

ESSAY 2

DESIGN RESEARCH

(DESIGN) GENERATIVE

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- 2.4.1. Outputs of the participatory action research process.
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Figure 2.0.1. (right) A DStv satellite dish spotted above a roof made covered with plastic sheeting in Plastic View (Kriek 2021).



Figure 2.1.1: (below) *The plastered brick front facade of a Plastic View spaza-shop, with timber eaves that awaits roof sheeting for shading (Author 2021).*

Figure 2.1.2.a: (right, above) *An example of an activated street-facing threshold space in Plastic View, taken in 2020 (Moreleta Park Integration Project 2020).*

Figure 2.1.2.b: (right, below) *The same activated street threshold exactly one year later (2021), now built of brick. The timber from the tree that used to feature is now used as part of the roof structure (Moreleta Park Integration Project 2021).*



2.1. THE ROLE OF THE ARCHITECT

2.1.1. On Authorship

There has been a shift in recent times with respect to the architectural design process, and more particularly - a departure from the notion of the architect as “hero-author”, and rather, a recognition of the collective capacity of multiple authors - as argued within the discourse of spatial agency (Barthes 1977:142-148, Schnieder & Till 2009:97). Here, there is a marked emphasis on process, and success is measured based on outcomes situated far beyond the scope of what is traditionally understood as architecture (in the form of a building) - visible in the work of Balkrishna Doshi, Urban Works, and Sameep Padoora. There is significant difficulty in pursuing such a process in practice, where architecture is reduced to a specialist discipline and a service accessed and leveraged by society’s economically advantaged minority and those with political agency - the contemporary image of what gives an individual the power to act or shape their world. This has resulted in the industry becoming increasingly redundant and in desperate need of transformation.



2.1.2. Expanding beyond the professional

The architect is thus tasked with the challenge of mediating their responsibility and capacity to serve a larger scope of individuals, albeit on a potentially non-physical, social level - with the normative expectations and needs of their consumer-clients. In this endeavour, and in the context of a highly unequal society, there is room to critically consider both socially and physically constructed scarcity and its relationship to architecture (Till 2014).

Here, there is opportunity to learn from the un-recognized individuals, such as residents of Plastic View, and organisations such as Abahlali BaseMjolo, who already challenge traditional practice by shaping our cities informally - as well as the works of architects such as Lina Bo Bardi, that aim to reposition architecture to acknowledge a shared production of identity; as extensions of the everyday. This necessitates a reframing of the architect's role from designing against the eventuality of scarcity, to designing from scarcity. There is no doubt that a complete departure from making "buildings" is an unhelpful place to start if common ground between the "formal" and "informal" place-making environment is the ultimate goal. So, then, for the sake of

operating an investigation in such a way that contemporary market-driven approaches to practice might also see positive change, or come out of a context of scarcity rather than that of abundance, one is compelled to still ask what comes of the elevated capacity of the architect, through educational and practical experience, to fully explore and realize the spatial and technical potential of a place.

2.1.3. A concern for Place

A potentially powerful overlap with the longer established architectural paradigm of phenomenology has been identified, which although understood through the subjective perspective of the individual in respect to space, materiality, and time - gestures towards the extension of making or shaping one's environment far beyond the formal scope of the architect; to whoever subsequently experiences and makes use of the space (Sennett 2009). Globally, the work of architects such as Alvar Aalto, Carlo Scarpa, and Peter Zumthor are acknowledged to be examples of sensitive, experience-centered architecture that is conceived out of a process concerned with gaining a deep understanding of user and place. In a different light, a promising concern for the flexible emergent capacity of buildings can be observed

globally in the mat-building strategy of structuralists in the 1960's. Local African examples that reflect these two positions include the work of OMM Design workshop, Chris Wilkinson, Cohen and Garsen, 26'10 South, and Fancis Kere - and, by virtue of a different cultural and social landscape, have shown more regard for the space-making capacity of the non-architect, end-user, in their design processes. Despite this, there still exists an opportunity to explore the potential that exists by combining the existing concern for the end-user experience, with a process that is equally centred around, and inclusive to, the non-architect actor. In this way, the process does not end with the conclusion of the building process, just as the experience or use of the "place" being made, does not simply commence once the job of designing and building is complete.

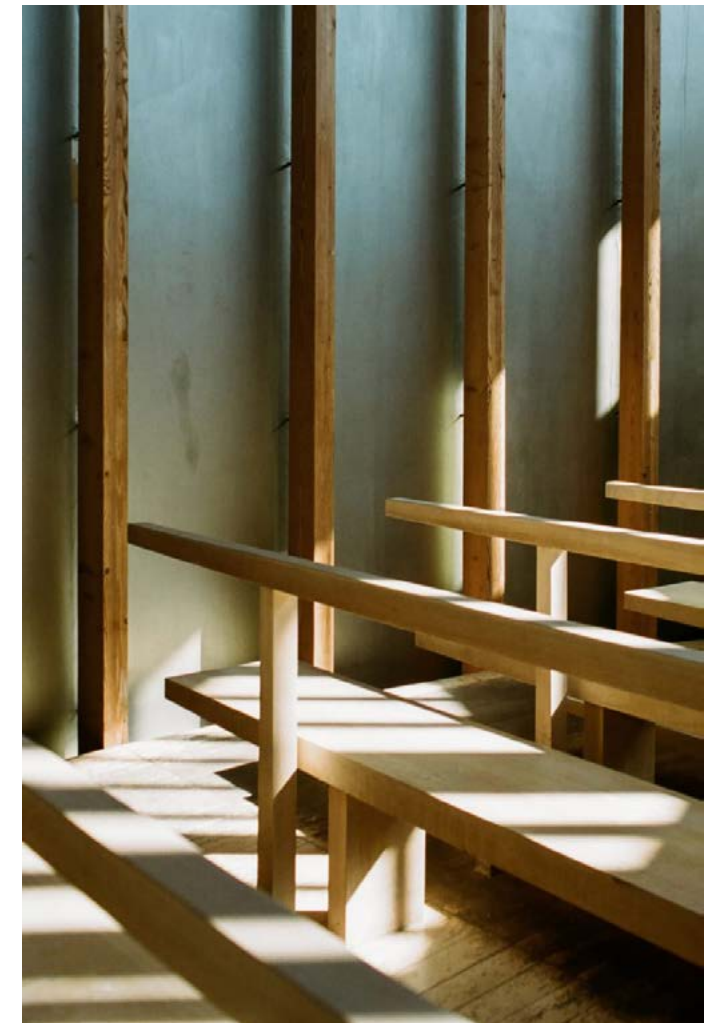
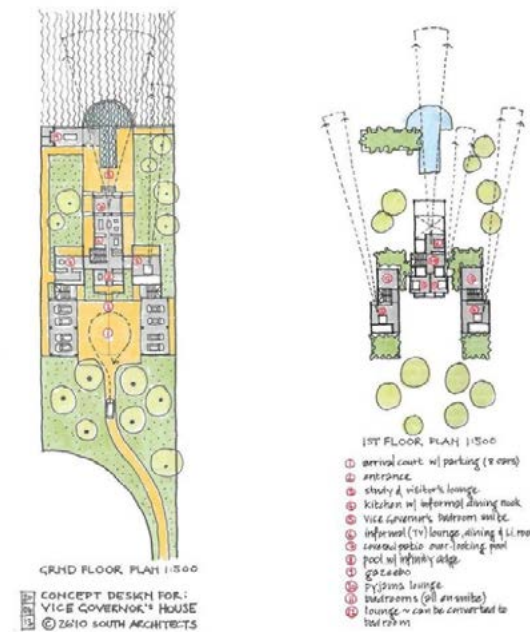
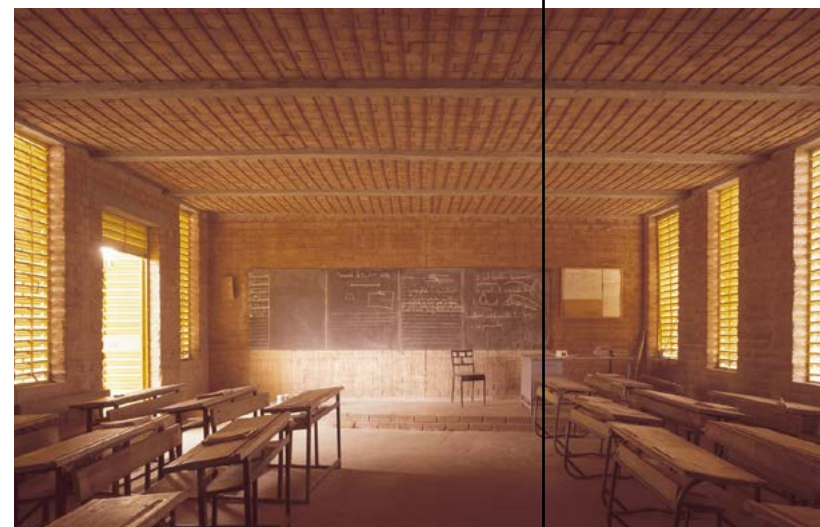


Figure 2.1.3: (far left, below) Interior of a classroom at Gando Primary School, Burkina Faso, designed by Fancis Kere (Duchoud 2009).

Figure 2.1.4: (top left) Sol Plaatje University by Wilkinson Architects, Northern Cape, South Africa (Wilkinson Architects 2014).

Figure 2.1.5: (left middle) Concept Sketch by 26'10 South Architects (Deckler 2020).

Figure 2.1.6: (bottom, middle) Scarpa's courtyard seen from the lower level, with its steel frame acting as a clerestory, bringing light down to surrounding spaces ('Ambiente' Exhibition; period photograph 1968).

Figure 2.1.7: (bottom, far right) Timber detailing in Peter Zumthor's Caplutta Sogn Benedegt (Stani 2020).

Figure 2.1.8: (top) *Colourful isometric sketch, characterising and contextualising Plastic View Informal settlement* (Katranas & De Bruin 2020)

Figure 2.1.9: (far right, below) *Diagram contextualising the research output of the Moreleta Park Integration Project honours students 2020, with QR codes that link to the respective open source content* (Katranas 2020).



2.1.4. The Moreleta Park Integration Project

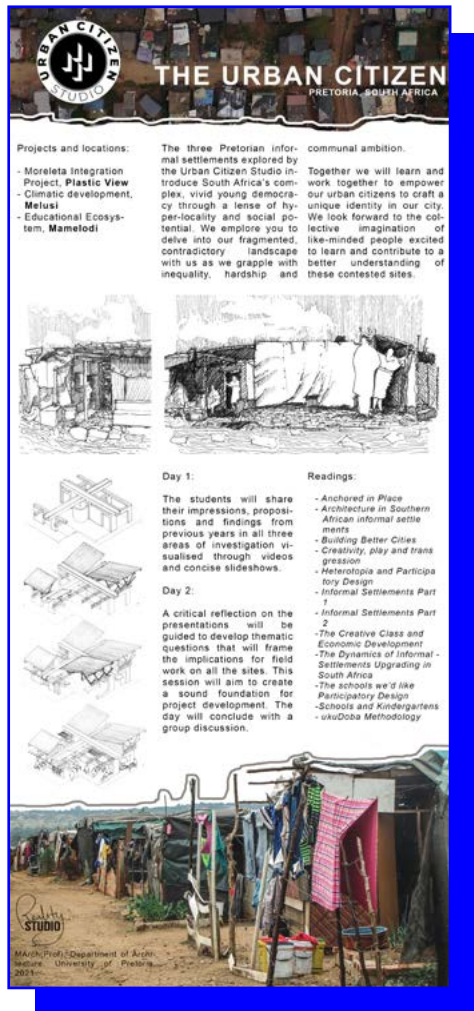
Before delving into the work of notable professionals that have helped locate the intention and approach of this project within the continuum of architectural discourse, it is necessary to outline the core contextual conditions and experiences that have ultimately galvanized the architectural stance. Between 2020 and 2021, students from the University of Pretoria's Unit for urban Citizenship were afforded the opportunity to explore this very meaning of the architect's role within the con-

text of Moreleta Park, through the theoretical and methodological lenses of Community Action Planning (Hamdi 2010), Codesign (Vaajakallio & Matelmaki 2014, Lee 2008), and Participatory Action Research (Howard & Somerville 2014). This cross-disciplinary research process enabled collaboration with an array of individuals through a hyperlocal site engagement process and global collective knowledge-base. Established by the 2020 Q1 Moreleta-based Architecture Honours studio with the commencement of our research in 2020, and henceforth referred to as the Moreleta Park Inte-

gration Project - this section will cover an overview of the last two years of engagement with specific emphasis on the process from February to June 2021. The collective effort of the Moreleta Park Integration Project became an important avenue through which primary data was collected, mapped, interpreted, and packaged - and became particularly useful to stakeholders and partners that are directly involved in disaster relief for Plastic View and Cemetery View during the COVID-19 lockdown and events such as fires.



2020



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Figure 2.1.10: (top) South Africa context brochure prepared for prospective reality studio group members (Kriek 2021, featuring sketches by De Bruin 2020 and Jordaan 2020)

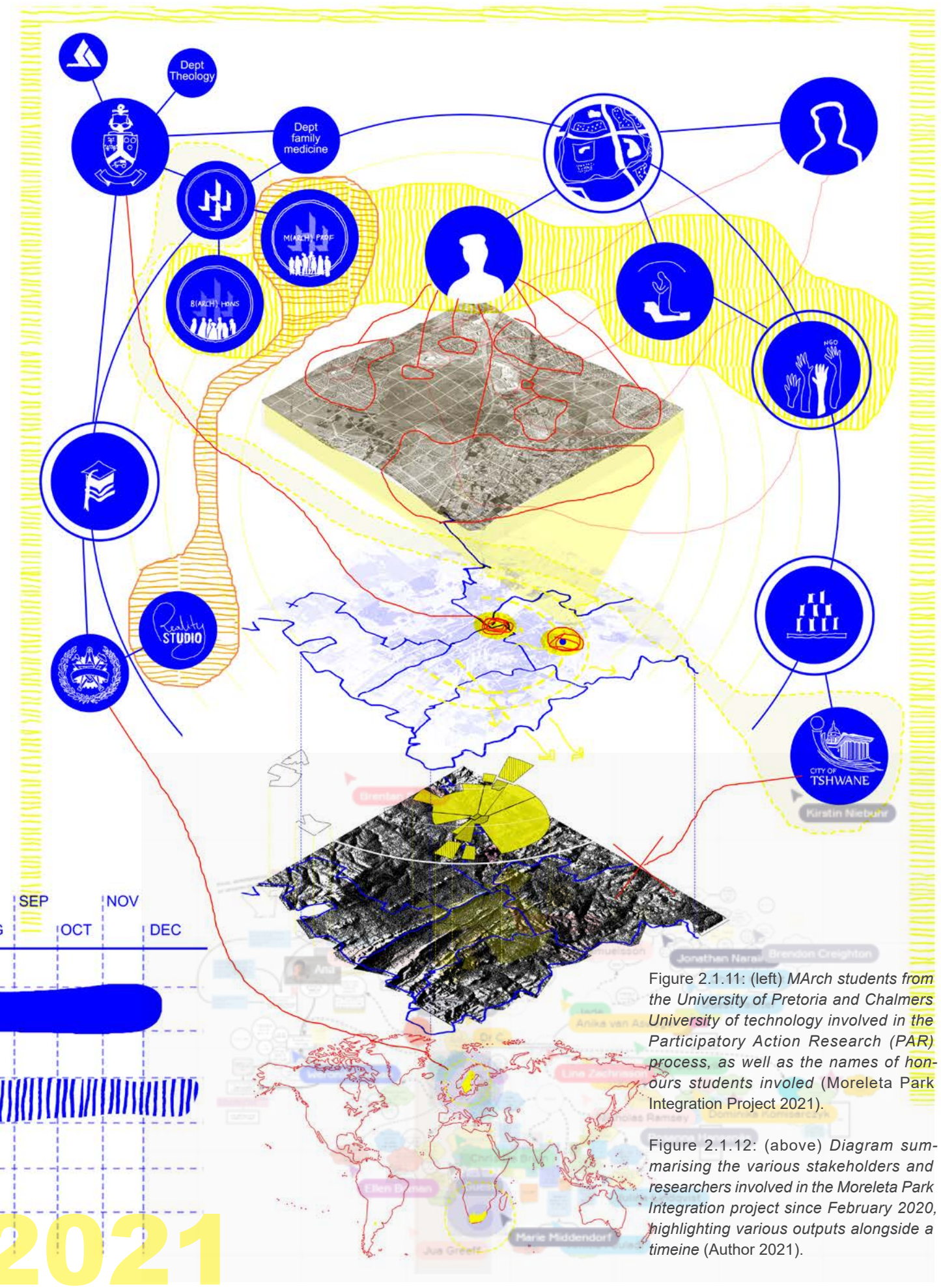
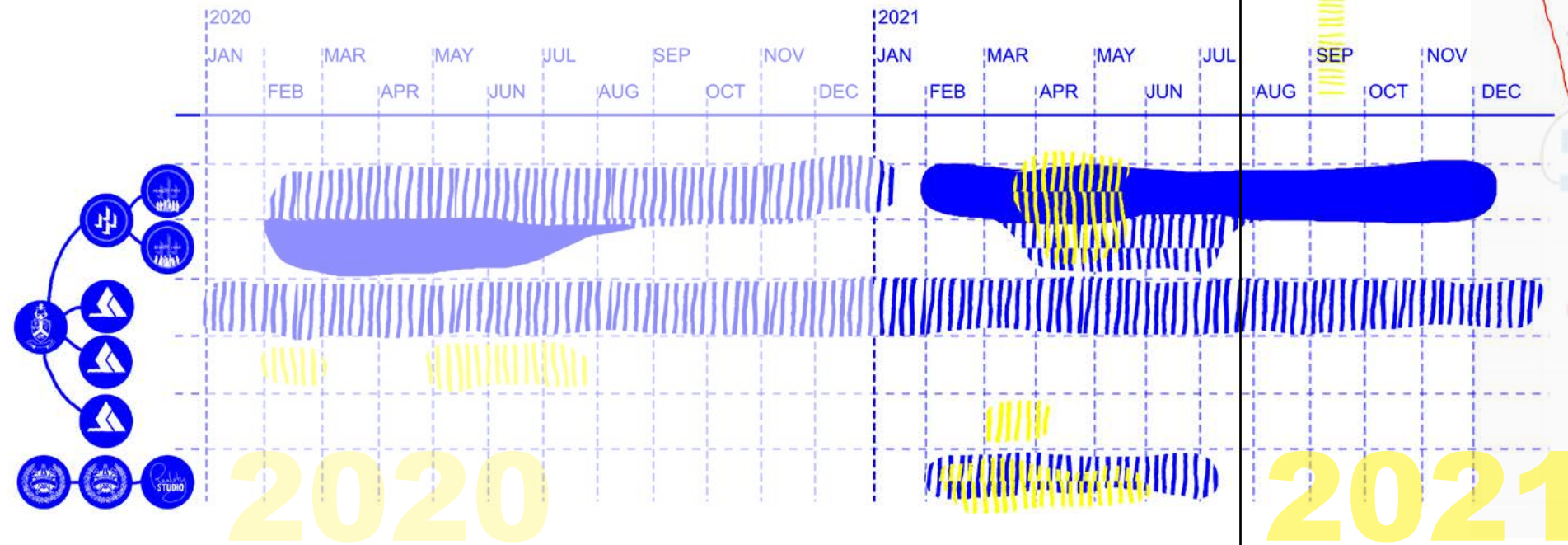


Figure 2.1.11: (left) MArch students from the University of Pretoria and Chalmers University of technology involved in the Participatory Action Research (PAR) process, as well as the names of honours students involved (Moreleta Park Integration Project 2021).

Figure 2.1.12: (above) Diagram summarising the various stakeholders and researchers involved in the Moreleta Park Integration project since February 2020, highlighting various outputs alongside a timeline (Author 2021).

MORELETA PARK INTEGRATION PROJECT

BACKGROUND

Macro scale
Plato View is a spontaneous urban settlement in Moreleta Park, Pretoria. The settlement was established in 1974, when the area was used as a military base. It is now a densely populated informal settlement with a population of approximately 10,000 people.

Meso scale
The 2014 and 2019 National Land Use Integrated Review (NLUR) identified the need to address the spatial and land use challenges in the area. The NLUR provides a framework for the development of the area, including the integration of the settlement into the city of Pretoria.

Micro scale
Plato View was established and developed by the municipality in 1974. It was established as a military base and later used as a residential area. The settlement is now a densely populated informal settlement with a population of approximately 10,000 people.

Human scale
The settlement is a result of the military base and the subsequent urbanization of the area. It is a densely populated informal settlement with a population of approximately 10,000 people.

WHERE ARE WE?

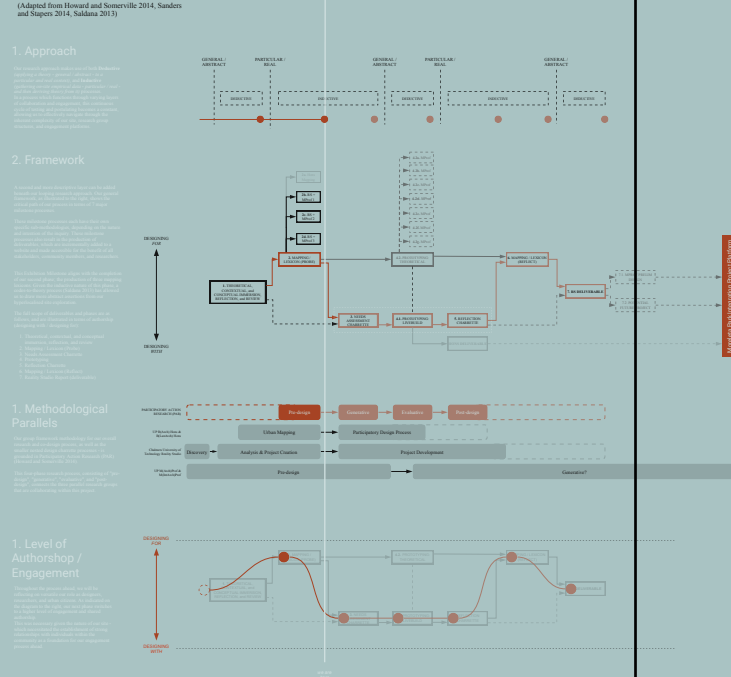


WHO ARE WE?

Moreleta Park Integration Project consists of all 11 students from University of Pretoria, and 2 students from Chalmers University of Technology. We are currently collaborating in four smaller groups in order to cover more ground and gain insights into various urban issues.

- Socio-spatial cataloguing**
- Circular material and skills flows**
- Empathy and greater rituals**
- Shared spectrum floor mapping**

FRAMEWORK METHODOLOGY



WHERE ARE WE NOW?

We have spent three weeks delving into our various urban issues, while developing our methodologies and models of research. An earlier data collection and analysis phase was carried out in parallel with our fieldwork research process and the final group research methodology to produce a range of data that can be used going forward. All the data collected was analyzed through the various lenses that participate in this ongoing understanding of the city space under the rubric of equity. The aim is to create a program by creating a capacity for further complexity and a rigorous process that will be shared over our lifetime. The reality. Stay tuned!

FINDINGS

As we are entering the research phase of our project, we collectively believe that the findings from the research phase will be a valuable addition to the understanding of the city. The findings will be a valuable addition to the understanding of the city. The findings will be a valuable addition to the understanding of the city.

WHERE ARE WE GOING?

Reflection and analysis
Needs assessment charrette
Prototyping / Livebuild

REFLECTION
The reflection is a key to professional growth. It is a process of looking back on what has happened, thinking about it, and then using that experience to inform future actions. It is a process of looking back on what has happened, thinking about it, and then using that experience to inform future actions.

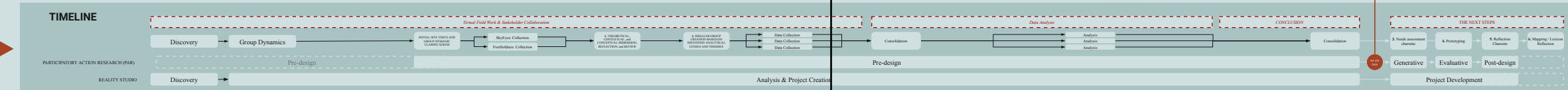


Figure 2.1.13: (above) Reality Studio virtual Miro exhibition (Moreleta Park Integration Project 2021).

2021

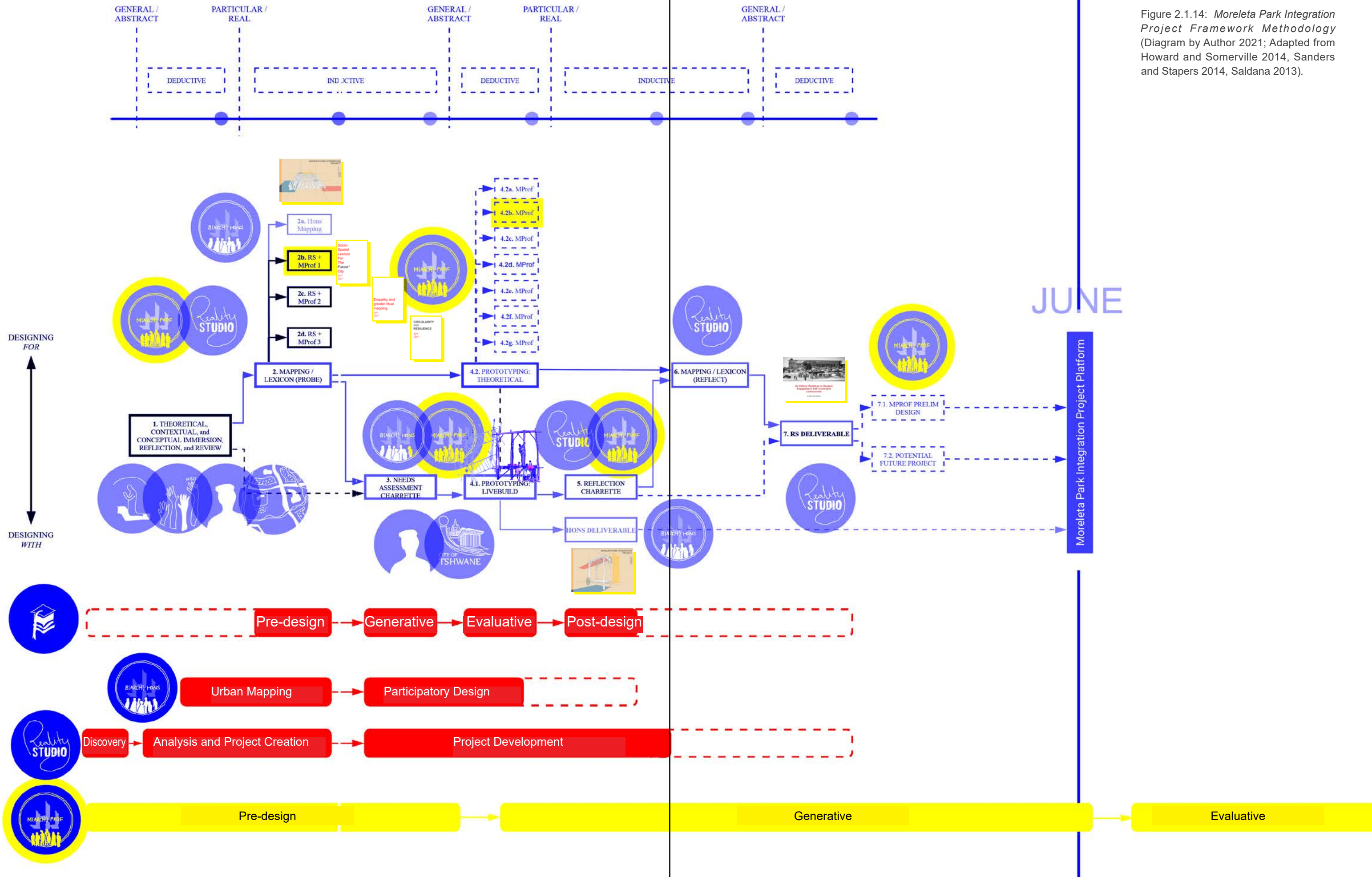


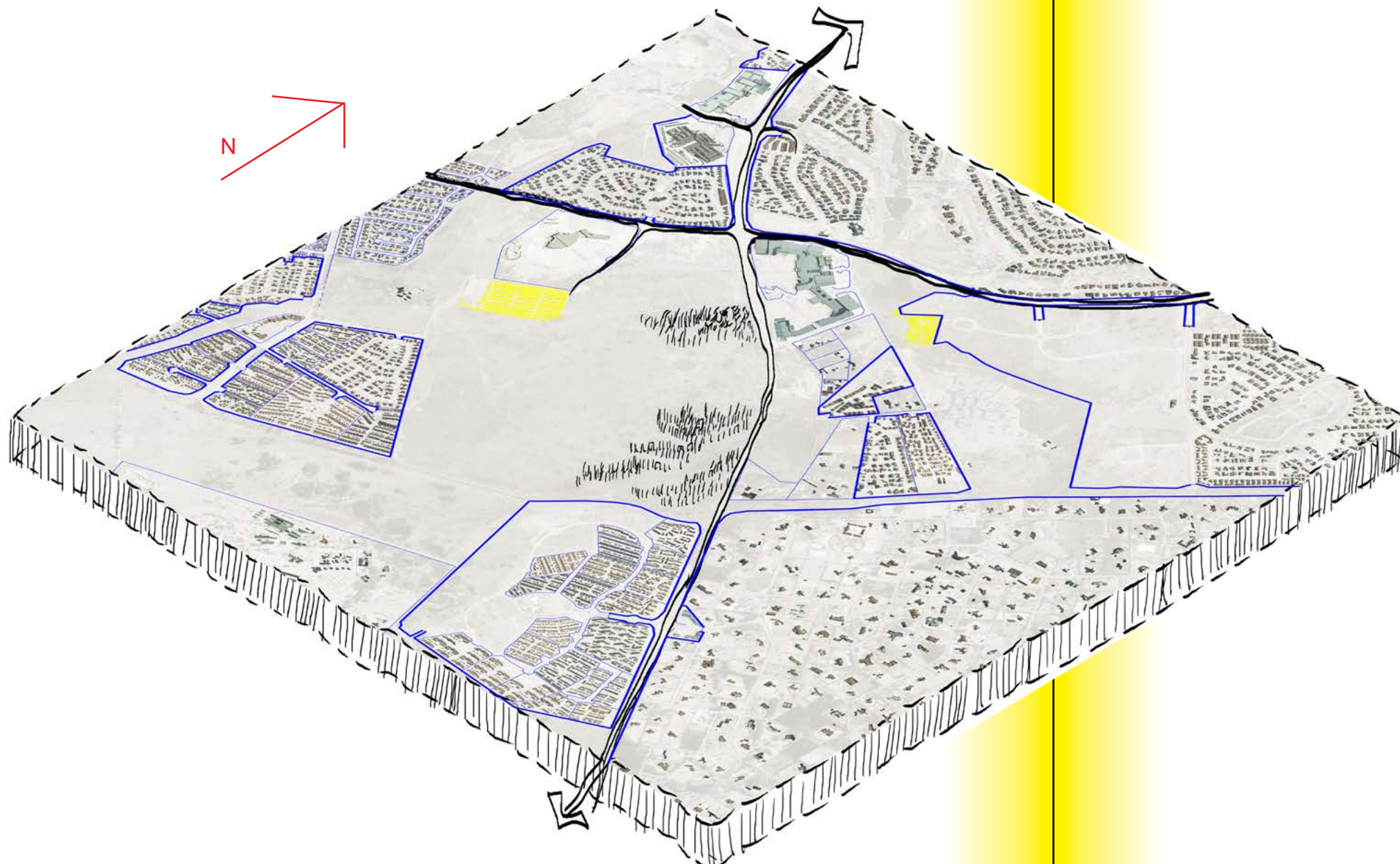
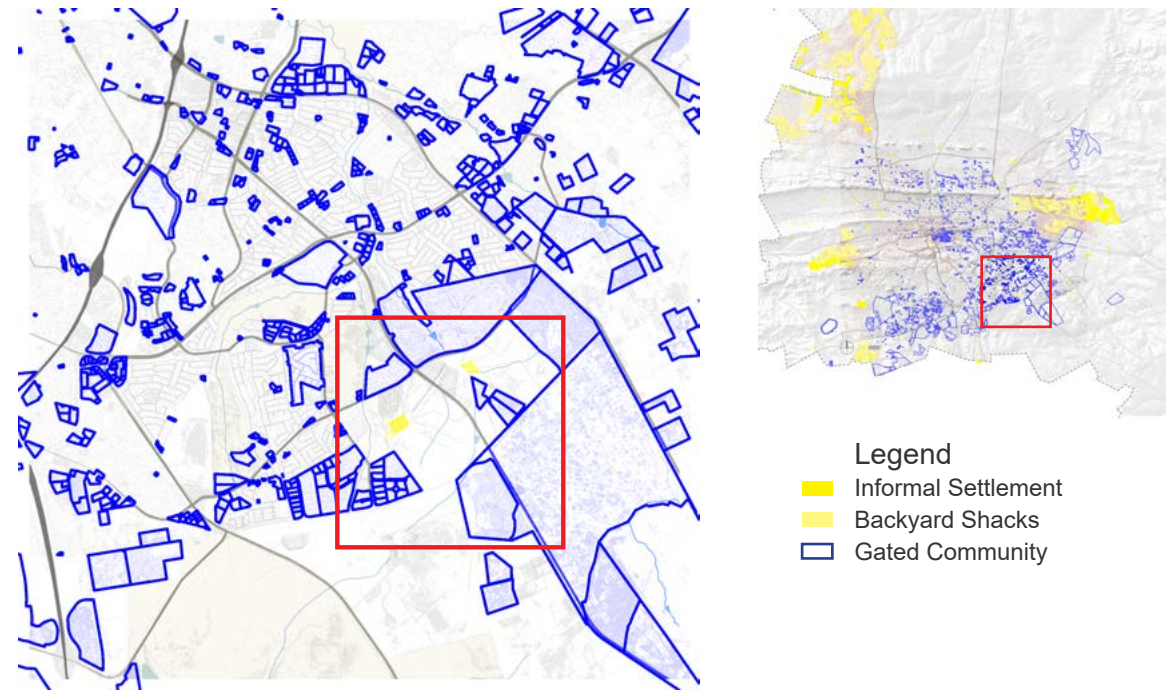
Figure 2.1.14: *Moreleta Park Integration Project Framework Methodology* (Diagram by Author 2021; Adapted from Howard and Somerville 2014, Sanders and Stapers 2014, Saldana 2013).



Figures 2.1.15a-f: Photographs from the numerous site visits, during the field research process between February and June in Plastic View (Moreleta Park Integration Project 2021).

Figure 2.1.6: (page 82-83) Two community leaders play a boardgame outside of the community initiated office in Plastic View (Zorn 2020).





2.2. CASE STUDY: MORELETA PARK

Figure 2.2.1: (left) *Isometric map of Moreleta Park, the case study area* (Author 2020)

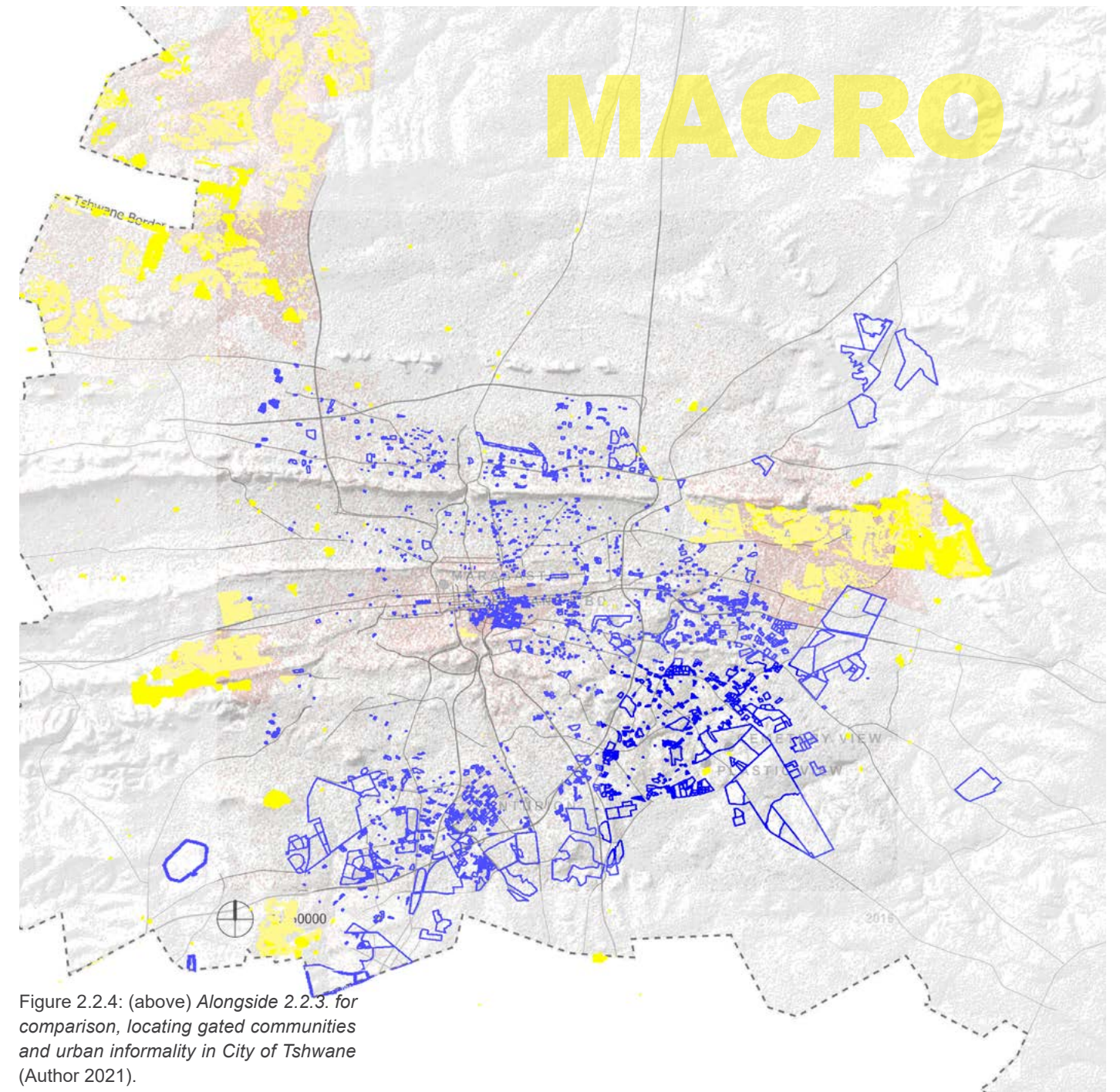
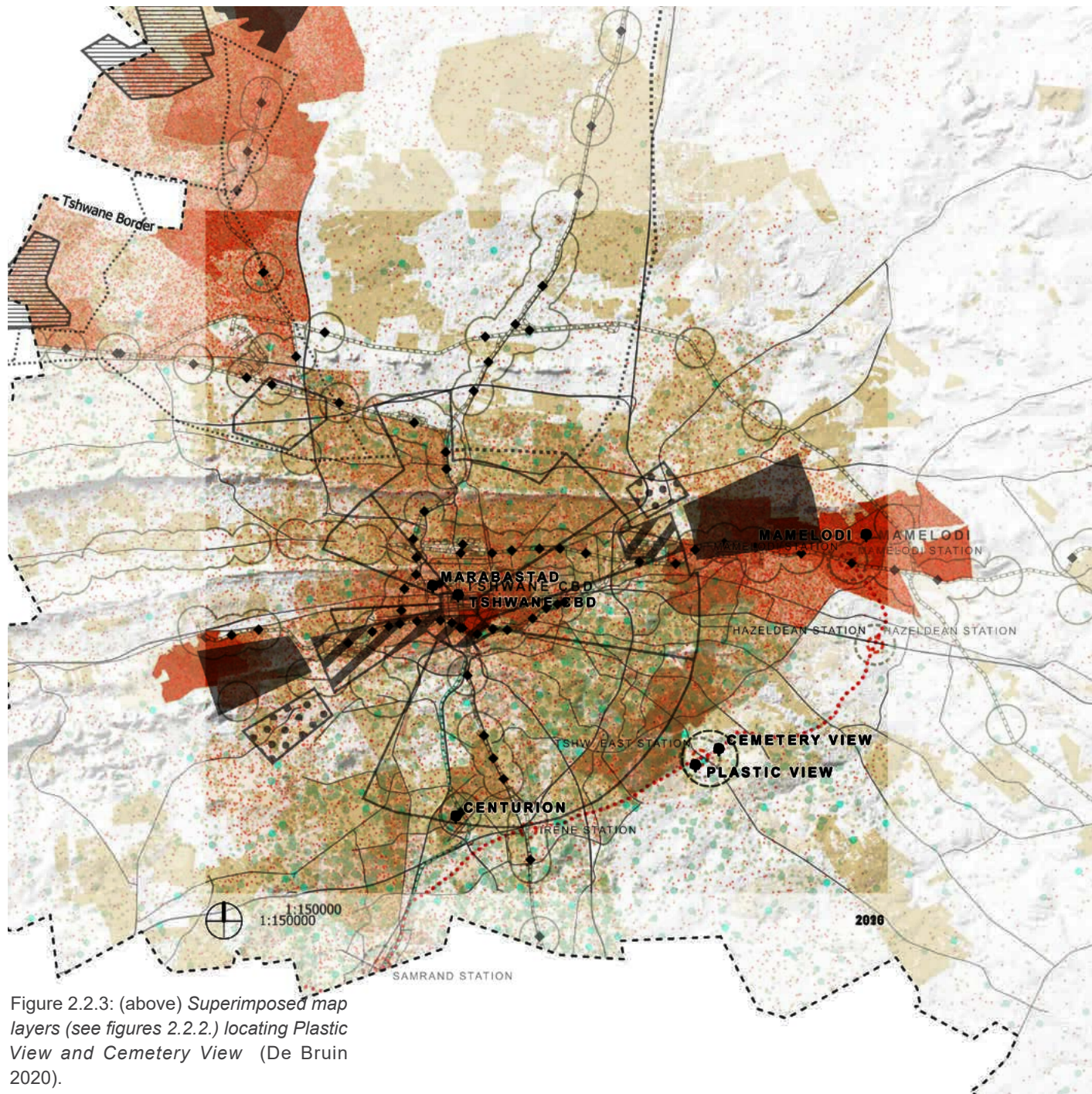
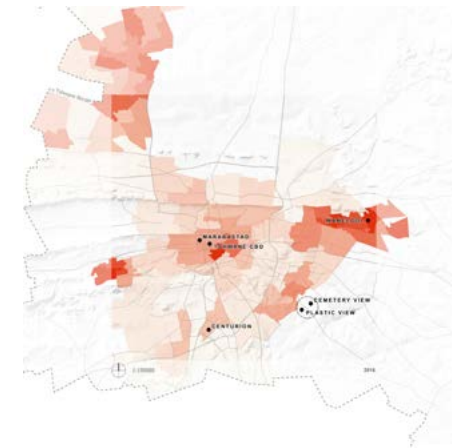
2.2.1. Locating Moreleta Park

It has been asserted that socially constructed scarcity results in a system that tries to avoid scarcity by resorting to often violent and discriminatory measures, thereby producing the scarcity that is feared (Till 2014). The physical consequences of socially constructed scarcity are perhaps most poignantly displayed in and permeated by the callow urban grain of Moreleta Park; the front of the battle of multiple futures.

When unpacking each layer and dimension of place, the most appropriate point of entry, embedded with clues of the “future city”, has been the

area’s evolution of urban morphology - especially given that this investigation explores a site where urban sprawl and urbanisation meet and display telling patterns from both the static and kinetic city (Mehrotra 2020).

As a foundation to the arguments that follow - the next set of mapping, completed in 2020, provides a brief overview of information such as urban planning schemes, land-use, service infrastructure and morphology - at a macro, meso, and micro level. These are viewed against maps which identify gated communities and urban informality at each respective scale.



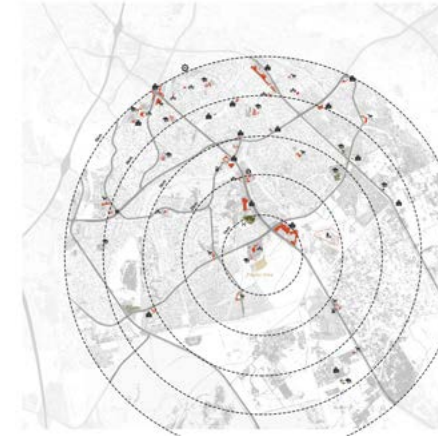


Figure 2.2.5a: (left) Contextual meso map layer (Katranas 2020).

Figure 2.2.5b: (left) City of Tshwane Region 6 zoning (Katranas 2020, adapted from CoT RSDP 2018).

Figure 2.2.5c: (left) City of Tshwane Region 6 nodes and corridors (Katranas 2020, adapted from CoT RSDP 2018).

Figure 2.2.5d: (left) Amenities within a 1km-5km radius of Plastic View (Katranas 2020).

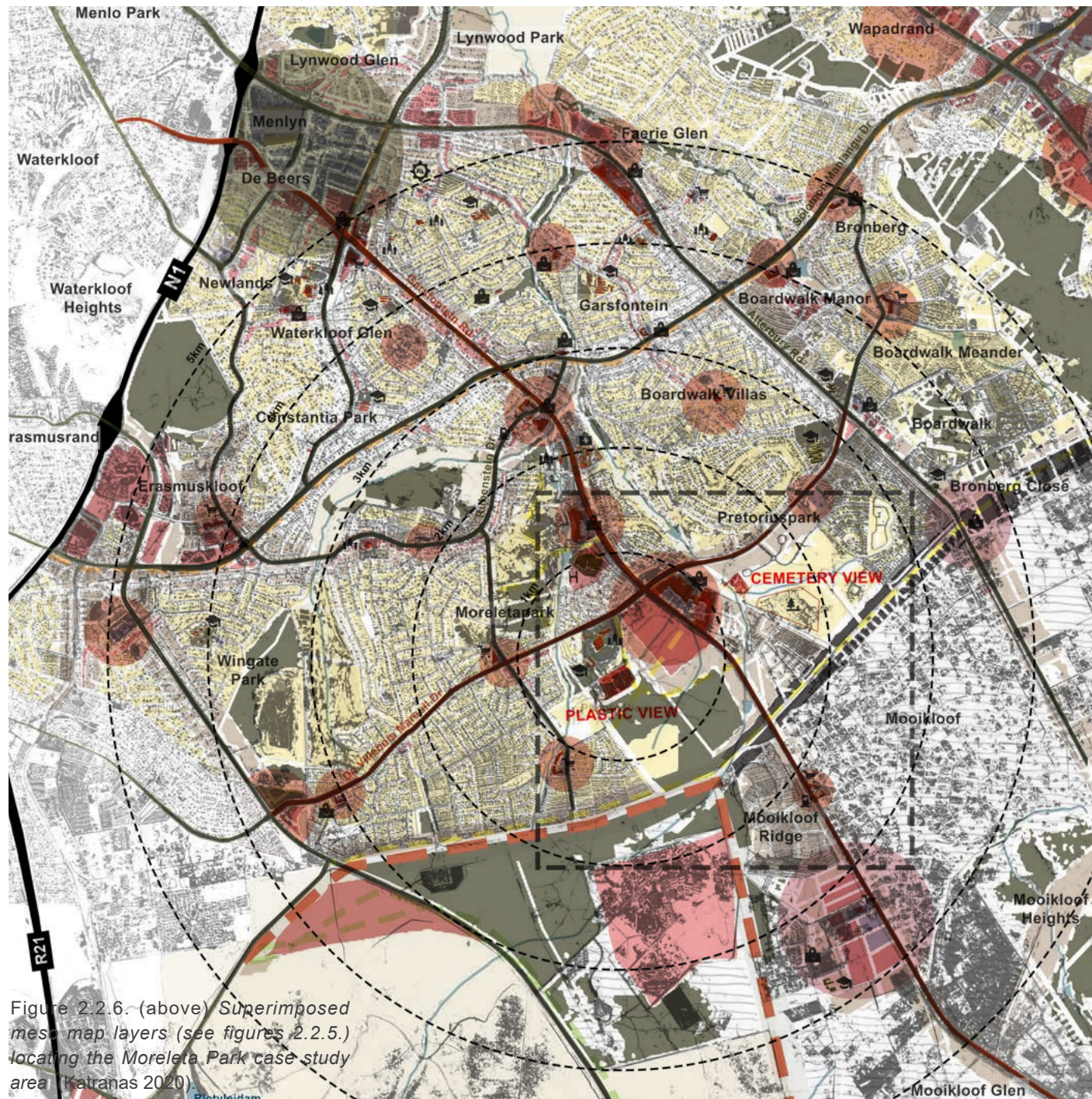


Figure 2.2.6. (above) Superimposed meso map layers (see figures 2.2.5.) locating the Moreleta Park case study area (Katranas 2020).

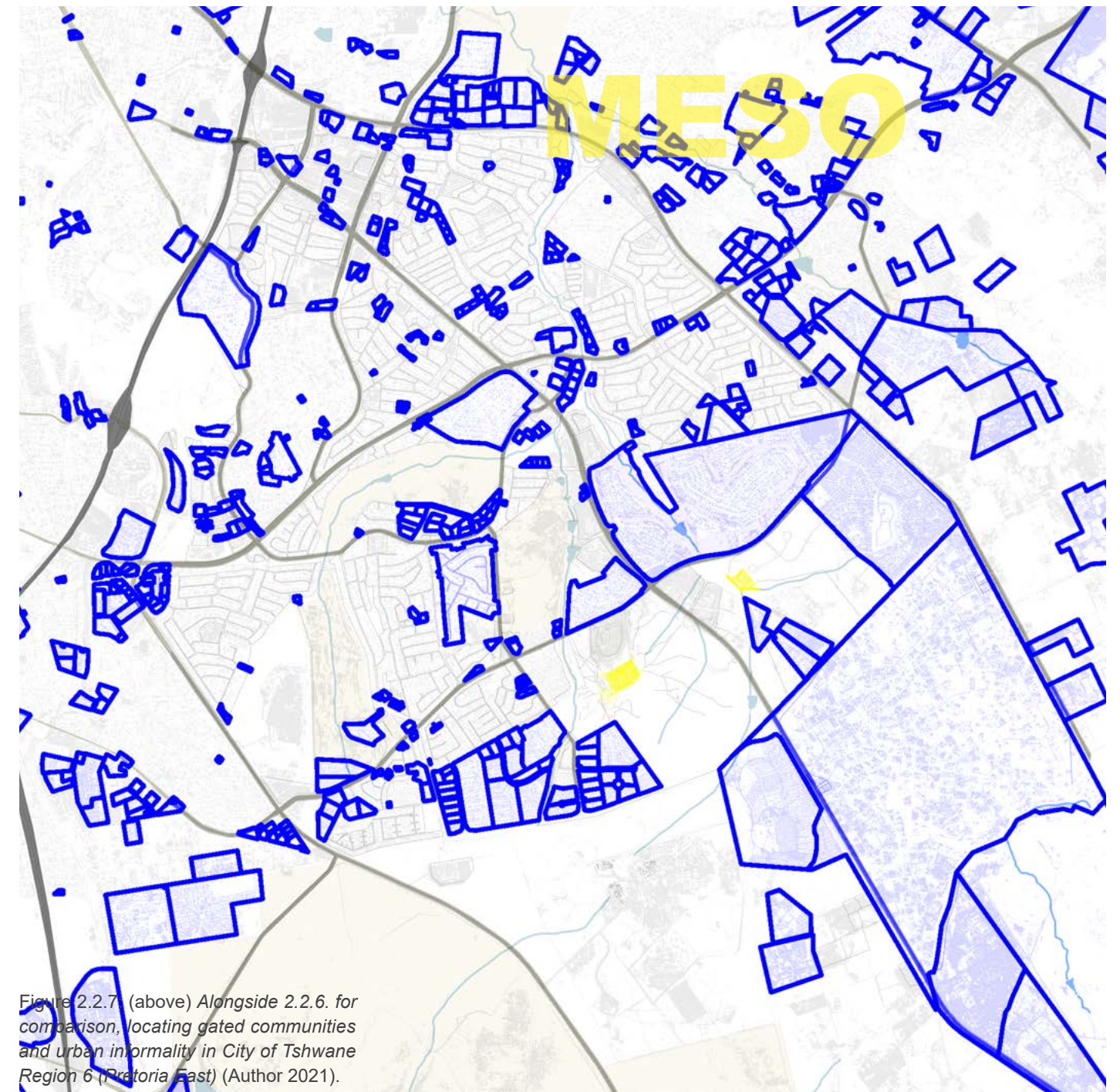


Figure 2.2.7. (above) Alongside 2.2.6. for comparison, locating gated communities and urban informality in City of Tshwane Region 6 (Pretoria East) (Author 2021).



Figure 2.2.8a: (left) Contextual micro map layer (Katranas 2020).

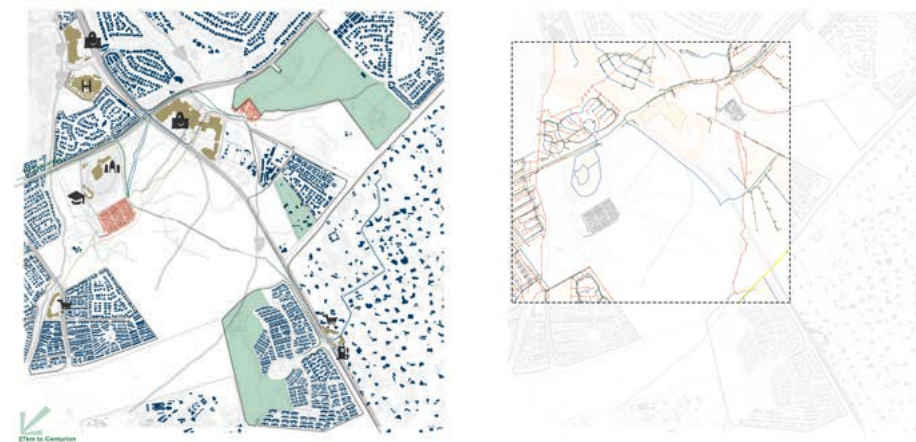


Figure 2.2.8b: (left) City of Tshwane Region 6 - Moreleta Park and Wingate Park nodes and corridors (Katranas 2020, adapted from CoT RSDP 2018).

Figure 2.2.8c: (left) micro context land parcels and ervens (Author (Katranas) 2021).

Figure 2.2.8d: (left) External job opportunities from the perspective of Plastic View and Cemetery View (Katranas 2020).

Figure 2.2.8e: (page 91) Servitudes and infrastructure reticulation (Katranas 2020)

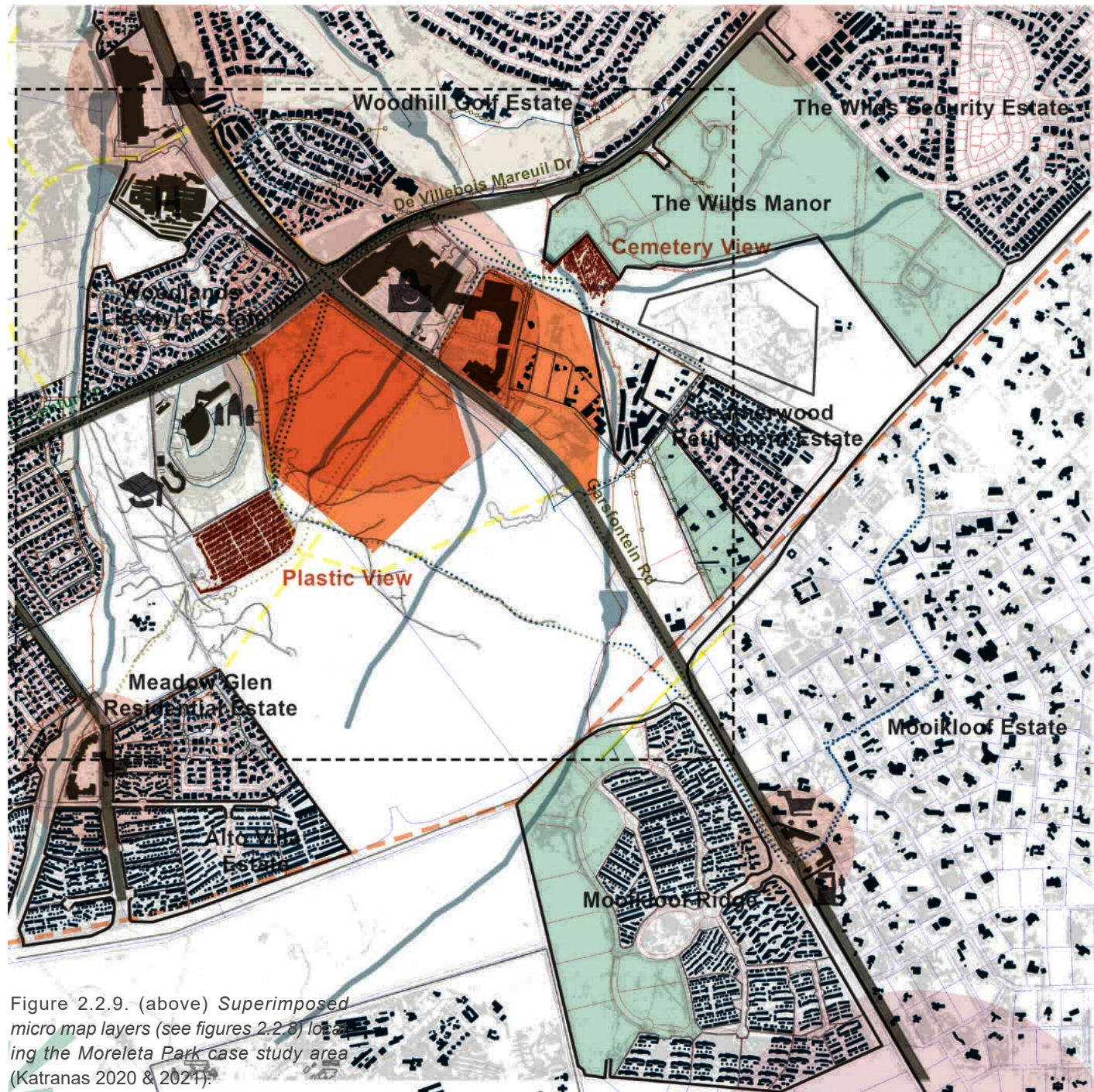


Figure 2.2.9. (above) Superimposed micro map layers (see figures 2.2.8) locating the Moreleta Park case study area (Katranas 2020 & 2021).

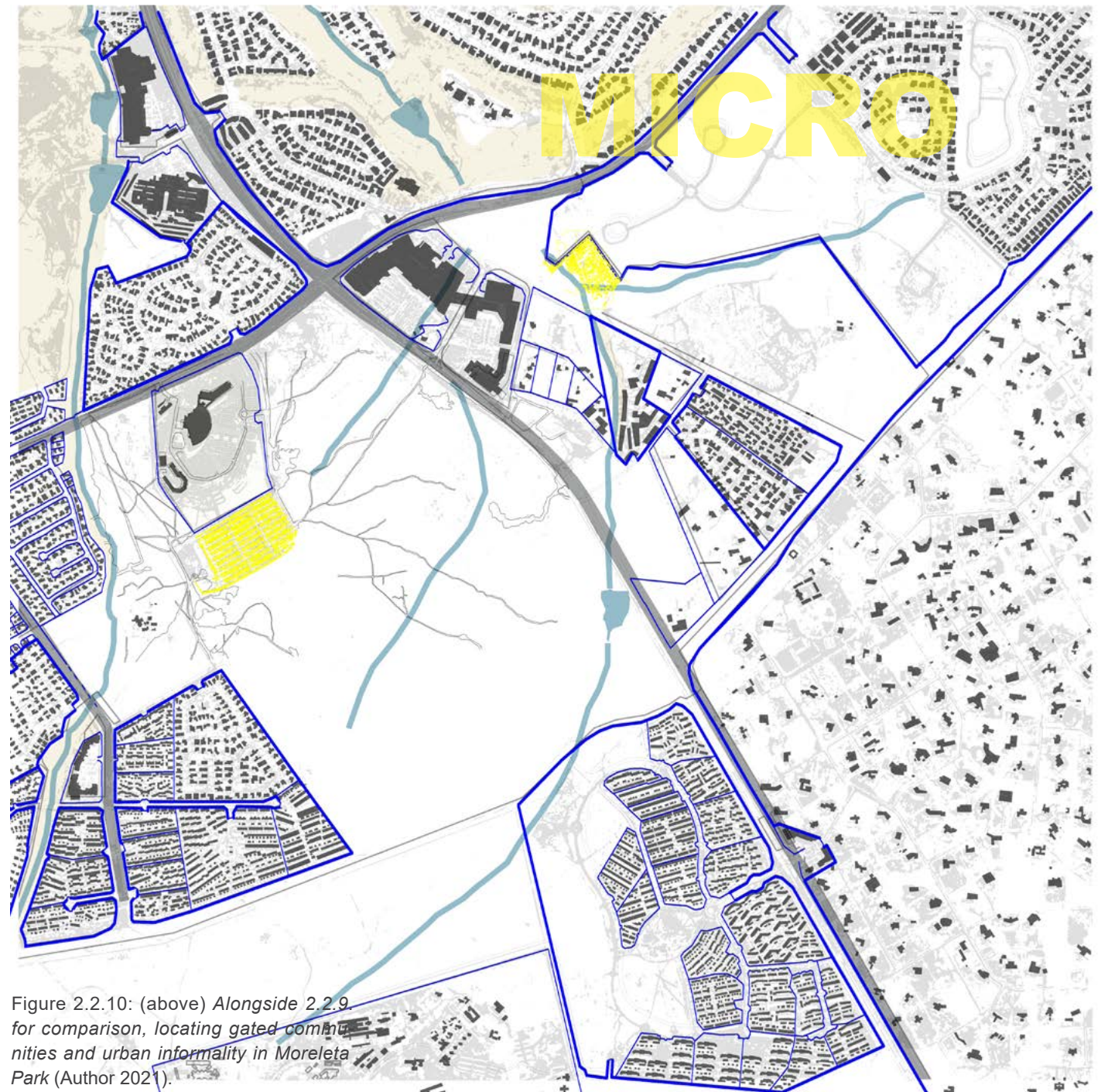
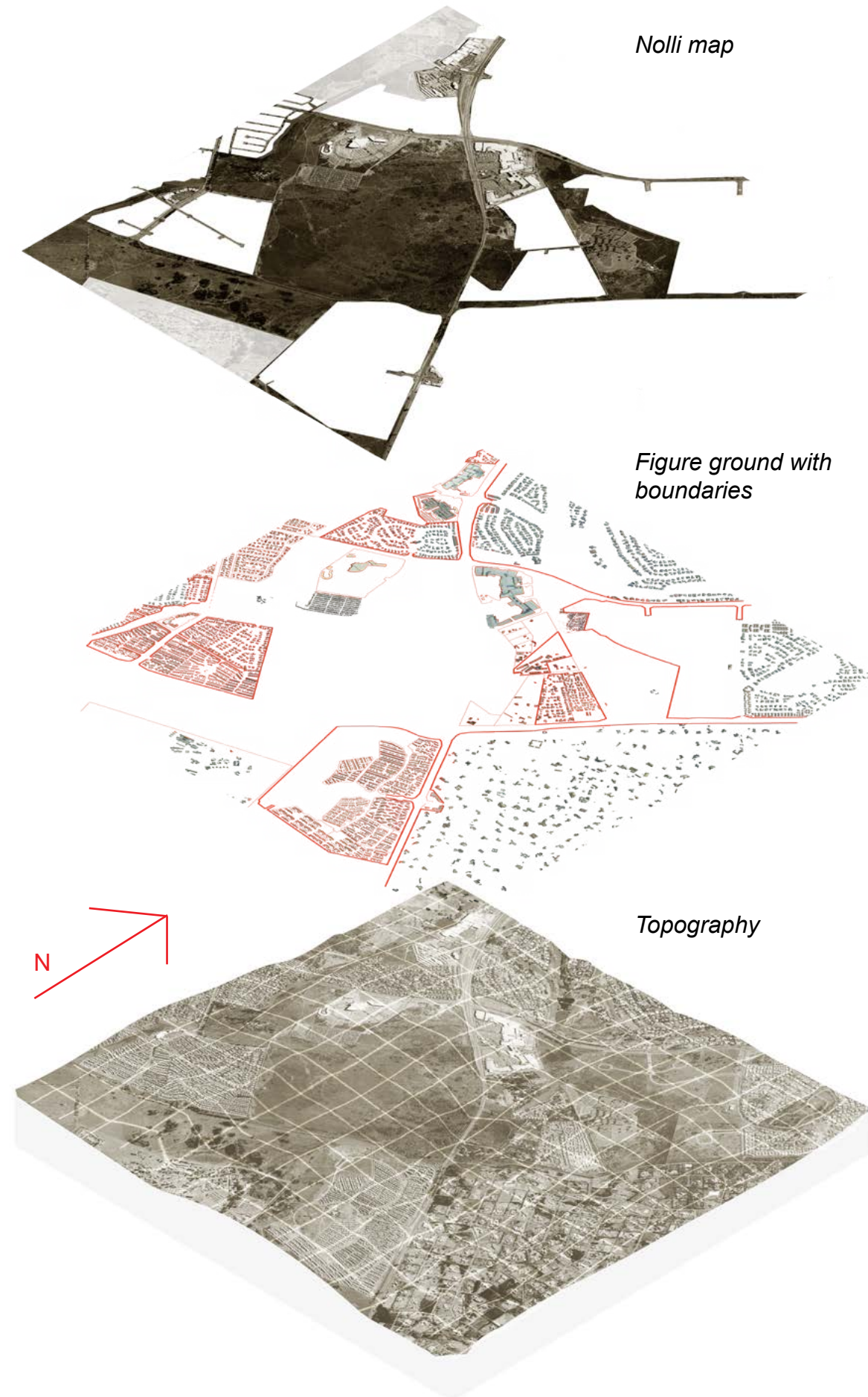


Figure 2.2.10: (above) Alongside 2.2.9 for comparison, locating gated communities and urban informality in Moreleta Park (Author 2021).

FINDINGS



This investigation has led to the discovery of a variety of patterns, trends, and relationships.

1. First, the current fragmented and vehicle-centric morphology induces a dependence on and overconsumption of resources - due to the resulting lack of cross-optimisation of resources and flows. This results in an unsustainable system that fuels the toxic social construction of scarcity, which in turn, results in the need for fortification.

2. This, alongside the problematic climate implications that arise from a similarly transactional attitude to the environment, disproportionately impacts those living in informal settlements – for socio-economic reasons and due to their location in spaces left after planning (SLOAP) that are often undesirable or unfit for development (such as cemetery view being in a flood plain).

3. There is an increasing trend towards the enclosure of existing open neighbourhoods and streets – hindering the walkability of an already pedestrian-dismissive urban landscape.

4. The City of Tshwane has identified several important nodes and corridors situated near Moreleta Park – and this project's focus area falls on a state-owned land parcel that is situated within walking distance of the Woodlands Boulevard Node. According to the City of Tshwane Region 6

Spatial development framework, “this land is served by Garsfontein Drive and De Villebois Mareuil Drive, and it is ideally located to accommodate mixed land used comprising of-ices and a small percentage of higher density residential developments” (City of Tshwane 2018).

5. A node is defined as “a place where both public and private investment tends to concentrate” (City of Tshwane, 2018) and translates to job opportunities. The tendency to separate land-use zones, and concentrate economic functions into centralised nodes, does little to accommodate the more natural transition of residential buildings along main roads into economic enterprises (and ultimately, the intertwining of domicile, livelihood, and mobility) – which is more linear and requires a more porous street edge than what gated communities allow.

6. Several future roads and future BRT routes have also been identified in the area (City of Tshwane, 2018). These include future highways and Mobility Spines. The Identified mobility spine (a) has been earmarked as a future Gautrain railway line. This line will link Samrand and Irene to Pretoria East, and Run from Pretoria East to Mamelodi (City of Tshwane, 2018).

7. Within the micro-scale area, residential urban grain and density ranges between one housing unit per hectare

in Mooikloof, to between 2-10 units per hectare in the high-income residential gated communities such as Woodlands Lifestyle estate and Woodhill Golf Estate, 30-40 Units per hectare in older residential neighbourhoods and higher density complexes such as Meadow Glen and Alto Villa Estate, and over 120 units per hectare in plastic View informal settlement.

8. There is little to no service provision in Plastic View and Cemetery View informal settlement.

9. Moreleta Park is favourably positioned amongst a variety of privately funded amenities, such as schools, a hospital, and malls – with varying levels of accessibility on a recreational level, and providing formal job opportunity on a livelihood level.

Figure 2.2.11: (left) Series of isometric maps highlighting the dominant urban morphological characteristics of the Moreleta Park study area: Nalli map, figure ground, and ortho-photo topography map (Author 2020 & 2021).

2.2.2. The origin of Moreleta Park

Moreleta Park exists on significantly valuable land, owed to its ecological assets such as the visual beauty of undulating topography and the prominence of both perennial and non-perennial fluvial systems operating in tandem with ecologically crucial wetlands within a catchment area. An analysis of historical imagery from 1994 to present reveals the steady degradation of these natural flow driven systems alongside the area's rapid urban infrastructure development. This predominantly low-density, high income residential development, as well as the construction of malls such as Parkview and Woodlands Boulevard - facilitated the emergence of loosely scattered informal dwellings in the open veld since 2001. This was revealed through interviews with community members of Plastic View, who remember the days prior to formalisation in 2007 as a time of instability and insecurity.

"I have been living in PV since its inception in 2009 but have been here since 2004. Was staying in the bush in the area. When I first came, I came on my own. Then my wife came in 2016. I saw and learnt a lot - life experiences. Saw

many things in life, most of them are dangerous things. At that time there was no leadership, each and every person was doing their own thing. When someone is walking, when people don't know them, they take all their belongings. It's one of the reasons that made me want to be a leader. To create change."

Respondent 20

"I am from Zimbabwe, moved here in 2007. Came here because we were staying outside in the bush. And then the other man "Colin" came, put a fence, "come inside, for safety". Came here because my husband was working here. Came to join him. I never thought of moving anywhere else. It is cheap to stay here. The money we are earning is not enough to rent somewhere else, transport is expensive. It is easy for us to stay here and support our children. My children still need clothes, food, school - hardly manage that - so wouldn't think of moving yet. Have family in Zimbabwe. Usually go home during easter and

December. When Zimbabwe became hard to survive, we came here. We come here for jobs. Otherwise I wouldn't have left Zimbabwe. We spend time teaching other people to cook - especially during the weekend. Friends visit each other, teach cooking, socialize. Ingredients bought at woodlands or checkers. Some things we get from the spaza shops, some stuff from the malls."

Respondent 22

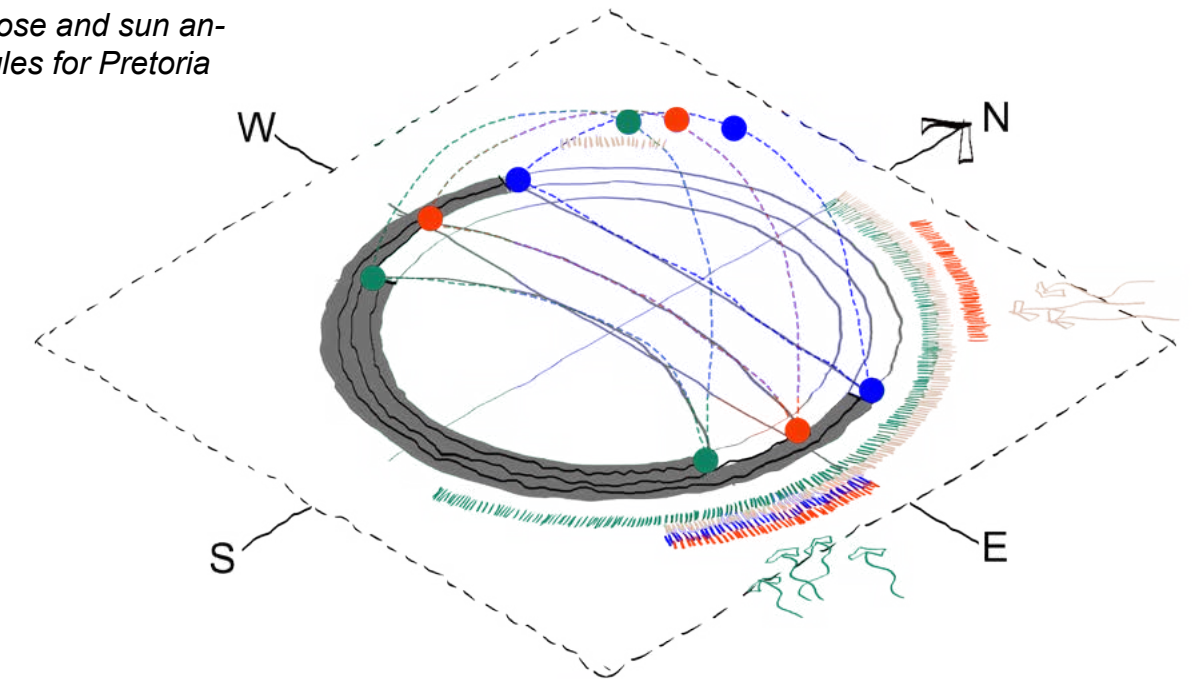
"Room is better than sleeping in a bush."

Respondent ____

Both protected and inhibited by a string of 12 court-orders mediating the needs and responsibilities of the court, police, the nearby churches, the municipality, malls, the residents of the plastic view as well as the home owners associations of surrounding gated communities, Plastic View, otherwise know as Woodlane Village, has become a part of the identity of an otherwise fortified upmarket area (Mashika 2019).

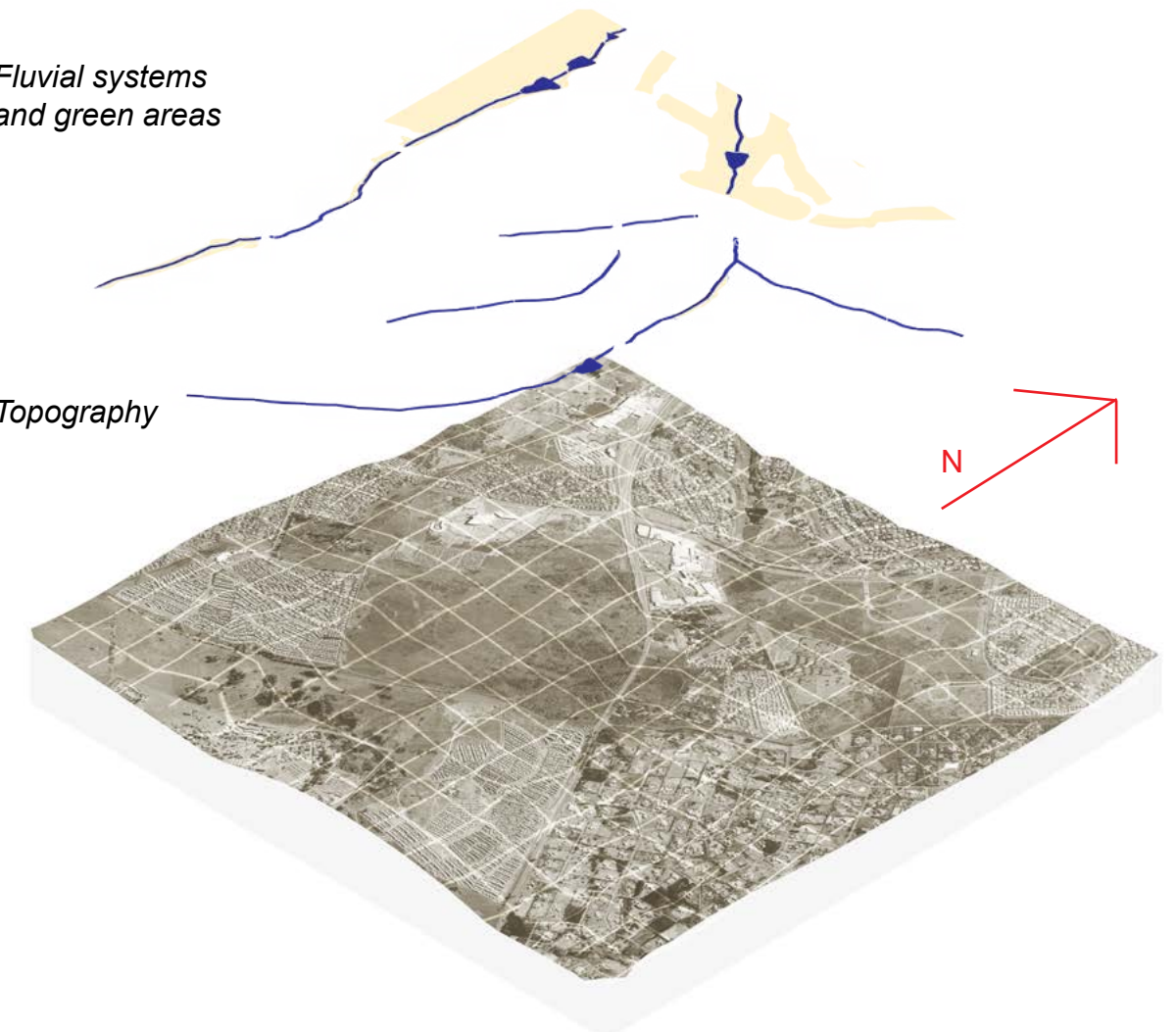
Figure 2.2.12: (right) Series of isometric maps highlighting the environmental considerations and characteristics of the Moreleta Park study area: seasonal wind-rose and sun angles, fluvial systems and green areas, and ortho-photo topography map (Author 2021).

Seasonal wind rose and sun angles for Pretoria



Fluvial systems and green areas

Topography



2.2.3. A morphology and materiality of Scarcity

Characteristic of contemporary planned neighbourhoods, Moreleta Park lacks both the humane sensibility of scale, as well as the complexity and organisation required to support resilient and effective cities. Described as a “Floating city” these deficits are made visible by the plethora of shopping malls and gated communities - which whilst dominating large areas of space and existing in great frequency, are limited in function and are regrettably change averse (Salat & Bardic 2011).

Salat and Bardic (2011) aptly capture the conundrum faced by developing cities, having been robbed of crucial processes of emergence that are known to engender the capacity to better deal with the social and physical dimension of scarcity. Similar to the view posited through the theory of Panarchy, and the adaptive cycle: if a city were to be conceptualised as a complex open system in continuous flux, constituting a palimpsest of objects and events that exist at various scales of magnitude and at respectively inversely related frequencies - then, when faced with the external flows and disturbances which interrupt the system’s preferred equilibrium, it is the invaluable “orderly patterns of chance” facilitated by

complexity which defines the systems strength to return towards momentary equilibrium (Salat & Bardic 2011, Holling et al. 2002, Peres & Du Plessis ___).

There is a strong link between the ecological paradigm orientated theory of Panarchy, and the Gestalt theory posited by the paradigm of phenomenology - which aims to understand place and acknowledges it as that which exists in relation to contexts and “in configurations with other places” (Jordaan 2015:71). With respect to the material dimension of Moreleta Park, in addition to the unmistakable distinction between violently permanent and forcibly transient constructs, there also exists, on a hermeneutic level, a tendency towards a “Nostalgic and romantic approach to placemaking that leads to superficial and anachronistic productions of old places, and even kitsch environments” (Jordaan 2015:68). This is evident in the tuscan style of homes in both the gated communities and informal settlements - a mere simulacra of efficiency (OMM design workshop___) and paradise. This reveals a misdirected attempt at tapping into the image or symbol that represents the healthy emergent, palimpsestuous complexity found in ancient tuscan towns. It indicates the act of preserving a static image of paradise, and a rejection and fear of time and change.

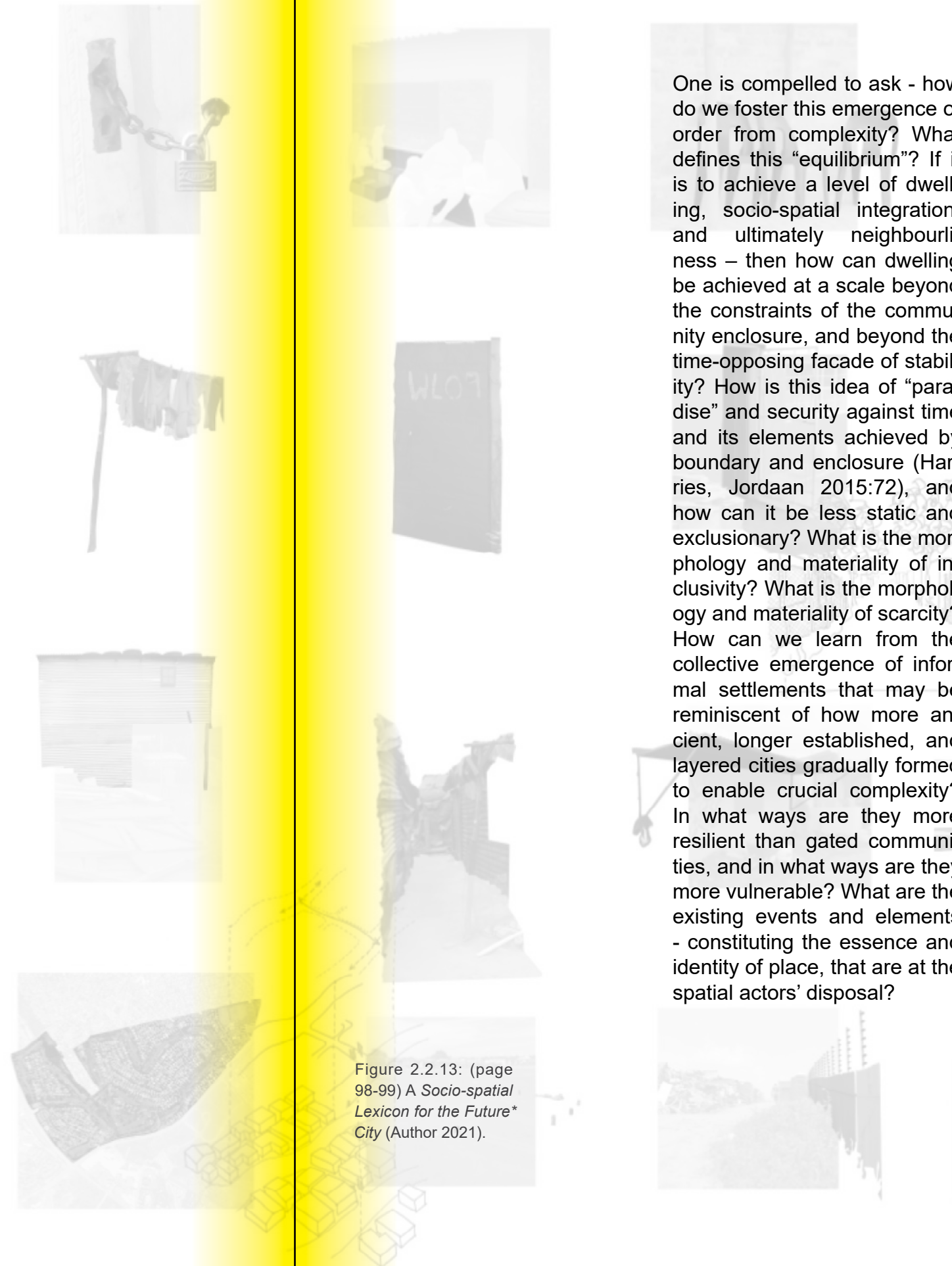


Figure 2.2.13: (page 98-99) A Socio-spatial Lexicon for the Future* City (Author 2021).

One is compelled to ask - how do we foster this emergence of order from complexity? What defines this “equilibrium”? If it is to achieve a level of dwelling, socio-spatial integration, and ultimately neighbourliness – then how can dwelling be achieved at a scale beyond the constraints of the community enclosure, and beyond the time-opposing facade of stability? How is this idea of “paradise” and security against time and its elements achieved by boundary and enclosure (Harrises, Jordaan 2015:72), and how can it be less static and exclusionary? What is the morphology and materiality of inclusivity? What is the morphology and materiality of scarcity? How can we learn from the collective emergence of informal settlements that may be reminiscent of how more ancient, longer established, and layered cities gradually formed to enable crucial complexity? In what ways are they more resilient than gated communities, and in what ways are they more vulnerable? What are the existing events and elements - constituting the essence and identity of place, that are at the spatial actors’ disposal?

Bearing in mind the dominant condition of urban migrancy and socio-spatial discrimination present in post-colonial and post apartheid cities, perhaps the most useful starting point is acknowledging that the present and future city is in fact a “community of strangers, an elsewhere, a place of transience” (Enwezor 2011:386). Where strangers live in proximity, and there inherently exists physical barriers.

In order to successfully leverage the often overlooked complex processes of emergence within Moreleta Park as well the City of Tshwane at large, the crucial question of “what does it mean to live in a city today”, was embarked on through the lens of Plastic View informal settlement. Through a socio-spatial cataloguing process (Katranas & Kriek & Zachrisson 2021) that identified hyper-optimisation, third spaces and places, and safety, surveillance and insecurity as relevant avenues of inquiry, the next three sections comprise a coded, multi-scalar, and visual collection of objects, conditions, and typologies that lend to a greater understanding of the “placial” dimension (Jordaan 2015) and Essence patterns (Mang et al 2016) of Moreleta Park.

SOCIO-SPATIAL LEXICON FOR THE FUTURE* CITY



MPIP 2021 Home Context Mapping Ethical Roadmap Needs Assessment About

MAPPING

Socio-Spatial Lexicon For The Future City*

SOCIO-SPATIAL LEXICON FOR THE FUTURE CITY

EMPATHY AND GREATER RITUAL MAPPING

UNIT FOR CIRCULARITY AND RESILIENCE

			} Socio-spatial cataloguing
Delani Kriek UP M(Arch) Prof	Alexia Katranas UP M(Arch) Prof	Lina Zachrisson Chalmers M(Arch)	
Nick Ramsey UP M(Arch) Prof	Alexander Mbedzi UP M(Arch) Prof	Chris De Bruin UP M(Arch) Prof	
			} Empathy and greater rituals
Brendon Creighton UP M(IntArch) Prof	Dhane Herbst UP M(IntArch) Prof	Julina Lindqvist Chalmers M(Arch)	
Anniqwe Haese, Charlotte Swart, Wessel Ebersohn, Ingrid Schmutz, Naseera Goga, Nicholas Hudson, Ryan Meij, Tlamelo Mojakhoko UP B(Arch) Hons			} Broad spectrum focus mapping

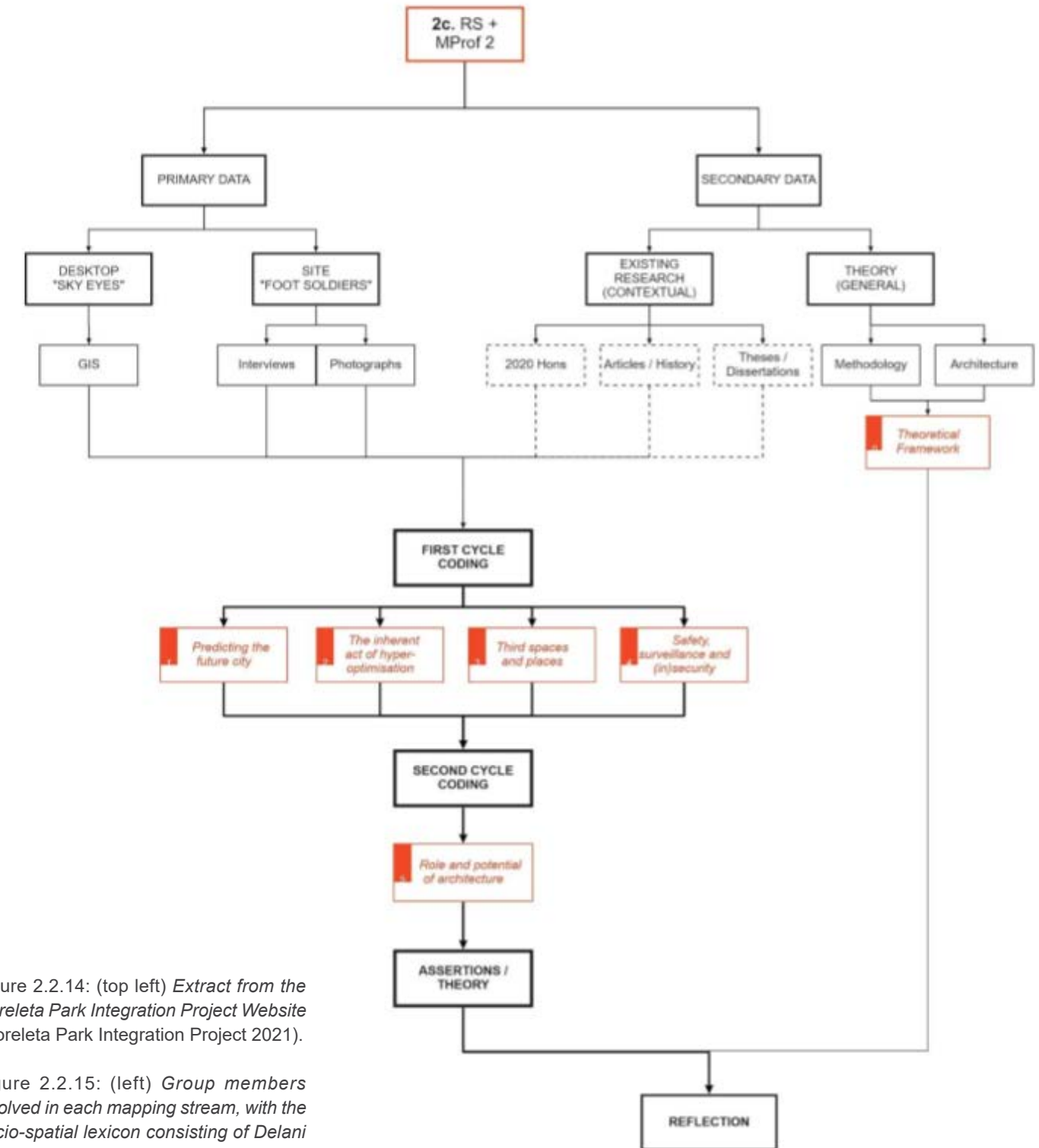


Figure 2.2.14: (top left) Extract from the Moreleta Park Integration Project Website (Moreleta Park Integration Project 2021).

Figure 2.2.15: (left) Group members involved in each mapping stream, with the Socio-spatial lexicon consisting of Delani and Alexia from the University of Pretoria, and Lina from the Chalmers University of Technology (Moreleta Park Integration Project 2021).

Figure 2.2.16: (above) Spatial Lexicon for the Future City Methodology (Author 2021, Adapted from Saldana 2013).

SOCIO-SPATIAL LEXICON

The inherent act of hyper-optimisation

- Material usage
- Levels of appropriation
- Socio-spatial self organisation



2.2.4. The inherent act of hyper-optimisation

“The hyper-optimisation of spontaneous urban settlements is an inevitable evolution of our future urban landscapes. As all future urban population growth is estimated to happen in informal settlements, slums and other spontaneous dwellings, the self-organisation and appropriation of these areas of our cities is of vital importance, not least in the pursuit of social and environmental sustainability.

In Plastic View, we are able to identify multiple indicators of this inherent change in action. It takes the physical form of changes and appropriation to housing typologies, building materials, appropriation of the public and semi-public space and reorganisation within pre-existing and creation of new blocks and groupings in the settlement.”
(Extract from Zachrisson in Moreleta Park Integration Project 2021)

Figure 2.2.17: (left) The inherent act of hyper-optimisation (Kriek 2021).

Building Materials



2.2.4.1. Plywood

Indicator of high level of appropriation. Easily accessible in non-standard sizes from a variety of sources (as building scraps), doubled up for better insulation.

Fig. 2.2.4.1a (above) Plywood construction (Zachrisson in Moreleta Park Integration Project 2021)
Fig. 2.2.4.1b (above) Plywood construction explanatory axonometric (Author in Moreleta Park Integration Project 2021)



2.2.4.2. Corrugated metal

High level of flexibility, and sheet metal has a good resale value making it a durable investment.

Fig. 2.2.4.2a (above) Corrugated metal construction (Zachrisson in Moreleta Park Integration Project 2021)
Fig. 2.2.4.2b (above) Corrugated metal construction explanatory axonometric (Author in Moreleta Park Integration Project 2021)



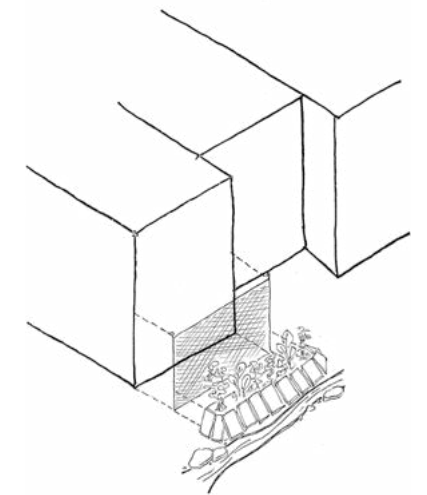
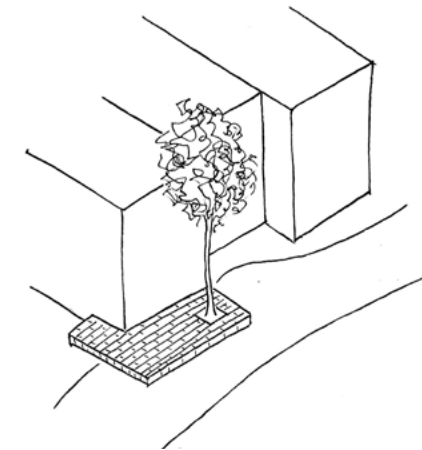
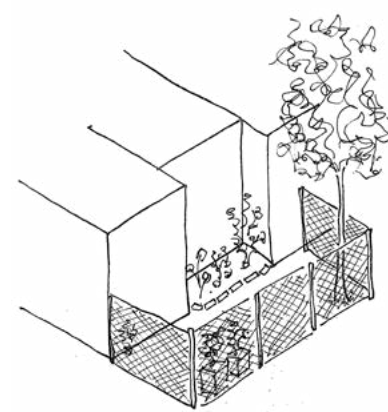
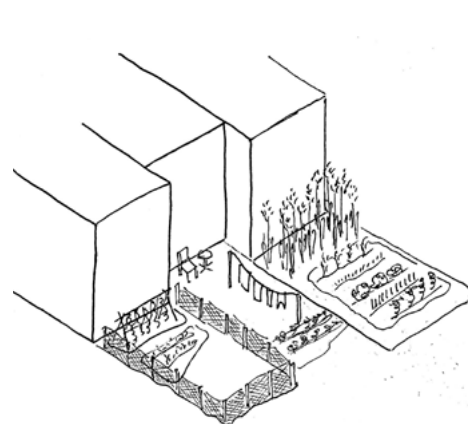
2.2.4.3. Brick masonry

Plastered and exposed stock brick exterior and interior facades. Bricks signify stability and safety against fires and other natural disturbances. Is consistent with the prevailing structural material of surrounding residential buildings.

Fig. 2.2.4.3a (above) Brick construction (Zachrisson in Moreleta Park Integration Project 2021)
Fig. 2.2.4.3b (above) Brick construction explanatory axonometric (Author in Moreleta Park Integration Project 2021)

Levels of appropriation:

Garden typologies



2.2.4.4. Vegetable Garden

Gardens used for urban agriculture are mainly located on the southern periphery of the settlement challenging its formal boundaries.

Fig. 2.2.4.4a (above) Vegetable Garden (Zachrisson in Moreleta Park Integration Project 2021)

Fig. 2.2.4.4b (above) Plywood construction explanatory axonometric (Zachrisson in Moreleta Park Integration Project 2021)

2.2.4.5. Aesthetic Garden

Decorative front and back yards indicating a high level of appropriation and an expression of identity. Most often sighted in stands considered to be longstanding permanent homes.

2.2.4.6. Planted tree

A single tree planted in the front yard or on the pavement on the front porch.

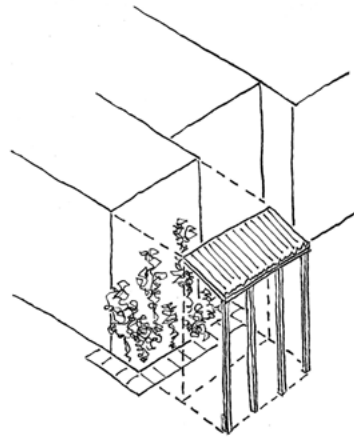
Used as a landmark, shading mechanism, or celebrated for visual beauty.

2.2.4.7. Vegetable patch

Smaller scaled vegetable garden that double up as aesthetic gardens. Often found on central stands within the settlement.

2.2.4.8. less structured flower bed

Used to demarcate space, often at the foot of physical boundaries such as fences. Green spaces are also used as buffers alongside boundary walls in surrounding residential and commercial developments.



2.2.4.9. Structured Flowerbed

Versatile and movable, pots multiply the potential uses of softscaping. It is seen here to assist in threshold and the linear demarcation of public and private space.

2.2.4.10. Collection of Pots

Versatile and movable, pots multiply the potential uses of softscaping. It is seen here as a visually beautiful element, used to create a public facing space that can be gathered around.

2.2.4.11. Vegetable Pot

Versatile and movable, pots multiply the potential uses of softscaping. It is seen here as a visually beautiful element, used to create a public facing space that can be gathered around.

Fig. 2.2.4.4a (above) Vegetable Garden (Zachrisson in Moreleta Park Integration Project 2021)

Fig. 2.2.4.4b (above) Plywood construction explanatory axonometric (Zachrisson in Moreleta Park Integration Project 2021)

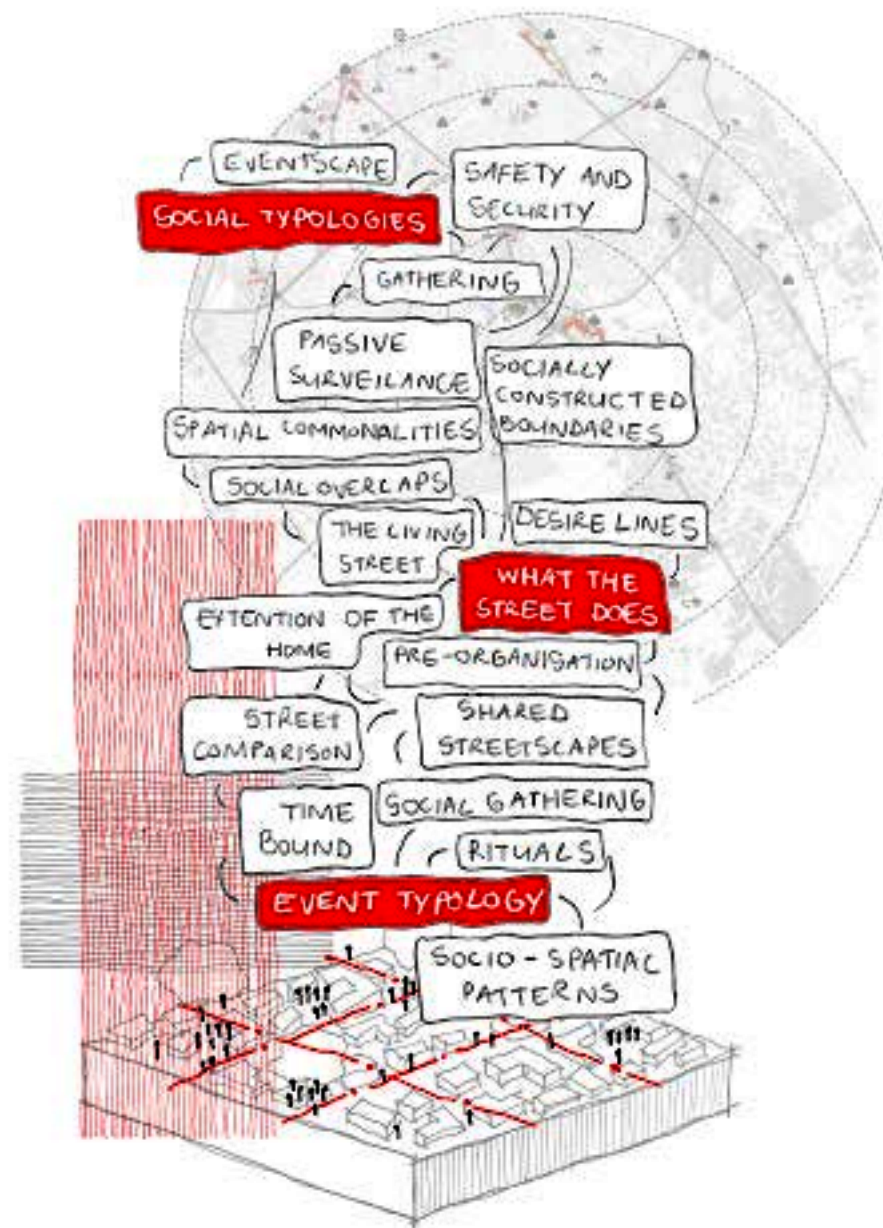
SOCIO-SPATIAL LEXICON

Third spaces and places

Social typology

The streets

Event typology



2.2.5. Third spaces and places

“This section of the socio-spatial lexicon is focusing our attention to the third spaces and places of spontaneous urban settlements. Third spaces are places between work and home and include the streetscape as well as public official and informal gathering and event spaces.

are trees or greenery, on private porches or verandas, she-beens and barber shops, as well as around water tanks and other amenities. Such places as well as the general function and purpose of the street, are therefore of interest for this section’s investigation.”

(Extract from Zachrisson in Moreleta Park Integration Project 2021)

From the research made in 2020 it was observed that third spaces in Plastic View consist of street spaces where there

Figure 2.2.18: (left) *Third spaces and places* (Kriek 2021).

SOCIO-SPATIAL LEXICON

Safety, surveillance, and insecurity

Interfaces: boundaries and thresholds

Methods of surveillance



2.2.6. Safety, surveillance, and insecurity

"The urban wall has always been the result of an ongoing, often volatile, process of negotiation between the city and its enemies, its allies, its elites, and its marginalized residents. Minimizing real and perceived group vulnerability is a primary force shaping city-making and partitioning". (Calame and Charlesworth 2012:144)

observed mechanisms of association and exclusion - and the manifestation of its interfaces - are unpacked at various scales to better understand the intrinsic relationship between architecture and survival.

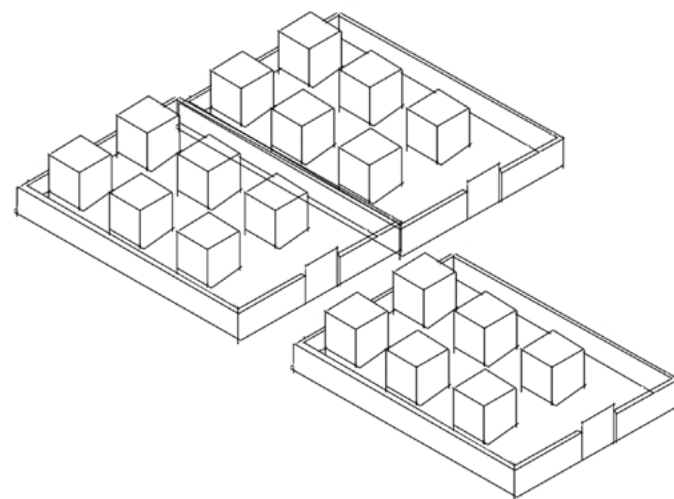
(Extract from Katranas in Moreleta Park Integration Project 2021)

With the scarred morphology of post-apartheid Pretoria as the backdrop, the contextually

Figure 2.2.19: (left) Safety, surveillance, and (in) security (Kriek 2021).

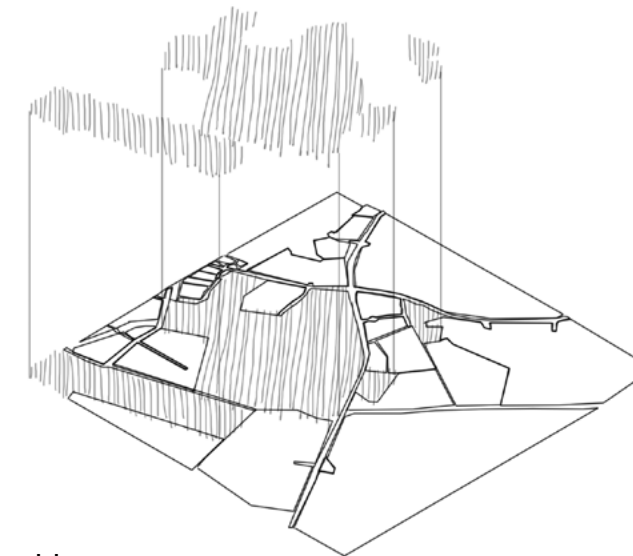
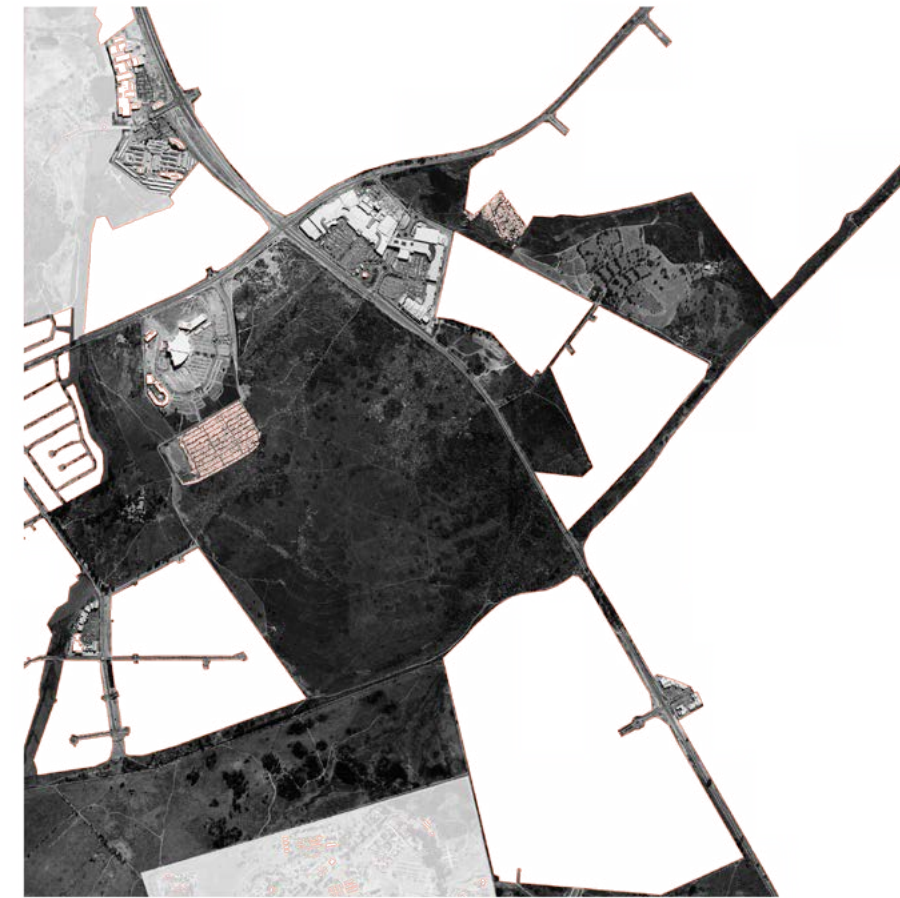
Interfaces: Boundaries and thresholds:

Macro Scale



2.2.6.1. Fortification

Dominant urban condition of Moreleta Park. Large scale enclosure is utilized by gated communities using high boundary walls and limited, controlled access points. This contradicts the City of Tshwane's goal for a more "walkable City".

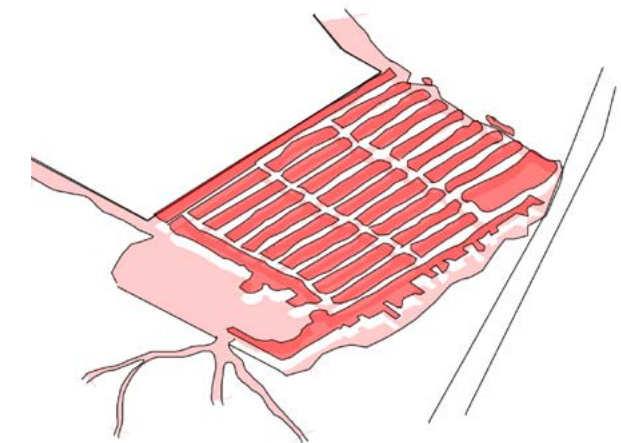
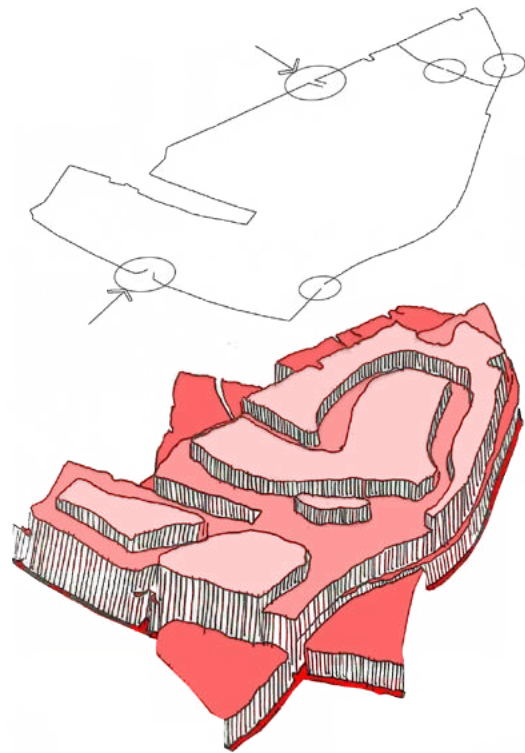
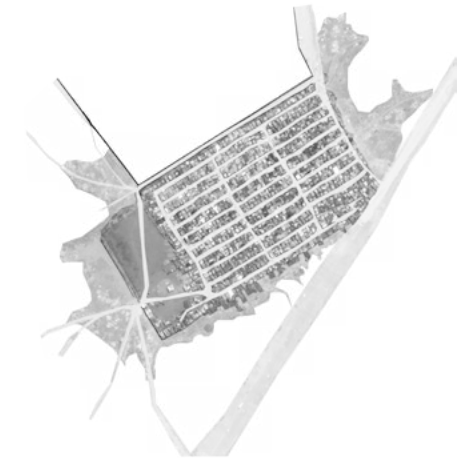
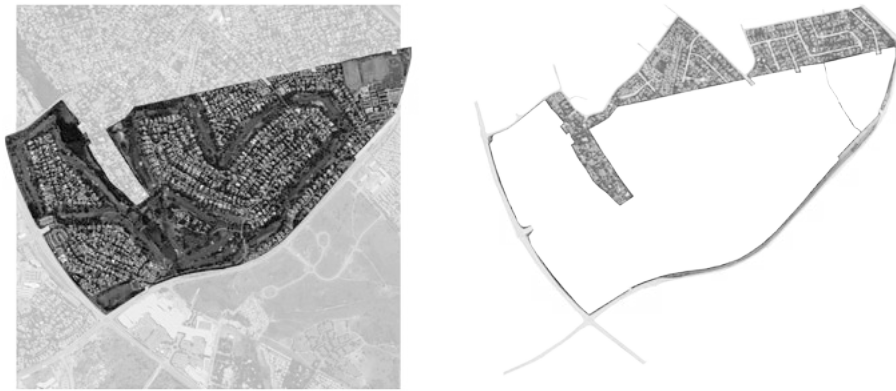


2.2.6.2. Residue

Comprising the wetland, and 220 hectares of key municipal land, these left-over spaces host Plastic View and Cemetery View informal settlement. A variety of urban frameworks have been proposed for the important government-owned land.

Interfaces: Boundaries and thresholds:

Meso Scale



2.2.6.3. Woodhill Golf Estate

2.2.6.4. External Interface

2.2.6.5. Internal Interface

2.2.6.6. Plastic View Informal
Settlement

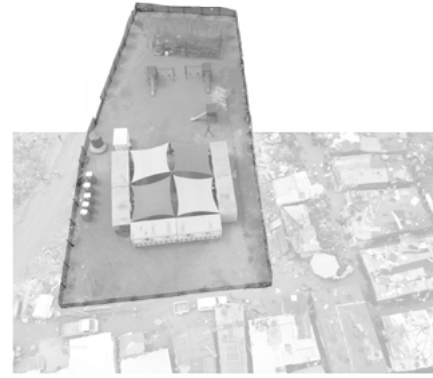
2.2.6.7. Interfaces

Interfaces: Boundaries and thresholds:

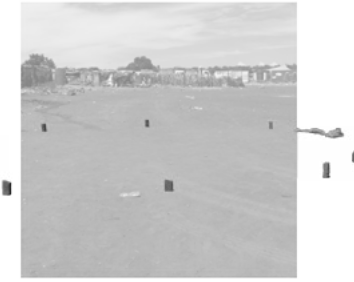
Micro Scale



2.2.6.8. Boundary Fence



2.2.6.9. Pre-school



2.2.6.10. Demarcation of
space with rocks

(De Bruin 2021)

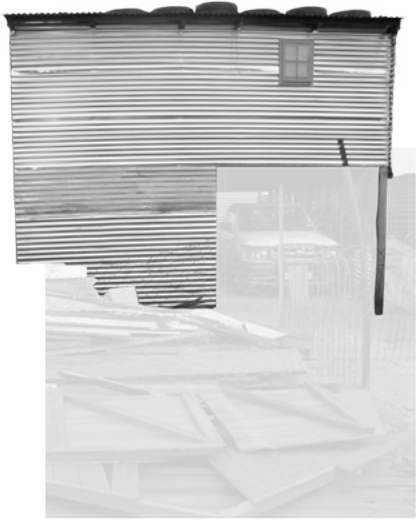


2.2.6.11. Multi-flat stand

(De Bruin 2021)



2.2.6.12. Single stand



2.2.6.13. Double Storey



2.2.6.14. Front Porch



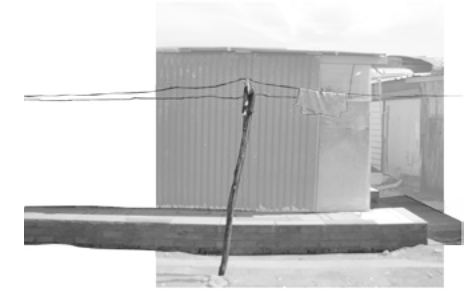
2.2.6.15. Canopy



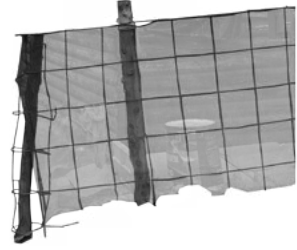
2.2.6.16. Alley



2.2.6.17. Communal Fence



2.2.6.18. Plinth Seating



2.2.6.19. Washing Line

2.2.6.20. Front-yard Fence

2.2.6.21. Street Entrance

2.2.6.22. Front Gate

2.2.6.23. Gate and street entrance

2.2.6.24. Spazashop interface

Methods of surveillance:



2.2.6.25. Floodlight



2.2.6.26. Businesses



2.2.6.27. Seating



2.2.6.28. Camera



2.2.6.29. Padlock

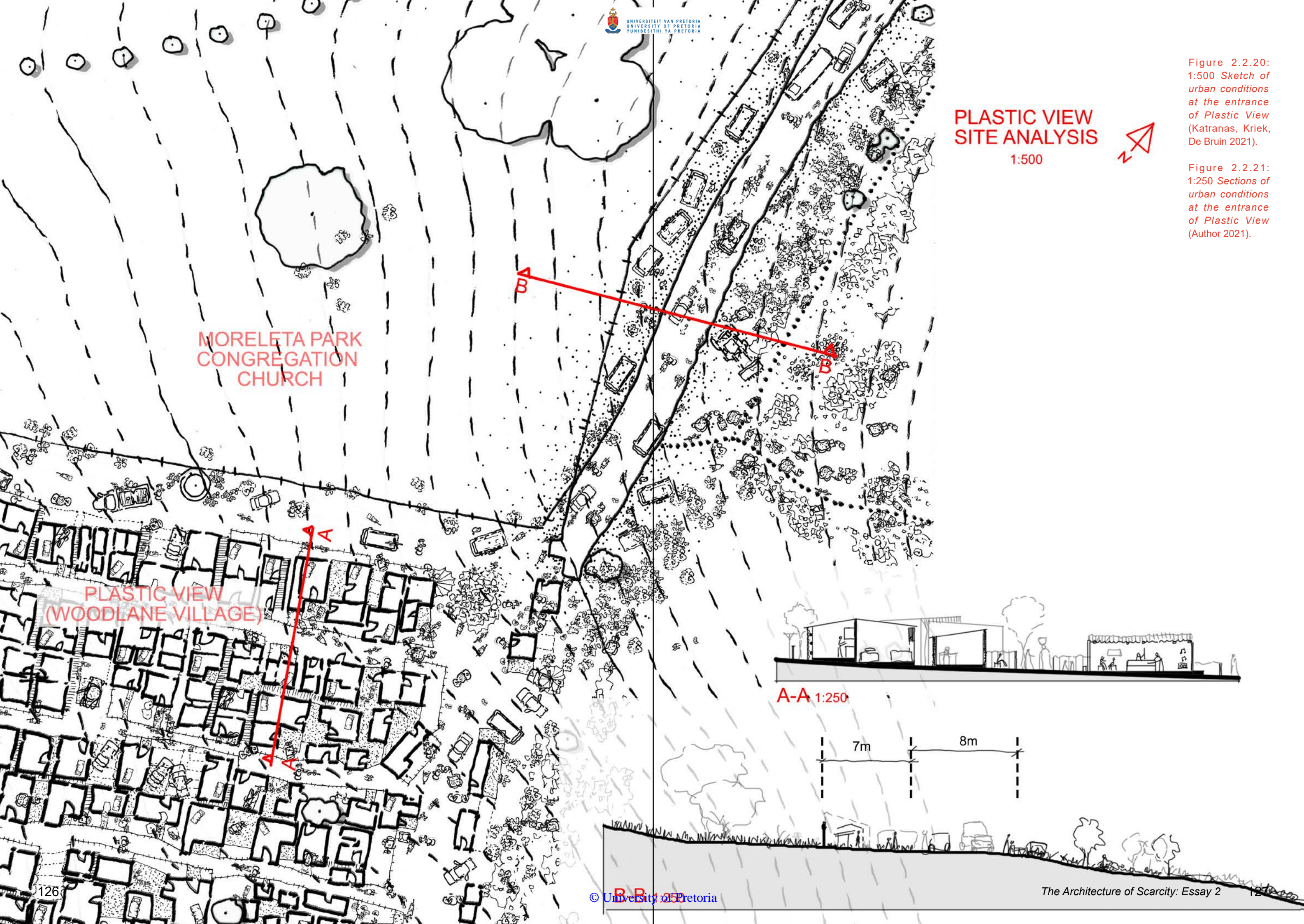


Figure 2.2.20:
1:500 Sketch of urban conditions at the entrance of Plastic View (Katranas, Kriek, De Bruin 2021).

Figure 2.2.21:
1:250 Sections of urban conditions at the entrance of Plastic View (Author 2021).



Figure 2.2.22:
1:500 Sketch of
urban conditions
at the Taxi-rank
South of Plastic
View, on the corner
of Wekker
Rd and Brabham
Street (Katranas,
Kriek, De Bruin
2021).



Figure 2.2.23:
1:500 Sketch of
urban conditions
on either side of de
Villiers Marek
Dr, North of Plastic
View, includ-
ing Woodlands
Lifestyle estate
(Katranas, Kriek,
De Bruin 2021).



Figure 2.2.24:
1:500 Sketch of
urban conditions
on the Southern
site of Plastic
View, depicting a
Sunday morning
soccer match on
the soccer field,
the netball field,
the ECD, and neigh-
bouring dwellings
(Katranas, Kriek,
De Bruin 2021).

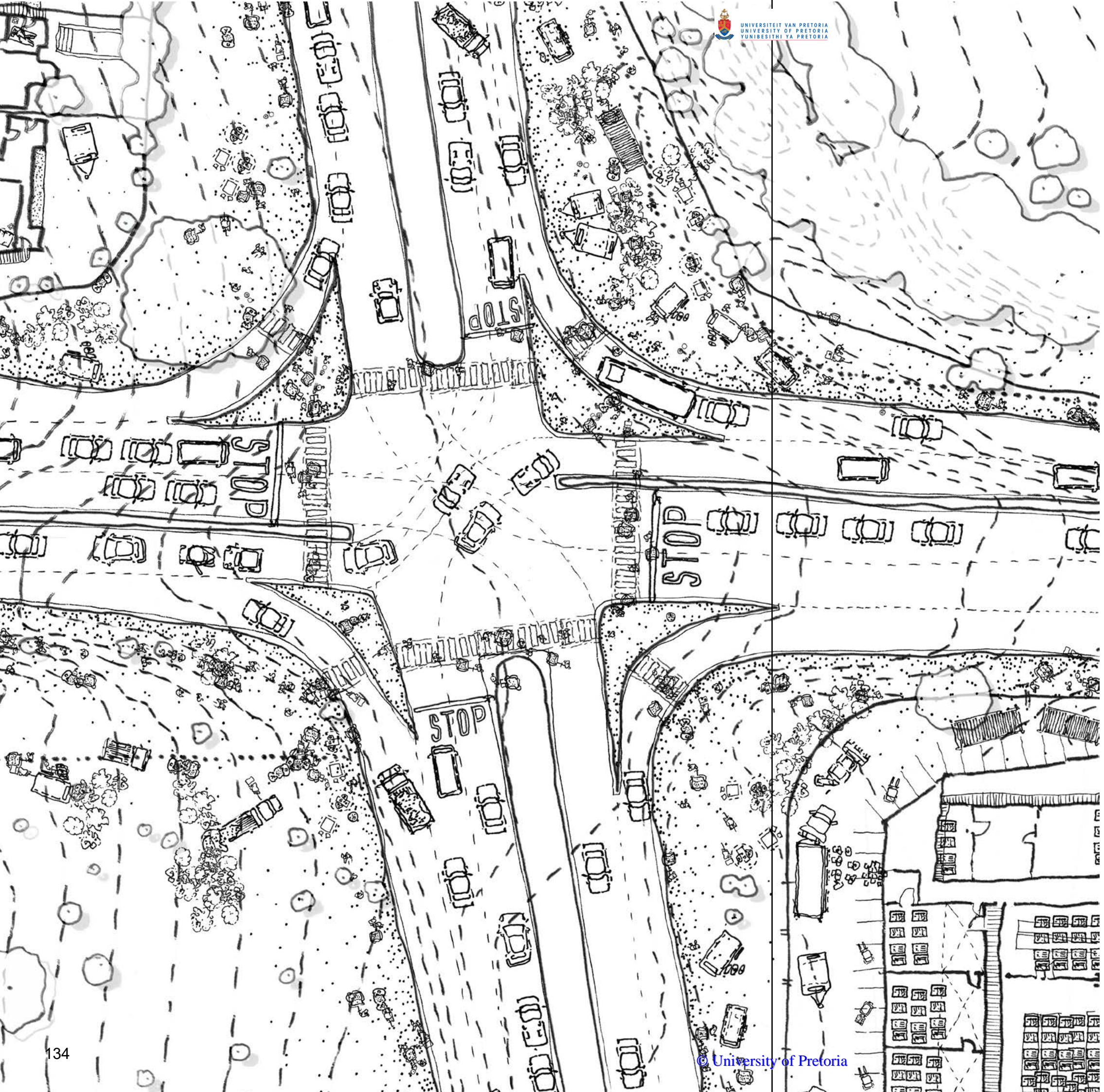
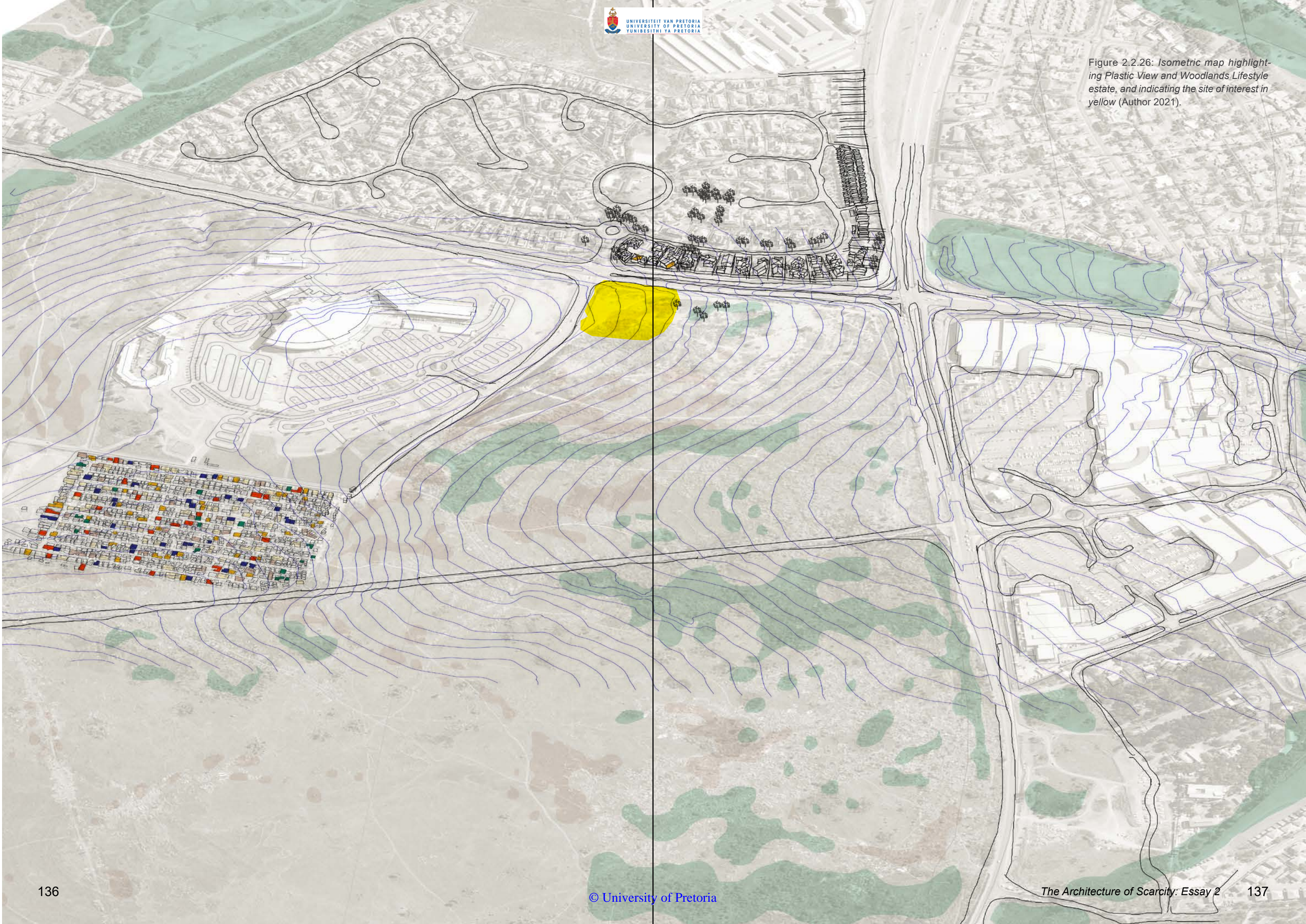


Figure 2.2.25: 1:500 Sketch of urban conditions on the Southern site of Plastic View, depicting the busy intersection of De Villesbois Mareuil Drive and Garsfontein Road, as well as the hard-edged boundaries of Woodhill Golf Estate, Woodlands Lifestyle Estate, and Woodlands Boulevard Mall (Katranas, Kriek, De Bruin 2021).

Figure 2.2.26: Isometric map highlighting Plastic View and Woodlands Lifestyle estate, and indicating the site of interest in yellow (Author 2021).





Figures 2.2.27: Site photographs conveying key insights on boundary, hyper-optimisation of space, and third spaces in Moreleta Park (Moreleta Park Integration Project 2021).



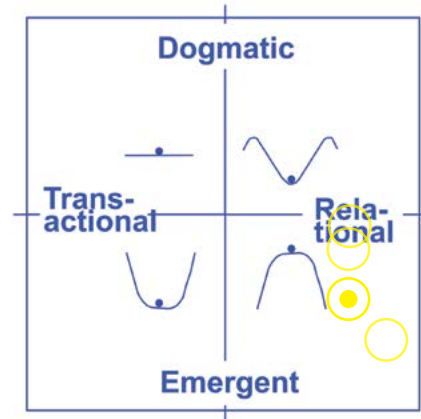


Figure 2.3.1: (left above) Locating the physical and socio-spatial context of the works of Lina Bo Bardi (Author 2021).

Figure 2.3.2: (left below) Interior stage and audience space of the Teatro Oficina - blurring the boundary between actor and audience; embodying a literal theatre of the everyday (Bujedo Aguirre).

2.3. PRECEDENT STUDY

2.3.1. Theoretical, methodological, architectural, and technical frames of reference

The work of few of the architects touched upon previously will be unpacked where they provide notable guidance for dealing with this project's particular "placial", spatial, programmatic, and technical requirements. Alongside the findings of the socio-spatial lexicon, and by utilising the socio-spatial heuristic - architectural responses and processes will be further assessed to identify key relationships, principles, and strategies to assist in establishing appropriate design principles.

Bardi is critical of the mainstream approaches employed during the 1960's, image fixated search for new identity in Brazil - by shifting focus to material usage and building processes, that better serve the interests of those participating in the construction and occupation of buildings. Her view of architecture as the "theatre of the everyday" results in simple manifestations that celebrate the notion of architecture being produced from a context of scarcity, rather than representing abundance. Architectural practice served as a device of resistance in face of austerity, largely by demystifying the idea of poverty, and the fear and shame associated with it (Williams 2009).

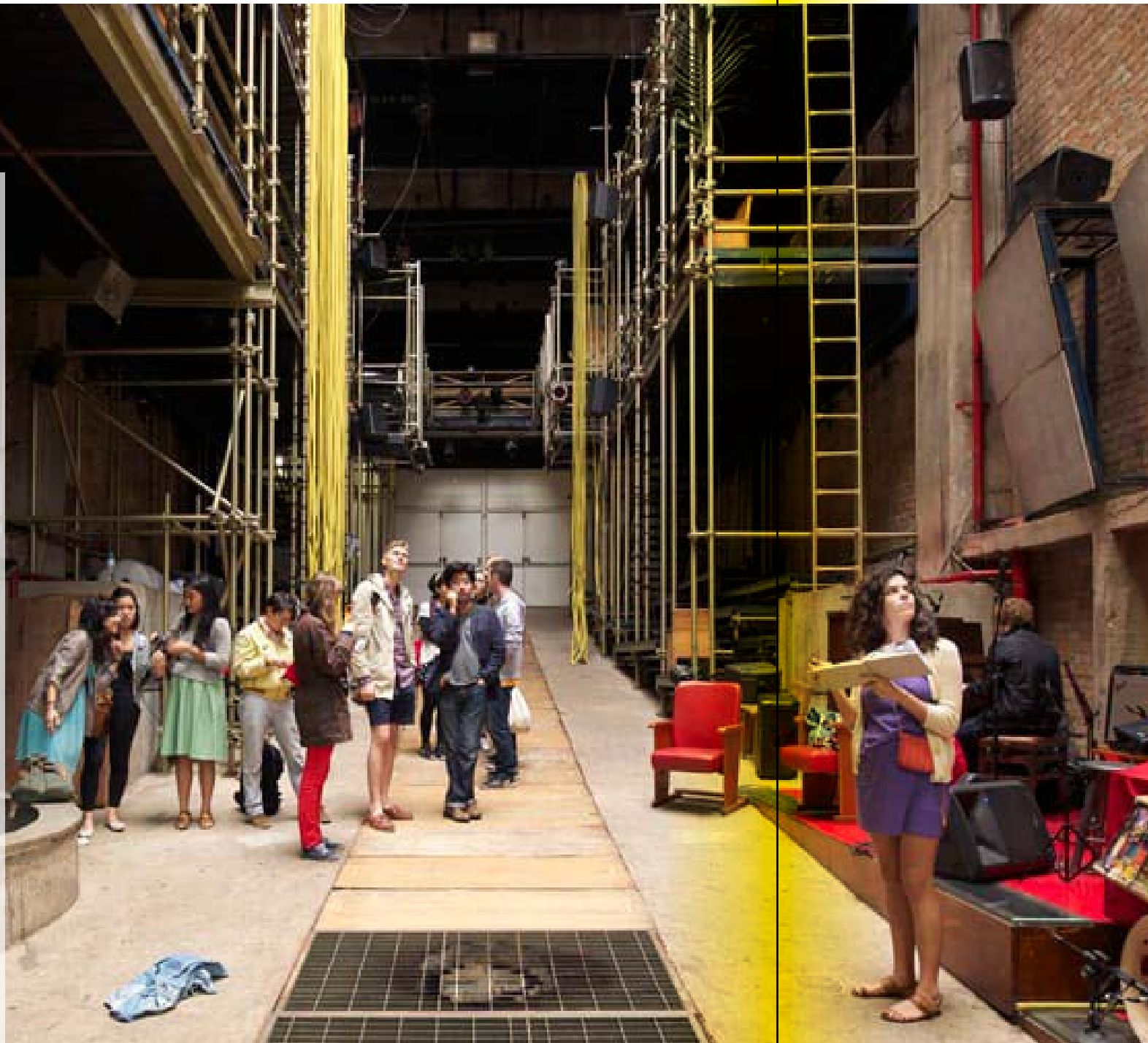
2.3.2. Designing from scarcity: the work of Lina Bo Bardi

As a foundation, the work of Italian-born, Brazilian-naturalised architect and activist Lina Bo Bardi, will be interrogated to better understand the potential of leveraging architecture for socio-political change.

Bo Bardi's idea of "poor architecture" finds inspiration in the motivations of Glauber Rocha's film "A Estetia da Fome", "The Aesthetics of Hunger" - which opposes the poverty-concealing sanitising exercises embarked on by the Brazilian government to erase traces of post-colonial identity, and to present as more "developed" to the western world. Resistance is achieved by both Rocha and Bo Bardi by visually accentuating the "other", or "those people (the poor) that the middle class fears most" (Williams 2009).

"I am architect, I break walls."

Deeply motivated by politics, the architecture of Lina Bo



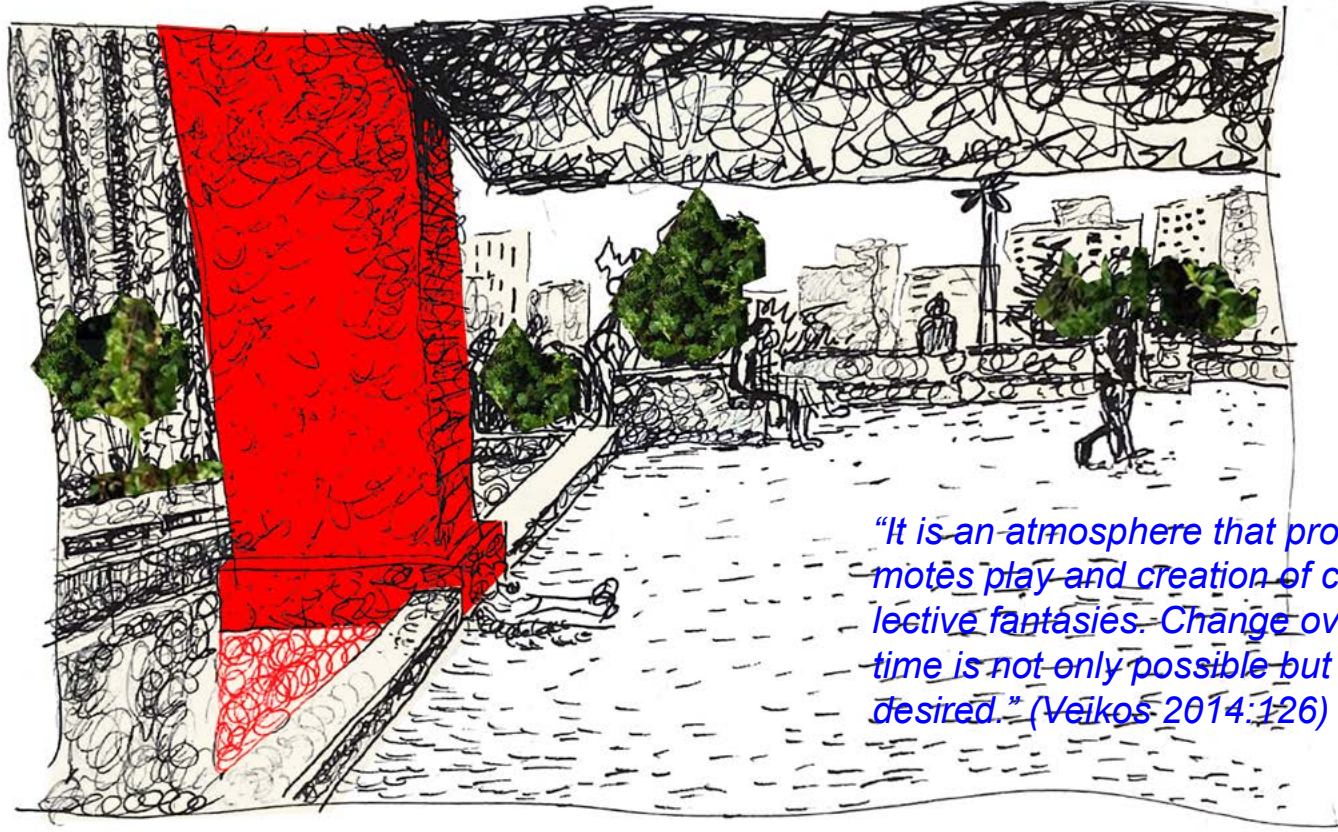
Architect:
Lina Bo Bardi

Selected Work:
Sesc Pompeia
1977, Sao Paulo
Teatro Oficina
1984, Sao Paulo
MASP
1968, Sao Paulo

Relevance:
Conceptual
Spatial
Material Articulation

Principles:
Architecture of resistance
"Not beauty, but freedom"
Architecture of scarcity
Architecture as landscape
Architecture as street

*“Not beauty, but freedom.”
(Bo Bardi 1992)*



“It is an atmosphere that promotes play and creation of collective fantasies. Change over time is not only possible but desired.” (Veikos 2014:126)

“Civilising architecture through the dignification of human life, through active participation in collective processes of artistic communication, of the collective management of knowledge, of the collective creation of a collective identity.”

Her work achieves this in various ways, beginning with her acknowledgement of the participatory nature of occupation. This is celebrated though affording design freedoms to inhabitants, both spatially through openness that encourages unanticipated event, and materially through unbarred and raw finishes, so that people may breath life into a building as opposed to merely consuming it as a commodity (Veikos 2014:126).



Figure 2.3.3: (left above) *Drawing of the MASP (Author 2021).*

Figure 2.3.4: (above) *Street entrance to the Teatro Oficina (Bujedo Aguirre).*

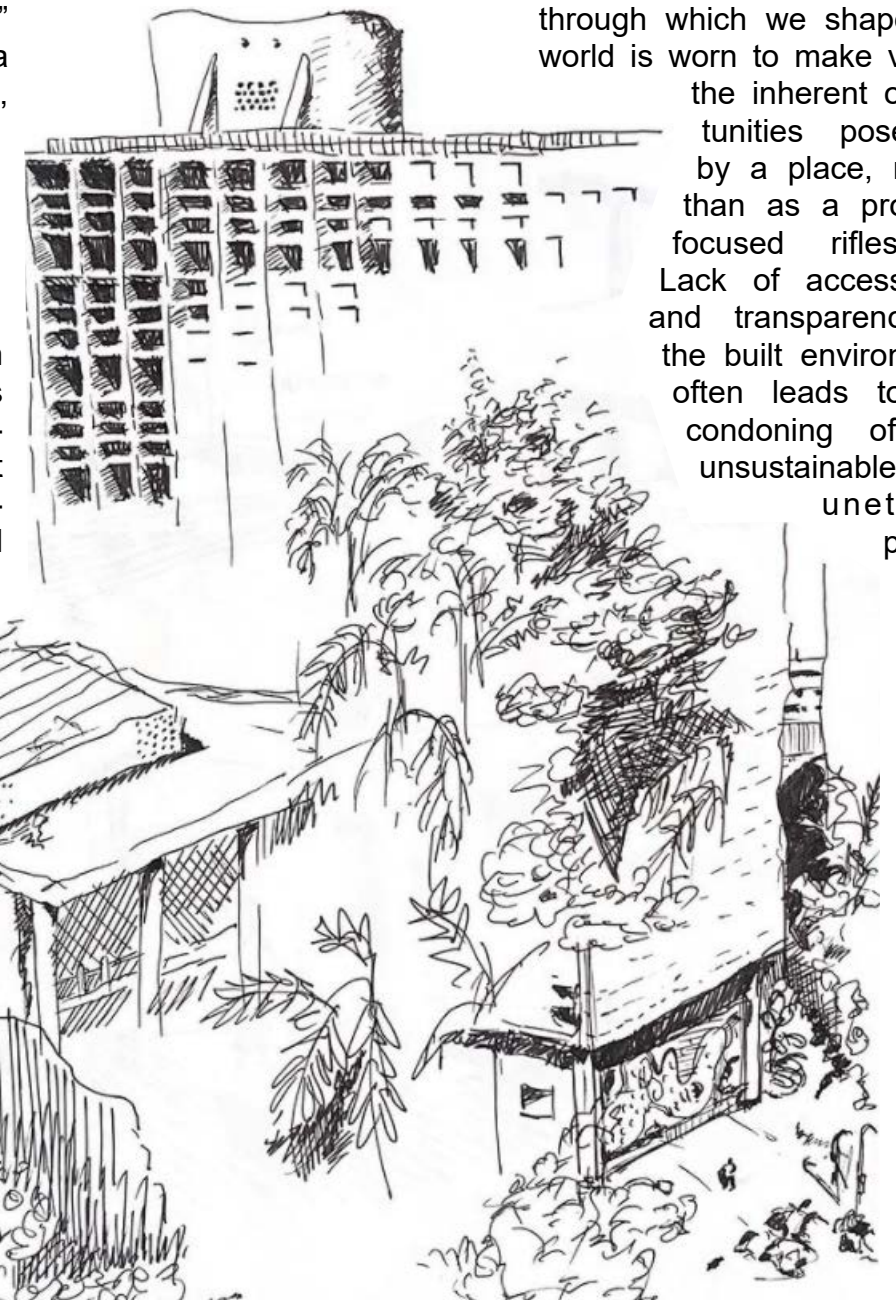
Figure 2.3.5: (right) *Sketch Explorations of various works of Lina Bo Bardi (Author 2019).*

It is perhaps her fixation with building as an extension of landscape which allowed the architecture to harness the potential of specificity of place. Expressed through her exposure and celebration of building structure and services, and visible marks of time (erosion, decay), Bo Bardi honours the inherent fragility of life and nature with respect to time and its many instruments - furthermore honouring nature as the primordial essence of “being” (Bader 2014:89, Veikos 2014:125). This also translates to the highly accessible, change-embracing public centred “domestic landscapes” created in the Sesc Pompeia (1977), Teatro Oficina (1984), and Museu de arte Sao Paulo (1968) (Veikos 2014).

Bo Bardi’s frame of reference included a favouring of the Italian vernacular, and precipitated a further appreciation of Brazilian vernacular. This is reflected in the spatial versatility, complexity, and almost ruin-like palimpsest encouraged by her brutalist material expression (Bader 2014:89).

*“Architecture must be key to the landscape, merge with the landscape, become the landscape itself.”
(Bo Bardi & Paganini 1940:40)*

There is much to learn from her limited but incredibly impactful built projects in terms of their ability to ultimately transform architecture from being a divisive “wall” or barrier, to a “street” that emancipates the “other”, on a physical and social level. This is why her work has become increasingly relevant, especially within the increasingly austere urban conditions materialising not only within post-colonial and post-conflict divided cities, but also within the traditionally developed world.



An increase in physical conditions of scarcity, fuelled by desire for the sanitised image of capital abundance, necessitates a deeper level of accountability within the built environment on a systemic level. This is specifically urgent with respect to its present role in accentuating the stigma of poverty and thus urban informality, by refusing to legitimize the face of what is ultimately a valid, age-old socio-economic condition.

Change becomes possible when the direction of hostility is shifted from the symptom to the root cause, and when the lense through which we shape our world is worn to make visible the inherent opportunities possessed by a place, rather than as a problem focused riflescope. Lack of accessibility and transparency in the built environment often leads to the condoning of the unsustainable and unethical practice.

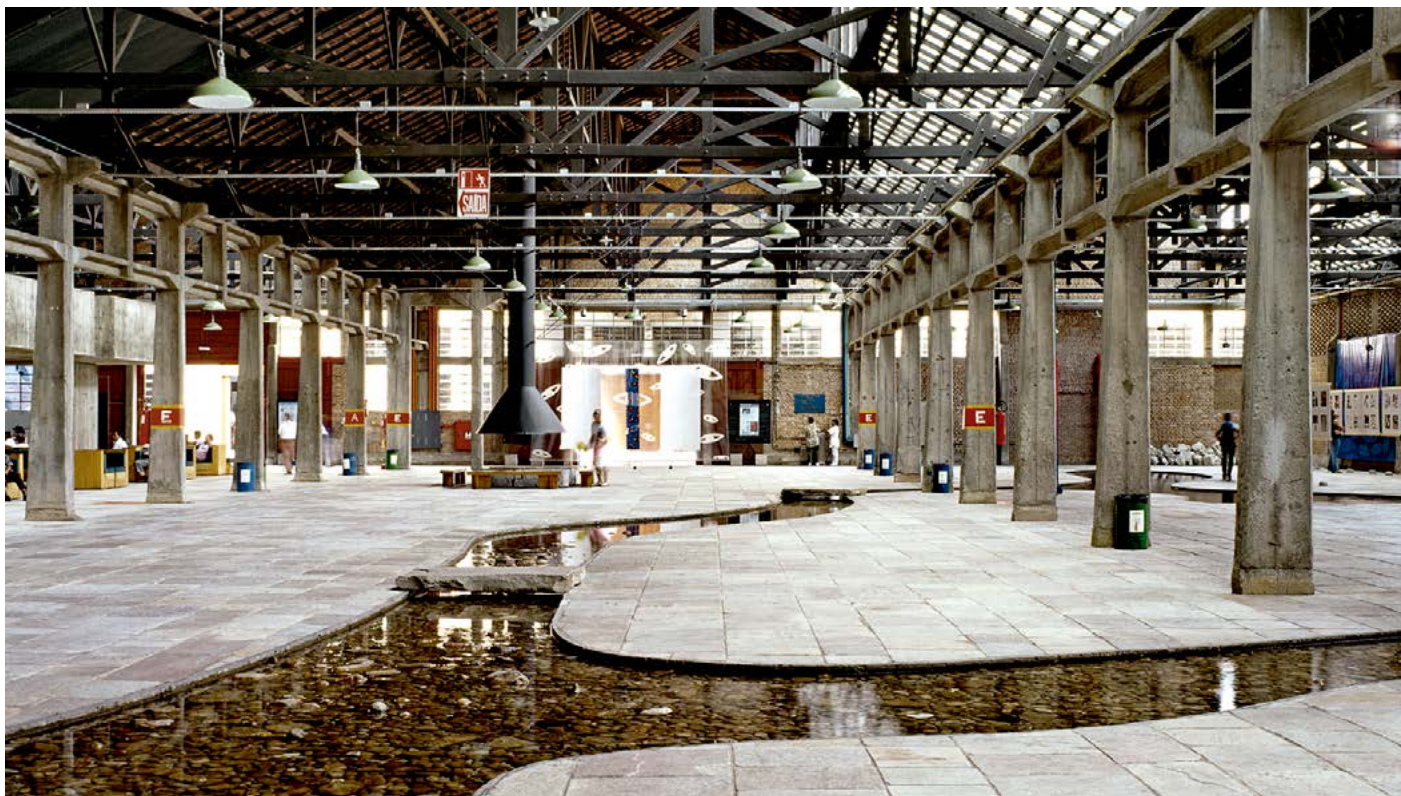
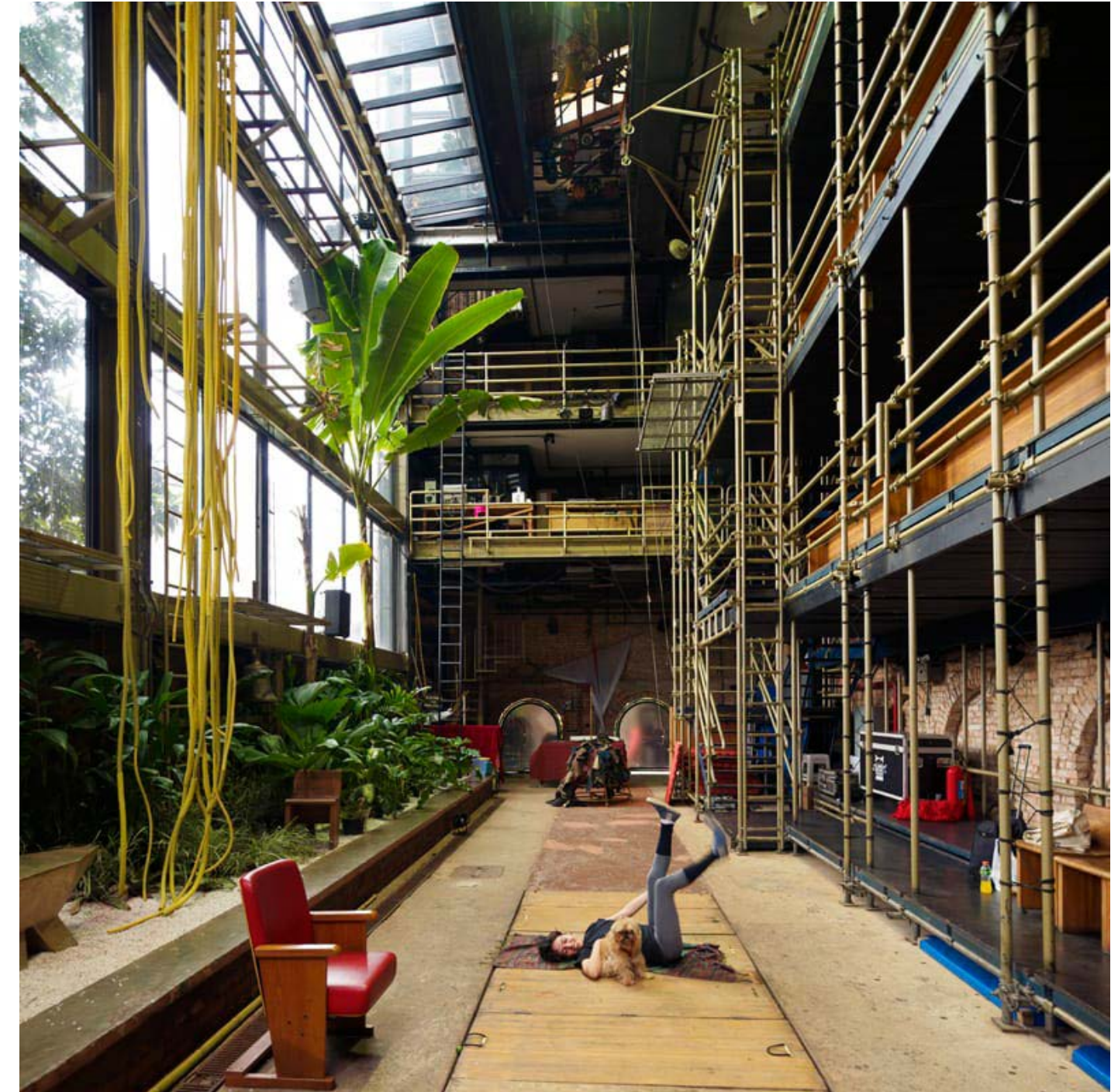


Figure 2.3.6: (left above) *Street condition at the Sesc Pompeia* (Bujedo Aguirre).

Figure 2.3.7: (left) *Interior public space at the Sesc Pompeia* (Bujedo Aguirre).

Figure 2.3.8: (above) *Teatro Oficina* (Bujedo Aguirre).

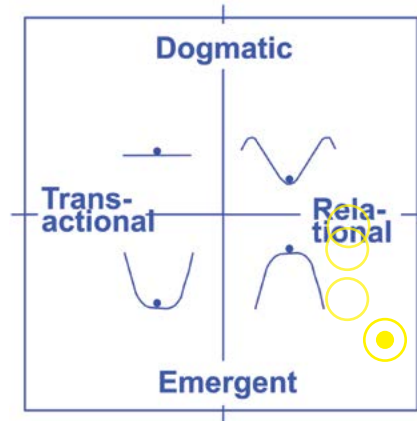
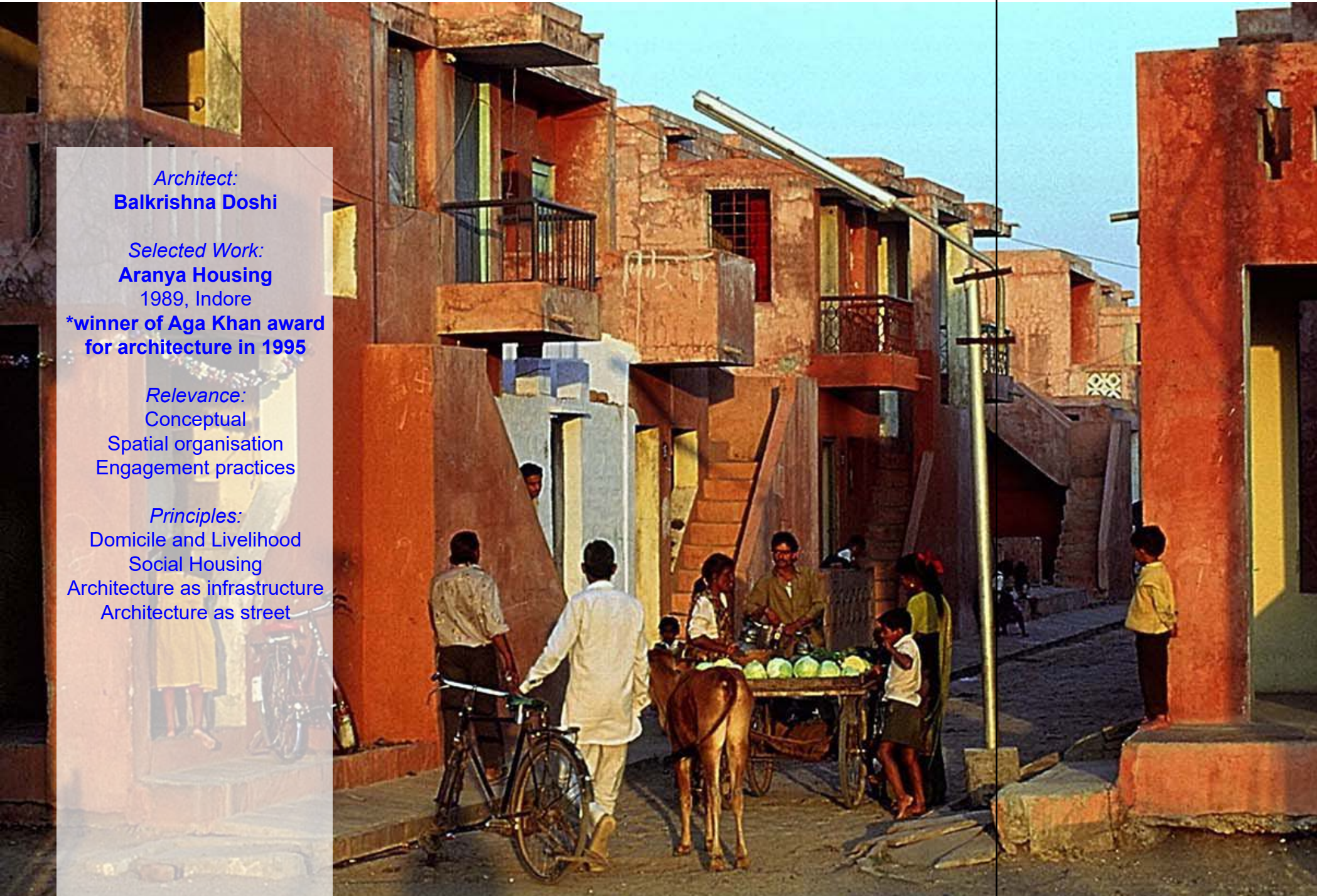
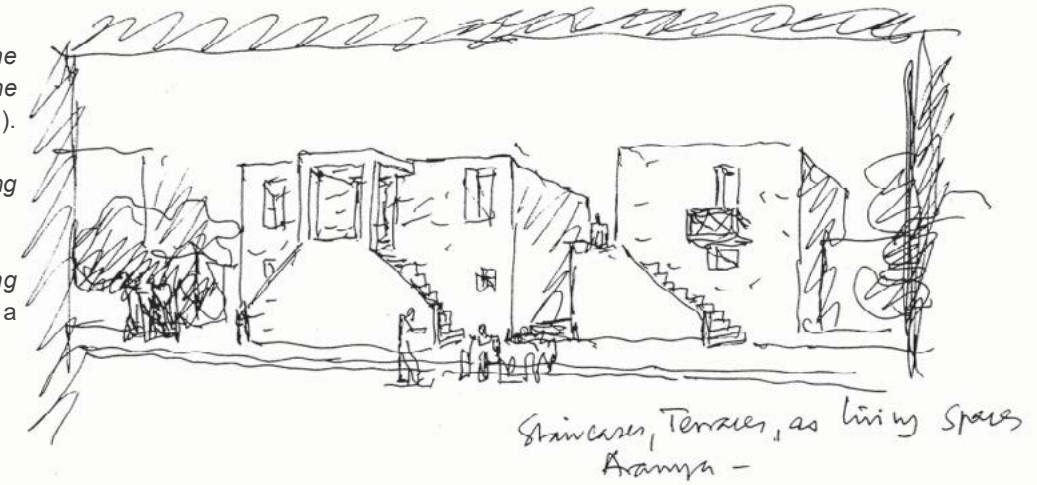


Figure 2.3.9: (left above) Locating the physical and socio-spatial context of the works of Balkrishna Doshi (Author 2021).

Figure 2.3.10: (left below) Aranya Housing in the 90's (SANGATH).

Figure 2.3.11: (Right) Aranya Housing conceptual sketch (Vastushilpa Foundation).



Architect:
Balkrishna Doshi

Selected Work:
Aranya Housing
1989, Indore
***winner of Aga Khan award for architecture in 1995**

Relevance:
Conceptual
Spatial organisation
Engagement practices

Principles:
Domicile and Livelihood
Social Housing
Architecture as infrastructure
Architecture as street

2.3.3. Creating domicile by providing the essentials of life: housing by Balkrishna Doshi

“Architects are on a pedestal, they aren’t looking down, where there are a lot of clients.”

Faced with an omnipresent socio-spatial urban condition that does little to address the housing needs of the urban poor - and the rippled effect of urbanisation, overcrowding, slum-conditions, and ultimately the violation of the right to human dignity - the Aranya low-cost housing model, commissioned in 1983 by the Indore Development Authority, embodies the fruitful outcomes that follow when the very role of the architect and the inhabitant is questioned (Mollard 2019:121-122).

First, the space-making potential of the end-user is recognised, and the architect’s role is shifted to comprise the planning of infrastructure, such as water, sewer, and electrical services, and street plots. This aligns somewhat with the protocol suggested in South Africa’s Upgrading of Informal Set-

tlements Policy.

The second level of intervention is focussed on affording end-users the choice and agency over shaping their living spaces. This is done initially by divvying a kit of parts: different options or variations that can be applied to the plot in relation to service blocks at the back end. Circulation (including vertical circulation) is concentrated on the street, creating a complex, activated threshold that both sets the stage for outward living, and provides the opportunity to observe from more semi-public and private boundary elements, such as balconies, windows, and stairs. The street becomes the extension of the home, transcending the physical boundary of its walls (Mollard 2019:121).

The third level of intervention is the untapped potential for expansion, which is purposefully yielded from the architect to the individual end-user, and provokes opportunity for livelihood within the neighbourhood realm. This expands the function of housing from a device of shelter which provides “crucial privacies”, to a place of resilience and cooperative community growth and development.

As a complete scheme, the resulting spaces are designed for and centred around public life, acknowledging the social structures that exist at the core of domicile. The right to shelter and human dignity is satisfied, alongside other “essentials of life” such as Shops, Cafe’s and businesses. Both architect and end-user become connected to the act of building, and thus, the articulation of the boundary; with it, the power to foster inclusive private and public realms.

“That means borders that are diffuse. What you need to find is how to create not separations but buffer zones, places where there is room for variation.”

The street, the courtyard, and the activated buffer/threshold have proven to be timeless elements of the architect and inhabitant’s syntax of design, transcending cultures and socio-economic strata. This makes them excellent elements for integration, and this is utilized by Doshi in the planning of Aranya, where housing typologies allow for households from different socio-economic backgrounds to be accommodated alongside one another, as both stranger and neighbour.

These same elements are demonstrated with great success in Plastic View, and although present in Moreleta Park’s gated communities, are largely underutilised, and hin-

dered by more transactional attitudes towards placemaking. There lies the opportunity to explore this potential with respect to gated community typologies, to better leverage the nuanced potential possessed by the boundary, for integration.

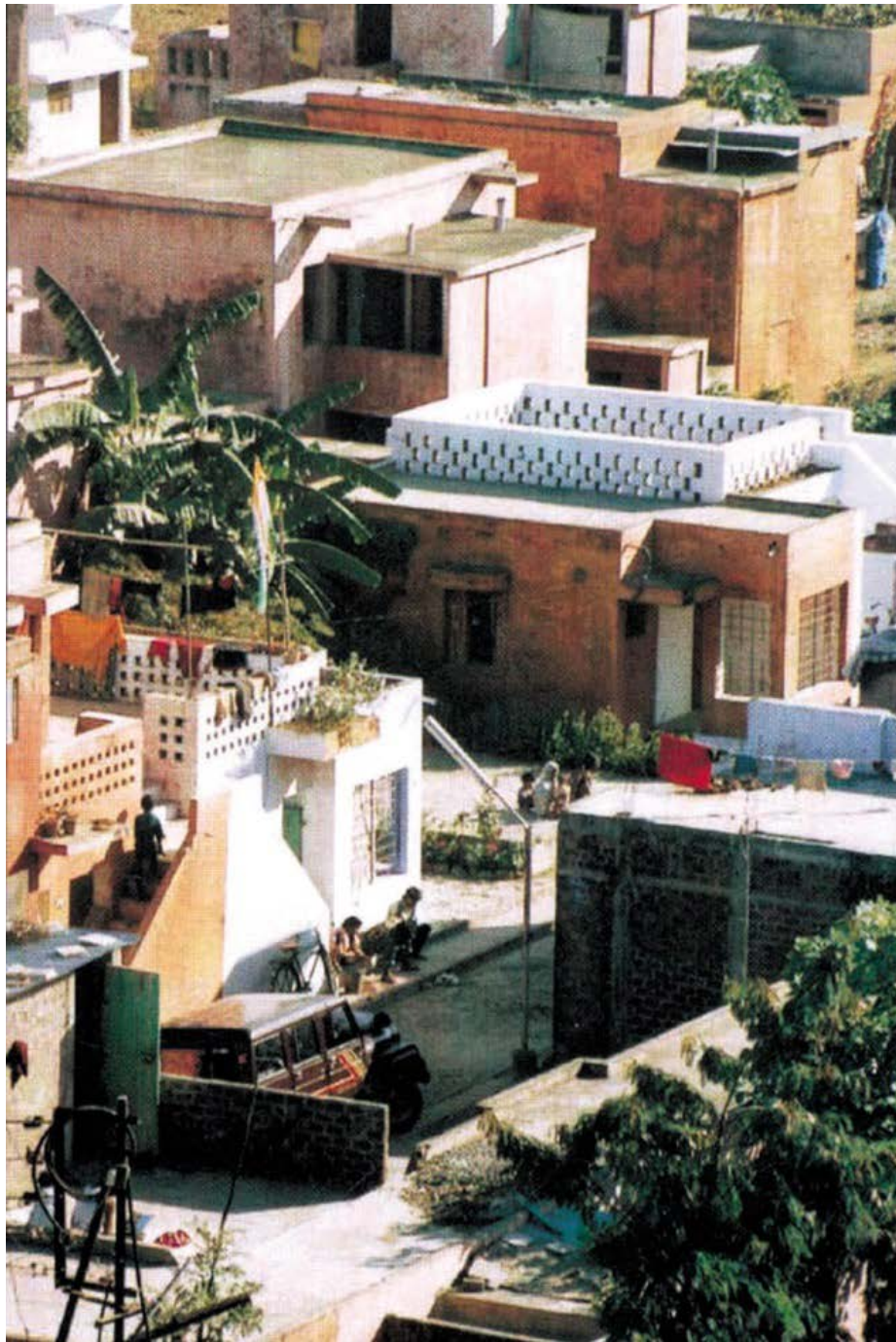
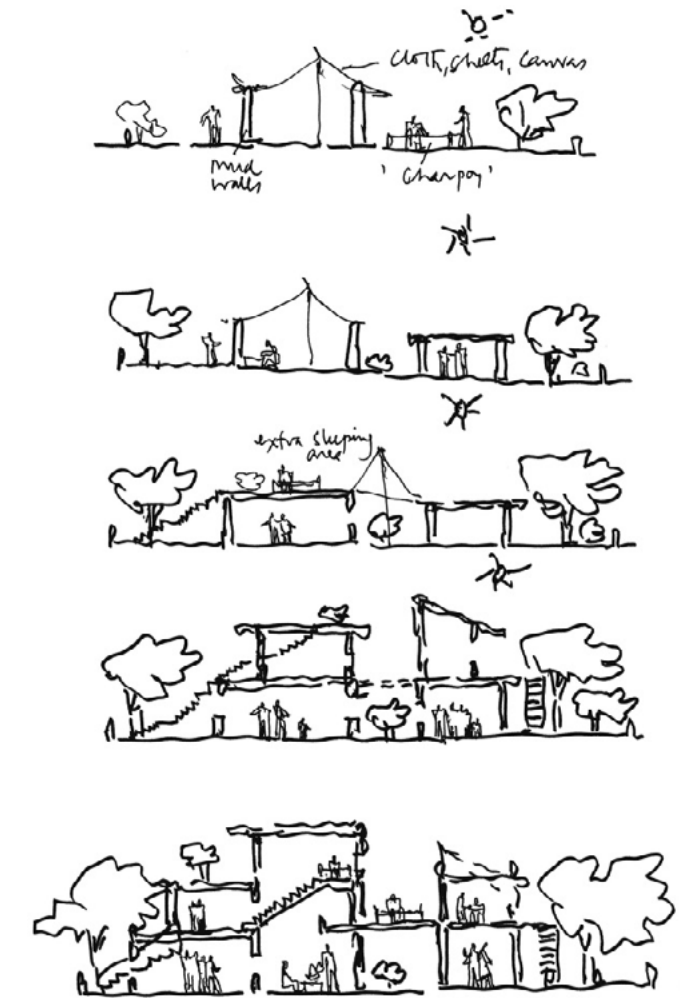
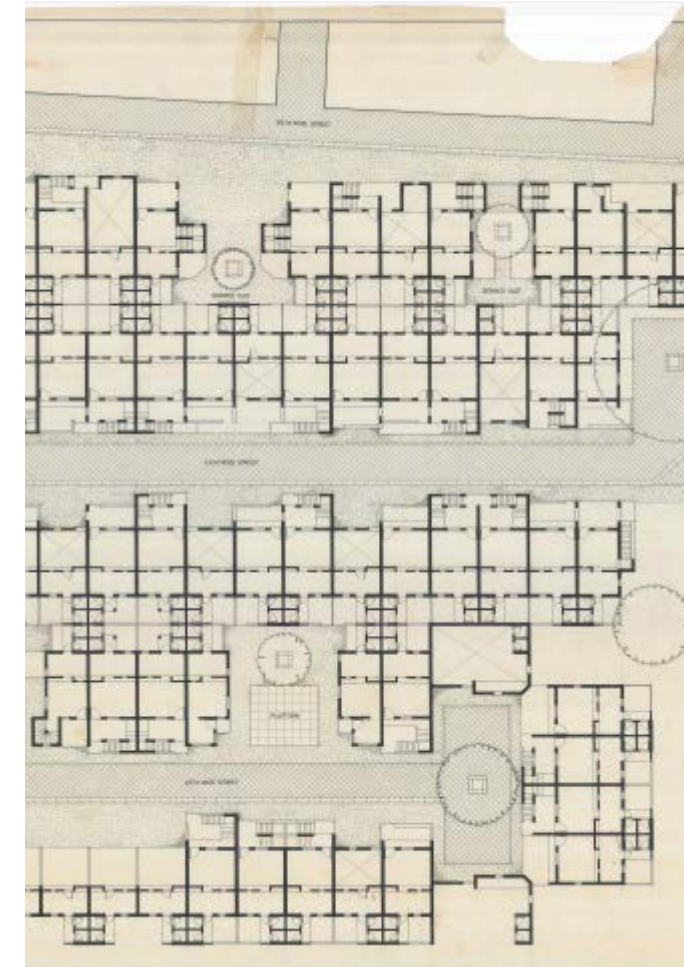
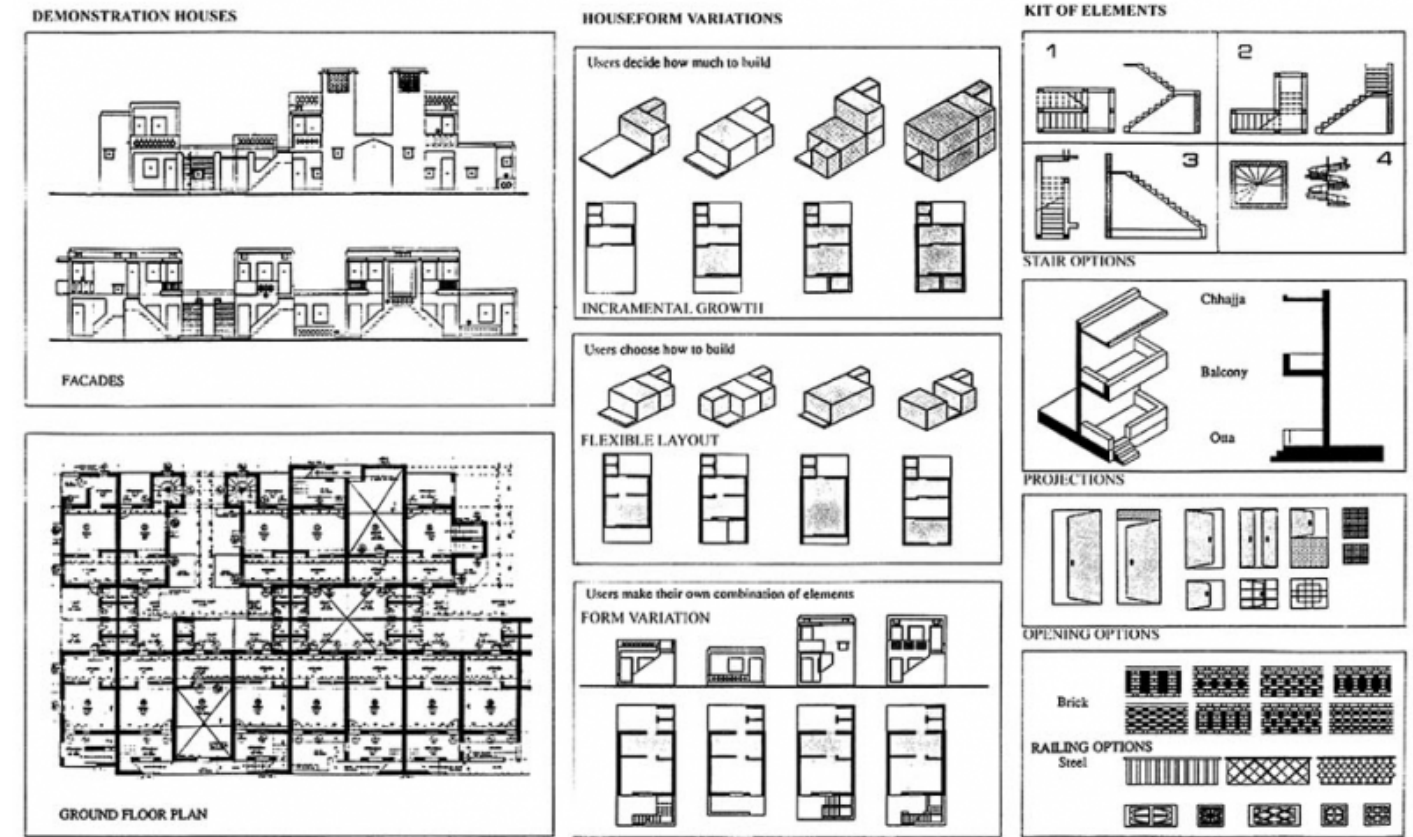


Figure 2.3.12: (below) *Photograph of Aranya from a rooftop in the early 90’s* (Vastushilpa Foundation).

Figure 2.3.13: (right above) *Aranya Housing kit of parts* (Vastushilpa Foundation).

Figure 2.3.14: (right below) *Aranya Housing base-plan* (Vastushilpa Foundation).

Figure 2.3.15: (far right below) *Aranya Housing conceptual sketch* (Vastushilpa Foundation).



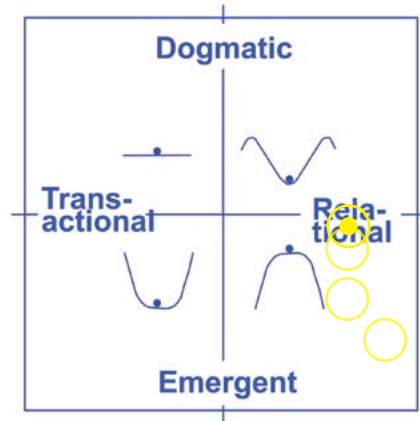
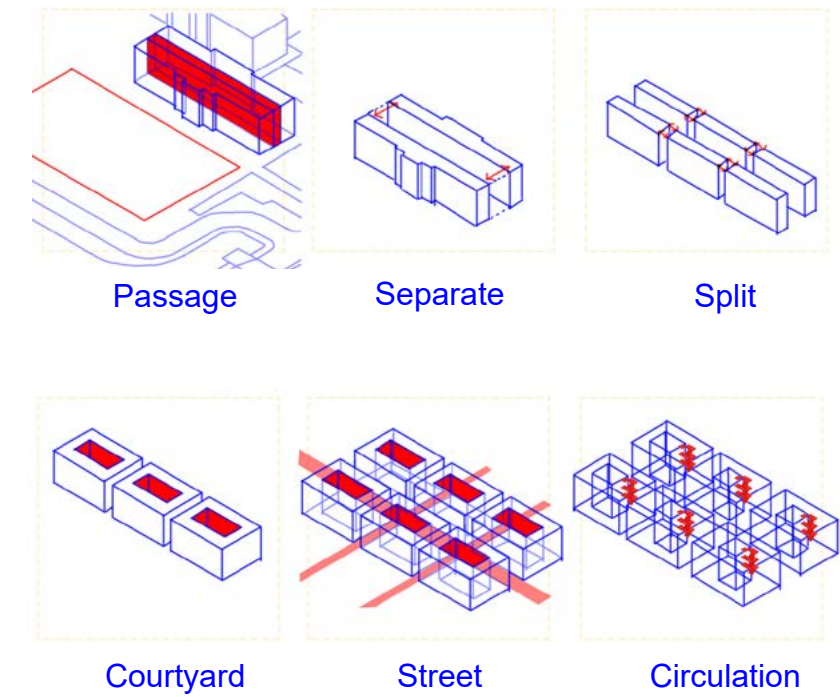


Figure 2.3.16: (left above) *Locating the physical and socio-spatial context of the works of Cohen and Garson Architects* (Author 2021).

Figure 2.3.17: (left below) *Courtyard at UMP Student Residences* (Cohen and Garson Architects).

Figure 2.3.18: (Right) *UMP Student Housing design principles* (Author 2021, after Cohen and Garson Architects).



2.3.4. **Shared spaces as a tool for hyper-optimisation: lessons on spatial organisation from the work of Cohen and Garson Architects**

Two differently scaled residential projects by Cohen and Garson Architects benefit from fuller micro-urban semi-private spaces through cluster typologies. In both cases, these in-between spaces were programmed either as “calm moments”, social gathering spaces, and pedestrian streets. In addition to achieving the benefits of providing what Bo Bardi would refer to as “public living rooms”, these in-between spaces are curated to suit Mbombela’s hot climate, and Johannesburg’s slightly milder climate.

sist in promoting cross-ventilation, outdoor shading, and street-level permeability - all contributing to a healthy live-learn domicile for students. Whilst the services, circulation, and organisation of the structure is not conceived as needing to accommodate change or appropriation, the private bedroom units specially plug into shared service amenities such as bathrooms and kitchens. This spatial configuration defines varying hierarchies of association. Each of the five residential blocks consist of two shared living clusters per building level, with the spaces between private bedrooms and shared amenities connecting to vertical circulation and courtyard spaces - elongating and grading the threshold between most public and most private.

Courtyards and external circulation in the University of Mpumalanga’s student residences have proven to as-



Architect:
Cohen and Garson Architects

Selected Work:
UMP Student Residence
2014, Mbombela
Seven Houses
2008, Johannesburg

Relevance:
Hyperoptimisation
Spatial organisation
Material Articulation

Principles:
Community clusters
Courtyard typology
Shared spaces
Architecture as street

In the case of Seven Houses, these ideas are expressed most convincingly through a common, shared, access street - overlooked on either side by the individual family homes that form this smaller, client-initiated community cluster. A simple yet impactful spatial gesture demonstrated in this scheme is use of the traditional row-house typology to create two different shared spaces, the street through the middle and a shared backyard on either side, that are spilled into through the front and back facing facades respectively. In addition to these shared outdoor spaces, intermittent courtyards and roof terraces within each sectional title provides more private outdoor living rooms.

Situated within a well-established suburb of Parkview, an existing house was demolished and one acre (4000sqm) worth of land was divided into the shared street and yard portions, as well as into seven sectional title portions of 725sqm each (five full-sized and two half-sized). Whilst reflecting the same enclaved quality of other gated communities and complexes - this scheme is successful in mitigating the deficit of capabilities for livelihood integration, faced by traditional gated community complexes. This is due to its scale, grain, density, typology footprint, and high level of engagement from the homeowners throughout the process.

Of larger interest, however, is the notion of gradual densification and hyperoptimisation of traditional suburban plots, both previously developed and

for future development, to accommodate and integrate a more diverse community of urban dwellers within well located upmarket areas. In the case of Moreleta Park, the architecture of plastic view, despite displaying slum conditions, provide contextual testaments to the value that shared street and courtyard spill-out spaces poses on a social and pragmatic level.

The average single plot size of existing erven in Woodlands Lifestyle Estate is roughly 1000m² with an average legal area of 800m² - and typically consists of a single dwelling that houses a family of four (MPIP 2020a). When the same erf area is superimposed onto Plastic View - the approximately nine dwellings, as well as three streets, and small courtyard spaces, are covered, accommodating a wider variety of programme and functions related to livelihood.

Whilst the principles governing the Seven Houses scheme provides scope for a middle ground, and the potential to mediate different housing needs in the rapidly urbanising future city - there exists a lack of opportunity for permeability and integration into the outside neighbourhood. There is value in further exploring the potential of what is usually treated as a defensive property boundary wall - to that it becomes a meaningful space and threshold where there exists the opportunity for social, political, economic, and spatial negotiation.



Figure 2.3.19: (left above) *UMP Student Residence elevations* (Cohen and Garson Architects).

Figure 2.3.20: (left middle) *ground floor plan* (Cohen and Garson Architects) indicating organisation of private, semi-private, circulation, and courtyard spaces (Author 2021).

Figure 2.3.21: (left below) *ground floor plan* (Cohen and Garson Architects) indicating vertical circulation and service spaces (Author 2021).

Figure 2.3.22: (far above) *Seven Houses* (Cohen and Garson Architects).

Figure 2.3.23: (above) *Seven Houses plan* (Cohen and Garson Architects) indicating organisation of private, semi-private, circulation, and courtyard spaces (Author 2021).

Figure 2.3.24: (immediate left) *Comparative study of an 800m² portion of land in Woodlands Lifestyle Estate and Plastic View, indicating organisation of private, semi-private, circulation, and courtyard spaces* (Author 2021).

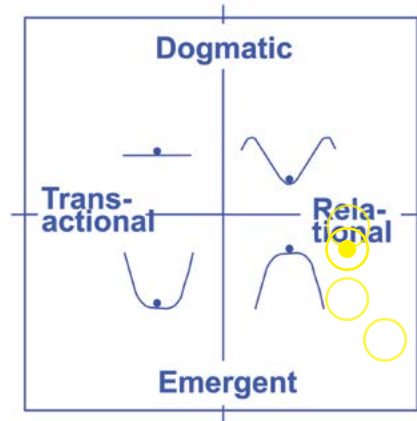


Figure 2.3.25: (left above) *Locating the physical and socio-spatial context of the works of Peter Barber* (Author 2021).

Figure 2.3.26: (left below) *Upton Village Proposal sketch* (Peter Barber).



Architect:
Peter Barber

Selected Work:
Ilchester Road
2018, Barking (London)

Relevance:
Conceptual
Spatial
Council housing
Material Articulation

Principles:
Security of Tenure
Palimpsest
Mixed tenure
Courtyard typology
Architecture as street

2.3.5. A return to the relational: translation of spatial intent to material expression in the work of Peter Barber

Between the 1860's and 1940's, following the industrial revolution and two world wars, and the subsequent urbanisation and infrastructure damage - a necessary boom in provision of council housing in London occurred to fill a growing housing gap. Regrettably, this saw the demolition of many old areas of the city by the 1950's, in favour of large multi-storey modernist apartment blocks, enclosed by boundary gates and parking lots (Cordell 2019:99-103). Severing decades of community and social structures that were entwined in the courtyards and streets of densely populated traditional back-to-back, terraced row-houses - government's fixation on clearing areas deemed as "slums" proves once again to be a misguided gesture towards the simulacra of efficiency.

In many of the more favourable cases, a process of "municipalisation" was undertaken, retaining the integrity of existing neighbourhood morphologies

- by buying up private flats, upgrading their infrastructure to suit the needs of a growing population and rapidly changing technology, and providing residents "secure council tenancies" (Cordell 2019:101). The success of this approach serves as both guidance and testimony to the potential of South Africa's under-utilised Upgrading of Informal Settlement Policy.

The subsequent success enjoyed by the residents of municipalised neighbourhoods, was proven inconsequential through the lens of Margaret Thatcher's anti-poor Neoliberal agenda in the 1980's and the architecture which followed, prophetic of the lingering socio-spatial transactionality that exists globally today.

Much of what makes the housing of architect-urbanist Peter Barber so significant is his utter rejection of architecture's neoliberal affiliation, and his favourable consideration of those left vulnerable by current socio-economic structures. In lieu of the sprawling image-fixed, profit-driven housing market (presented much in the likeness of Moreleta Park's formal architecture) - Barber stresses the importance of "old

buildings”, such as the traditional terraced housing (still deemed as slums by government). Old buildings are crucial to the functioning of cities, as well as possess the crucial patterns and qualities necessary for designing better “new buildings” (Barber 2021) - the latter being most relevant for any intervention in Moreleta Park.

“Asked for a solution that can be scaled up in the face of a housing market that prioritises profit over housing needs, Barber’s answer is that the problem is, once again, a political issue, and not one about design. ‘Some people might say the ending of private property. We have to do something pretty radical don’t we?’” (Cordell 2019:107)

Consistent with the work of Bo Bardi, Doshi, and Cohen and Garson Architects - the main considerations and “building-blocks” for space making are the street, courtyard, security of tenure, and mixed tenure. Visible in one of the firm’s more simple yet activity-catalysing architectural response - a council housing project on Ilchester Road in Barking, London - the application of such architectural syntax results in a materially-humane and everyday-celebratory architecture. Furthermore, perhaps it is Barber’s attention to the finer, tangible surfaces that dwellers interact with most intimately, and the leveraging of each material’s visual and tactile potential, that sets these projects apart from their less humane counterparts.

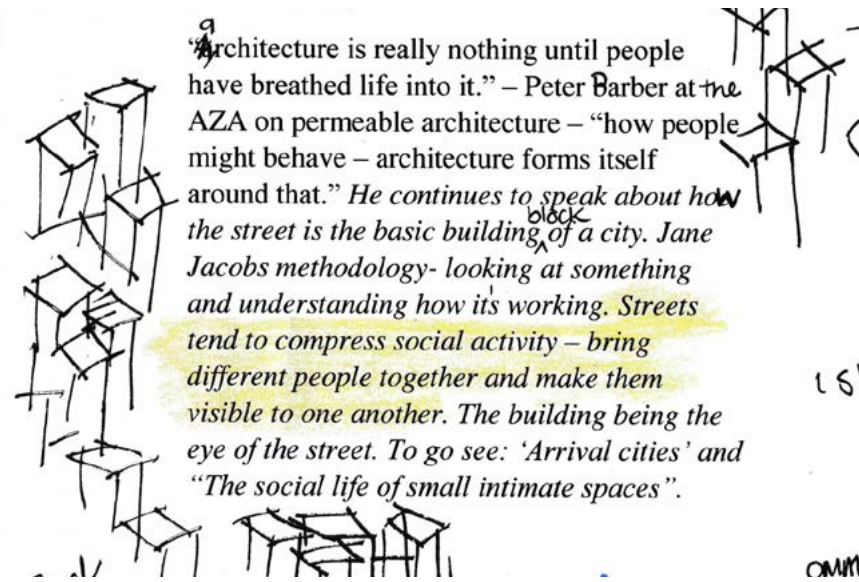
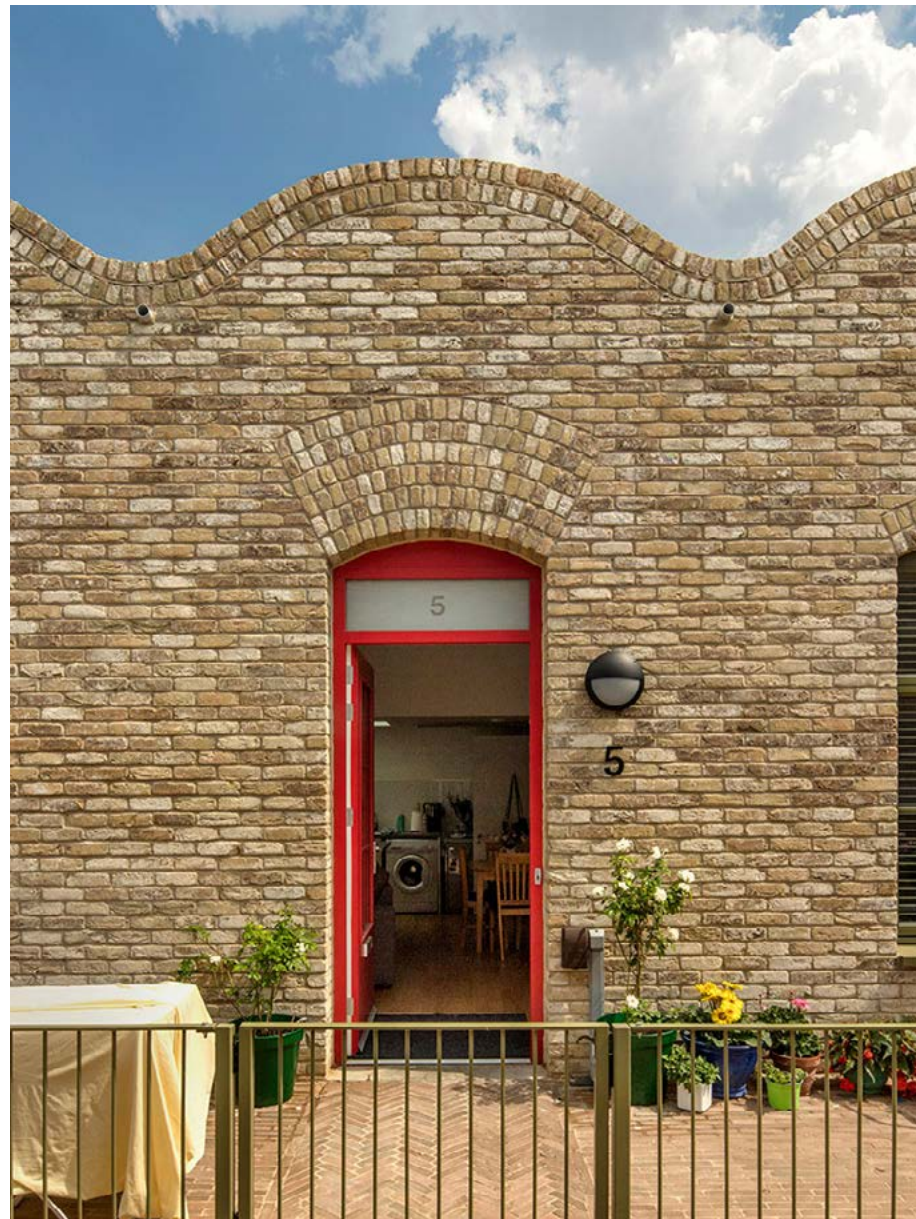
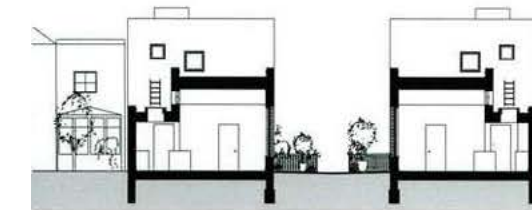


Figure 2.3.27: (left above) Excerpt from notes taken on Peter Barber (Author 2018).

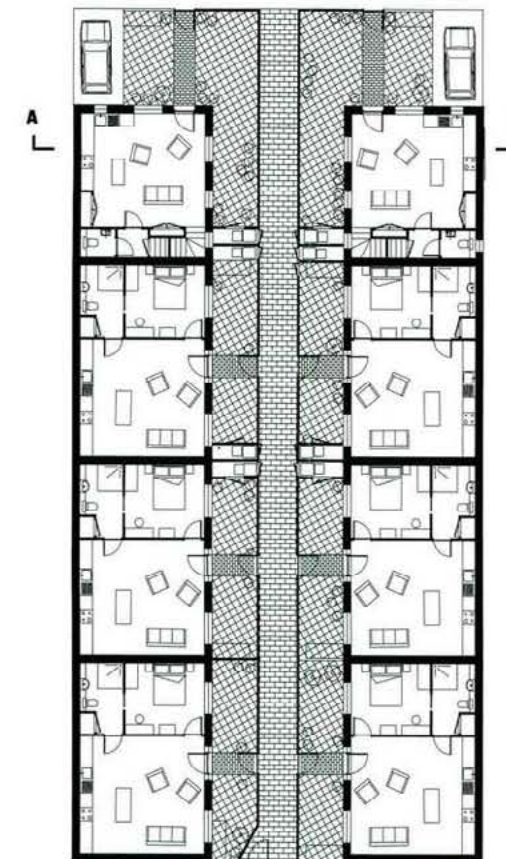
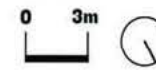
Figure 2.3.28: (left below) Entrance to council home in Ilchester road (Peter Barber).

Figure 2.3.29: (lbelow) Section and plan of Ilchester road project (Peter Barber).

Figure 2.3.30: (right) Ilchester road project, view from street (Peter Barber).



section AA



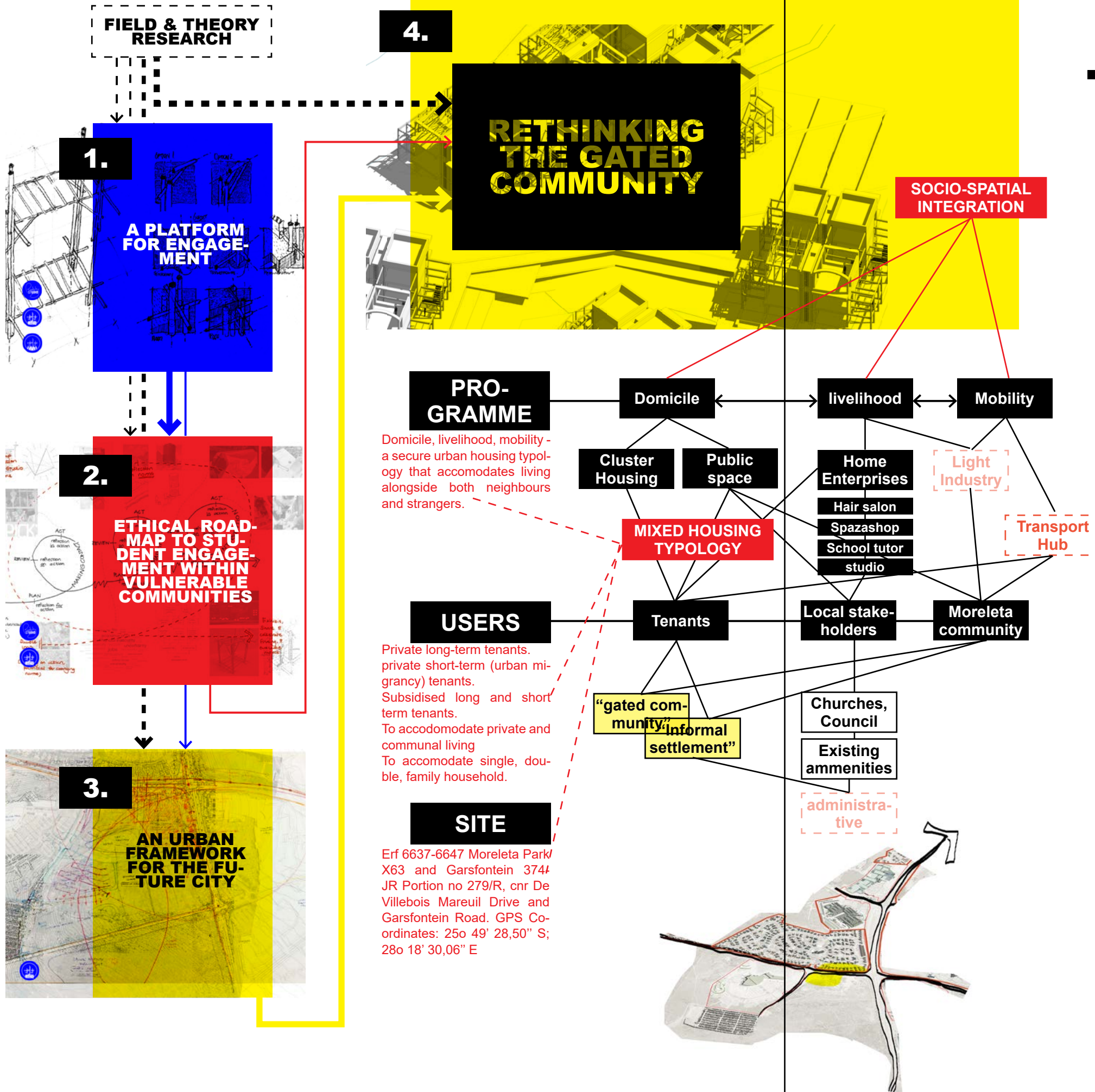
ground floor plan





Figure 2.3.31: (right) *Ilchester road project*, view towards street (Peter Barber).

2.4. THE ARCHITECTURAL OPPORTUNITY



The findings from the participatory action research process outlined in the previous chapter have manifested in three major outputs to be graphically summarised within essay 2:

- 1. A Platform for engagement** in the form of a live-build prototype exercise, completed in collaboration with the 2021 honours students.
- 2. An ethical roadmap to student engagement within vulnerable communities** - serving as the main output of the Reality studio for Lina Zachrisson and Julina Linqvist from the Chalmers University of Technology.
- 3. An Urban Framework for the future city**, completed in collaboration with Delani Kriek and Chris De Bruin, who are within my studio and share the same case study area.

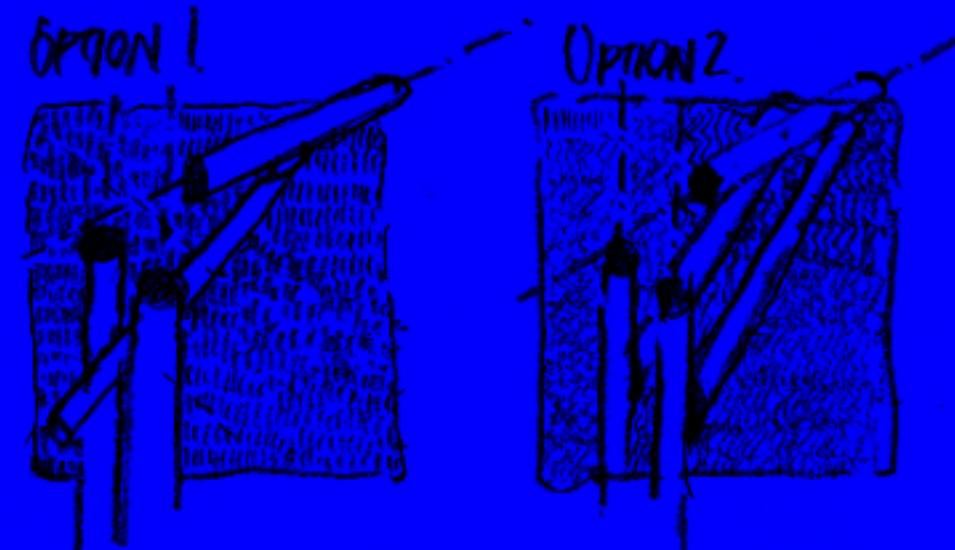
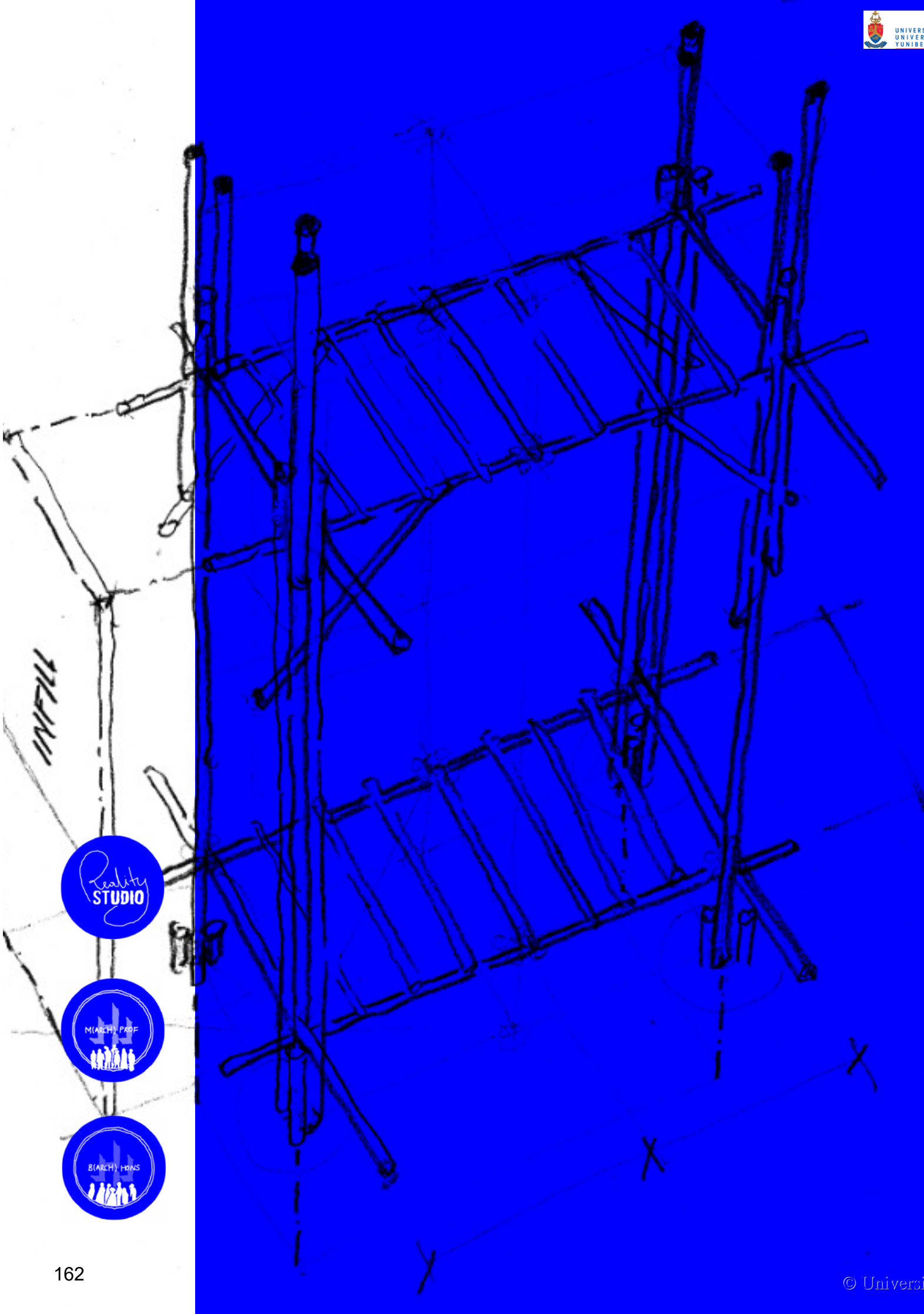
These each stand as their own architectural outcomes, achieved through a co-authored, design-lead research process. In the context of this project, whereby the the fourth, most important outcome (the eventual individual process towards desgined building response) becomes a response to a particular research question - the three preceding outputs

act as informants alongside the initial mapping process. In this way, the "co-design" aspect is not the direct means of spatial enquiry for this dissertation outcome - but rather an preceding process that yields the necessary knowledge and insight that will allow a more authentic architectural response.

This was proven particularly helpful as the engagement precipitated a better understanding of the needs of Moreleta park residents - ultimately informing the programme and influencing the choice of site.

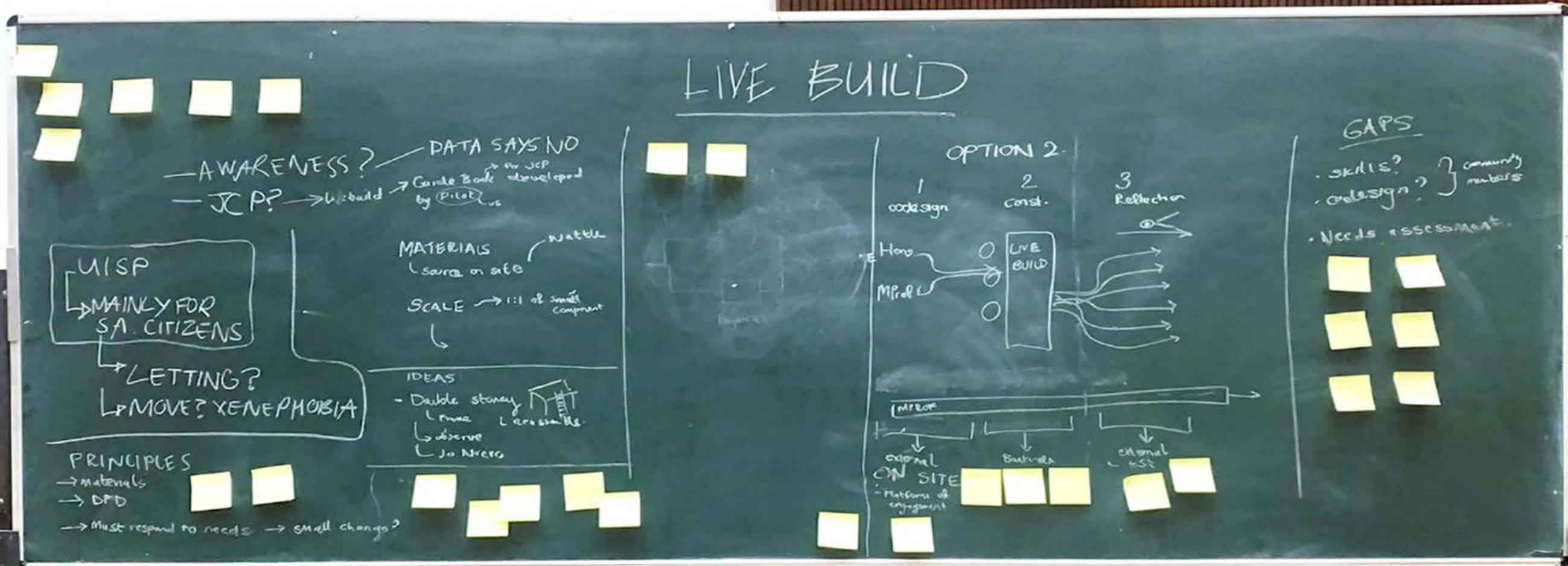
On an ethical level, it was important to step away from site engagement once the direction of the project output resulted in only one-sided, and not mutual, benefit (only the student-architect and their hyperthetical project is benefitted).

Thus, before proceeding to the project-specific design process outlined in essay 3, this essay is concluded with the backdrop of the three relevant group outputs.



A PLATFORM FOR ENGAGEMENT

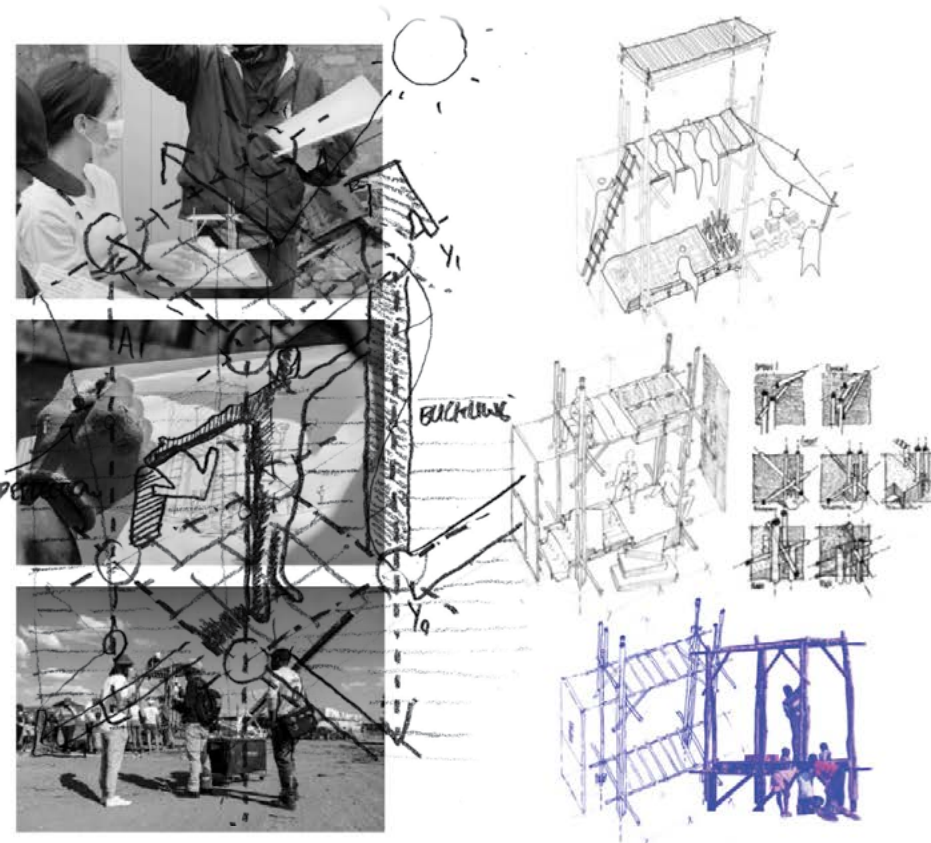




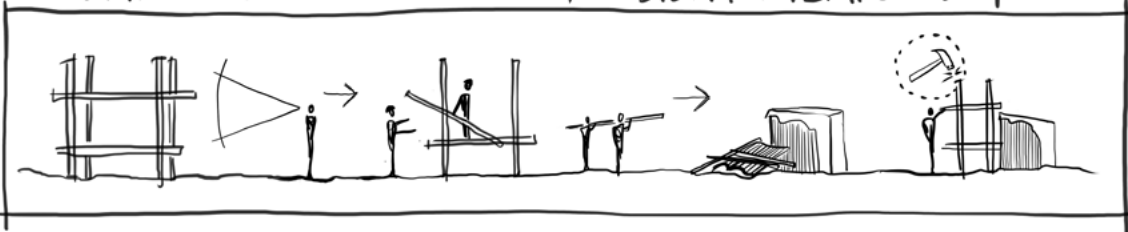
1. DESIGN RESPONSE

2. ENABLE DIALOGUE

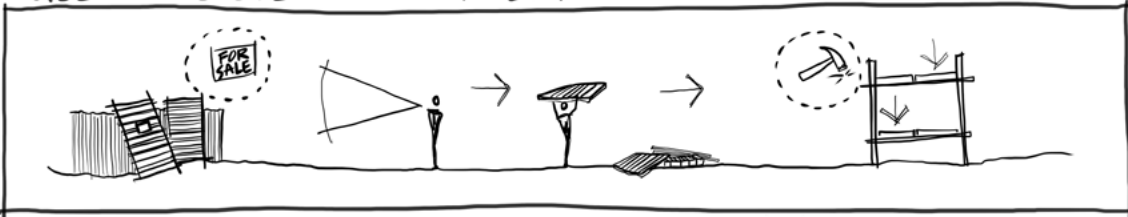
3. SUPPORT AGENCY



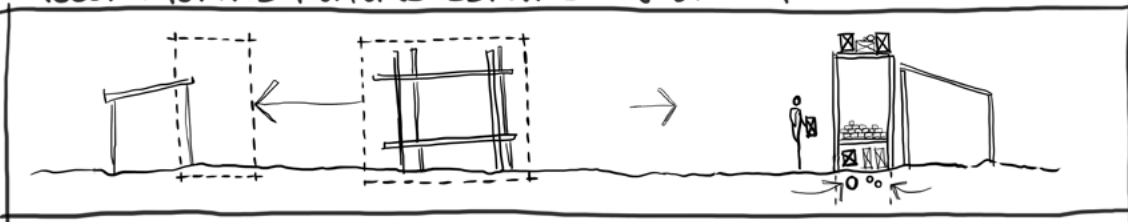
DESIGNED FOR DECONSTRUCTION, MOBILITY & TEMPORALITY



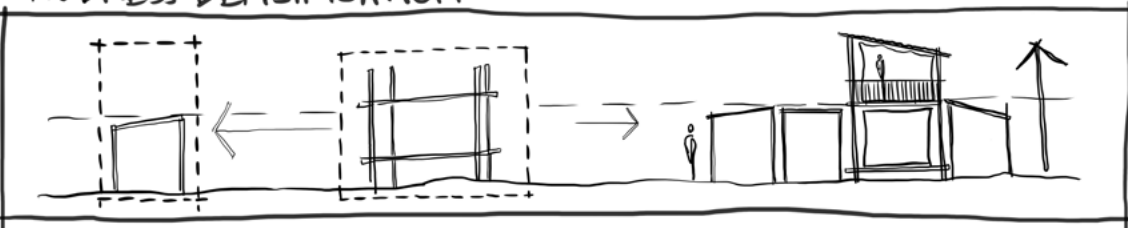
USE AVAILABLE & AFFORDABLE MATERIALS



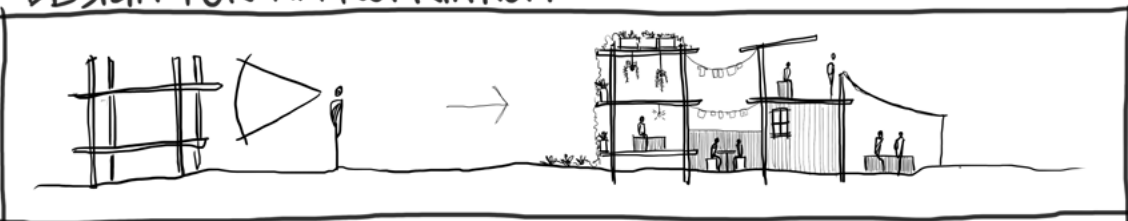
ACCOMMODATE FUTURE SERVICES & STORAGE



ADDRESS DENSIFICATION



DESIGN FOR APPROPRIATION



Above: MArchHons students, Moreleta Park Integration Project 2021



The reality is that you can't really set up a mutual goal unless all parties are equally and directly implicated in the outcomes.

... because our intention is not, and should not, be to assume the position of being "saviours" [...] It felt a little bit more like journalism; I think that's how our stakeholders started to see us eventually.

Real benefit and change can only happen when people who can take action are able to use our research outcomes

In general we were over cautious with ethics simply to ensure no discomfort and ensure that we could use all the valuable information later

The mall and the sweets situation was a bit of a jolt. Sometimes improvisation doesn't have the best outcome. I suppose at least we learnt never to bring sweets to site."

ETHICAL ROAD-MAP TO STUDENT ENGAGEMENT WITHIN VULNERABLE COMMUNITIES

We were under the impression that we assessed most of the [...] but [...] (and soon [...] we didn't nearly think of everything.

To this day, however, [...] to know [...] the [...] a [...] the [...] whole idea.

... because you can't really set up a mutual goal unless all parties are equally and directly implicated in the outcomes.

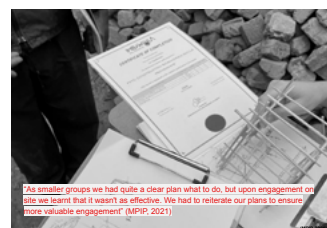
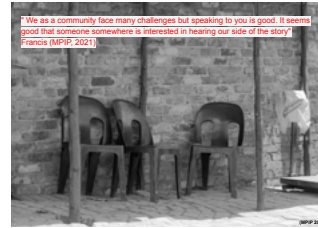
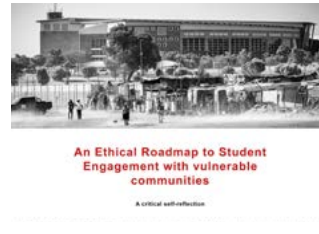
I'm not sure that this is possible, but it will be fruitful to, from the get go, know what groups to target. We can build on existing relationships and expands if the opportunity presents, but it won't be possible to always include everyone."

Generally we had loose daily goals which guided us more than a set plan would have because of the ever-changing circumstances"

We had a clear plan to use epicollect and geotagged photos etc. This however changed when we tested it on site as we realised that we needed something more engaging and personal, which lead to a reiteration of our questionnaires to paper."



(Zachrisson & Lindqvist 2021)



HOW CAN STUDENT RESEARCHERS BETTER ENSURE AUTHENTIC, ETHICAL ENGAGEMENT WITHIN VULNERABLE COMMUNITIES?

“

Situated within a project that aimed to empower vulnerable communities, a student researcher set out to engage with the data samples that constructed the core of the project. Upon arrival at site the data samples became dynamic, fluid in their movement.

The researcher looked at a mirroring image. A reflective window. A human being. A man from Plastic View. She began the same old introduction, attempting to explain the group's intentions, and why they were documenting his neighbourhood. He jokingly responded with an analogy to a zoo.

One March afternoon, a student researcher indulged in desperate reflection...

"The issue here lies in that it is us students imposing an architectural project which has not been sought after by the community in any way.

There needs to be a common goal, which allows the opportunity to learn, and arrive at a more informed architectural outcome.

Depending on the ideas generated through our future engagements, it is likely that the architectural outcome will solely be serving the student, in which case the role and power balance must be shifted accordingly - where the stakeholder becomes a sort of "su-

pervisor" on their own accord. In other words - "designing with", I speculate, is only authentic where the goals and outcomes are for the shared benefit of all parties, regardless of the participatory nature of the process.

Without this shared benefit, the project itself is inevitably (and only hypothetically) "designed for" stakeholders, riddled with tokenism, and furthermore, of no direct value to them.

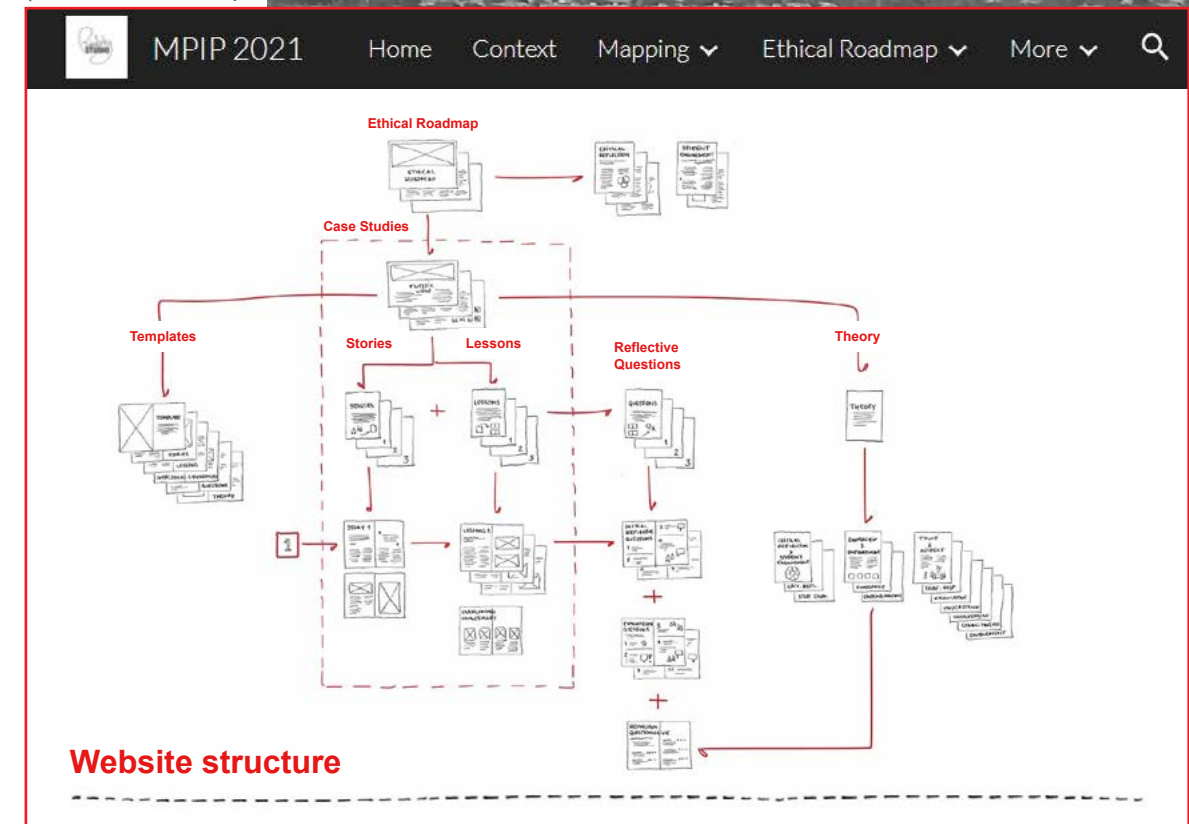
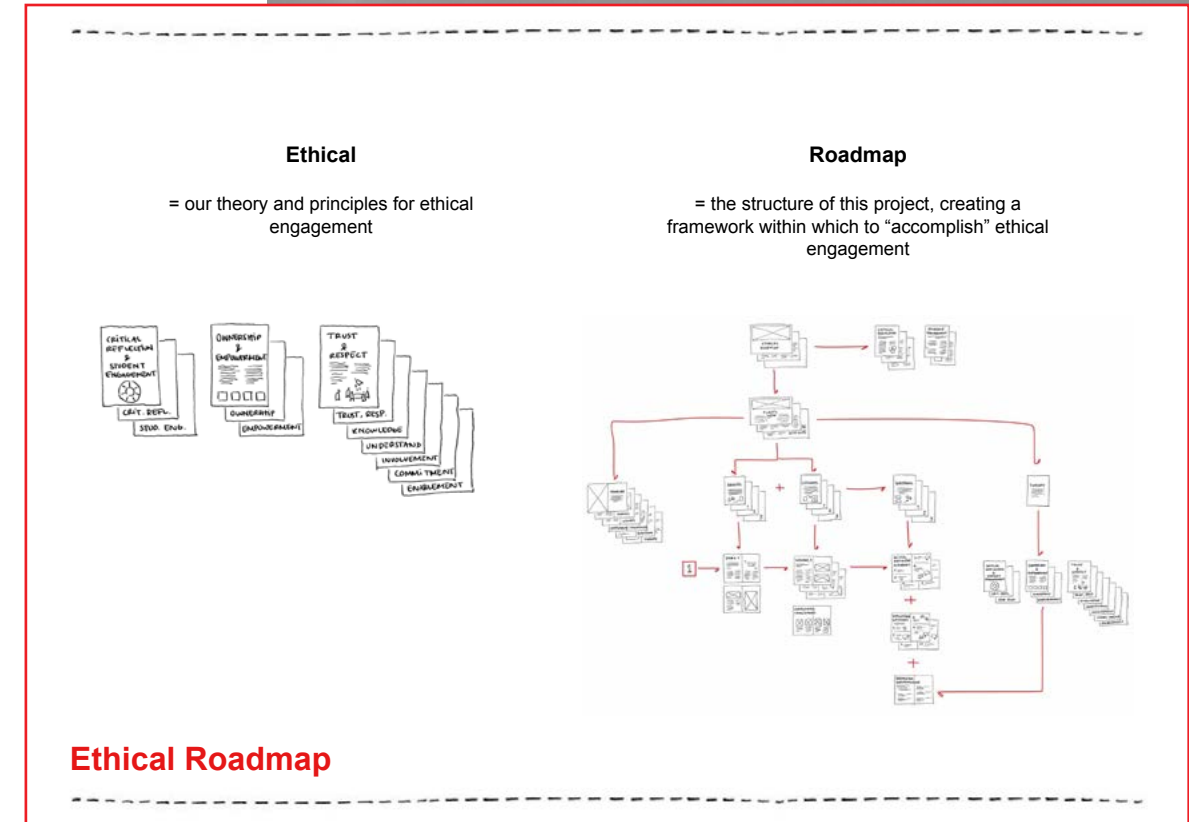
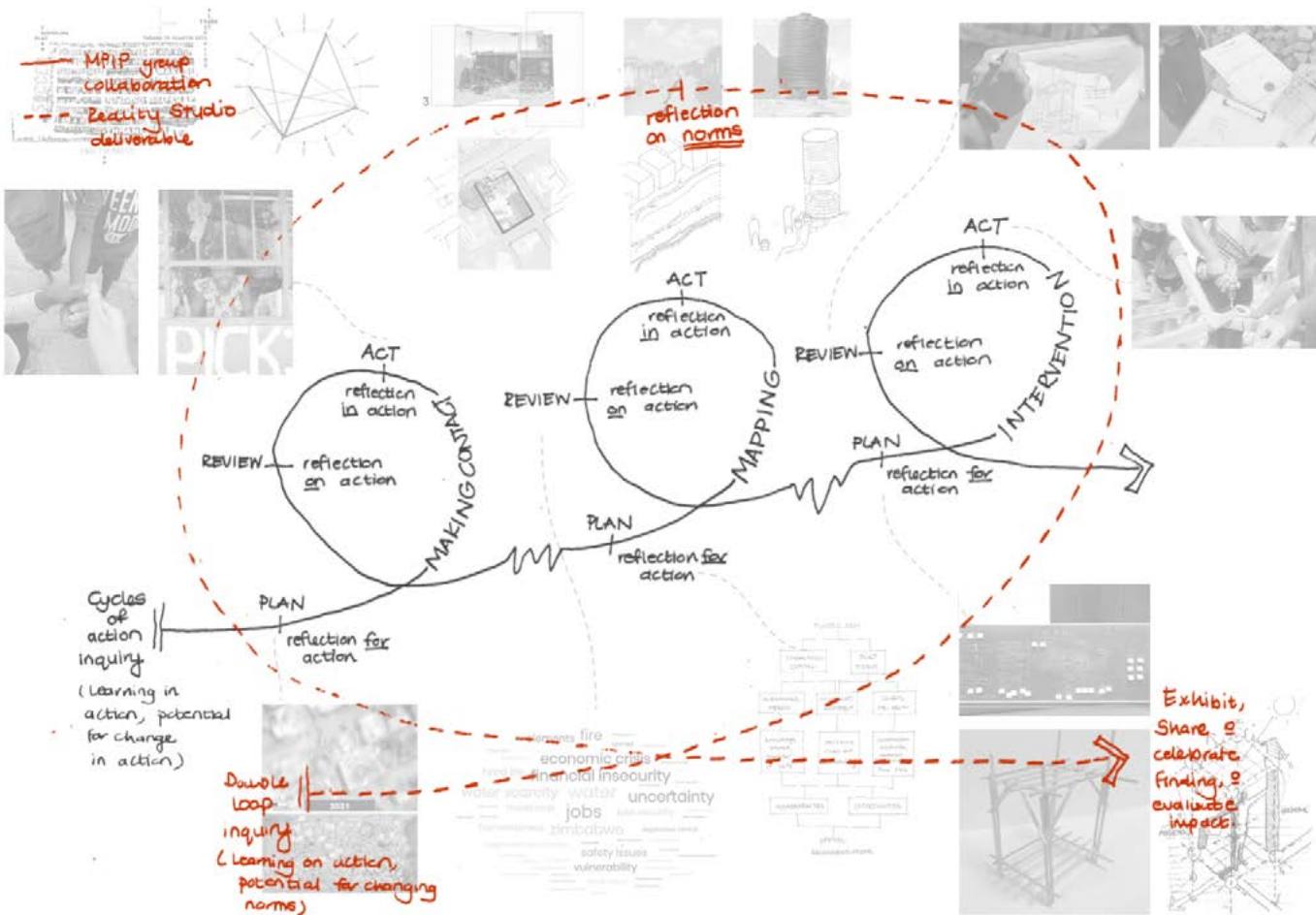
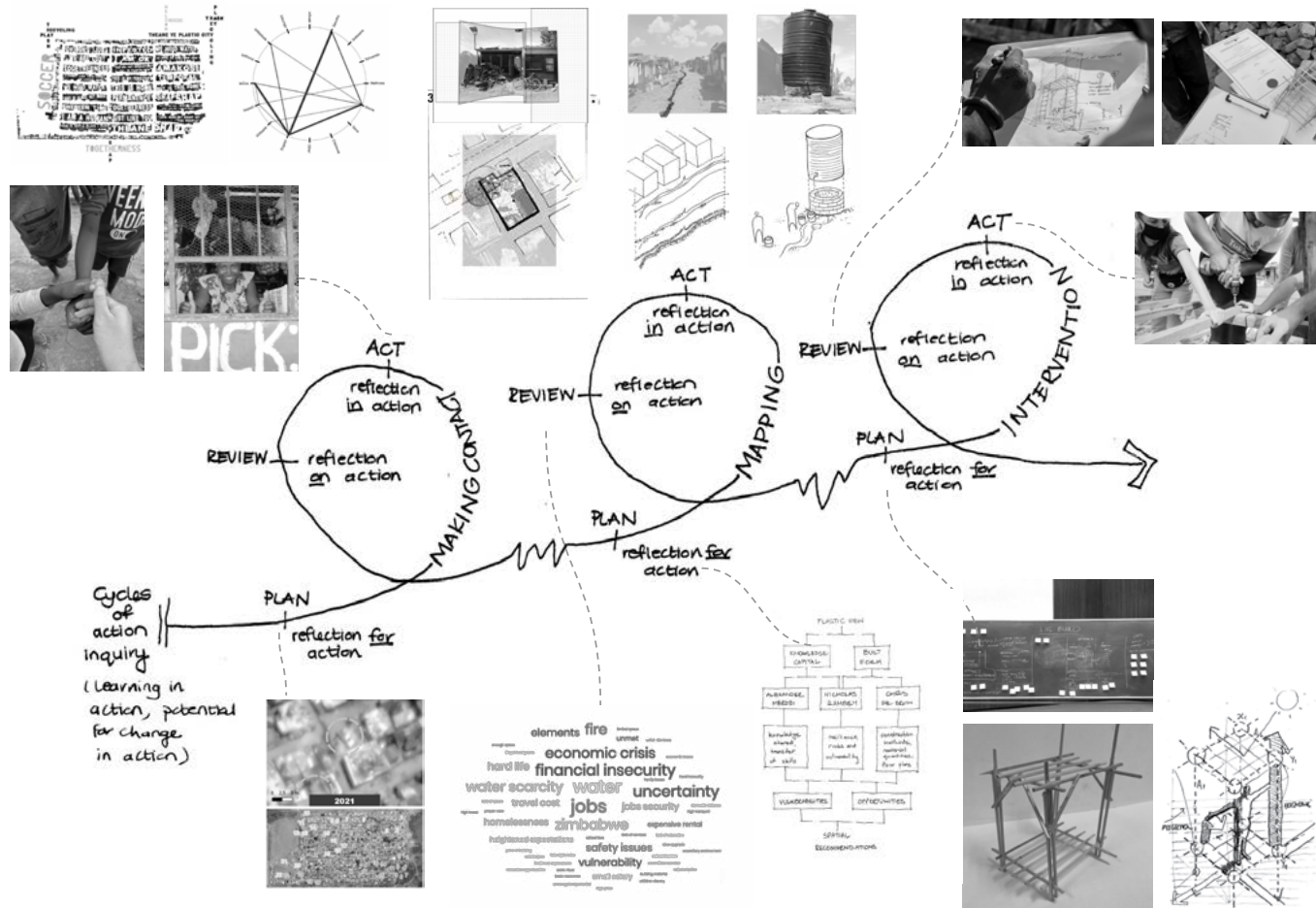
It is important to understand common needs and capabilities.

I suppose my biggest trouble here is justifying the imposition of a codesign process on the assumption that my own case-study and design project is something that a community needs or will benefit from.

How does one distinguish their position as a researcher for the collection of shared knowledge production, from that of a privileged person trying to use their privilege for what they assume is "good".

I feel uncomfortable documenting the lives of people (and taking their time) for the purpose of a design project which is ultimately used to assess my individual abilities and merit."

- A Katranas 13/03/2021

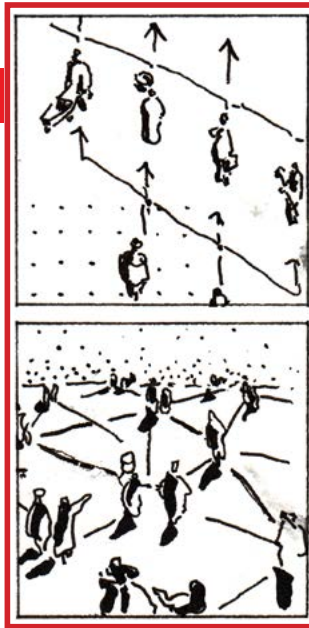


AN URBAN FRAMEWORK FOR THE FU- TURE CITY



PRINCIPLES

Extract from Urban Vision (Katranas, Kriek, De Bruin)



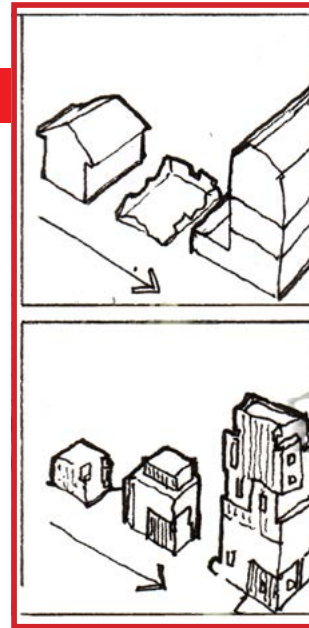
Design for Transformation: there is irony in that other cities around the world are moving towards fragmentation (Simone 2006). This highlights that it is not just the remnant apartheid division that exists spatially at an urban scale that requires remedie, but also - a systemic shift, from consumption driven development to more inclusive agendas, is necessary (Meagher 2018).



Design for Urbanisation: recognise and accept increased spontaneous kinetic currents within the static urban fabric as a consequence of rapid urbanisation (Mehrotra 2008:205, Pieterse 2011:1, Dodman et al. 2017).



Design for informality and spontaneity: design from the perspective of the Slum, recognising it as the "heart of the city" (Pieterse 2011:5), the entry-point to the city in its role as a means to enable upward socio-economic mobility (Griffiths 2018, Simone 2006).



Design for agency: "the individual's freedom to choose and bring about the things that he/she values" (Frediani 2010:176, Schneider & Till 2011). Simone argues that "Viewing the right to the city as the right to pursue multiple aspirations ensures that no structure of governance can ever really manage the activation of this right" (2006). This places the focus on how "freedoms" and "opportunities" are allocated, instead of assets or rights (Architecture Sans Frontiers International 2012:104-105, Sen 1999) - The Capabilities Approach (CA) Framework.



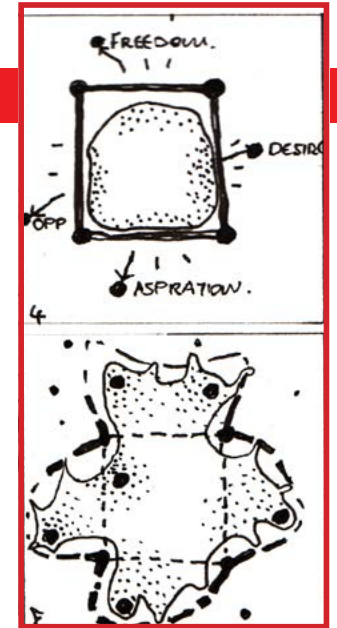
Design for resilience: Salat argues for self-sufficient districts made up of heterogeneous communities with a strong recognition of the existing site condition; compact, walkable, mixed use and a high level of economic self-sufficiency (2011). Strength and resilience in interconnectivity (Salat 2011:18).



Design for the re-integration of Industry: as a means to ameliorate the diminished livelihood prospects that are linked to the problematic disconnect between urbanisation and the industrialisation necessary for sustainable growth (Meagher 2018, Dodman et al. 2017)



Design for long-term infra-structuring



Design for Change, evolution, . Informal urban contexts present "city spaces where there are many different ways to get something done - where the way you prefer just isn't possible now" (Simone 2006). This is in contrast to the more permanent "formal" infrastructure.

- domicile dominant
- public green space
- Livelihood dominant
- Transport-Mobility dominant

