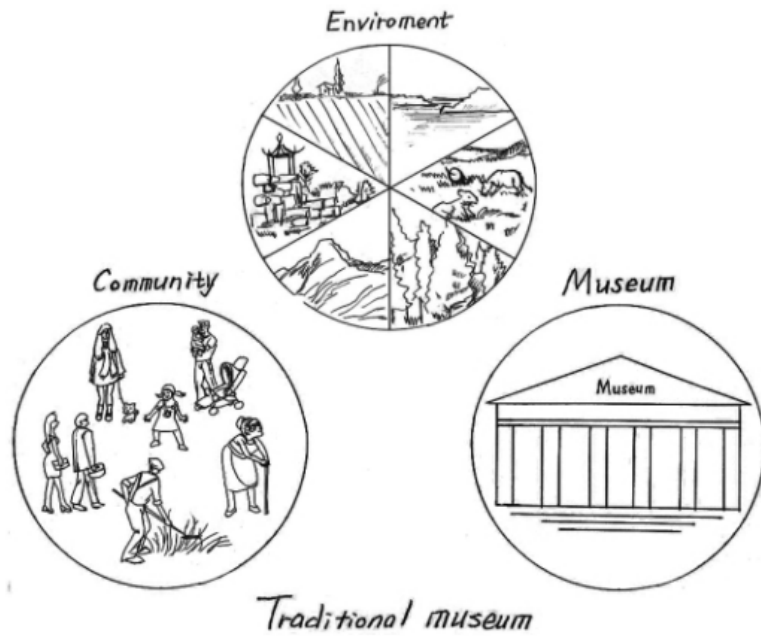


Figure 6.3: Ecomuseum explanation and characteristic diagrams (Chang c2015)



## ECOMUSEUM VISION

### *“SMALL CITY”: Outreach Precinct*

*PASSIVE RECREATION  
ACTIVE RECREATION  
SPORTS*

*LANDSCAPE AND  
ENVIRONMENTAL  
CELEBRATION*

*COMMUNITY  
ADVERTISEMENT AND  
INFORMATION/HELP*

*SITES EXPLORATION  
AND LINKAGES*

### *ELKE[BITSO]: the urban interior talent library*

*CREATIVE WRITING*

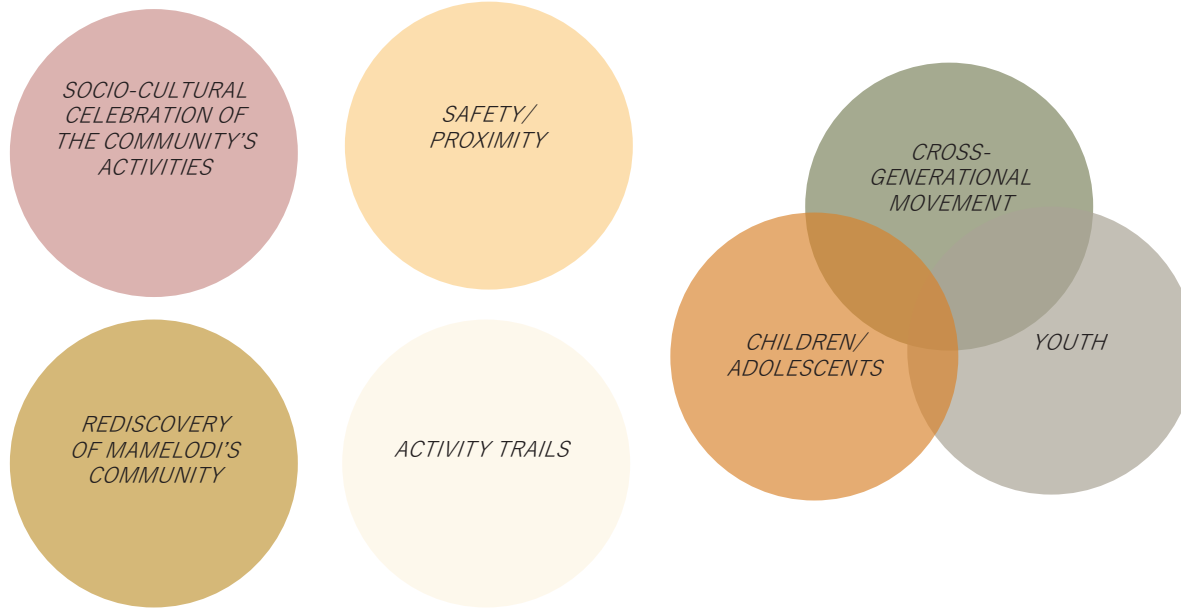
*PERFORMANCE  
ART  
MUSIC*

*TEACH  
EXPRESS*

*SAFETY TRAILS FOR  
CHILDREN AND  
ADOLESCENTS*

Figure 6.4: Mamelodi Vision Combining “Small City and  
“Urban interior (Elke[Bitsso]) (Author 2021; Niebuhr  
2021)

**OBJECTIVES**



**STRATEGY**



ANCHORS

**Locations:** Sites with current everyday activities (educational facilities, sports grounds)

**Impact:** Extended safety, cohesion, collaboration, recalling satellites, place for gathering



TRAILS

**Locations:** Between anchors and satellites

**Impact:** Extended safety, anchor and satellite connector, cycling routes, cultural journey



PRIMARY SATELLITES

**Locations:** Smaller hubs near places of significance, neglected recreational sites or local landmarks (attractions)

**Impact:** Extended safety (in proximity of trustworthy members of the community), advertising place of significance and anchors



SECONDARY SATELLITES

**Locations:** Smaller hubs between primary satellites

**Impact:** Extended safety (in proximity of trustworthy members of the community), moments stitching the trails

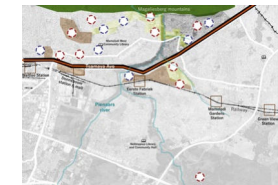
**INFORMANTS**



Education



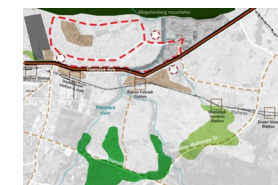
Safety and danger zones



Cultural mapping



OPSF



RSDF

Figure 6.5: Urban vision objectives, strategy and informants {Author 2021}

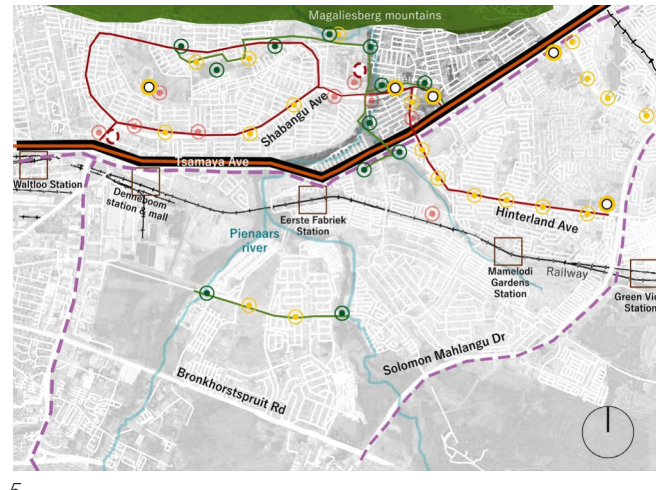
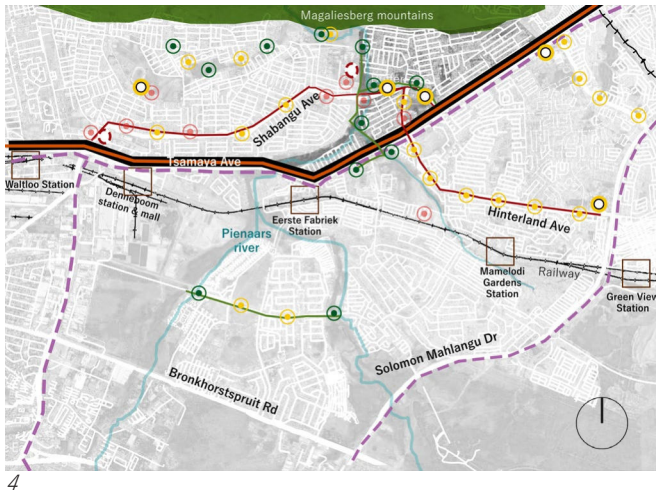
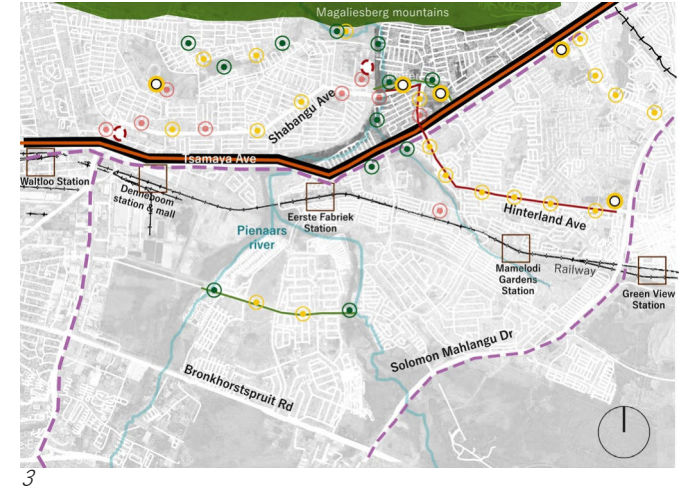
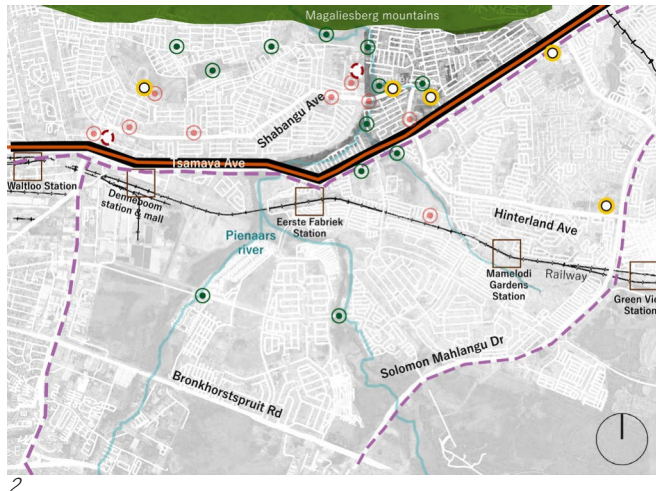
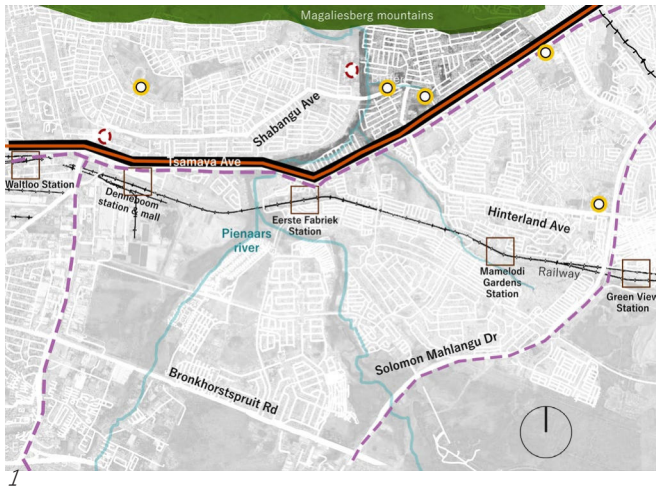


Figure 6.6: Evolution of the urban framework {Author 2021}

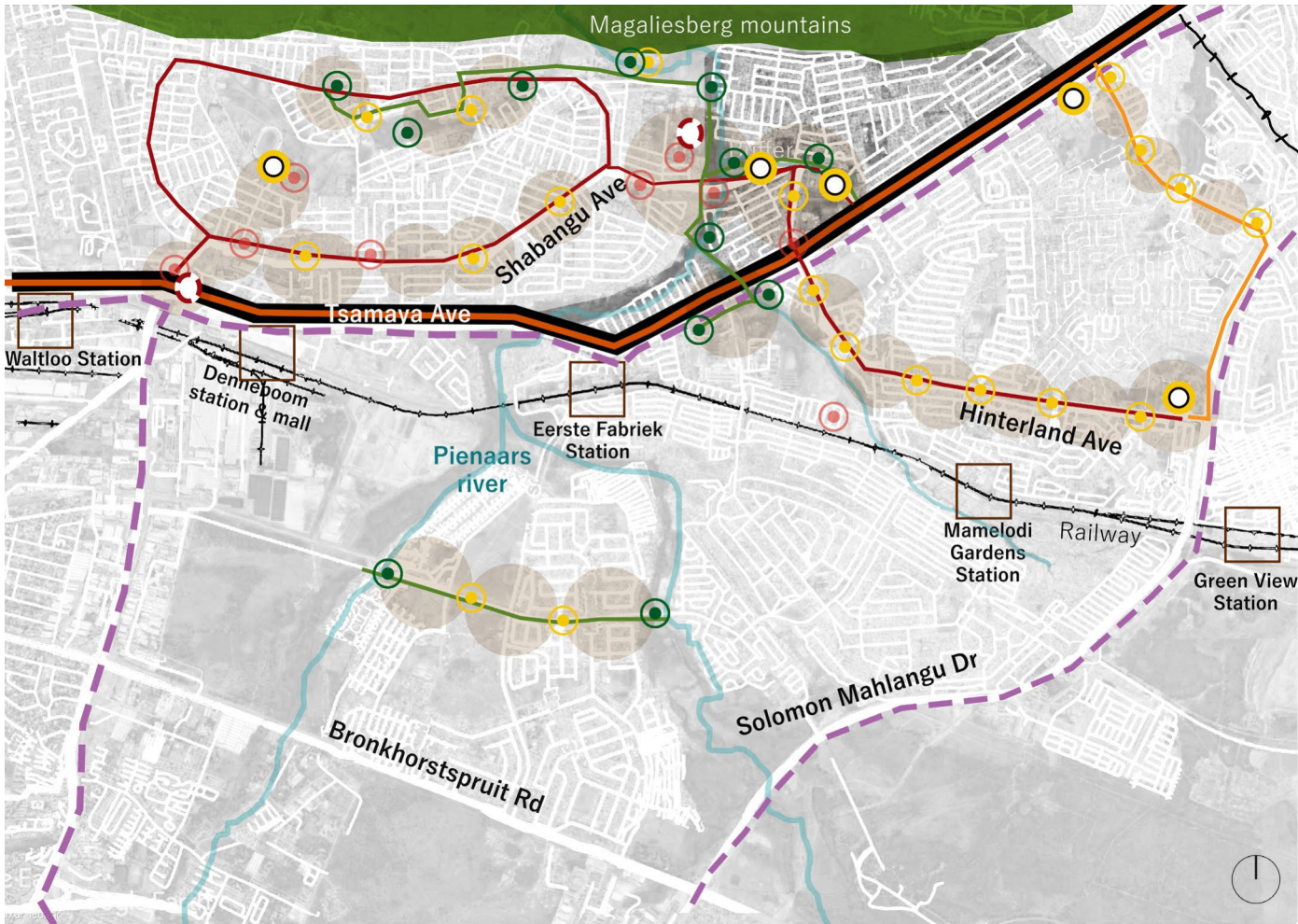


Figure 6.7: Development of urban vision (Author 2021)

# BLOCK VISION



Figure 6.8: Development of urban vision (Author 2021)



Figure 6.9: Development of block vision (Author 2021)

## LEGEND

- |   |  |   |  |   |                 |
|---|--|---|--|---|-----------------|
|  | Cultural precinct                                      |  | Park   |  | Freed up street |
|  | Integration of existing Infrastructures                |  | Home-based activities & parallel pop-up shops/market in the park |  | Tertiary trail  |
|  | "Elke[Bitso]"  |  | Markets  |  | Secondary trail |
|  | Plaza  |  | Small parklets/playgrounds, Showcase gardens                     |  | Primary trail   |
|  | Regenerated vegetation and wetland Grazing,            |  | Bicycle pavilion   |  | Green-way trail |
|  | Community garden, Promenade, Food and plant market     |  | Small business stops   |   |                 |
|  | Sports facilities, small gym, outdoors, fields, courts |  | New one-way street   |   |                 |

## 6.3 PROGRAMMES AND CLIENTS: implications of a public space project

### //Programmes

As a result of the dissertation's investigations, this project proposes a hybrid mix of recreational activities that encompass a balance between sports and both passive and active recreation while also considering what would most benefit the identified actors and their aspirations. The aim is, thus, to create an 'out-reach precinct' that consists of a larger anchor that is complimentary to the satellites and other anchors present in the cultural spine. These programmes are represented in Figures 6.10-11.

<i>DESCRIPTIONS</i>	<i>ACTORS</i>
<i>Stories, Knitting, chess</i>	<i>Families/the Elderly</i>
<i>Employment opportunities</i>	<i>Adults/Parents</i>
<i>Most connected</i>	<i>Children/ Adolescents (teenagers)</i>
<i>Limited movement</i>	<i>Post-rehab groups</i>
<i>Creativity</i>	<i>Bicycles</i>
<i>Asset</i>	<i>Park/River/Trees</i>
<i>Needing support and change of atmosphere</i>	

Figure 6.10: *Unfolding the interconnected programmes in relation to 'actors' and needs (Author 2021)*

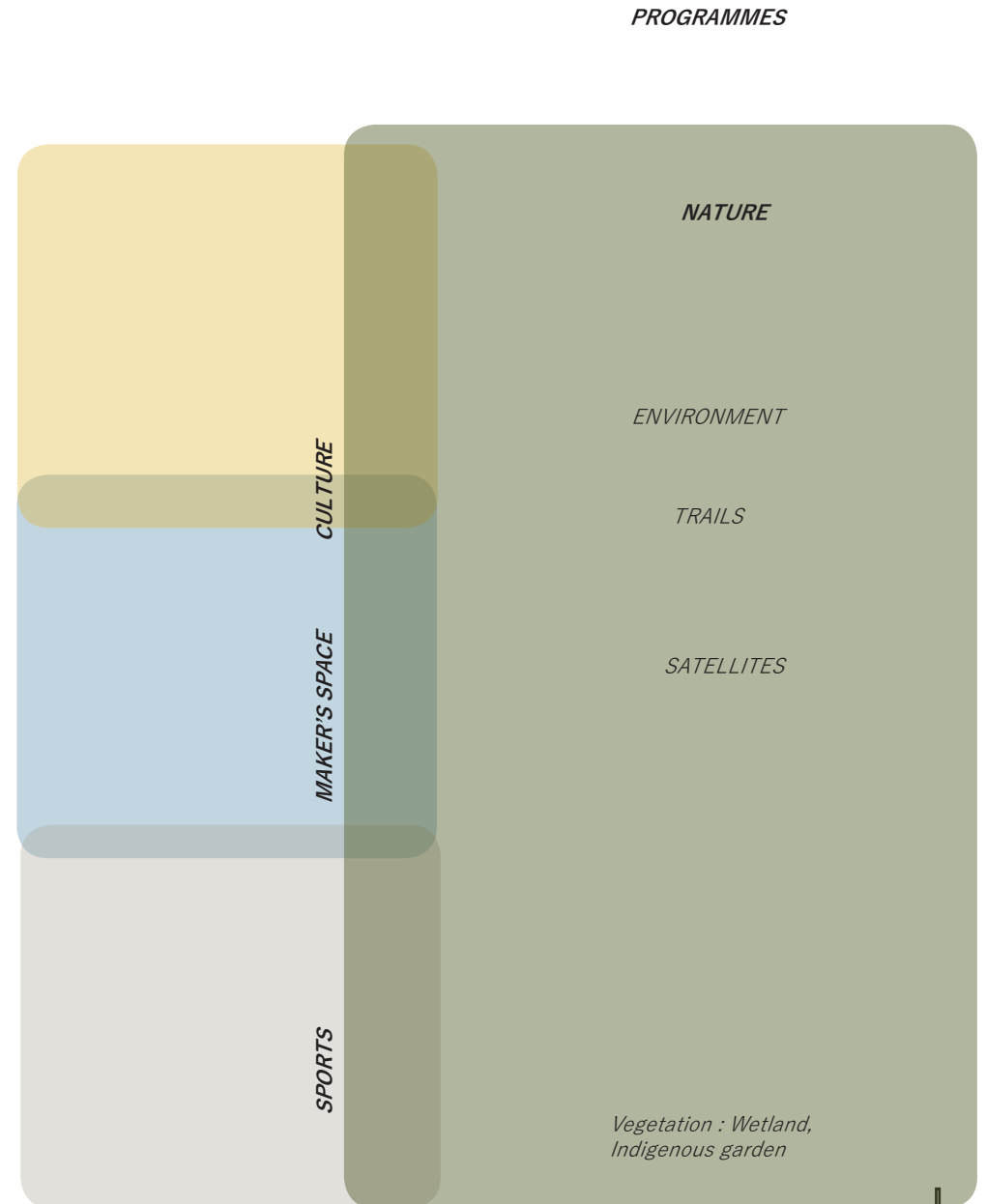
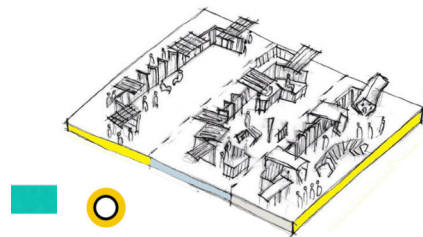
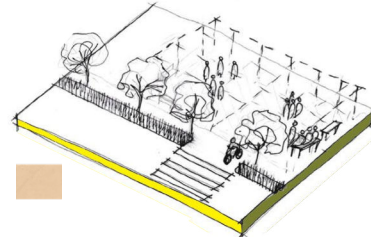


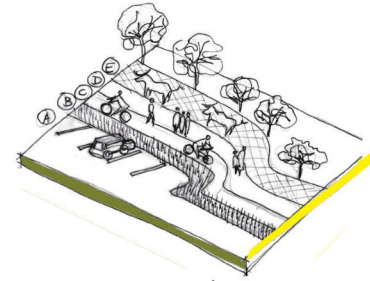
Figure 6.11: Development of programmes in relation to vision and site opportunities (Author 2021)



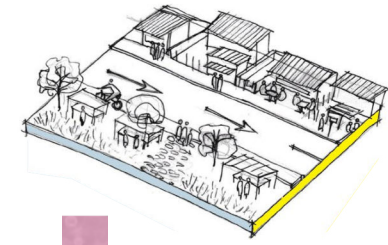
"Elke[Bitso]"



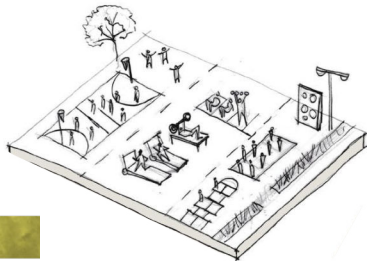
Plaza



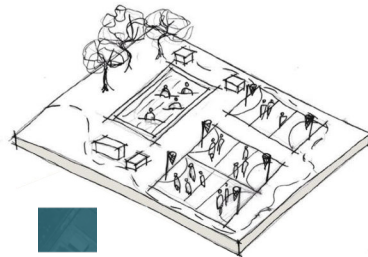
Paths and Parking



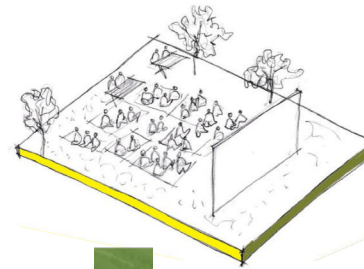
Home-based activities & parallel pop-up shops/market in the park



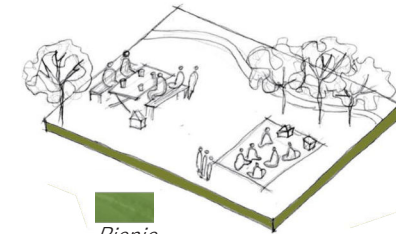
Sports facilities, small gym, outdoors, fields, courts



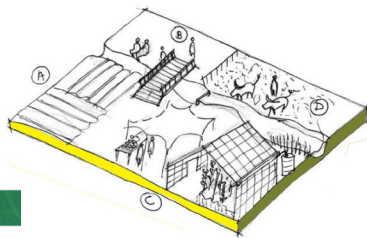
Integration of existing Infrastructures



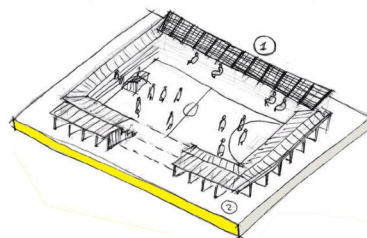
Open air cinema



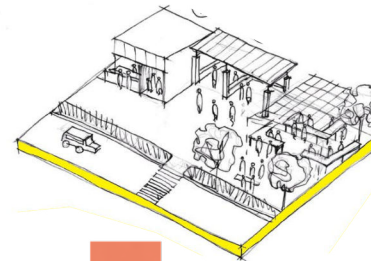
Picnic



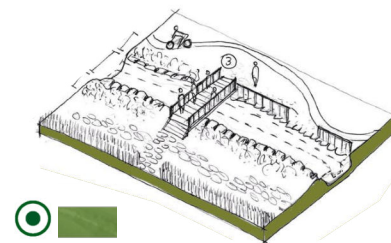
Grazing, Community garden, Promenade, Food and plant market



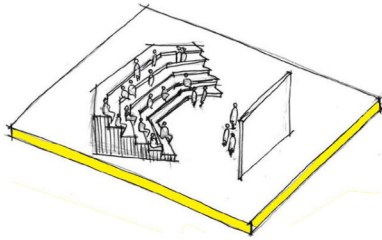
Solar powered bleachers and Small shops



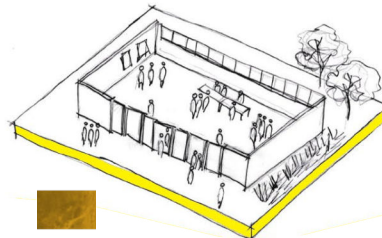
Shops, Small market stalls, Market plaza



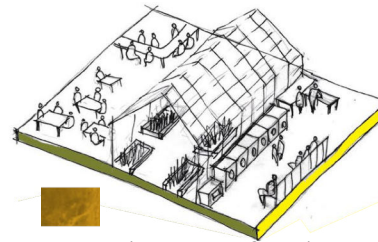
Naturalised banks, Flood control, Revitalised plant palette and Infrastructure



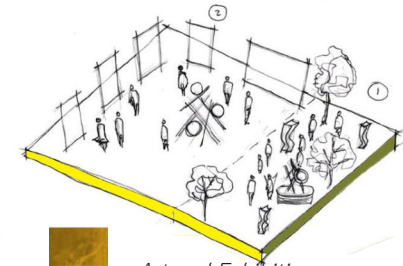
Amphi



Multipurpose hall

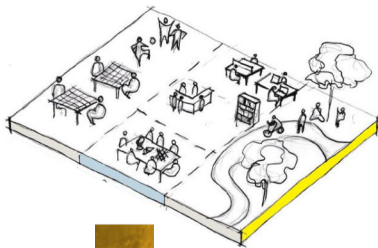


Food, Miniature Greenhouse,  
Laundromat

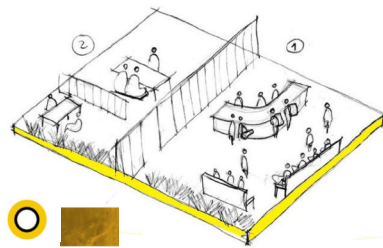


Art and Exhibition

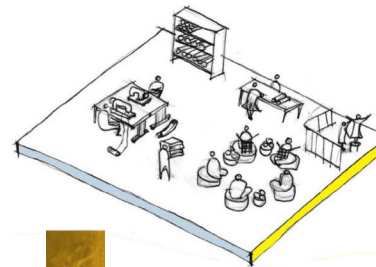
Performance



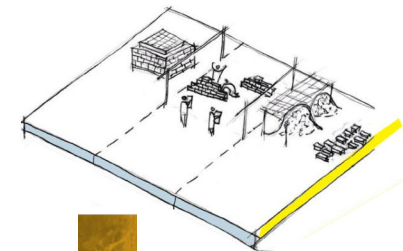
Afterschool, study /  
help centre



Info desk, Consultation (orientation),  
NPO management, office



Sewing/ Knitting  
workshop

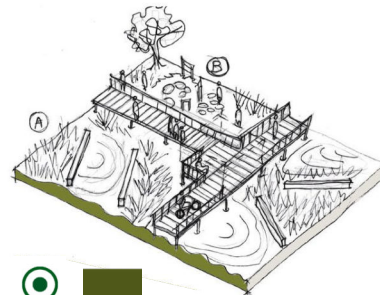


Brick workshop

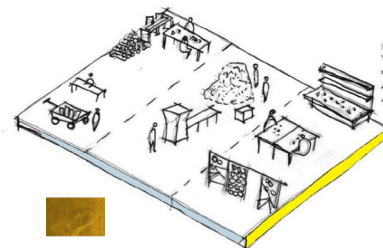


Temporary dorm for post rehab  
programme or sport events

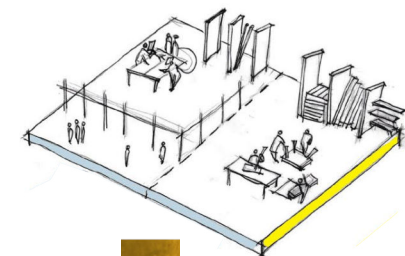
Soccer, Netball, multipurpose  
courts, tennis, Small Gym



Wetland and Indigenous garden

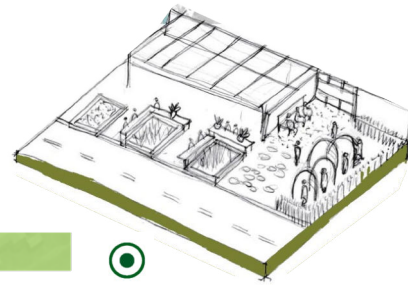


Glass workshop

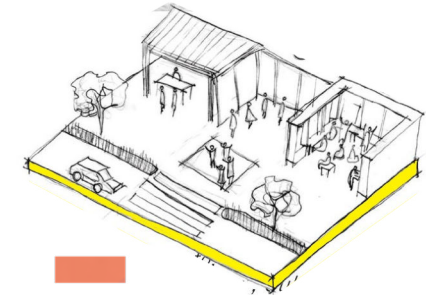


Welding and Woodwork  
workshops





Small parklets/playgrounds, Showcase gardens

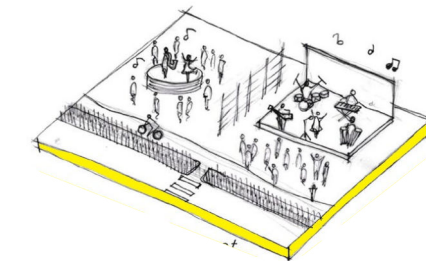


Street info, Cultural "Treasure box", Cultural history games

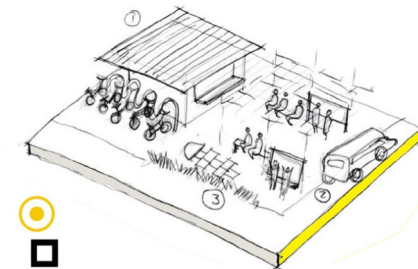
ACCOMMODATION

Space	Spatial quality and Requirements	Size (m2)	Amount	Reference
<b>HELP DESK/SOCIAL SUPPORT</b>				
Reception		27-42	1	
Consultation rooms/office		12	4	
Gallery/lobby		151	1	
Shops		-21	6	
<b>GYM</b>				
Reception/gallery		27-36	1	
Canteen		135	1	
kitchen/area for food distribution		216	1	
Showers/toilets			6 showers, 6 toilets, 5 urinals	
Refuse area		5	1	
Pool area		1517	1	
<b>DORMS (temporary)</b>				
Shared showers/changing rooms with gym		36	2	
Rooms		9	21	
Outdoor garden		324	1	
Common area (relax)		72	1	
Repurposed caretaker building, additional dorm area		170	1	
<b>ENVIRONMENTAL BUILDING</b>				
Exhibition/experiment/lab		112	1	
Seed library				
Landscape caretaker quarters		21	1	
Gardening Storage		13	1	
<b>GREENHOUSE</b>				
		5,10,18,28, 37 (plots)		
Plant area		41	5x12, 4x12 and 3.5x7, 4x25 (beds each)	

Restaurant(s) with kitchen			36	1
Eating area			108	1
Laundromat			6 drying, 6washing machines, folding space	
Repoting area			31	
Storage			5	
			13	1x8m2, 1x5m2
<b>AFTERSCHOOL</b>				
Multipurpose classrooms with storage			91min	7
Library/computer space			205	1
<b>CULTURAL</b>				
Hall			86	1
Amphi/Auditorium			229	1
<b>MAKER'S SPACE</b>				
Storage			191 total	
Textile/sewing			108	
Construction business office			51	
Front Shops/miniature office			36	3
Wood workshop			743 (7-8 people) add lumber space	
Welding workshop			156	
Firing area/assembly			45	
Arrival and sorting zones			81	
Glass workshop and assembly			108	
Toilets			9 urinals, 17 toilets	
Market stalls			9	52
<b>SANITATION/service</b>				



Performance and Street culture



Bicycle Pavilion (repair, rent, park), Bus/"small business" stop, Info/play box

Semi-buried greywater collection point			4	3
<b>BICYCLE PAVILION</b>				
Repairs, shops			104	1

Figure 12: Early speculative accomodation schedule(Author 2021)

## //Clients and Stakeholders

Several components advocate for layered, multifunctional, diverse, and hybrid recreational spaces that present symbiotic relationships and benefits. Due to the possible scale of the intervention when aiming to achieve these criteria, along with the values that members of the community voiced, a range of clients and stakeholders have been identified (Figure 6.13). The right stakeholders in a public space project are crucial, as incorporating a good range of stakeholders can reduce the risk of a top-down structure and can make the endeavour far more inclusive and efficient, particularly when attending to specific needs in the community (Hamdi 2010 , Mr J ., verbal communication, August 2021). This kind of approach is especially necessary when relating to the pertinent issue of management present in townships (Hamdi 2010 , Mr J., verbal communication, August 2021).

Of further importance is that the complete management of a project may not be in the realm of expertise of architects; however, by suggesting collaborations and relations between clients and stakeholders, it is possible to take inspiration from the influence and dedication of NPOs and other stakeholders (Mr J., verbal communication, August 2021 ). Such collaboration, in turn, allows for a created steering committee to transcend into an independent NPO that holds a full understanding of the scheme and which is capable of managing the future intervention(s) (Mr J., verbal communication, August 2021).

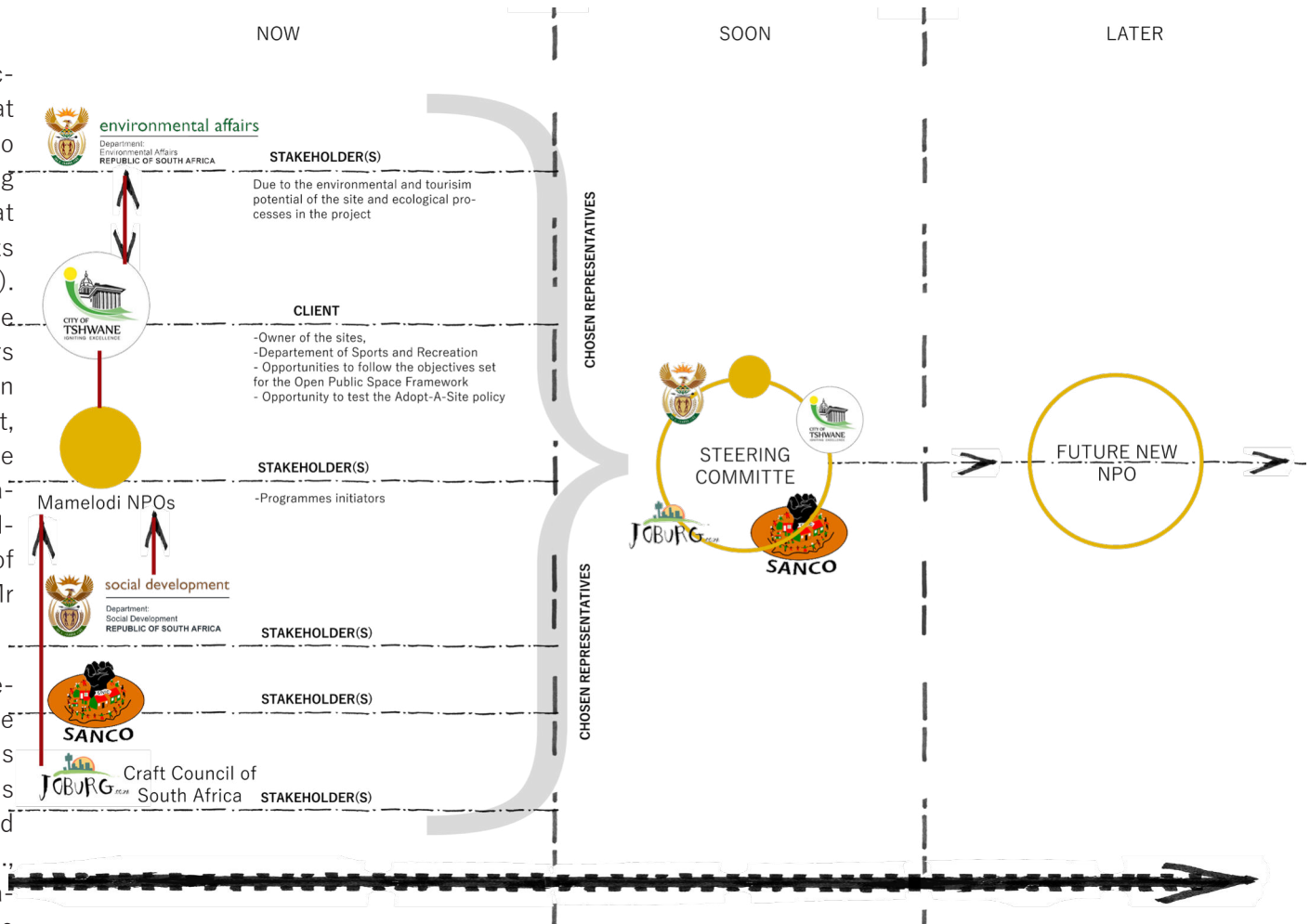


Figure 6.13: Stakeholders and client timeline (Author 2021)

## 6.4 CONCEPTUAL EXPLORATION: ITERATION 1

This project engages with the concept of the ‘connector dispositif’, which is explored in the design of an outreach precinct. The architecture within this project could be said to become an invitation of sorts, as it meshes elements together while simultaneously attempting to capture the hospitality emanating from the community’s actors.

### //Blending Ecologies, Diversity of space and Platforms for Networking

The concept presented in this paper begins by abstractly interrogating spaces in relation to one another through the combination of parts (i.e., green zones, squares/plazas, passages, ramps, indoors, and outdoors) as a way to connect processes and people. This interplay of responses between built form, volumes, and green and blue infrastructures is an attempt to integrate ecology with architecture in a bid to celebrate the environment as an actor while also permuting the possibility of public space devices. Indoor and outdoor passages are also investigated as places for gatherings, activities, and connectors for built forms (Figures 6.14-6.20).

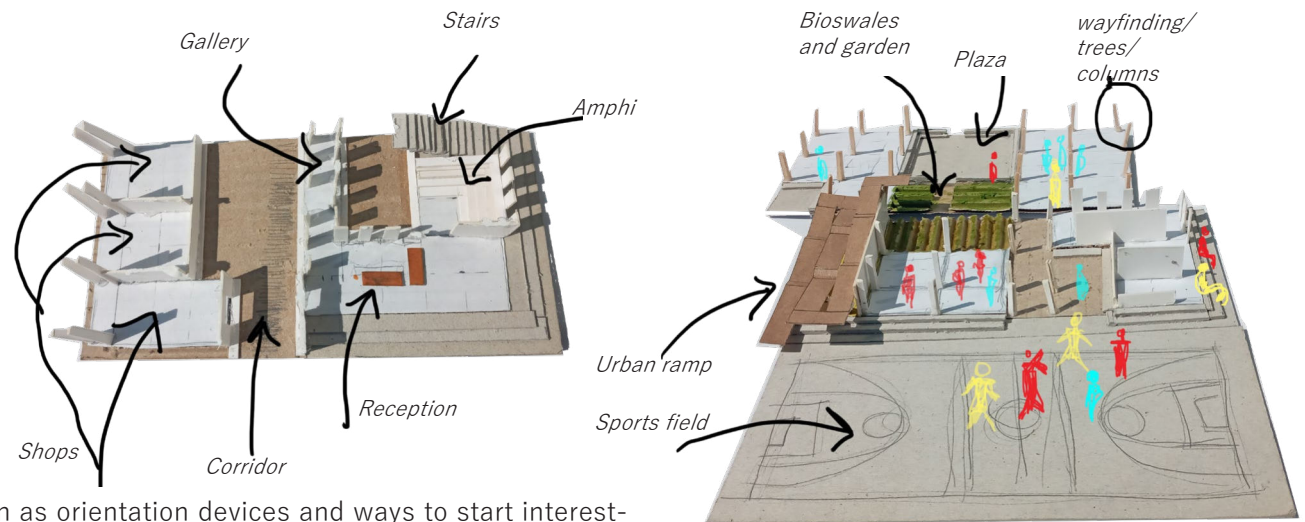
Screens, pavements, window displays, walls, and vertical elements (e.g., columns or trees) further delimit areas, and their distinctive characters can be seen as either static or dynamic elements with which the community members can create or interact through time. This process can, furthermore, involve the networks of schools, craftsmen, and others with transferable skills. Built form can, thus, serve as ‘built boards’ that func-



Figure 6.14: Linking places and creating platforms of spaces (Author 2021)

Figure 6.15: Platform 1

Figure 6.16: Platform 2, 3 and 4 combined



tion as orientation devices and ways to start interesting dialogues at different levels.

## //Acknowledging and Immortalising Social Trails and Traces

The previously noted site analysis portrayed movement (i.e., patterns as a key factor to the site). While this prior exploration handled diversity, it lacked a sense of direction and context. The diversity of the proposed programmes can, thus, potentially benefit from the distinctive aspects of the site's portions by becoming agents that weave together different, disjointed parts (e.g., the sports facilities and the park) (Figures 6.20-6.25).

The current desire lines (i.e., social trails) are, therefore, recognised as natural clues that indicate both points of departure and destinations, along with the tangible and intangible parallels between the stream (i.e., a blue way), Tsomo Street (i.e., a red way in the vision), and Tsamaya Avenue (i.e., a brown and red way). These unique corridors already loosely stitch the site together.

By recalling the agency of the street as well as the interfaces, the site is bisected via two main axes that immortalise the social trails by creating a fourth parallel way (i.e., an inner pedestrian path) that links the park, YMCA, pool, Rethabile Sports Grounds, and soccer field. These two new axes form the backbone for the arrangement programmes that will eventually sprout from them in an attempt to attract cross-generational endeavours and a merge of 'actors'. Miniature versions of these axes can further bisect the main ones so as to create smaller ways. These ways, in turn, can be either landscape- or pedestrian-related. Some programmes can also become 'pillars' that influence the character of the spines while others are not limited to specific areas. Therefore, circulation is

a key device to narrate the site. In order to incorporate ecological diversity, a connection between the stream and the YMCA is also suggested as an ecosystem that poetically rekindles the vestigial flood plain to its water course in the form of a constructed wetland.



Figure 6.17: Placing all anchors and satellites (Author 2021)

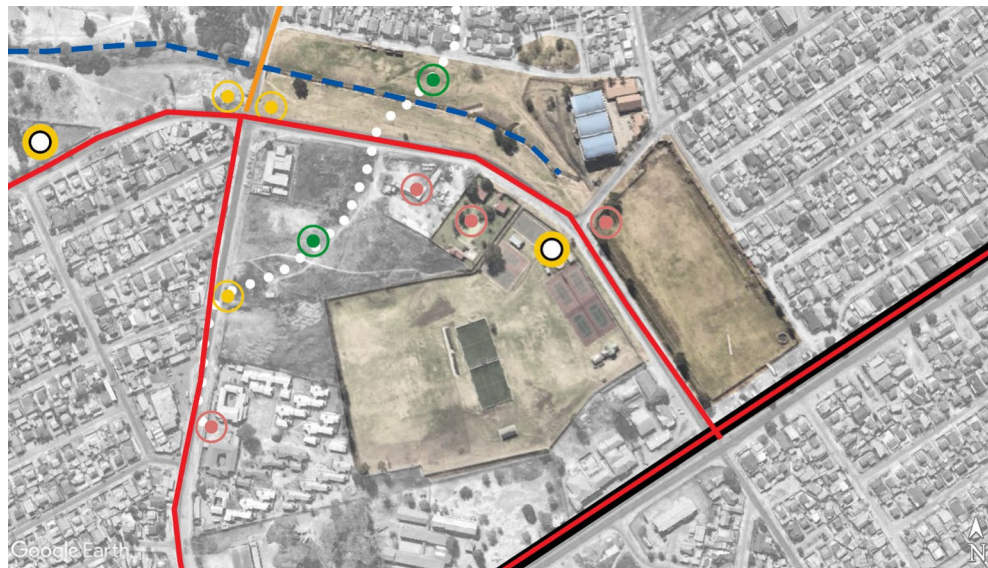


Figure 6.18: Adding the Trails and ways and desire lines

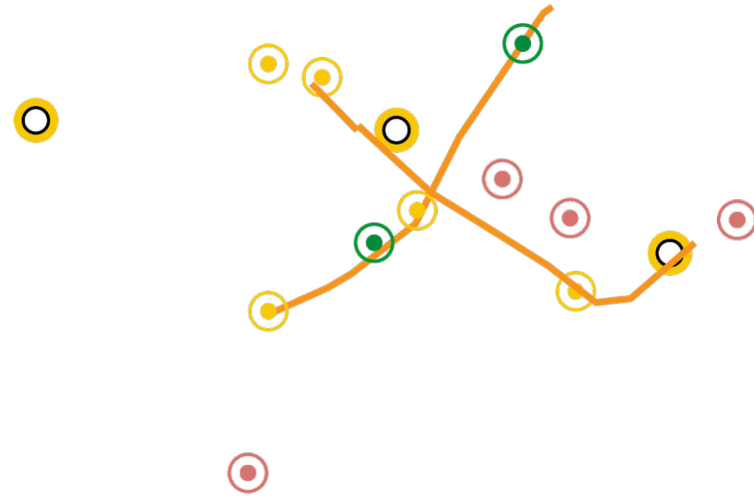
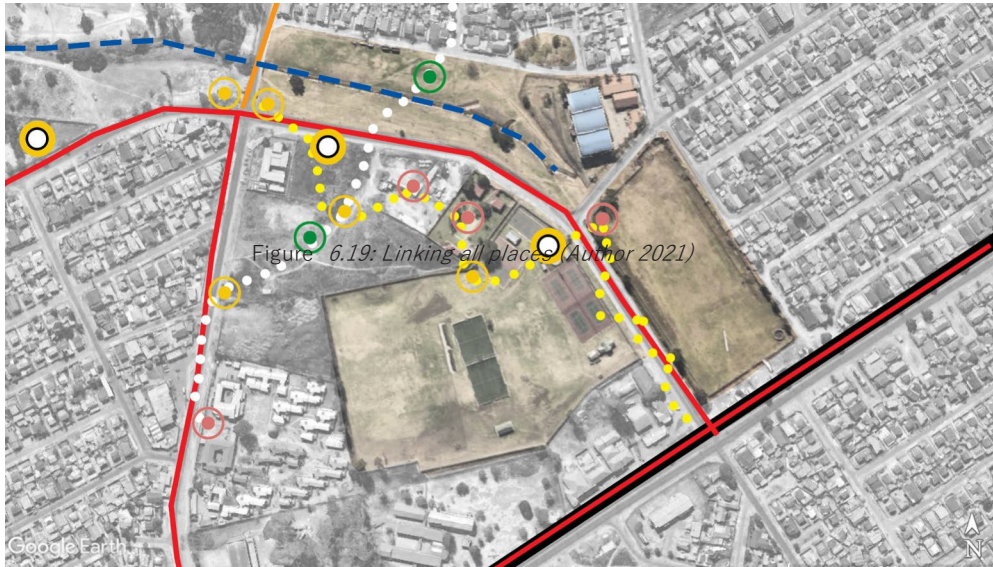


Figure 6.20: Extracting the axes (Author 2021)

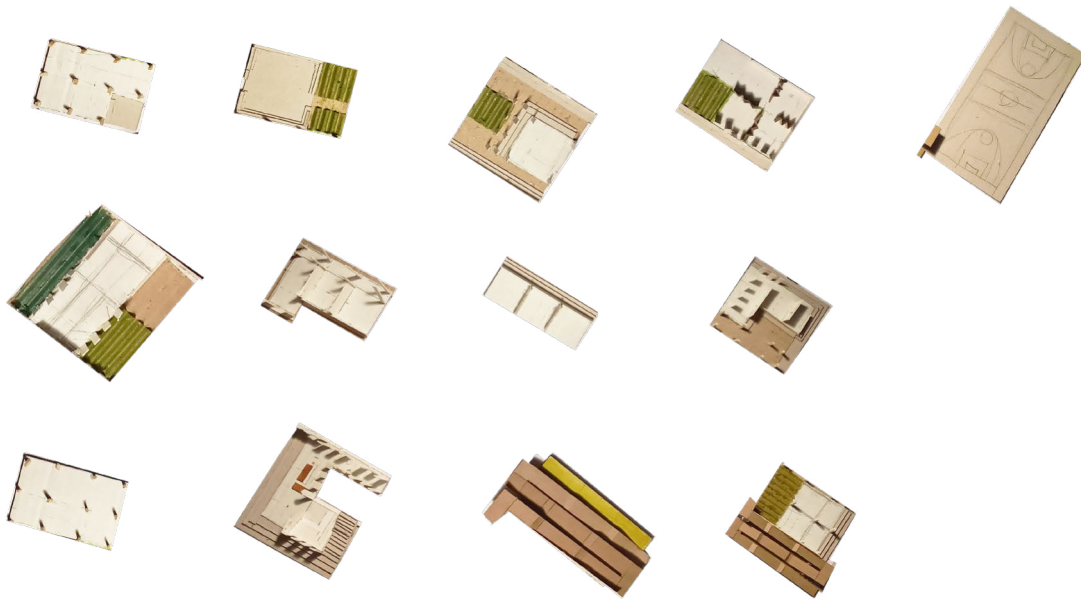
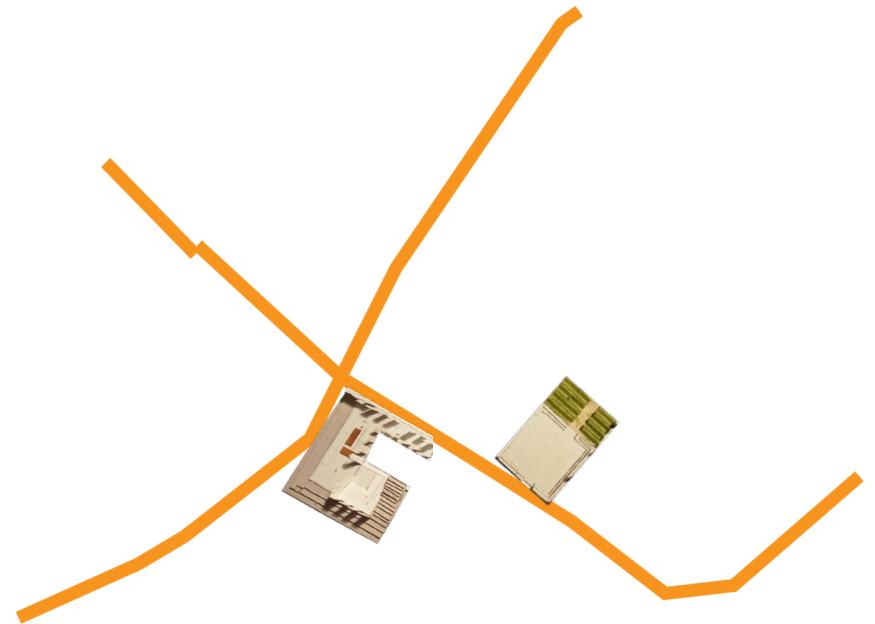


Figure 6.21: Replacing spots with platforms, combining all (Author 2021)



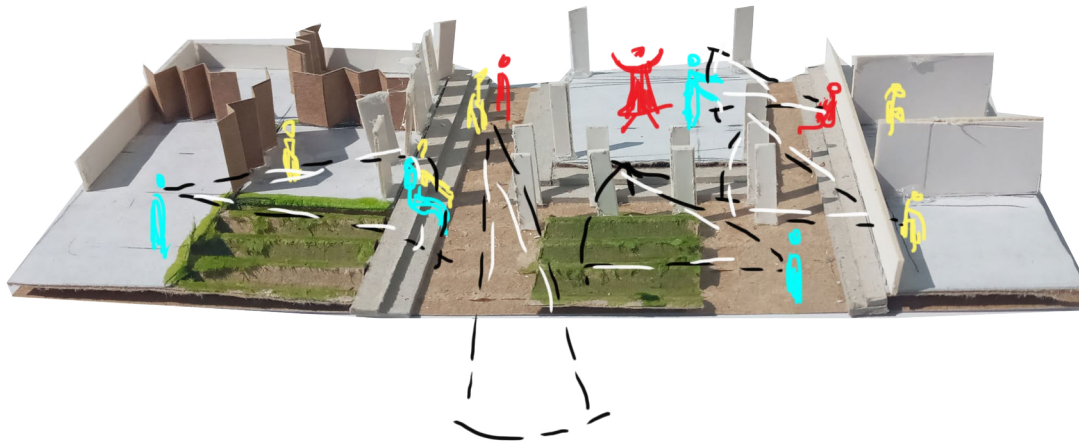


Figure 6.22: Sights lines exploration platform 4 (Author 2021)

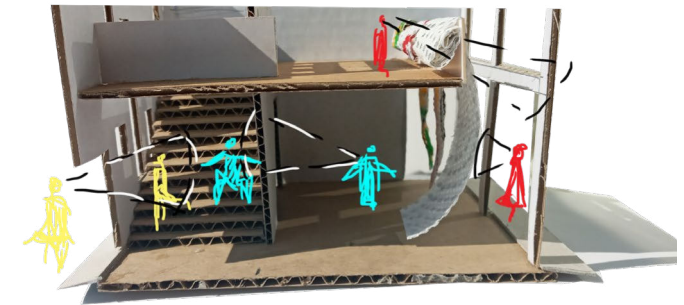


Figure 6.24: Sights lines exploration workshop (Author 2021)

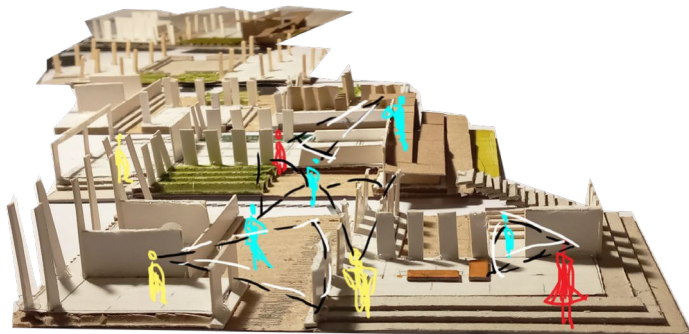


Figure 6.23: Sights lines exploration platform 5 (Author 2021)

### //Views and Sight Lines

A medium to incite comfort, as revealed through the precedents study, is the celebration of views to trigger people's curiosity and reasons to dwell in a place long enough to establish relations with other people as well as the environment (Figures 5.3-5.20). The currently proposed intervention is, thus, located between two natural landscapes (i.e., the Magaliesberg mountains ridge in the distance, and the series of plain 'parks' with their envisioned regenerated gardens and floodplain vegetation). These features make for good vistas and natural landmarks, while the created paths act as streets that provide passive surveillance (Figures 6.22-6.25).

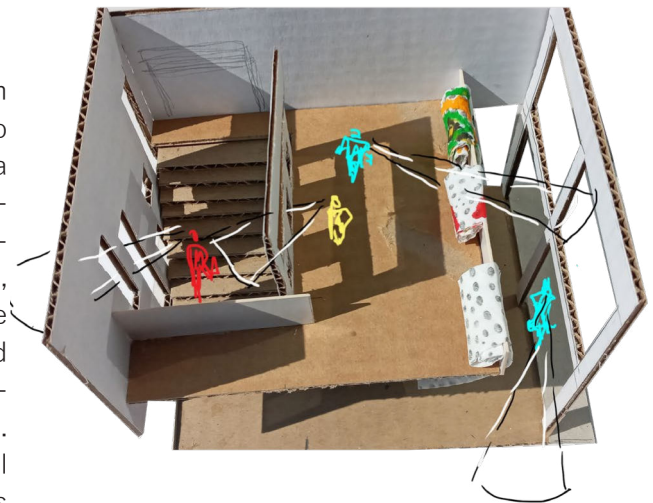
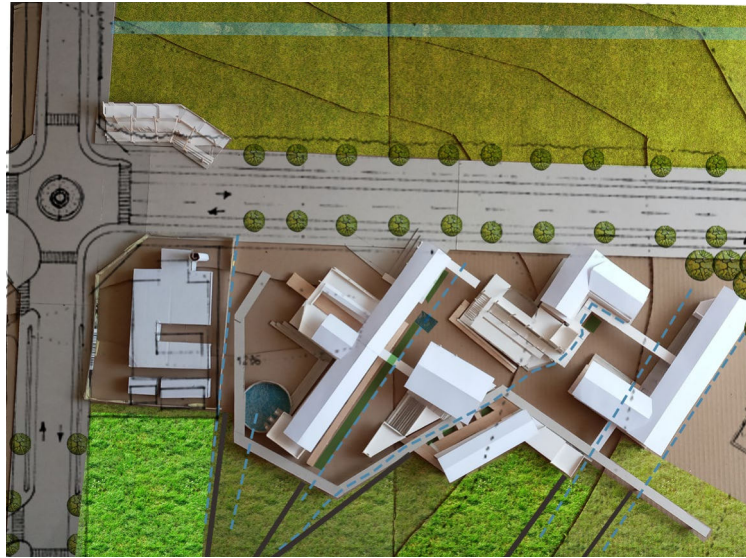


Figure 6.25: Sights lines exploration workshop above (Author 2021)





## DESIGN BRIEF

*DOUBLE FUNCTION  
"DISPOSITIFS"*

*INTEGRATED SCHEME*

*ACTIVATED  
THRESHOLD*

*USE OF PROMENADE*

*PASSIVE DESIGN  
CONSIDERATION*

*PASSIVE  
SURVEILLANCE*

*CONNECTION TO THE  
OUTDOORS*

*FLEXIBLE INTERIORS*

*SKILL DISPLAY  
THROUGH ENVELOPE*

*CROSS-  
GENERATIONAL USE*

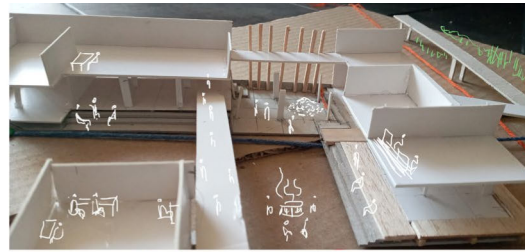


Figure 6.29: Site view model 1:200 (Author July 2021)



Figure 6.30: Water mitigation exploration and vegetation regeneration (Author 2021)

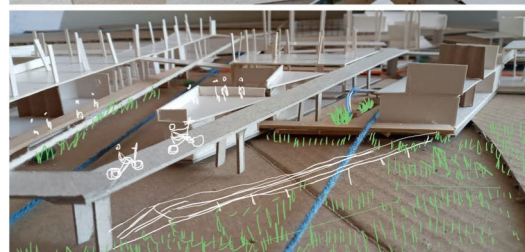
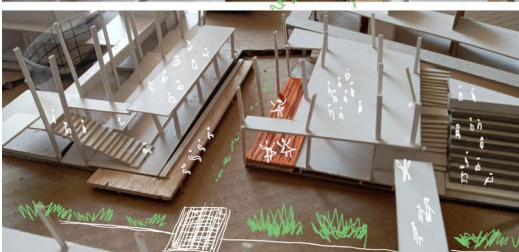


Figure 6.31: Scenarios (Author 2021)