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Looking for leftovers: in search of a common thread between the forgotten and incompatible in Johannesburg

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Looking for leftovers.

In search of a common thread between the forgotten and incompatible in Johannesburg.

Alexandra Gascoigne
831486

Cover Image
01.
+29-02-2020
+Hanging out
+Pentax Asahi 35mm
on Expired Kodak film

Project Summary

Project Location

Jeppestown ; Johannesburg

GPS Co-ordinates

26°12’32.6”S
28°03’32.2”E

Program

Social Housing and Textile Mill and Market.

Research Field

Human Settlement and Urbanism (HSU)
Identity | Phenomenology | Structure

Client

Residents of Jeppestown and Surrounding Suburbs

Theoretical Background

The design and application of a rapid urban redevelopment scheme aimed at the reprogramming of existing spatial legacy, through the research of temporary programming and place-making tools applied to social housing architecture.
An intervention that will inspire a sustainable social and urban progression in critical urban regions.

Architectural | Urban Approach

This paper aims to develop a strategy at the interface between “Resident”, “Architecture” and “Infrastructure“ and will suggest a design approach to social architecture and supporting infrastructure in the critical context of Jeppestown, Johannesburg .

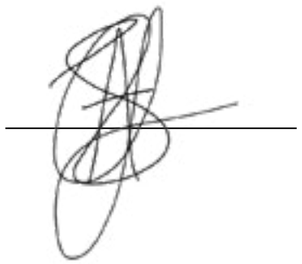
Declaration.

I, Alexandra Gascoigne, 831486, am a student registered for the course Master of Architecture (Professional) in the year 2020.

I hereby declare the following:

+ I am aware that plagiarism [the use of someone else's work without permission and/or without acknowledging the original sources] is wrong.
+ I confirm that the work submitted for assessment for the above course is my own unaided work except where I have stated explicitly otherwise.
+ I have followed the required conventions in referencing thoughts, ideas, and visual materials of others.
+ For this purpose, I have referred to the Graduate School of Engineering and the Built Environment style guide. I understand that the University of the Witwatersrand may take disciplinary action against me if there is a belief that this is not my unaided work or that I have failed to acknowledge the source of the ideas or words in my in my own work.

Alexandra Gascoigne



This document is submitted in partial fulfillment for the degree: Master of Architecture (Professional) at the University of the Witwatersrand, Johannesburg, South Africa, in the year 2020.

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG | SCHOOL OF ARCHITECTURE PLANNING

Acknowledgments.

Thanks to all those that accompanied me on this wild ride.
What a time.

You're all great.

To Brendan Hart, thank you for the guidance, encouragement and calm.

To Hilton Judin for the spots of advice and honesty.

To the Hart crew, Maseeha and Dani, I'm not sure I could have asked for better couple to stress with.
So much appreciation for you.

To my amazing non-archi friends - thank you for understanding.
Ella for the genuine love,
Justin for the distractions ---

Karen for the walks, ice-cream and rants.
Jon, for the conversations that continue to force me to challenge myself and aspire to know and be more. We will start a firm.
To Lize, for the support through our many years of friendship, and the occasional glass of wine.
Joshil, Hashim and Vern, for the concern, honesty and love.

Most importantly, thank you to my family, my parents and brother, my home.
For keeping me grounded and for the unconditional love.
Challenging me to be my own person.

Looking for leftovers.

ABSTRACT

In search of a common thread between the forgotten and incompatible in Johannesburg.

The main objective of this research report is to confront the ephemeral nature of architecture within a South African context. Questioning and gaining insight into the production of spaces that make use of the exiting fabric.
Considering spaces, places and practices that are forgotten and need to be confronted.

Using modern architecture as a platform to view forgotten spaces so to deal with the altering nature of modern structures and the autonomy that these spaces allow for. Providing people with a building that adapts and changes with time, through program and aesthetic.

Johannesburg was formed through the discovery of gold and continues to grow and adapt throughout time as a reaction to the industry. With the industry came the racial divide that was not only social but physical. As we look at the city at this very point in time, the inception of the city is somewhat forgotten and the spaces that were prevalent in the creating of the city have too, been forgotten.
This temporal nature of the industry in Johannesburg has created spaces that are left over.

The selected site and existing structure, portrays the re-appropriation of forms and spaces for appropriate situations and goes on to address the use of incompatible programs within architecturally reduced provided spaces.

The temporal nature of architecture spills into the identity of place and the nature of place-making and spatial control.

Place is defined by people, their points of view and personal experiences. Exploring the tools within place-making through the lens of spatial agency and ultimately spatial control, as a way to confront and understand the networks and relationships that come about through individual perceptions of spaces.
Addressing place as a culmination of aspects that are reliant on a multitude of personal experiences. Redefining the place model of David Canter to rather include and question place through assessing the community, the material and the element of time.

Ultimately, providing a space through-which an injection of an incompatible combination of people and programs highlights the temporal nature of places and architecture.
Re-imagining a process that ideally deals with sustainability in a multitude of ways and to consider time within the architectural realm as having more of a ephemeral effect.



02.
"Thrown together."
+ Concept image
+ Authors own.

Contents.

+ Declaration **i**
+ Acknowledgments **ii**
+ Project Information **iii**
+ Abstract **iv**

1.

+ Begin **14**
+ Methodology **16**
+ Limitations and Delimitations **18**
+ Theoretical questions **20**

2. Theory.

+2.1 Leftovers **24**
+2.2 Focus **25**
+2.3 People and place **26**
+2.4 Johannesburg- An Ephemeral City **28**
+2.5 Housing in Johannesburg **30**
+2.6 Displacement **34**
+2.7 Johannesburg today. **36**
+ Literary Precedent **38**
+2.8 Wake Up this is Joburg. **43**
+2.9 Right to the city **44**
+2.10 Spatial Diversity - Embracing the change. **48**
+2.11 Architecture and the invisible **52**
+2.12 Conclusion. **56**

3. Site.

+ Johannesburg **61**
+ Joburg through my eyes. **62**
+ Looking out **64**
+ The Surrounds **66**
+ City and Suburban **68**
+ Jeppestown **70**
+ Maboneng **72**
+ Fashion District **74**
+ I went on a walk **76**
+ Programmes and safety **78**
+ Points of Interest **80**
+ Urban Characteristics **82**
+ Climate information **84**
+ The Existing Builing **86**
+ Physical **88**
Stripped structure **90**
Social **92**
Site and me **94**
Things I see **96**
The Eastern Gateway- Proposal. **98**

4. Programmes.

+ The Role of the Architect **102**
+ Programmes - Multi-programmatic. **104**
+ Building as a city **105**
+ Open Building and Auto-construction **108**
+ Programme selection **106**
+ Experiment **108**
+ Residential **110**
+ Vertical and incremental **111**
+ Textile Market **112**
+ Textile Mill
+ South African Textile Industry **114**
+ Mill and market **115**
+ Textiles today. Fashion **116**
+ Fiber selection **118**
Dye choices **120**

5. Concept Development.

+ Leftovers and programme **126**
+ Stitch, patch, quilt - **128**
+ Concept models **130**
+
+
+

6. Design Intentions.

+ Urban response **136**
+ Informant **138**
+ Programming **140**
+ Components **142**
+ Design model exploring **144**
+

6. Design Intentions.

+ Urban response **136**
+ Informant **138**
+ Programming **140**
+ Components **142**
+ Design model exploring **144**
+

1. Preface.

03.
"The shell and infill"
+ 03-08-2020
+ Kaserne Building
+ +Pentax Asahi 35mm on Portra 400 film
+ Authors own,

Begin.

Leftovers.



04.
"On the other side of the fence."
+ 29-02-2020
+ Kaserne Building.
+ Pentax Asahi 35mm Portra 400 film
+ Authors own.

Leftovers can be many things; the much anticipated meal that you've packed for lunch the day after dinner, or change that jingles in your pocket after handing a teller a R50 note for items totaling R36,99.

Every day, mundane references can be made, some negative and others positive, but to me, to this report, leftovers are places and objects that are a result of a complex society and places over time. A result of unjust actions and exclusion.

The city of Johannesburg has taken on many forms and grown into a place that holds both hope and despair.

The legacy of gold and the colonial rule bought a sense of temporarily , segregation and greed. These are still apparent within the city today.
.
With the uncertainty that has been leftover, people have evolved so to accept the constant state of flux and need for adaptation and reinvention.

Within the growth and excitement for Johannesburg, there are spaces, industries and people that are left behind in a physical and metaphysical state of the in-between.
Spaces of uncertainty where the finality of a process is disregarded.

This report is an attempt to acknowledge the spatial and social injustices of the past have been allowed to evolve.

I wish to expose the realities that so many academics write about, but many in practice seem to shy away from.
Designers need to detach themselves from the consumerist and capitalist society so to tackle the city for the greater good of all users. Through our power as spatial manipulators, we need to see the merit in the social modifications and improvements.

Spaces that are abandoned and leftover should be treated with creativity, and feed off the needs and informalities that promote perceptions and successful places.

The area of Jeppestown has been a space that has made its way into my heart. I never saw it as anything more than a place to pass through, a leftover, but through working and interacting with the people and the buildings during my years away from studies, I wished to understand the reasoning behind the spatial chaos and injustice.

The Kaserne Building that I passed everyday intrigued me, with a facade patched together using cardboard, plastic and corrugated iron. Why did the collage of materials invoke such emotion?

Was it sadness, anger or motivation to change?
Derelict areas on the city peripherals were worlds apart from the northern suburbs that I was fortunate too grow up in.

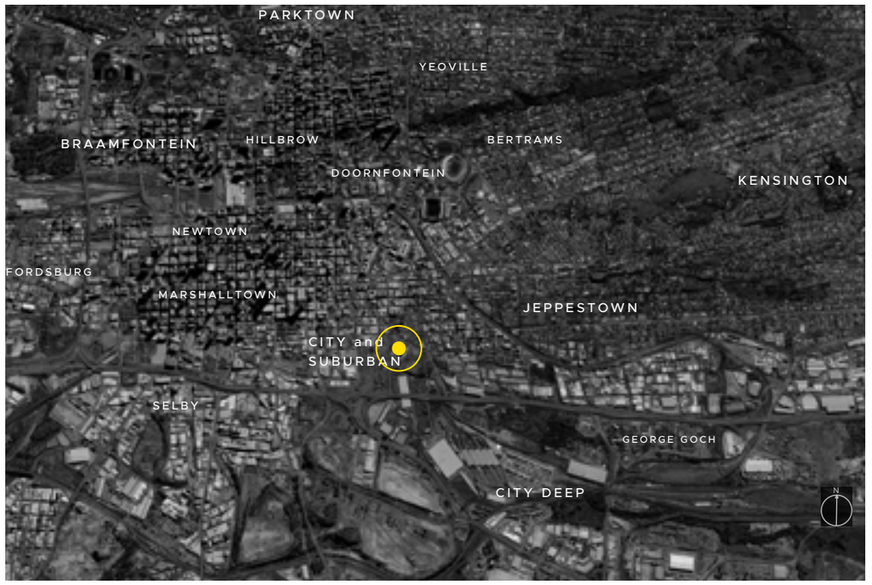
Instead of forgetting the decay and leftovers of our system, I wish to look the problem in the eye and motivate for change and community justice.



05.
"Looking in."
+29-02-2020
+Kaserne Building.
+Pentax Asahi 35mm on Portra 400.
+Authors own.



06.
"Contrasting - the foreground."
+ 29-02-2020
+ Kaserne Paring Garage Pavement.
+ Pentax Ashanti 35mm on Expired Kodak film
+ Authors own.



Methodology.

1. A critical reading and mapping of the areas.

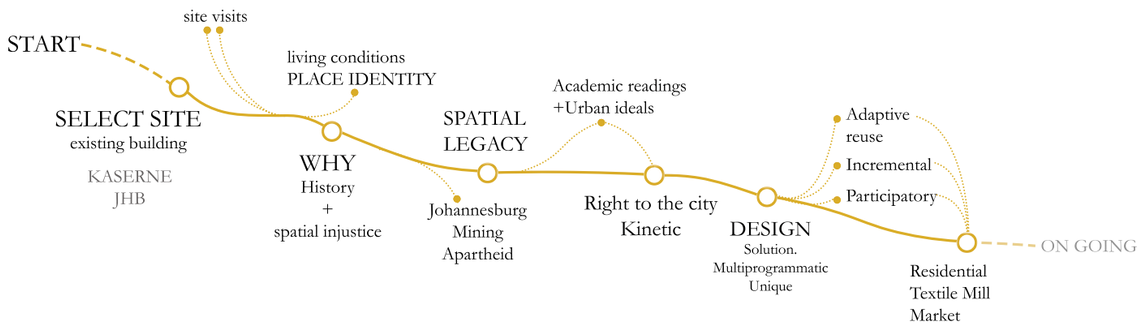
2. Development of a multi programmatic scheme that addressed the reuse of spaces within Johannesburg.

3. On site and area analysis through photography analysis.
+ Understanding the existing available materials as well as an understanding of the users and inhabitants of the area. Seeking the consequences of spatial agency

4.Formulation of introductory concepts and departure points and furthermore limitations identifying and assumptions to be carried throughout the project.

5. Theoretical, contextual and conceptual analysis was undertaken so to draw parallel thoughts and understanding of Johannesburg and the spatial implications of the post apartheid city.

6. Historical research was undertaken through extensive Online access as well as literary references



Snap.

A few years ago, I bought a 1960's Asahi Pentax 35mm Film camera.
There was something so appealing about the uncertainty of an outcome and the consideration required for each and every click.

I chose to use this method to not only capture the lived-in spaces to be used in this report, but also to pay respect to a process that requires a bit more thought, speculation and hope.

This medium speaks to my need to seek beauty through real interactions that can be found in the most unassuming spaces. An attempt to capture the perfect image, because well, *an image speaks a thousand words.*



07.
Self-Portrait
(Authors own,2020)

Limitations and Delimitations.

Assumptions.

It will be assumed that:

The building is structurally sound and therefore has the ability to be re appropriated.

The current community that lives on site and within the existing building will partake in the upliftment of the building and area.

The taxi rank will be uplifted and a wetland will be proposed and accepted.

Delimitations.

Due to the time constraints and vastness of the overall context, the prescribed/ suggested program of housing will merely be programmed and zoned according to the proposed layout, but will not be developed in detail.

The research does not intend to directly solve the larger social issues of Jeppestown and City and Suburban such as crime and housing, but rather suggest options of community upliftment and activation.

Limitations.

Limited site visits due to the dangerous nature of the space.

Lack of plans available due to city council being closed results in the structure and form being determined through some secondary sources and video footage.

Lack of community interaction and design based on secondary sources and interviews due to Covid restrictions.



08.
"The Church in Jeppe"
+ 29-02-2020
+ St Mary's Church, Jeppestown
+ Pentax Ashanti 35mm on Expired Kodak film
+ Authors own.

Theoretical questions.

Main questions.

Attempting to gain insight into the consideration of leftovers in society. Will the activation of abandoned buildings along the peripheries of Johannesburg contribute to better community engagement within the area?

Exploring the conditions of auto-constructive communities and multi-programmatic buildings so to develop spatial agency and better living conditions.

Subsidiary questions.

1. Upliftment of space and community inclusion.

2. Spatial injustice

3. How do architects design for change and consider the environments in flux. -How to design for change, for flexibility and adaptability?

4. Factors of change and allowing for a good quality of common and social space.

5. Multi-programmatic and circular economy that promotes spatial control and spatial agency.



09.
"Town"
+ 29-02-2020
+ Streets in Marshalltown.
+ Pentax Ashanti 35mm on Expired Kodak film
+ Authors own.

2. Theory



10.
"Beneath and between."
+03-08-2020
+City and Suburban
+Pentax Ashanti 35mm on Portra 400
+Authors own,

2.1

Leftover.

Johannesburg. The city of Gold.
A place determined by the discovery of a gold rich vein running below the earths surface.
It was a place which held promise and hope.
It called on people from across the globe in search of a better life.

The mining industry waged a war on the landscape but was also a pivotal player in the spatial development of the city and the racial oligarchy[1] that ruled over South Africa (Harrison and Zack, 2012).

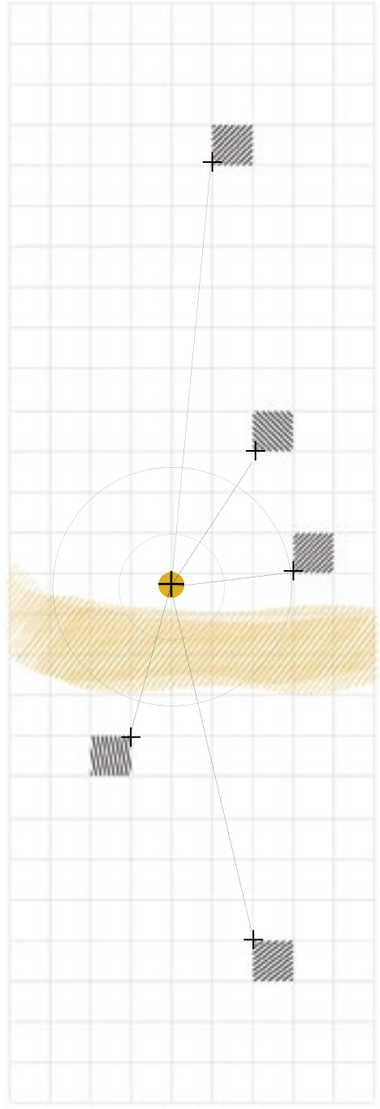
After the decline in gold, once the dust had settled and the wealthy had migrated further north, various areas became void of consideration, community engagement and wellbeing.
Spaces and the people within were left.
All leftovers from a growing city, an impactful industry and racially charged regime.

The sprawling growth and evolution of Johannesburg reflects the ephemeral[2] state of the city. A city in flux, constantly changing to meet an indulging, consumerist society where leftovers are discarded.

The leftovers represent not only the physical, but capture the spatial injustice prevalent through segregation and warped perceptions that have plagued not only Johannesburg, but South Africa and its people.

I belong to this society, this collection of people with the privilege to consume, to have a choice to turn a blind eye to the injustice that occurs.
I choose to learn and improve, and use my knowledge and privileged to open my mind and eyes so to create spaces for those not fortunate enough to have a choice.

The departure from defining the leftovers comes about due to the decay and neglect within the abandoned and vacated spaces that run along the city edges.
There is a need to explore the possible link between the nature of the spaces, the community and individual wellbeing.



[1] **Oligarchy:**
(noun)
government by the few /a group exercising such control
(Oligarchy, n.d.)

[2] **Ephemeral:**
(Adj.)
Lasting a very short time/ of temporal nature.
(Ephemeral, n.d.)

2.2

Focus.

The theoretical focus of this thesis aims at addressing the spatial and societal injustices in relation to time. The modern architectural and spatial planning ideals that define the city of Johannesburg, reject flexibility of mindsets and physical needs.

When spatial planners truly delve into the spaces of Johannesburg that have grown organically and adapted, it is evident that the adaptations are a result of those that occupy them and their situations.

My view on place is that *place is people* and *people are place*.
In acknowledging such a statement, it brings up the need to address the situations whereby people and places are neglected. This is through the inability for planners and corporates to plan for the future and flexibility that is associated with natural human needs, growth and progression.

The inability to plan for change shows the gaps within society and the consumerist and materialist nature of people. *The inability to plan for change* captures the mindset that those that can enforce change, wish not to.
People living in poor conditions are fearful of further displacement and continue to live within said conditions, as they are stuck in a system that overlooks misuse of funds and poor execution of interventions.

This thesis aims at exploring and gaining insight into the needs of individuals who are faced with societal and spatial exclusion in the hopes of providing a possible option and alternate.
Within a South African context, where injustices of the apartheid regime and universal modern planning schemes are visible along most streets, there needs to be a shift to allow for a more human considering approach to design.

Within the context of Jeppestown, there is a divide that is amplified through the prominent presence of the wastelands within the immediate context, as well as the zoning for light industrial land use.

The singular zoning of areas is a planning tool that is a reflection of a the inability to foresee growth and varied needs within society. These singular programmatic areas create dead single use zones as apposed to mixed use and diverse environments. (Jan Gehl 161.)

These negative factors contribute to the spaces as being seen as “misused and promoting isolated islands of singular use”, dead zones.

This lack of an inclusive and varying environmental approach allows for unsafe and exclusionary spaces to flourish, and therefore impact spatial perceptions.
Forgotten and void of human activity and interaction, contributing to poor community involvement, wellbeing and a negative association with the physical/material.

The notion of permanence as well as static programs and areas should be disregarded as the city has been in flux since inception.
There should be encouragement of movement, life and connections throughout all spaces at all times.

The ever changing and kinetic nature of the city of Johannesburg often results in the view that there is an informal nature, however, there is rather a need to “plan” for the “informal” as the informal is often a result of the authentic needs and reaction to spaces.(Mehrotra)

The current issue of a lack of social responsibility within the urban context of Johannesburg draws attention to the wasteful nature in all aspects of our society.

Leftover and forgotten spaces amplify the need to implement interventions that promote diverse and inclusive spaces as well as conditions that pay tribute to the temporal nature of Johannesburg.

Place:
(noun)
A particular position, point, or area in space; a location.
(Place, n.d)

The Material:
The embedding of cultural and social ideals into objects so that the object is seen as the item of power.
(Latour, 2005)

Formal:

Informal:

2.3

The people and place.

Ozymandias

I met a traveler from an antique land
Who said: Two vast and trunkless legs of stone
Stand in the desert. Near them, on the sand,
Half sunk, a shattered visage lies, whose frown,
And wrinkled lip, and sneer of cold command,
Tell that its sculptor well those passions read
Which yet survive, stamped on these lifeless things,
The hand that mocked them and the heart that fed:
And on the pedestal these words appear:
'My name is Ozymandias, king of kings:
Look on my works, ye Mighty, and despair!'
Nothing beside remains. Round the decay
Of that colossal wreck, boundless and bare
The lone and level sands stretch far away.

-Percy Shelley-
(Shelley and Forman, 1888)

A place is very rarely connected to entirely physical entities.
Monuments to period ideals, people and systems hold very little value unless there is some form of a connection and perception to the specific object.

When one looks at objects that monumentalize certain ideals that are void of community participation and interaction upon inception, it can be seen that there is a loss of value over time, possibly as there was very little value placed upon them to begin with.

Looking at the urban and architectural modernist ideals, there was an emphasis on the efficiency and systematic workings of spaces. This resulted in spaces and structures that lacked the suggestion of human engagement. The lack of understanding of the organic and flexible nature of humans resulted in a machine-like outlook on planning and design.

This lack of Genus Loci presented in the static spaces, creates dead zones and non-places. This concept of space having identity, or rather being known as a non-place, links to the understandings of placelessness, where there is a lack of identity and a weakening of the ability for one to distinguish a space for its perceptible identity (Relph, 1976, p. 6).

The Material:
The embedding of cultural and social ideals into objects so that the object is seen as the item of power. (Latour, 2005)

Genus Loci:
Latin
The pervading spirit of a place

non-place:
Defined as having a lack of identity, individuality and has no memory or association with the individuals that transition and occupy the space at any given time. (Augé, 1995)

The modernist approach has however allowed for the user of a space to determine the perceptions through shifting the spatial intention to suit a required use.
The structures take on the identity of those that use the space at a specific time and serve their required purpose.
They provide the platform for adaption.

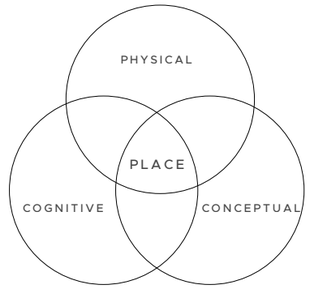
Places are partially a result of a physical form but are composed of a multitude of varying factors. The above goes to show that places are identity driven, however, the question arises as to how does one create a “successful” place?

Place, is generically defined as a particular position, point, or area in space; a location. (Dictionary, n.d.) This definition, however, does not take into account the other essentials that contribute towards a place and the identity of that place, as stated above.

The contemporary definition of architecture states that it is “The art or practice of designing and constructing buildings” (Oxford) This generally accepted definition sees architecture as the built form which points towards it being entirely power and product driven (Awan, Schneider and Till, 2011).
This can stagnate the field through the emphasis on form and negate the consideration whereby the duty of an architect is to be considerate of the on-going social interactions that occur in-between the built.

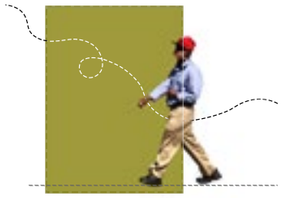
When we look to the past, to ‘the beginning’, where simple forms such as stones, the sky and natural elements were the founding points of architecture, and only later did the idea of enclosing and defining come about, architecture was, and continues to be, defined as places that encourage connections and interaction. (Koskof, 2010, p. 21)

Place identity is not defined by a single entity. It is not simply physical, but consists of the anthropological and conceptual. Three “components”, as per David Canter’s model of place-making.



11.
Diagram illustrating place identity as a combination of three main attributes. (Authors own drawn from Canter)

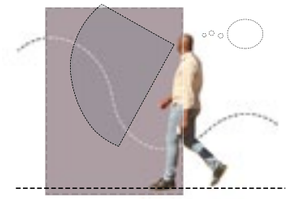
PHYSICAL — The physical attributes of a place lend itself to the tactile and tangible elements.



COGNITIVE — The experience of an individual through thoughts and emotional responses (Relph, 1976, p. 37)



CONCEPTUAL — Users of a space become aware of where they are and form associations through actively partaking in events within. (Twigger-Ross & L.Uzzell, 1996, pp. 206-207)



Along the outskirts of Johannesburg, there are areas that are deemed undesirable and are therefore neglected.

When one looks at the suburbs of Jeppestown, City and Suburban, City Deep and those that run along the former gold mining belt, it is blatantly obvious that these spaces have become zones of industry and neglect that lack any form of wellbeing. A place where no one truly wishes to live, amongst the wasteland, where the legacy of the mining industry lives on.
These spaces are created as a result of an ever changing, Ephemeral city.

These raw and real spaces have over time become discarded as they no longer serve their initial purpose or role. This shows the constant shift in views and outlooks in the city, and paints the picture of a space constantly adapting to the users demands. The place being constantly altered through the adaptive and creativity of users.

[3] **Tactile:** *(Adj.) Of or connected with the sense of touch*
[4] **Tangible:** *(adj). Perceivable by touch.*

12.
Diagram illustrating interaction with physical elements.

13.
Diagram illustrating experiential through space.

14.
Diagram illustrating conceptual awareness in space.

(Figures all authors own)

Questioning.

Through the initial exploration, realisation and identifying of problems and ideals associated to place-making, it brings about the need to engage and gain insight into the “components” and “elements” that encapsulate place-identity and garner community growth. Also referred to as “Goal of environmental design is the creation of Places” (Canter, 1977, p. 157)

How does one manipulate the negative leftover places, much like Jeppestown, and the place making model so to obtain spatial control and acceptance.

2.4

Johannesburg.

All roads lead to Johannesburg.
If you are white or if you are black they lead to Johannesburg.
If the crops fail, there is work in Johannesburg.
If there are taxes to be paid, there is work in Johannesburg.
If the farm is too small to be divided further, some must go to Johannesburg.
If there is a child to be born that must be delivered in secret, it can be delivered in Johannesburg.

(Paton and Baker, 1968)

An Ephemeral City.

The seemingly chaotic growth of the city is a result of the ever changing identity of Johannesburg as it has progressed through time.

It was initially vast and rural highveld with no development what so ever until the discovery of gold in the late 1800's. It was rebuilt over time as the temporal nature of the city turned to permanence with the simple use of material.

The use of modernist and universal principles lacked an attempt to create with context and individuality in mind.

The influx of diverse characters allowed for a city to grow, however the common thread that runs through the nation of segregation and cutting off groups of individuals still plays a role in the current spaces lacking in inclusion.

The past has defined the city and there is a need to respect the kinetic nature but in an environment that encourages connections and healing of wounds.

15.
Time-line of prominent dates within South Africa.
(Collage compiled by Author)







1886
First record of the discovery of Gold on the Witwatersrand reef.

Jeppestown Established as a Suburb

1887
+ JSE and The Star newspaper are founded.

1888
+Development of suburbs through the portioning of land. 50 x 100 cape feet.

+ Randlord club is founded.

1891
+ Kliptown is laid out. (SOWETO)

1893
+First Public Library erected out of corrugated iron.
Permanent recreational activities.

1895
+ Permanent structures began to be erected.

1897
+Rissik street post office completed.

+ The Old Station.
Late 19th Century prefabricated structure designed and made in Netherlands.
One of the oldest structures in Johannesburg.

1899-1901
+Anglo-Boer War.
Colonial government formalizes racial segregation.

1903
+ Sophiatown established

1906
Johannesburg has been reinvented three times.

1. Corrugated structures.
2. 1-2 Story Brick + Mortar.
3. Industrial Victorian multiple story structures.

1913
+Union Buildings in Pretoria designed by Sir Herbert Baker. Italian Renaissance style.

+ Museum Africa built initially as a food market

1913
Black Land Act No 27 of 19 June 1913

+Formation of South Western Native Area (Later renamed SOWETO in 1963)

1920
Miners strikes over poor living conditions.

1923 - 1948
Native Urban Areas Act 21 of 1923

1926
The Mines and Works Act (Colour Bar Act) No 25 of 1926.

1927
Completion of Jeppe Power station due to increased demand for electricity by the growing population.

1928
Johannesburg is considered a city.

1934
Slums Act of 1934







1931
Standard Bank building built.

1951
The Bantu Authorities Act No 68 of 1951

Prevention of Illegal Squatting Act No 52 of 1951

NE51/9

1952
The Pass Laws Act of 1952.
The natives Act of 1952

1954
Native Resettlement Act of 1954

1955
The Freedom Charter

1974
Carlton Centre Completed.

1976
Soweto Uprising

1985
Economic Crisis

1990
Nelson Mandela released from custody.

1994
South Africa's first Democratic election Nelson Mandela elected President.

2010
FIFA World Cup hosted by South Africa.

2019
+Xenophobia within Johannesburg CBD.

+ Construction of The Leonardo in Sandton City.

2.5

Temporary/Kinetic/Ephemeral.
Introduction to changing spaces.

transient:
(adj)
passing through or by a place with only a brief stay

Johannesburg, a city that has been through multiple rebirths, tells the story of extraordinary growth, as well as bitter loss and injustice.

The transformation of the city from a desolate landscape, to that of high-rises and urban sprawl, is a reflection of the adaptive nature of humans and the leaps in modern industrial technology that fed off the hope and greed created by the presence of gold.
The romanticized stories that narrate the development of "The City of Gold" often leave out the inception of the city, where it was a simple mining camp that capitalized on political power and control. (Harrison, Wray, Gotz and Todes, 2014)

This chapter is a brief introduction into the founding of the City of Johannesburg and its constant evolution from a state of temporary to permanence.

The physical growth of the city was not only triggered by the industry, but the racial segregation that wove its way into the societal hierarchies and unequal spatial development.

The geographical development and separation that has ultimately shaped the city goes back as far as 1888, with racial segregation within the labour force prevalent (Harrison and Zack, 2012).

Much like the gold industries worldwide, there was very little certainty as to whether the gold mining industry in the Witwatersrand would be permanent (Harrison and Zack, 2012). This early temporal approach to the industry instilled a perception that the city was not a final settling space. It was simply transient.

However, through the fluctuations of the industry, Johannesburg continued to grow due to the investment by mining corporations that were based within the center of the city.
The rapid growth within the city during the 1930's bought about urban change through "rebirths", where older architectural interventions were demolished to be replaced with modern high-rise buildings and structured forms of urban planning. (Chilvers (1948, 235)

The growth went hand in hand with opportunities of work, and bought about an influx of labour from across the country. These individuals were ultimately housed in single sex hostels/ compounds. As the city continued to grow further, more individuals seeking a living wage saw Johannesburg as a place of opportunity. The need for accommodation within the city resulted in the mixing of various races within the city spaces.



16.
Area plan of a part of Johannesburg - 1897 (Lewis, 1966)



17.
Old maps site

This intermixing was unacceptable to the early 1930 governing bodies.
This would be the starting point in the attempted racial segregation through geographical relocating (Harrison and Zack, 2012) (Parnell and Mabin 1995).

This demographic shift through racial segregation is reflected in the development of the urban fabric whereby there is a harsh and distinct quality of space projected into varying areas. (Matsipa, 2017)

The use of these modernist and western urban planning tools, methods and policies were intended to impart control, surveillance and stability so to discourage, or reject natural connections/links and dynamic spatial evolution (Van Noorloos et al., 2019).

As the city of Johannesburg became more permanent, the wealthier white elite moved further north in an attempt to distance themselves from the mining belt. The conditions were appealing due to the reduced noise and dust.
This northward migration contributed to the urban sprawl and spatial elitism still very much a part of the Johannesburg land ideals.



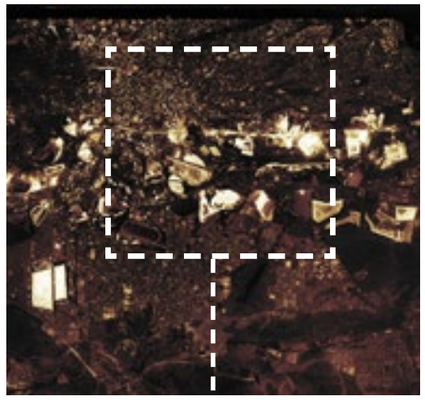
18.
City and Suburban mining camp.



19.
Johannesburg as a small scaled mining town. 1920's.



20.
An aerial of a section of the mining belt in 1959





21-22.
Aerial of a section of the mining belt in 1969

The land consuming nature of people resulted in the need to connect nodes of development, and thus erasing true urban centers (Mehrotra, 2008).

As time progressed, and the establishment of the city displayed modern "universal" and rigid spatial patterns, the underlying formation was and still is a result of the political, economical and social transformations.
To look at the development through a post-colonial lens, there is the presence of a cultural hybridity.

The establishment and control of the National Party in 1948 adopted and pushed the segregation model further, to the point whereby the development of "Model Townships were planned so to move the non-white population from the white city that Johannesburg had been become (Harrison & Harrison (2014).

National Party:
Political party in South Africa started in 1914 and disbanded in 1997. It was an Afrikaner ethnic nationalist party that promoted Afrikaner interests in South Africa through rulings such as racial segregation etc.

Architecture and spatial planning, as stated prior, became a political tool of power and control. Throughout the control of South Africa, forced removals and spatial and social segregation defined the cities.

After the fall of the National Party, the promise of freedom from poor living conditions and segregation is still a dream, 26 years on.

Spaces and areas that were once part of the segregating urban planning model have retained the lack of opportunity. The placement beyond the outskirts of the city have become spaces which encapsulate the economic and cultural struggles of the past for the users that remain. This concept of spatial segregation and displacement is to be explored in a later chapter.

One can characterize Johannesburg as a kinetic city due to the natural shift from the modern and static planning to more of a free and adaptable city.

The current development has shown that Johannesburg is an organism that has grown incrementally with a disregard for the permanent and monumental, but rather in a direction of temporarily, uncertainty and constant growth. The modernist predetermined intentions, have however, allowed for an appropriation of social connections and practices (Le Roux, 2014).

This kinetic city draws attention to the inequality within the system through spatial divisions and excluded groups that are excluded, disregarded and leftovers. Not not deemed to be part of the formalised architectural realm.

This has birthed yet another concept whereby the city has adapted and taken on places of "pirate modernity". The planned and formal have been by-passed in order to implement the "informal" to survive without any conscious attempt at constructing a counterculture (Mehrotra, 2008).

The memory of what once was becomes an "enacted" process of a temporary memory.
The organic and fast paced adaptive nature within Johannesburg and other cities results in meanings of spaces and such that are not stable. These spaces become unpredictable and allow for themselves to be consumed and reinterpreted and recycled into new forms with new associations (Mehrotra, 2013).

In terms of the kinetic city, the fundamentals are not the physical built forms. They are rather the spaces in which people interact and connect (Mehrotra, 2007).

The physical adaptations are merely the result of the interactions, connections and ability to change. The physical manipulation and "indigenous urbanism" (Mehrotra, 2008) is not conducted through the practical logic that modern spatial planning methods follow. It is rather the temporary occupation of spaces that explore the limits of an intuition based approach to living and spatial arrangement.

Accepting and acknowledging Johannesburg as a kinetic city, the nature of the environment and living, architects should shift from a position of enforcing strict, permanent and stable oppressive schemes.
People have and never will be predictable, and so the spaces in which we live and move should not be reflective of non-human traits. There is a time and place for everything, yet the popular desire for static objects reduces architecture to building as a commodity and disregards the dynamic in favour of the stagnated.

The only thing that remains constant is change.





23.
"Informal trades"
+ 29-02-2020
+ City deep.
+ Pentax Ashanti 35mm on Expired Kodak film
+ Authors own.

24.
"Corners in Fietas"
+ 19-07-2019
+ Fietas. Vrededorp.
+ Pentax Asahi 35mm on Fuji 200 film
+ Authors own.

Static cities:
The embedding of cultural and social ideals into objects so that the object is seen as the item of power. (Latour, 2005)

Kinetic city:
The embedding of cultural and social ideals into objects so that the object is seen as the item of power. (Latour, 2005)

2.6

Housing and spatial injustices

Maybe have starting key words for guidance.

The development of the urban fabric within Johannesburg, as stated prior, was the result of the mining industry and the apartheids' planning methods that enforced racial segregation.

To truly understand the current urban state and the city as kinetic, the history of the housing schemes and urban planning within the unique spatial configuration of South Africa should be viewed and considered. This is due to the perceptions of space that continue to linger today.

The initial development of accommodation was through the need to house the new found mining community that were encouraged to migrate to larger cities in search of work.
Land located within a close proximity to the mines were deemed the most ideal.

The labour force was composed of mainly black Africans and Chinese men who were housed in same sex compounds as it was seen as a way in which to control individuals and use as little land as possible.

The compounds/hostels were built out of light temporal materials such as iron and wood, but with time were constructed using hardier materials such as concrete and brick. The shift towards more permanent structures was an indication of the permanence and stability by the governing bodies.

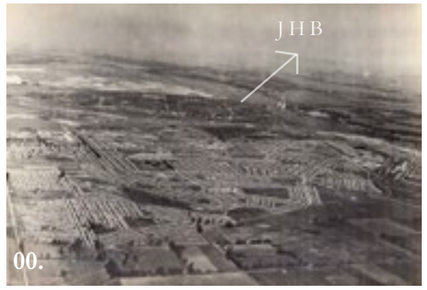


26.
A communal stove and concrete beds in a mining compound.
(Maclennan, 1985)

"On the mines, workers formed social networks supporting migrant cultures whose common sense was firmly rooted in the commitment to total practice. It is in such networks of sharing that cultures of solidarity and personal identities are maintained and recreated" (Moodie, 1994; 24).

Figure 22. Captures the disregard for the mining labourers and the limited space available.
Each room could house up to 50 workers. (Crush and James 1991; Crush, Jeeves, and Yudelman 1991).
The image captures the dehumanizing treatment of black bodies within the industrious age. Due to the social division, the European community overlooked any issues faced by the labour forces.

While most labourers lived within these compounds, others moved into other municipal compounds and "slums" within in the confines of the city. As stated within the previous section, the inter-mixing of races within the city was frowned upon and resulted in the development of townships that grouped and moved individuals based on race.



The townships that housed communities that were 'non-whites' were placed along the peripheral edge of the city.
The origin of Soweto dates back to 1903, with Kliptown being laid out as early as 1891.

This forced movement to the outskirts was a conscious effort in pursuit of physical and geographical segregation. It contributed to the disconnected city and the breaking down of the defined city center. (Harrison and Zack, 2012).

25.
Aerial photograph of soweto taken from the west.
(Lewis, 1966)

Lewis, P., 1966. A City Within A City - The Creation Of Soweto.

The governing bodies began to implement acts such as The Native Urban Act of 1923 which restricted the ownership or rental of land by black Africans. This enforcement ensured that there was a move towards the housing developments along the outskirts of the city.

Few years later, the Slums Act of 1934 gave local authority the legal "right" to forcefully displace and relocate residents to other "housing developments" that were well out of the city's immediate context. There are further academic writings that deal with the cultural meaning within these "slums".
The creation of the townships from the 1930's to the 1970's under the rule of the National Party not only created physical and social segregation, but also lack of infrastructure and industry within the vicinity.





The planning of the townships proved to be lacking in creativity and consideration for wellbeing through the singular programmatic approach to the spatial. It was a way in which to provide for numbers (masses) rather than individual people.

This is where the modernist influence was present. The abstraction and dehumanizing of groups of people in favour of a universal approach. This mass approach is reflected in the housing models, namely the NE51/# which were copy and pasted within an urban plan.
This singular approach created poor urban conditions and is an apartheid industrial legacy that has shaped the fabric.

Spatial theories by urban planners such as Jane Jacobs, state that neighbourhood have the potential to become self-sufficient and community orientated through connections and spatial diversity. (Jacobs, 1961)

In the cases of townships, much like Soweto, there is no considered bottom-up architectural approach, but rather a universal, a-contextual macro-scaled top-down approach. This shows the power play implemented within the design of segregated urban planning.
The lack of spatial planning consideration for the user resulted in a reliance on Johannesburg. Spatial hierarchy.

When the apartheid regime came to an end in 1993/1994, there was an influx into the center of the city seeking opportunities. This influx resulted in the growth of "informal settlements" due to the poor spatial planning and lack of consideration for future growth.
Even with the end of apartheid, Johannesburg was still divided by race and fragmented (Harrison, Wray, Gotz and Todes, 2014), there was a continued reliance of the city center for infrastructure and opportunity.

Through this forced relocation scheme implemented within South African cities, the questioning of displacement came about that played into the ability for communities to define place within spaces void of memory and connection.

slums:
(noun.)
for the use in this report, slums are referred to as areas of residential activity that pr

27.
Photograph of a view of Soweto.
(Lewis, 1966)

28.
NE 51/# *house design.*
Basic and modern attempt at a design. -

These houses provided the basics and were mass produced based on a universal design.
There was little consideration for the needs of those to be living within and paid little attention to the urban needs in creating spatial control and diversity.

(Maclennan, 1985)

2.7

Housing and spatial injustices

Forced relocation and the concept of Displacement.

Displacement:
Displace:
to remove from the usual or proper place (displace, 2020)

The re-appropriation of spaces by different cultures reflects on the varied perceptions of spaces and needs. A meaningful common denominator needs to be present so to encourage neighbourly interactions and connections that function on more than a superficial level (Jan Gell Between Buildings). This need for commonality brings about situations in which the perceived meaning of "things", spaces and places, and even the most common ones, is still not a shared convention, and therefore results in the entity becoming contested (Heynen and Loeckx, 1998).

The flexible and unpredictable nature of humans has been a tough concept for spatial planners to grapple with, especially those during the colonial and apartheid rule. The lack of willingness to create spatial and place identity resulted in poor urban and social conditions, which ultimately creates displacement.

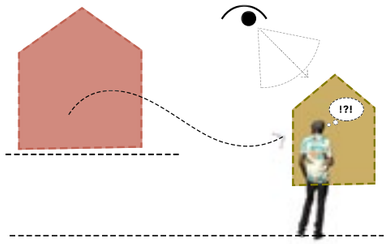
Within this refusal to accept the diversity and temporary nature of cities within South Africa, the issue of the inability to surrender control within a post-colonial mindset came about (Tissington, 2011).

Through the spatial planning of Johannesburg, and the need to provide separated accommodation for a group of individuals manipulated into participating in the capitalist and colonial societal environment, the "non-white" communities were forcefully moved to spaces beyond the city limits. This act of the forced removals and physical segregation through the use of the mining belt as a geographical buffer, was an act of displacement (Bremner, 1998).

Displacement is commonly done through architecture as a means of engaging with the built-environment. The manipulation of the spatial organization influences and plays an active role in the encouraging of cultural change and varied meaning in the interpretation of space (Heynen and Loeckx, 1998).

This displacement can be seen as a "Utopian planning style" of the apartheid where there is the need to assert control and dominance through manipulation of spatial perimeters (Robinson, 1998).
Architecture used to displace, can be seen vessel that results in the manifestation of social and cultural conditions.

The placement of a user into an unknown environment within the apartheid could be seen to be a tool for control and observation.
Architecture functioning as a spatial and



political tool for the regulation of behavior and perceptions.
The most obvious tool that comes to mind for the observation of spaces and people is the Panopticon. In the same way that users who are aware of being observed change their actions, the displacement of non-white communities into spaces of observation and unknown, it resulted in the adoption a varied relation to the space in which they are forced to occupy.


26.

29.
Displacement diagram. (Authors own, 2020)

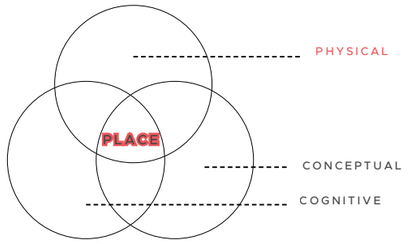
30.
Panopticon example. (Friman, 2005)

Friman, 2005. Inside One Of The Buildings Of The Presidio Modelo.. [image] Available at: <https://commons.wikimedia.org/wiki/File:Presidio-modelo2.JPG> [Accessed 15 September 2020].



31.
"Edge-fill."
+ 19-07-2019
+ Fietas. Vrededorp.
+ Pentax Asahi 35mm on Fuji 200 film
+ Authors own.

Displacement as an act influences the place identity through the direct link to the emotional state of the user. The physical manipulation, in the case of forced removals mass produced segregated townships alters the physical element of peacemaking which in turn determines the anthropological interactions and perceptions.
A failure in place-making.



The act of displacement shows the need for creativity within systems.
There is the need to adapt and alter the outdated and irrelevant. Displacing without reinventing for future adaptions and flexibility creates stagnation in mindsets and spatial perceptions. If designers of space and form reject adaption and flexibility, the result of otherness comes about through the constant displacement and deconstruction of communities (Heynen and Loeckx, 1998).

There is much relation to the Actor Network Theory (Latour, 2005) where there is a disjoint between the material (the physical, which I will explain further later) and the actor and the cultural networks.. The displacement of individuals removes that instillation of phenomenological components into objects and leads to a lapse in connections and embodiment of cultural importance.

With the embedding of cultural relevance into the physical 'the material' there is a power that is a part of the entirety of the object. This could be seen as to how control is enforced, through embedding of a preconceived social standard.
Only when the notion of power and preconceived ideal is removed, does the recognition of the social and dynamic nature of views and perceptions in flux come into play.

There needs to be play between the physical and their temporalities. Through the power of place, the physical environment provides a platform for interactions.
The physical environment in architecture needs to be encouraging of various forms of genuine interactions and conceptions.

32.
David Canter place making model reproduced by author. (Authour, 2020)

2.8

Understanding Johannesburg today.

We are living in the “democratic era”. The post-apartheid South Africa that carries the scars of a complex and discriminatory past.
To understand the current context, there was a need to explore the past and confront the former spatial injustices.

Johannesburg was referred to as a cosmopolitan city that could be compared to any city in Europe. This western ideal that catered to individuals based purely on their ethnicity.

With the fall of the apartheid regime and the flee of the white minorities further north to be barricaded in gated communities, the city became a space open for all (Simone 2004).
I view this migration as a need to further segregate, again, in an attempt for spatial control.

The physical and perceptive shift of the city occurred with the decay and abandonment of buildings as a result of the flight of businesses from the city center. The flight resulted in the move to more northern suburbs like Sandton, a place that fit the ideals associated to western views.

With the city now “open” there was a migration of a new demographic, an influx of new users, from the peripheral townships and across the African continent (Harrison and Zack, 2012).

Due to the lack of planning for adaptability and flexibility within the physical built form, and the need for individuals to be ideally situated within the city, overcrowding and poor living conditions became the new normal.

The need to be within the main center, closer to job opportunities, resulted in the moving from the segregated developments and into substandard living conditions.
The physical and spatial legacy of the colonial and apartheid rule continues (Harrison and Zack, 2012).

The city can be considered as a place for individuals to run to. The demographic shift, with relation to the segregated townships, sees the influx of residents due to opportunity and the rejection of segregation (Simone, 2004). The association to displacement due to the movement to outlying and peripheral townships altered the perceptions of the outlying spaces. A move to the city can be seen as a choice, a choice to be closer to opportunity, a choice to reject physical segregation.





Johannesburg as a kinetic city should not be viewed as a space of poverty that targets various inhabitants equally, but rather a place that captures the unequal distribution of opportunity and innovation (Simone, 2004). The formation of the city as a space holds much activity and movement It is the way in which Africans have the ability to reinterpret and invent terms through their lived experiences, while disregarding formal governance and control.
The city is filled with a multitude of identities, layers and networks which have been created through the adaption of a formally planned environment.

33-34.
A city street. Sauer Str.
23-05-2019
+ “Corner condition”
27-02-2020

+ Pentax Asahi 35mm on Fuji 200 film
+ Authors own.

It captures the ability of residents to alter spaces and further portrays the ephemeral state of Johannesburg.
With the city center no longer being the true center for business and institutional anchoring, it makes the case that those that reside within, define their own spaces, interact and form diverse connections. They survive based on what that can invent or put together.









As stated prior, the influx of individuals into the city created poor conditions, in buildings that are still lacking in all basic human rights.

The constitution states (section 26) that all South African citizens have the right to shelter, however the planning and handling of the housing crisis and poor service delivery has continues and the city continues to be fragmented.
This constant reinventing of spaces and shifting of formalised ideals conveys the need for planners and designers alike to break down the unjustifiable and groundless divides that fragment the city.

The approach to the poor living conditions in city buildings has taken on an attempts not to displace users however, Gauteng provincial government has taken the approach to formalize the settlements, with no upgrades to the living standards (Huchzermeyer 2011: 170).

This would appear to be a solution to the problem of displacement as mentioned in the prior chapter. It is however a strategy that doesn't deal with the upgrades and conditions that people have to live in. Reducing displacement does not address the inhumane living conditions, it simply renders the conditions as acceptable.

The gap within the housing models of South Africa results in the occupation of abandoned buildings with no infrastructure. And there is a lack of consideration to address the standards of living.

The continued acceptance of segregation seems to be a result, and/or legacy of the colonial and apartheid period.

35-38.
+ “City deeps signs”
27-02-2020
+ “Clocks and facades”
15-06-2020
+ “The Star- a star, 1964”
23-05-2019
+ “Infrastructure.”
02-08-2020

+ Pentax Asahi 35mm on Portra 400
+ Authors own,

39.
Chung Hua resident relocated.
(Masiteng, 2020)

Situations whereby individuals living within inhumane conditions are forced to be evicted, the rights to shelter is overlooked and cause the loss of possessions. Over time, if a process is run through a formal procedure, relocations are a possibility that result in displacement from more ideal locations to temporary accommodation far beyond the edges of the city.



The cycle begins again and people are forced back into poor city conditions for location and economical opportunities.
A case study that captures the nature of relocating is that of Chung Hua Mansions.

SERI:
The Socio-Economic Rights Institute of South Africa

"a public interest law centre providing dedicated socio-economic rights assistance to individuals, communities and social movements."
(About SERI, 2020)

The 250 Chung Hua residents that had occupied the building for years had done so in appalling conditions due to the lack of alternative accommodation options available.
Over time, with a new owner, the conditions worsened where water and electricity were no longer accessible. The occupants were subjected to violent evictions led by the police force, which resulted in a loss of possessions and dignity.

Under South African law, an eviction can only occur by way of court order. A court grants an eviction order only once it is satisfied the evictions just and impartial. If the eviction will render the occupants homeless, there must be temporary alternative accommodation provided.



40.
A staircase in Chung Hau Mansions.
(Masiteng, 2020)



In the case of Chung Hua Mansions, residents were relocated, with the help of SERI, however to accommodation that had no regard to the economical and social needs of the residents. The positive living conditions are a jump in the right direction, however the relationship to the spaces does not encourage a situation of home. The current planning and growth of Johannesburg does not see an improvement in the spatial. There appears to be a worsening of the segregation and economical conditions. Creating a new dispersed and fragmented city. (Harrison, Wray, Gotz and Todes, 2014)

In the current climate of South Africa, AbdouMaiq Simone (2004) states in his essay *People as Infrastructure*, that there is a continued nature of trickery due to the repercussions. A statement that captures the social conditions of the country, even in the year 2020 is the trickery of the politicians, those who are intended to be trusted. He goes on to say that "There is the need to prepare for an endless process of trickery. Government officials trick citizens with countless pronouncements of progress while finding new and improved ways of shaking them down."(Simone, 2004).

An example of such trickery is a development of shacks in Harrismith by the Free-state Municipality. The building of 500 single roomed shacks to the cost of R12 000 000. A staggering R22 000 per dwelling constructed from temporary materials (Masiteng, 2020).
This poor consideration for social improvement seems to be an extension of the mindset to provide for numbers and not for people.

In my opinion, it is due to the acceptance of anything, so long as it is deemed an improvement, or better than the offerings of the past. "Readapting the past" rather than enforcing a radical approach to move through and on from the segregation. The continued lack of problem solving and basic needs being provided, lead people to confront and address their own needs through adaptation and reinvention. .



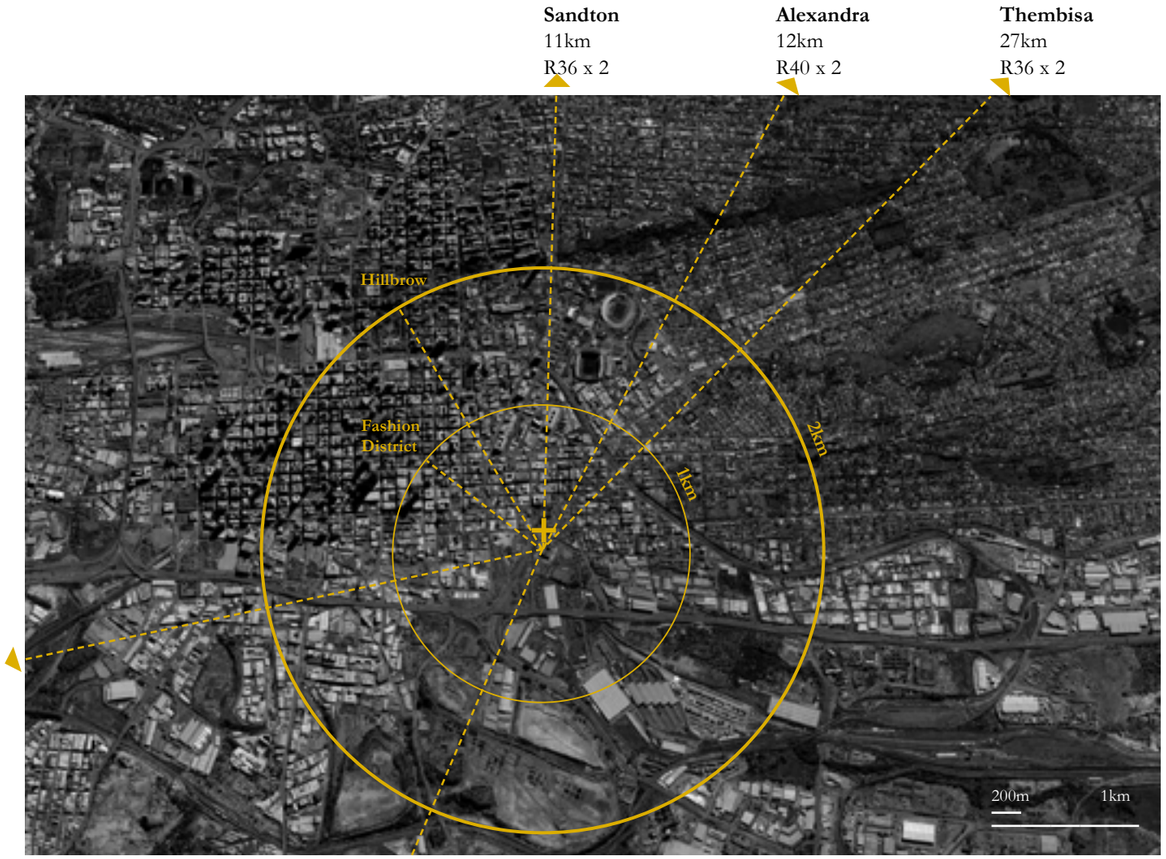


41.
Burst pipes and chemicals toilets.
(Authors own, 2020)

The density of Johannesburg does not follow the traditional methods of international trends.

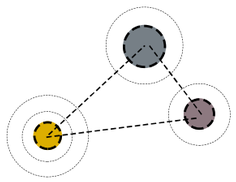
The urban sprawl is not a positive nor correct way to tackle densification, but the influx of individuals into the cities is an ideal due to access to services, jobs and opportunity. The flaw that is apparent however, is the mismanagement and lack of creative problem solving of the spatial and social environments.

42.
Freestate shacks.
(Masiteng, 2020)



43.
Distances and finncial burden assosiated with travel. (googlemaps and author 2020)

Johannesburg has developed in a polycentric form where the erasing of a singular center has resulted in a heavy reliance on vehicular transportation.



Mokonyama and Mubiwa (2014) raise the point of access to basic constitutional rights within South Africa.
Due to the vast distances between infrastructure, and the financial burden placed upon individuals to connect.
The right of access to health, food, water, freedom of movement etc. is seemingly impossible to attain. The stretched and fractured (Charlton, 2014) urban nature of Johannesburg sees connectivity as a technical limitation.

Literary Precedent.

Wake up, This is Joburg.
2014-2018

Photographs: Mark Lewis
Words: Tanya Zack

Wake up, This is Joburg, is a ten book series that captures Johannesburg and stories of those that live within its confines.
Tanya Zack speaks to individuals whilst exploring and engaging with the city itself.
There is a common thread throughout which deals with marginalized communities and how people adapt and inhabit the urban jungle.

There is no attempt to conceal or judge the stories of anyone, but rather bring light to the beauty and struggle that are attached to each word.

The harsh realities that are faced by individuals are confronted and accompanied by vibrant photographs taken by *Mark Lewis*.
When reading each book, and marveling at the photographs, a realisation of the unjust in society comes to a head. A reader is able to be transported into a space where the transient nature of the city is captured.

Each book looks into various spaces that are occupied and the individuals that live and act within. The focuses are varied, drawing attention to the living conditions within the city high-rise blocks, the bustling taxi community or the thriving bovine head industry.

The books bring the spatial, political and emotional realities that are faced by many to the forefront. In doing so, they attempt to 'force' the reader to engage with the city and its ways.
It shows that those that live within are the reason many of us are so deeply moved by this place.
The 'City of Gold' is simply a platform for people to define and mold place.

In Inside Out the duo bring back the stories of Yeoville Market traders, of the finely tuned economics of trading and of survival. Tony Dreams in Yellow and Blue leads the reader to the working-class suburb of Turffontein and the migrant dreams of Tony from Madeira brought to life by a vibrant landscape fashioned from waste.

"Not seeking to find conclusions, but rather to tell stories, to describe" is how they frame their travels but of course the notion is fraught, as unintentional themes arise giving shape to Zack and Lewis' interests.



44.
UnderCity
Mark Lewis.
"Wake up, this is Joburg!"



45.
Bedroom
Mark Lewis.
"Wake up, this is Joburg!"
2000.



46.
Zola
Mark Lewis.
"Wake up, this is Joburg!"
2000.

2.9

Right to the city.

The right to the city refers to the ability to reclaim the city and view it as an entirety that is a co-created space. There is this need to move from the colonial and capitalist norms that have been ingrained into society. This term was coined by theorist and sociologist, Henri Lefebvre.

In the South African context, the issue of informality has been a topic of opinions. This has long been contested and is fundamentally linked with the concept of Right to the City. During the apartheid regime, groups of individuals were forcibly moved to the city edges and had to engage with the conditions and build dwellings which satisfied their individuals needs in the time of segregation and marginalization.

The city is a space of temperance where few wish to belong to. The dynamics of the city however, provide residents with hope and add to the life, chaos and restlessness (Simone, 2004)

There needs to be a liberated of the strict rules used in defining of the spaces in the city. Layering of new and adaptive approaches to cater to the flexibility required.

The challenging of the top-down environmental approach in favour for the spatially diversifying bottom up, or grass roots approach shines a light on the importance of smaller scaled interventions for change that have the ability to permeate and become accepted and permanent within communities (Hamdi, 0000)

Through small changes in the attempt to encourage big changes.

The understanding of space in this context is that of space as a platform or stage for human activity

The current state of the city of Johannesburg and the spatial injustice have lead to the "informal" actions of residents. This conveys the practical intelligent that lies within the South African communities (Le Roux, 2014), but does place them in vulnerable situations due to the formalised systems that encourage removals and displacement.
In the Western society that shapes much of the urban, buildings that "decay" are removed so to create something new that neglects the embedded cultural and social importance (Gaule, 2008).

The modern and colonial planning worked as a political tool to prevent the possibility for spontaneous manipulation of space.
The modernist terminology frames informal spaces and slummification as places of disorder and unappealing chaos. The contrasting views see these spaces of self involved creation and adaption as an "emergence of new urban cultures and processes" (Matsipa, 2014).

Simone describes Johannesburg as the weaving together of new forms that ultimately result in a cohesive environment that encourages social relationships and connections. (Simone, 2004)

This struggle faced by many within many South African cities can be deemed a fight for space, but, it super-seeds merely the spacial. It is rather a struggle for social and spatial justice.

The right to the city and the spatial implications of the struggle that many are faced with result in the need for autonomous communities that address the direct needs of the people.

There is a need to understand how cities truly work, and how the informal networks produce rich places.
Within dynamic spaces there is the growth in the need for specialization in skills that appeal to the unpredictable nature that living presents. (Simone, 2004)

The marginalised within the city - those lacking rights require that there is a humanizing and restructuring of the city. (Lefebvre, 2005).

There is a need to humanize and restructure what is happening in the city in the current day and age so to reposition the power dynamics between inhibitors and those in power

Auto-constructed spaces see areas as people working together as a collective.
Inhabitants are no longer at the hands of the e bureaucratic system and politicians.
The maker is shifted from the receiver and the need for participation and so to encourage long term investment.
Participatory design is encouraged so to continue the creation of identity that evolves and adapts as he inhabitants and users change throughout time.

The knowledge of the various individuals can be brought into the living communities and spaces can be dependent on social and interactive opportunities. (Gehl, 2010)

Varying ways in which people feel connected through architecture - visual connectivity-communication is encouraged - design response for literal transparency within the community.
The producer-residents act together to encourage a diverse base of knowledge, abilities and efforts (Simone, 2004). The growth in skills and knowledge within communities strengthens the spatial identity and social networks (Gehl, 2010).

Through "self- build" or production of space, there is meaningful associations embedded into the material and the promotion of genuinely considered spaces.

47.
Previ adapted home. (Domus, 2011)



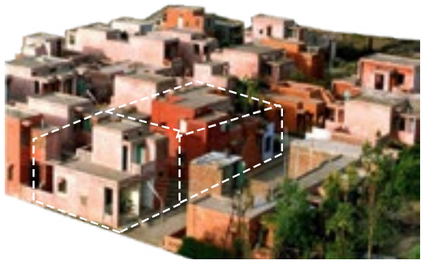
Architectural examples where design has allowed for personalisation and a platform for user interaction and participation is the Previ housing development.
The above image portrays the adaptations to a flexible platform that was provided. The incremental approach to the design resulted in the personalisation and ownership of each unit by the families.

Both designs addressed the flexible nature of people and provided so for a sense of place personally associated to each user.

Both addressed the following;
+ The adaptibility of the plan to suit te requirements of the inhabitants
+ Importance of family and providing the the lowest income bracket.
+ The ability for the scheme to create bonds and connections with neighbours.

48.
Doshi's Aranya Development. Architecture in development. org. (2019).

The Aranya development, designed by B.S. Doshi allowed for adaption and auto-construction if there were a change present within the users needs.
The design provided a variety of housing options that were not dependent on a specific material, but rather what was available at the time to the specific area.



There are however lessons learnt from structures such as Torre David, in Garaca, Venezuela. A 45 storey office building that was never completed and was ultimately abandoned. In 2007 there was an influx of families that moved into the building.
The building was adapted by the residents to provide much needed housing.
The building housed communities that made it their home. There was the coming together of diverse individuals that allowed for the spaces to be complex and intentional. (Torre David, 2012)

The building is an example of an autonomous community that through community investment, prevented the negative association with the "vertical slum".
There is much to draw from the vertical inhabitation as the building serves as a vehicle for place-making.

The eventual evictions of the building mimics the same displacement of communities that occur with in Johannesburg. Moved to the city peripheries, to new places that lack identity.



49.
Torre David in Venezuela. (Torre David, 2012)

Understanding the elements that can make a place.
Using principles of spatial diversity at the forefront and the need to adapt and reject spatial segregation and displacement. The realisation of connections formed through interactions with spaces that allow users to draw their own conclusions, rather than having them inforced upon them.

Place?

2.10

Spatial Diversity.
Take away and analysis.

As stated previously, the architect needs to be an advocate for change. Architects have the ability to grab opportunities and mold communities through awareness of social aspects and knowledge in design. The awareness of what constitutes good design and accepting the constantly changing, evolving nature of the world we live in, allows for better designed and managed communities.

We, designers, move through spaces,with the ability to observe our surroundings and activities. We can consider ourselves as a flâneur[1]. Floating through spaces with our minds open, experiencing and making connections and memories.
Through this ability to move and view, a deep need arises within to explore design elements that encourage social wellbeing, so users of spaces can enjoy the movement through them as much as I do.

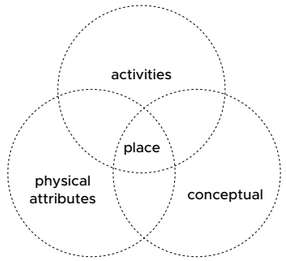
When moving through spaces and viewing the social requirements in conjunction with the physical form, I question whether spatial or environmental control through place-making is attainable.

What are the main elements to consider and how do we merge the social aspects and spatial agency with physical form to enhance networking and connection with positive outcomes.

Are we able to check components off of a checklist? Components that address the ability to implement changes and cater to the flexibility and dynamic nature of our social and physical environments.

The aim and goal of this research is to consider what can be done, and what should be done to ensure that an intervention is accepted and becomes able to accommodate the ever changing world that we live in.

[2]Flaneur:
From the French noun flâneur, means “stroller”, “lounger”, “saunterer”, or “loafer”. Flânerie is the act of strolling, with all of its accompanying associations. Charles Baudelaire to identify an observer of modern urban life.



A common take on community wellbeing is that of a multi-functional city with intermixing disciplines. This allows for spaces and communities to become self-sustaining and self-sufficient through connectivity and social diversity (Jacobs, 1961). Through the varying programs and functions that are developed, connections are formed and small scale and manageable environments arise. (Newman, 1973) There are connections between the architectural field and how architectural decisions in favour of “faceless developers” are made at the cost of social and economic advancements and consideration. (Sommer, 1974) There should rather be a rejection of the anonymous and commercial environments in favour of the spatially and socially considerate, small scale interventions that allow for community control the a better sense of environmental ownership. A shift from purely urban framework changes to community drivers. In the diversifying of the area there is the ability for individuals to be active within the area at varying times.
Through higher pedestrian activity within a space, the safety within increases due to the term “eye on the street” (Newman, 1973).

There is a need for an a natural and organic approach towards architecture that moves towards social diversity as a bottom - up perspective as opposed to the popular top-down. In the diversifying and reducing of community sizes, walkable and accessible spaces, there is growth and trust within spaces between individuals that have formed bonds and connections.

When considering the physical, material components, The Actor Network Theory speaks to the connection and relationship between perceptions and objects. The relationships that individuals have with material objects dependent on their social and cultural background. This allows for the embedding of importance into the physical. There is ultimately phenomenological components associated and embedded into objects. . This can be simple small artifacts or entire spaces and built form. The element of time becomes a key component as it plays into individual perceptions and memories and views. The Actor or individual is constantly varying as they move through space and time, the place/ material is constant but adapting through the eyes and mind of the actor. Architecture and places have a significant link to the emotional and the continuity of one’s self. (Twigger-Ross & L.Uzzell, 1996).

Inhabitants that use a space see themselves within a space and relate to an event, the material and time. (Augé, 1995, p. 42) They become aware of where they are and create associations of the space with themselves partaking in the event. (Twigger-Ross & L.Uzzell, 1996, pp. 206-207).
This goes hand in hand with the statement where place and space is kinetic and constantly in flux and people are place and place is people.

There are varying components that are deemed important in the kinetic city of Johannesburg and are seen throughout. The common bland uniform and pre-designed structures become isolated from the contextual particulars. Void of local culture, nature, energy and material flows, however, the site plays with the informalities and unintentionally, through Adhocism, shows the life cycle of materials and the communities adaptive nature to use what is on hand. The nature of the materials don’t only speak of the temporarily, but also of reuse and up-cycling. The do it yourself culture becomes revolutionary and empowering. The physical collaging of found objects shows the specialised and irrepressible spirit of invention and spontaneous survival driven creativity.
The future is never considered within the initial conception of the product . Single use and common cradle to grave mentality is the result. “All that is created and designed in the contemporary world is created to be thrown away and never truly and fully consumed.” (Mcdonough pg 27)

In the past, the city was destroyed and rebuilt with the newest trends and technologies that became available, but with the man-made world being built up of conceptual fragments from the past, there is a need to shift the physical world from the “Cradle to Grave” to “Cradle to Cradle”. The end of mass factory production leads to a rediscovery of meaning and trust. (Jenks)

This view on materials can be translated into the leftover spaces.
The importance of up-cycling and granting new life to people and places that are destined for the “grave”. Resources should be used for maximum efficiency.

The informal nature of Johannesburg and the relationship between informal and flexibility should be seen as opportunities and drivers for communities. Nabeel Hamdi, on small changes, believes that small manageable community driven interventions are able to make larger and more realistic changes to social environments.
Bottom up, also referred as the grass roots approach is where there are small scaled spatial agency implemented elements. They have the ability to have a large impact through community and urban participation. The natural progression towards the needs of the community holds greater importance and meaning which promotes acceptance.

A phased and adapted and/or manipulation of existing systems and structures has a possible immediate impact. The ability for an immediate and fast result shows the ability for acceptance with in communities and long term investment.
A community and small scaled approach to planning and social spaces allows for principles of good practice to be carried through into place-making.

Through the creation and unifying of smaller communities, the concept of commoning can be introduced into spaces.
The notion of sharing and instilling the prospect of ownership of space strives to create new bonds and relationships within (Stavrides, 2016, p. 79) The many hands approach to space could be a savior for space due to care and consideration for something that is owned and accepted.
An observation that I have made over my life, is that people care for what they own, rather than disregard what they do not. If we share, there is a common interest and an opportunity to improve on spaces and promote the identity of a place.

Places can be viewed through a broad lens, through which the previously explored can be grouped. The physical attributes, conceptual and the activities. David Canter highlights the way in which spaces can be transformed and viewed as places with identity through the presence of the three elements.

The conceptual attributes relate to the human and the activities that are performed within a spaces. It is the use of the senses and knowledge when interacting with a space that creates the connection between human and space. The activities and perception by the user determines the use. Space is seen as a bi-product of social interactions and as such, the space goes on to affect the perception and activities that occur within.

The physical attributes of a place lend itself to the tactile[2] and tangible[3] elements. The interaction through touching forms and moving or not, through boundaries, shapes the way in which a place in viewed. The physical and the view provides opportunities for interaction. For example, one can look to edges and facades. One can either pass or interact. These facades that can be manipulated and altered become an extension of space and create uniqueness within the place. (Zumthor, 1998, p. 21) Through physical manipulation there are opportunities for individuals to stay and live within a transitional space and from there, memories can be formed. (Gehl, 2011, p. 149)

[3] Tactile: adj. Of or connected with the sense of touch
[4] Tangible: adj. Perceivable by touch.
(tactile, n.d)
(tangible, n.d)

2.11

Architecture and the invisible.

A model.

The social aspects within architecture rely heavily on perceptions and the space in which people occupy. The exclusion of time would yield less understanding of places and their impact.

The site, which holds a five storey modern domino style building was abandoned and adapted to house individuals with no other options. This a contextual building holds no distinct identity, but only supplies people with platforms for infill housing and a roof over their heads. There is no cultural reference and importance, hence the ability to take on an entirely new purpose that depends on the current occupants. The building did not consider the context but rather efficiency and global trends.

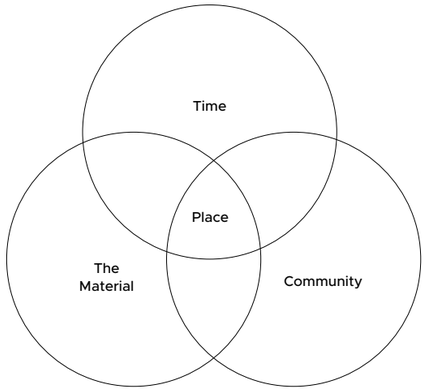
A social model or architectural example that captured a monumental failure would be the Pruitt-Igoe social housing in St Louis, Missouri in the 1950's. (Bristol, 1991) It was designed by Minoru Yamasaki with the intent to create vertical and cheap accommodation for the poorer individuals within the city.

During a time of post- war, and through the neglect and inability to maintain and run the complex, it failed and fell into a state of physical and community disrepair.

The premise of the lack of funding came through the lack of community acceptance and general lack of occupancy, through the inability to consider the community and social networks.

The fall of Pruitt-Igoe is referred to as the fall of modernism, as per Charles Jenks (Bristol, 1991). The point in time where the lack of contextual consideration and the focus on efficiency and objectification of the built form became apparent. The low occupancy rates and low income resulted in the deteriorating perceptions of the space and physical form. The lacking consideration for "the Material" lead to the disassociation by the community and the eventual demolition.
A removal of a purely form and efficiency driven model.

As explored previously, the notion to consider David Canters model of place-making is considered and somewhat manipulated to create a model that views place through a social lens and aims at exploring the spatial control that is attainable through various elements.
Where the main components, physical, perception and activity stand, the substituting of the material in place of the physical, time in place of perception and community in place of activity has the ability to view projects with the consideration and principles of spatial agency and social consideration.



Community.

Due to my previously mentioned need to understand space through social interactions and networks, the community and sense of togetherness is most often a component that is a consideration when designing.

The social connections and community within the urban context can be seen as a prime principle that runs through the theory of most architectural theorists that highly regard spatiality and the users wellbeing.
Hamdi sees that taking advantage of the city and respecting the constant evolution of on going life can better influence small scaled interventions.
I see the simplicity of the small changes that communities change themselves as considerate and concerned with the needs that are appropriate to environments. Street lights in spaces with limited access to electricity allow for lighting opportunities that extend to those in the public realm and individuals that are within the immediate context to use, in ways such as studying at night with access to light. (Hamdi, 2004) There is another example of pump attendants in a community that manage the community pumps. What is incredible is the ability for communities to accept interventions based on the fact that there is a mutual benefit that comes from small scale changes that stem from needs.

Jane Jacobs as well as Oscar Newman consider smaller "areas" with smaller number of individuals as a way to create better community management and acceptance. Through the downsizing and condensing of people so to create connections, spatial agency influences the ability to flourish and grow in a positive manner.

Time.

Time is an aspect that is multidimensional in approach and adds a vital layer of complexity.
Within spatial agency, the ability to incorporate knowledge and intervention with the prospect of longevity allows for better development and acceptance.
The influence of time as a factor and principle allows for the intent of intervention to be shaped by the separate layer of context and the importance of acknowledging the dynamic nature of social environments. (Awan, Schneider and Till, 2011)

Time considers the evolution and dynamic nature of life and social environments. Places and spaces, along with their perceptions are constantly influx and changing, taking in the element of time.

Spatial consideration should ideally be considerate of time, and the change and programming that occurs should be a bi-product thereof.

Modernist buildings and complexes based on efficiency and a contextual conditions fail due to the lack of insight and consideration for the future and the maintainability of both the physical and community. Overcrowding and high unstable densities come about and the previous need for smaller communities lapses and the controllability leads to physical deterioration and consideration.
Time should be considered as an investment.

The material.

The Material addresses components or objects that hold a form of importance, that vary based on the perception of the user.
Latour speaks of the embedding of cultural and social ideals into objects so that the object is seen as the item of power. (Latour, 2005)

In my opinion, value placed on any physical entity or idea can be considered as being seen as The Material.
If one is to consider any component as holding some relevance, be it physical or metaphysical, it is to fall under the material.

The reason for such is due to the social and cultural relevance that is associated to items. This association works hand in hand with the community and acceptance.
If there is a disregard for The Material, the community view alters and the hope of success and acceptance dwindles.
An example of such a case, where the views of an object, and the connotations are negative and influence the spatiality would be the Standby building in Hillbrow, (Zack and Lewis, 2016) Tanya Zack interviews individuals in Hillbrow and their particular views on a specific building are expressed which illustrates how people manipulate movement patterns so to avoid the building and the physical object due to the community based negative views.

The material is not only negative but depends on the view point.
Knowledge provided to a community that assists or informs is also a form of The Material as it can be accepted or rejected.

Case studies for community.



50.
Ocoyacac minimum housing project.
(Tatiana Bilbao Estudio | Apan Housing: Ocoyoacac Minimum Housing, 2018)

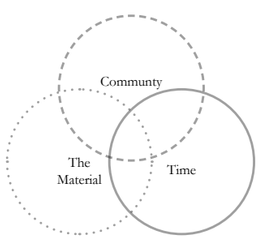
Half A House

Tatiana Bilboa | Apan, Hidalgo, Mexico

The project aims to work around the growth possibilities of families and their options within housing. The project looks to create an environment that encourages coexistence of communities and sees the creation of form as rather the formation that allows for relationships and bonds to be formed (Tatiana Bilbao Estudio|Apan Housing: Ocoyoacac Minimum Housing, 2018).

The four structure creates a courtyard that becomes an area for optional growth by the occupants of the home.

The **community** is involved through the concept of growth acceptance through the adaptable model of housing as **the material** through which importance can grow over **time.**





51.
Warwick Market.
Image : Dennis Gilbert.
(Asiye eTafuleni, 2007)

Asiye eTafuleni

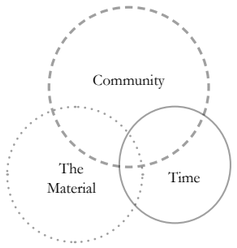
Durban, South Africa

Asiye eTafuleni is a Durban based NGO that see the value in supporting the "informal" traders within the economy and seek to educate the community on their rights. They provide knowledge through consultations and workshops that help growth withing the trading community, and act as mediators and educators for the informal traders communities.

The agency based intervention provides **The Material** for **the community** to handle, all while **maintaining** the involvement over an extended period of time.

+

There is a balance of input which results in an active community. (Awan, Schneider and Till, 2011; 103)



Half A House

Elemental Architects | Villa Verde, Chile

A master plan and concept of providing an essential half of a house to a community that had been effected by an earthquake was provided by Elemental Architects. A low budget was dealt with by situating the housing development on a well located property and providing half of a structure. This was so to provide a large number of houses to the community and allowing for personalisation based on needs.

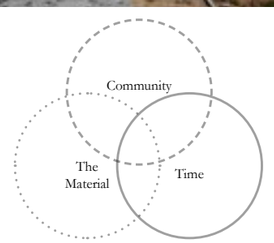
The allowance for incremental growth allows for moral ownership over the space to take place over a period of time. A degree of speculation within the design and trust through participatory design.

+

The design was accepted and the users adapted each home to their needs. There is a sense of community through the ownership and investment of the residents.



52.
Ville Verde, Chile.
(99 percent invisible, 2016)



San Souci Cinema

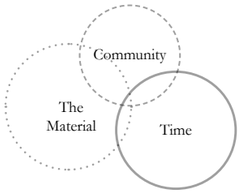
26'10 Architects | KLIPTOWN, South Africa

Within the rundown area of Kliptown, The Sans Souci cinema, which burnt down in the 1970's was provided with a new life through the converting of the physical object into a cultural public space. (2610south.co.za, 2019)
The activation of the ruin came through the realisation of the importance of informality and the connections that can be made beyond social norms. The project is still being considered and the certainty is currently unknown.

The space provided **The Material** for the **community** to interact, all while being produced with no budget and allowing for the greater scheme to become **timeless**. A space that has been able to adapt and can continue to evolve through time. The question of time however comes about through maintainability and finance.



53.
Community meeting at San Souci cinema (Spatial Agency : 26'10 & L. Bremner, 2020)



The diagram captures the scale of each element seen within the project.

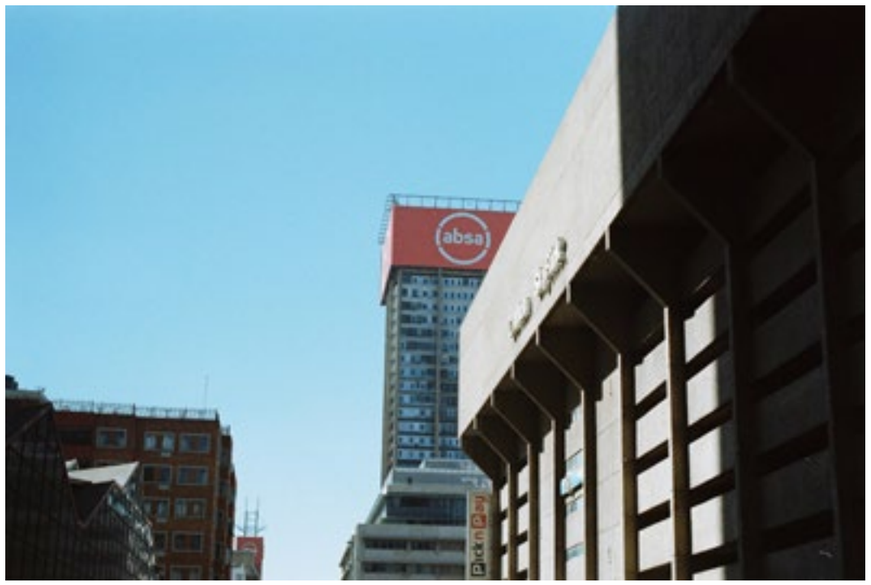
2.12

Conclusion.

In conclusion, it is apparent that the spatial legacy of Johannesburg's inception still runs through the development of the city.

Johannesburg as a city is in constant flux and requires accept and design in accordance.
There is no way to enforce static rules as the lived experience overrides the system in the search for needs.

Spatial control goes hand in hand with spatial agency and the commitment to communities with the element of time.
The reliance of communities for success in accepting spaces and spatial perceptions, proves that the identity is deeply rooted in the user and participants of spaces.



54.
"Carltonand Absa in the city"
+ 03-08-2020
+ Johannesburg.
+ Pentax Asahi 35mm on Fuji 200 film
+ Authors own.

3. Site.

55.
"Looking to the surrounds."
+29-02-2020
+Kaserne Paring Garage Pavement.
+Pentax Ashanti 35mm on Expired Kodak film
+Authors own,

Johannesburg.



+

Gold belt and
the formation of
Johannesburg.
It was dictated by a
vein of gold and racial
segregation that saw
forced removals and
racial groups pushed to
the edges of the city.

Johannesburg.

Johannesburg.

"I love this city."

I've been fortunate enough to grow up in this city, with a family that encourages adventure and exploration.
My father, a contractor, was always carting me around to all sorts of sites around the city and encouraging me to speak to those around me and eat all the foods that were nothing I had ever seen or heard of before.

By doing this, I've always wanted to capture the beauty of the spaces I came into contact with.

Here are a few of the many that feature within this report.
Each coming for a place with a memory behind it. As explored through the previous chapter, Johannesburg is a place of inequality and segregation, but it is also incredibly varied and unique.

Different experiences and views on every corner. All of these are moments and memories vastly different for each person that experiences.

Here is a little bit of this beautiful city through my lens.

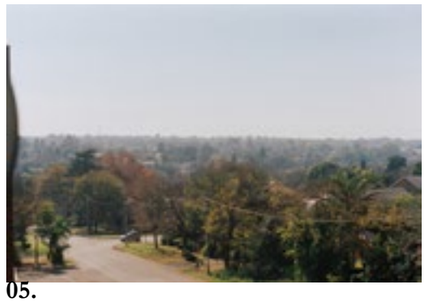



01.


02.

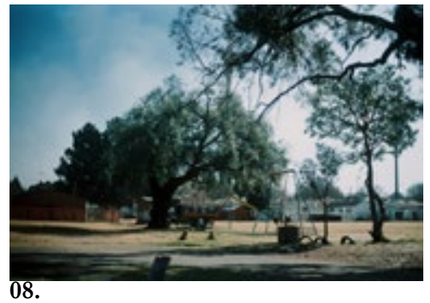

03.


04.


05.


06.


07.


08.


09.


10.

56-65
+ All photos taken by the author using 35mm Asahi Pentax Film Camera.
+ Film type varied.

01. *Friday Mosque (2019)*
02. *Fordsburg treats. (2019)*
03. *City & Suburban. (2018)*
04. *Commissioner str. (2020)*
05. *Emmarentia (2019)*
06. *St Mary's - Jeppe (2020)*
07. *Braamfontein. (2020)*
08. *Jan Hofmeyer. (2019)*
09. *Cyrildene. (2019)*
10. *Fordsburg street. (2020)*

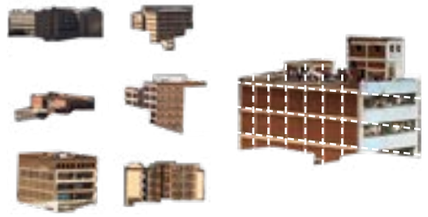
Looking out.

View from the top of Jewel City looking out South to the periphery. The presence of modern buildings across the city shows the architectural language present.

The number of modern concrete frame buildings is a near direct link to residential only developments. Singularly programmed.

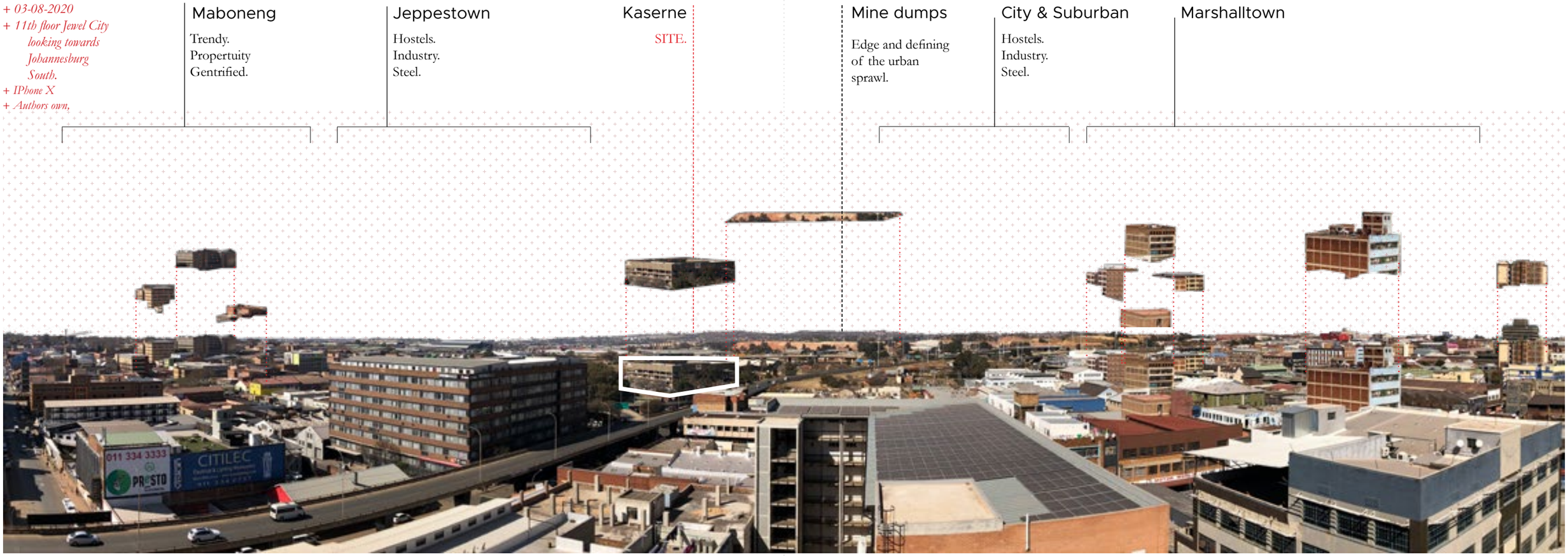
Extracted from the view below are a select few buildings that are easily identifiable as having a concrete column and beam structural frame with brick wall infill.

This building typology allows for the internal spaces to be easily adaptable.
This is due to the ability for the plan to be freed thanks to the load baring columns.
Internal walls simply define various spaces and can be altered depending on the proposed purpose of the building.

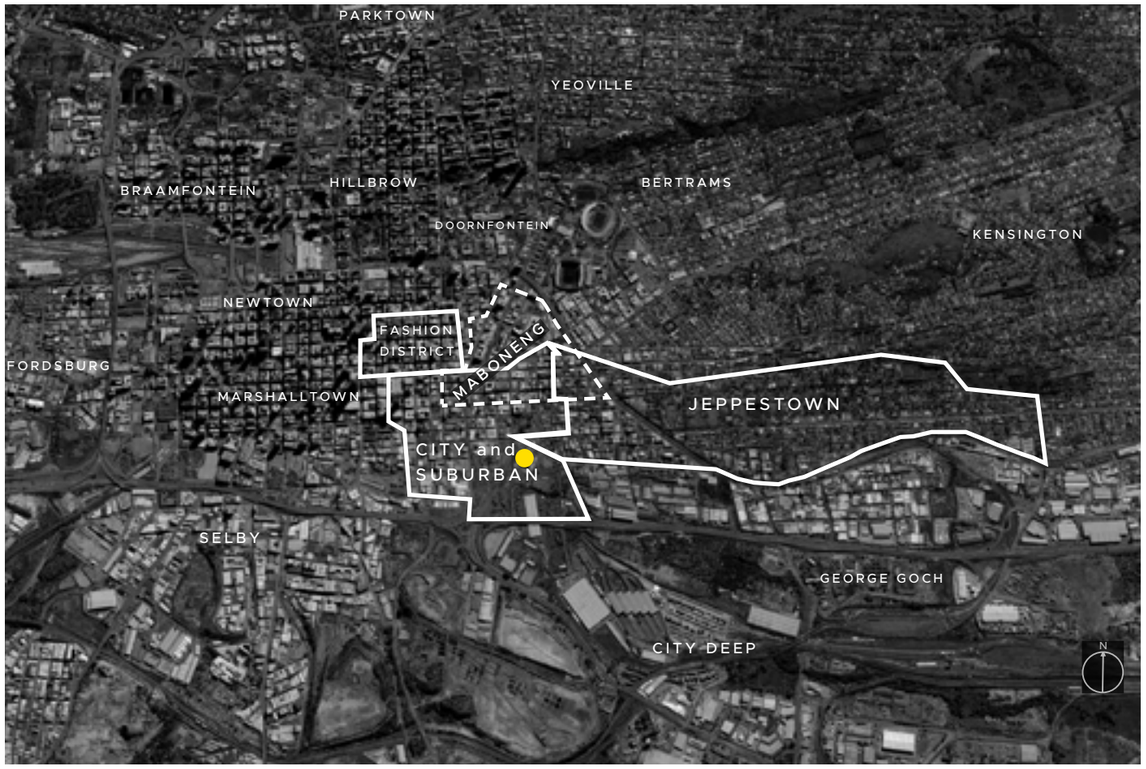


67.
+ 03-08-2020
+ 11th floor Jewel City looking towards Johannesburg South.
+ IPhone X
+ Authors own,

66.
+ 03-08-2020
+ 11th floor Jewel City looking towards Johannesburg South.
+ IPhone X
+ Authors own,



Surrounds



68.
Map of the surrounds and the placement of the site in relation.
Close proximity and locality map.

(Map not to scale. For reference purposes only.)

(Google Earth.)

City and Suburban

When one enters City and Suburban, there is a sense that there is much happening with new residential developments on every corner, scrap metal yards and people walking the streets and purchasing sweeties from street vendors that have set up a table for the day.

You move towards Maboneng which sits in both Jeppestown and City and Suburban and the feel of the space changes where the presence of life on the street and litter becomes less apparent, and somewhat more appealing. You take a left down Berea Road and head to the Kwa Mai Mai market which carries electricity in the air, along with the smell of Chesa Nyama, yet hidden behind the social appeal is the presence of spatial injustice and a lack of consideration for peoples basic human needs.

Jeppestown

If you need a new grill or mirror, or totaled your car, I know a place.
Jeppestown is flooded with auto-bodies with dinged cars lining most of the streets.
It also houses a mixture of people from all across South Africa and men from Kwa-Zulu Natal in the Wolhunter Hostel.

The streets are filled with life and heritage buildings that take you back to the early 1900's, however, it is also one of the most dangerous areas in the country. It is ranked within the top 20 top murder precincts in the country.

An area that is portrayed as dangerous with oil spills isn't given much of an opportunity, yet it looks onto the shiny tourist attraction of Maboneng with hope.

Fashion District

The fashion district is a space that overwhelms one with the colours and patterns of fabric that spill and bulge out of small ground floor shops, forcing pedestrians to interact somehow.

There is everything you could ever imagine when it comes to anything fashion or textile related.
Need to get a suit for your cousins wedding? Theres a tailor offering a discounted rate on tailored suits made to order. Want to learn to sew? Grab a sewing machine down on Pritchard street and they'll direct you to one of the schools located in the area and recommend the best fabric stall.

It is the best insult to the senses with custom made garments. It sparks interest through the possibility of what one is able to create.

Maboneng

A space that upon entering is filled with life and socializing. Music and people pour out onto the streets from restaurants and photographers loiter around at the intersection of Kruger and Fox street, waiting for some unassuming tourist to take a portrait with the famous "MABONENG" sign that resembles bunting suspended between street lights.
An area that was once "the place to go", but now filled with people unaware of the removals and disregard for the context and peoples needs.

City and Suburban.

Development.

The suburb of City and Suburban lies South of Johannesburg CBD. Prior to it becoming a suburb of its own, it made up a portion of one of original farms, Doornfontein, that Johannesburg was made up of.

From the discovery of gold in 1886 to 1896, when it was established as the Suburb of City and Suburban, it was known as the Natal Camp due to prospectors from Natal settling within the area. The spruit also became known as Natal Spruit.
It was then named after the original mine, City and Suburban Mine that ran along the southern edge of the city (Raper, Moller and Theodorus du Plessis, 2014).



69.
One of the first Aerial Photos taken of Johannesburg. 9 July 1911 (Munro, 2017)





70-72.
POSTCARDS find the location of the things. (Munro, 2017)

The miners and mining camps remained and the formation of the Mai Mai traditional market came about.
It is said that the name Mai Mai originated from one of the compound managers shouting "my, my" when he would inspect the premises and see the men enjoying their down time drinking sorghum beer.
The strong Zulu traditions and culture became rooted within the area along with the individuals originating from KwaZulu Natal.



Throughout the apartheid, the area was "disregarded" and the Mai Mai hostel and market was planned to be demolished on multiple occasions due to the conditions. The community endured the struggle and after years past, it was granted an upgrade (Lloyd, 1995; 2).

Today, there is still a strong link to KwaZulu Natal and a profound religious following in the area.
This has created communities and captures the ability for communities to adapt their social and cultural situation.



73.
City and suburban. (Authors own, 2020)

Jeppestown.

Development.

Jeppestown is one of the oldest suburbs within Johannesburg and was originally part of the original Doornfontein farmland.
It was utilized for residential due to the land being non-mineralized. It was named after the suburb manager at the time, Julius G. E. C Jeppe Snr.
In 1897, it was known as being one of the best suburbs on the outskirts of the main city.





74-75.
Jeppestown
Museum Africa
Jeppestown in 1889

It is home to the oldest surviving church in Johannesburg, St Mary's-the-less, which was built in 1899.
It still stands today.



76.
"St Mary's the less."
+ 09-08-2020
+ St Mary's, Jeppestown.
+ Pentax Asahi on Portra 400
+ Authors own,

The area served the initial mining community with an influx of middle class occupying which resulted in the development of public amenities.

The realisation of the poor environmental conditions (due to the dust and gold mining pollution), resulted in the demographic changing to where it served the mining labourers.
It was referred to as the place 'for the man of limited purse'.
The mines of Meyer & Charlton and Wolhunter saw this area as the opportune placement for housing of miners. This resulted in male occupied hostels, the Wolhunter Hostel still occupied today by a majority Zulu cultural group of males.
After the decrease in gold mining in Johannesburg, the outskirts of the city became more attractive to light industries.



73.

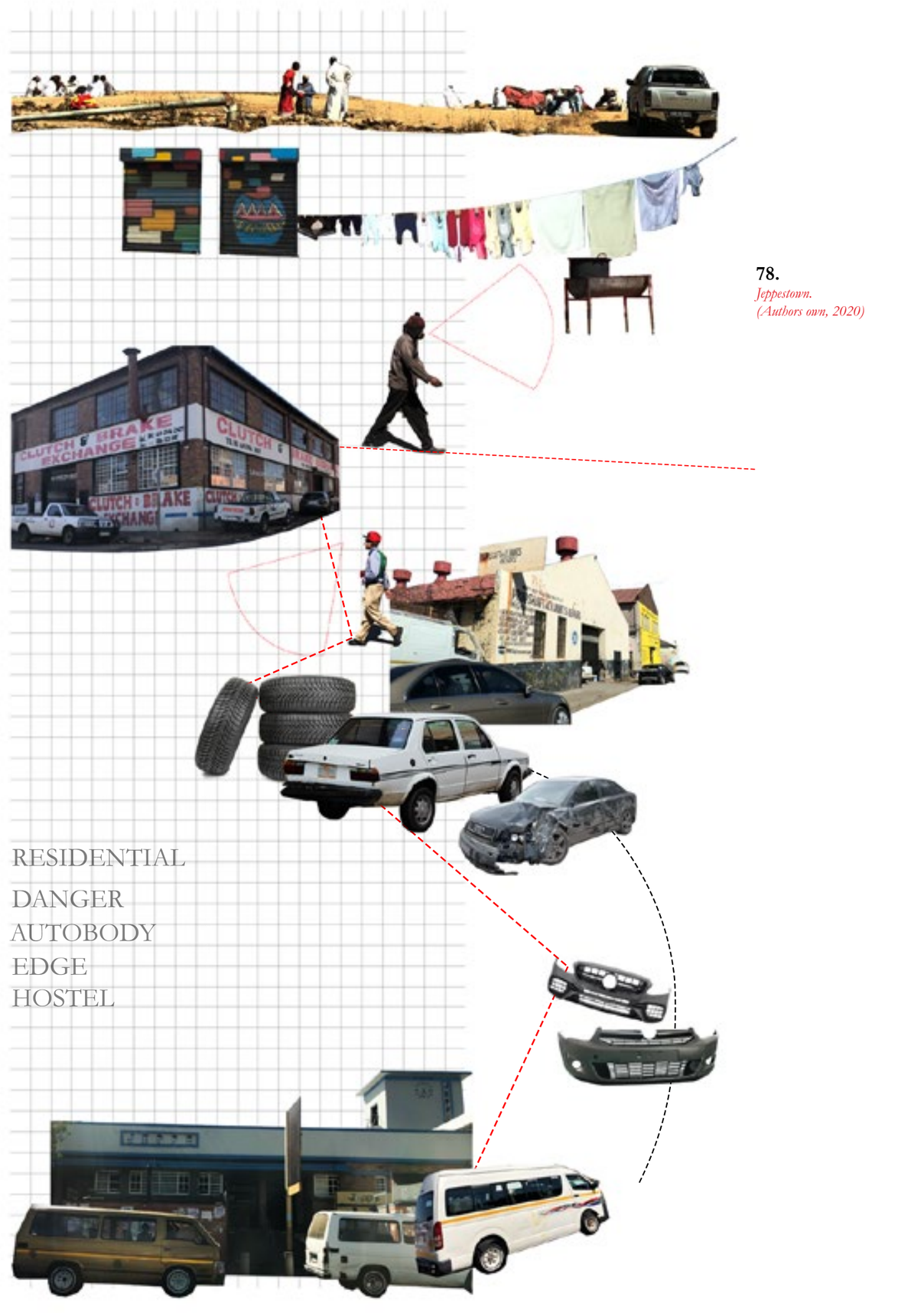
Today the area is populated by auto-body shops, small spaza shops and rundown buildings.

With the location and the current housing crisis that South Africa faces, the abandoned factories are being converted into affordable housing. The residential "appeal" could stem from the miners of the time remaining within the area as apposed to returning home and contributing towards an unplanned influx of people into the city.

The cyclical nature of the area is apparent with the inception being geared towards residential and now returning to that.

There is an increased number of individuals that are occupying the area, within dilapidated and neglected buildings as the location of the area allows for access to job opportunities within the city. The location becomes economically viable, however does not serve those in providing access to basic services.

77.
"Autobodies in Jeppe"
+ 03-08-2020
+ Jeppestown, Johannesburg South Africa.
+ iPhone X
+ Authors own,



78.
Jeppestown.
(Authors own, 2020)

Maboneng.

Development.

"Place of light"
Maboneng, is the seSotho word meaning "place of light".
The inception of the district in 2008 was to renew and revitalize the neighbourhood and inject a creative energy into the old light industrial area.

It is a collection of old buildings that sit within Jeppestown and City and Suburban that house a variety of creative spaces, restaurants and event spaces.
The two suburbs both have a very different social-economical environment and it brings to your attention the contrasting ideals that are introduced int the space. It comes across like this new space seems "out of place" and has ultimately been accused of gentrification.

The concept of introducing a multi-programmatic scheme into the city comes with good intentions, however the demographic at which it appeals to has allowed the area to evolve into a space where those with ample cash-flow have the ability to enjoy the regeneration and clean appeal.



82.
Maboneng Sign
(In your Pocket, 2019)

The new space that adapted the old intends on relaying the message of "a gem in the rough", however with the bringing in of the artistry and middle class appeal, it began to reject the societal issues at play within the context in favour of the capitalist appeal.





Maboneng was initially scrutinized due to the gentrifying nature of the space. It captured the elitist and exclusionary nature that separated the varying classes.
Over time, it has however evolved into a cultural hub that sees people from all walks of life. There is still the "trendy" feel, but the city and the people have somewhat reclaimed the space. Rather than the defined identity, it has adapted and allowed for a nature of uncertainty, informality to grow, with photographers capturing tourists, a lady singing her lungs out and selling Cd's on the pavements and much more.



79-81.
"Murals in Maboneng'
03-03-2020
Maboneng, Johannesburg
+ Pentax Asahi on Portra 400
+ Authors own,



83.
Maboneng.
(Authors own, 2020)

Fashion district.

Development.



The fashion district within the Johannesburg CBD emerged in the 1930's, however with the cities fashion industry in decline from the 1980's due to cheaper costs in Durban and Cape Town, as well as rising imports from Asia, the area appeal reduced.

Due to the decline and shift, many jobs were lost and the nature of the area changed. The buildings built to serve the fashion industry were left abandoned and the spatial tie to the fashion industry died out. (JDA Fashion District Development Business Plan, 2004). The area was however, still vibrant due to the imports of textiles and clothing from the rest of the world.

In an attempt to uplift the area and rebuild it to its former fashionable self, The JDA proposed and implemented a revival scheme that encouraged individual fashion items that spoke to the identity of the African trade and traditions (Cachalia et al., 2004).

The space current area is a "cluster" within the city that has an approximate figure of 1000 micro clothing enterprises and designers.

The businesses in the area are 83% fashion related and an upward number or 4000 people are employed by these businesses. It is estimated that the turnover per annum is R120 million for the area alone.

The learning opportunities within the area are granted by SewAfrica. Their aim is to train and encourage an emergence of South African based designers that can ultimately become part of the fashion industry on a global scale.

The area contributes to the need for growth within the fashion and textile industry within the greater South Africa.

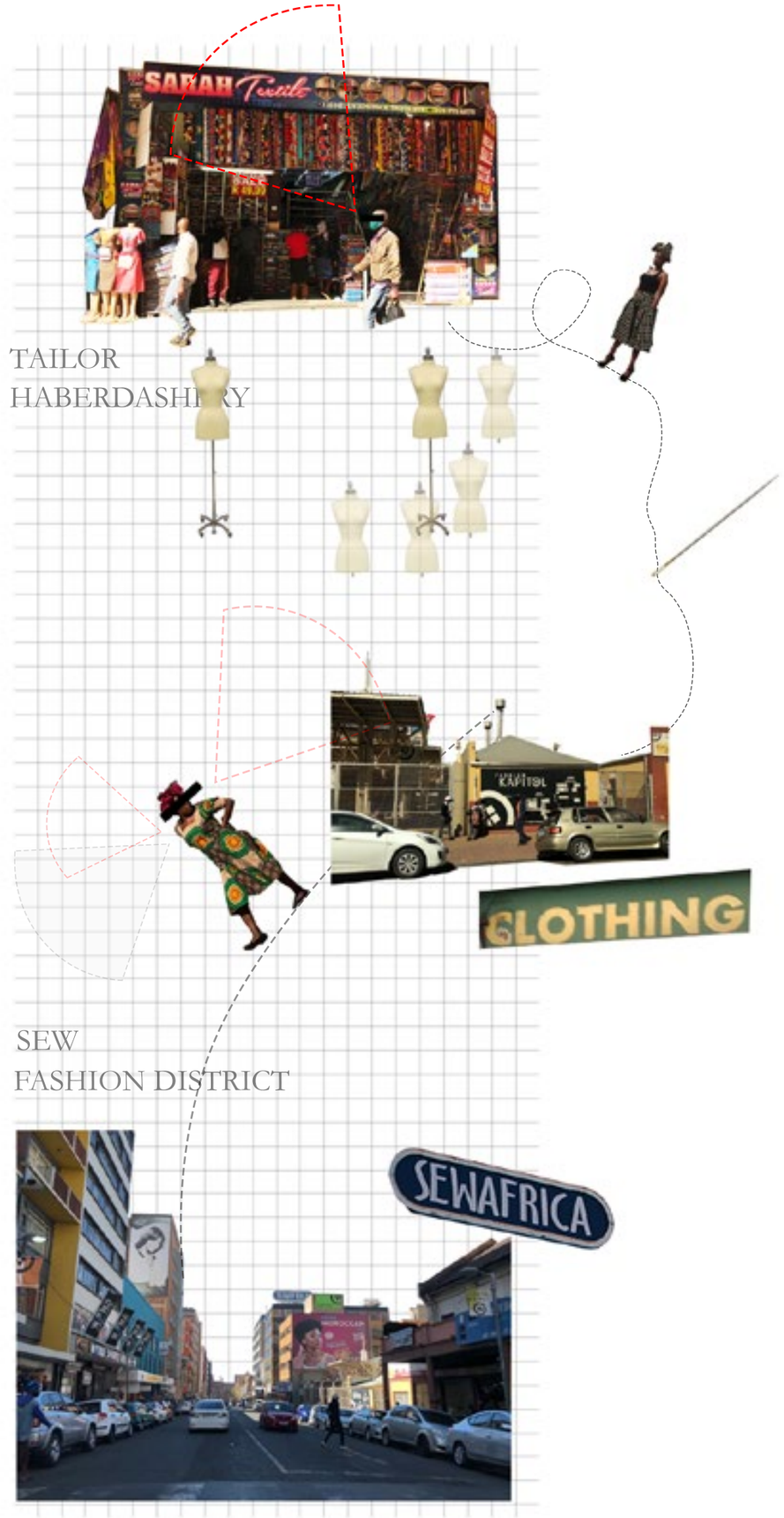






84.
"Prichard street'
+ 03-08-2020
+ Fashion District, Johannesburg
+ Pentax Asahi on Portra 400
+ Authors own,

85-87.
"Streets of the fashion district'
03-03-2020
+ Fashion District, Johannesburg.
+ Iphone X
+ Authors own.



88.
Fashion District.
(Authors Own, 2020)

I went on a walk.

















89-96.
+Film photos
+FEB
Taken on Pentax Asahi with Portra 35mm Film-
+ Authors own

A collection of photographs that illustrate a journey through the surrounding areas.
Photos taken on a film camera result in images that are considerate and the ultimate outcome is unknown.

1. **The Instagram spot.**
The Maboneng sign that attracts tourists. Photographers standing around waiting for their next snap.

2. **This wall.**
A wall with graffiti that has not been vandalized. It is seen as having a strong message for the community and the awareness around children.

3. **Colourful corners.**
Fruit sellers are scattered around the area selling cheap loose pieces of fruit. Water bottle in hand to keep it looking fresh.

4. **Under bridges.**
Taxis parked beneath a bridge. Waiting for home time and to whisk people off to where they need to go.

5. **Crossing over.**
The street separating the block which Maboneng falls in and the start of the Kwa Mai Mai market.
The divide between tourism and reality.

6. **Working out at the market.**
The Kwa Mai Mai Market is filled with people that not only sell goods and treatments, but also house individuals and allow for social living.

7. **A size 7 please.**
Shopping in the market. Many opportunities for people to create and sell varying items that they are proud of.

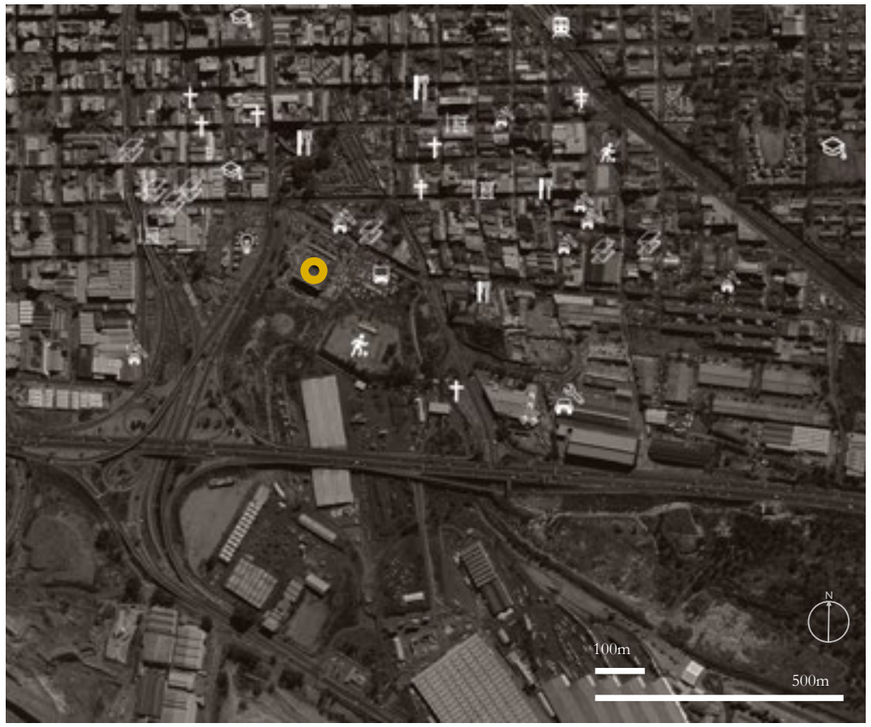
8. **The quilt.**
The Site which shows the layers of those within the building. Slowly growing and creating a quilted facade of the inhabitants.

Programmes and Safety

Surrounds.

+

Within walking distance of the site is a vast array of programmes.



Auto-body
Christian
Educational
Train
Steel
Food
Food
Electricity
Taxis
Taxis

With the decline of the gold mining industry, the industrious nature of th city tended towards other forms, such as steel.

Within the area, there is a mixed use approach but industry is still the most prominent program.

There are many scrap steel yards along with auto-body shops that make up the bulk of the industries.

Area - feelings of safety.



Safe
Uneasy
Unsafe
Site

Interacting with the area on foot and some from within a car, I mapped the sense of security that i felt.

The Maboneng precinct was the area where I felt most safe, It may have been a result of security but also due to the amount of people that were loitering and interacting with the mixed programs on the ground floor.

The areas where I felt less safe or uneasy were due to the feeling of being an outsider within the spaces.
I had also been told stories of areas not to go to. East towards the Wolhuter Hostel.

The large open pieces of land were also a place where i felt unsafe due to the lack of human presence.

+

Within walking distance of the site is a vast array of programs.

Points of interest.

Immediate.



97.

Points of interest within the immediate context. Within a 500m radius.
(Google Earth, 2020)

Within the area, points within the immediate context create opportunities for community engagement and social networking.

The locality of Maboneng is also a point that is seen as important/interesting due to the varied demographic and Genus Loci. A spirit of place that is different from its setting.

The Hostel up the road houses men who are predominately from the province of KwaZulu Natal. A link to the mining history.



kwa mai mai market

-Muti market
-Hostel and informal dwellings
-Food market

A re-appropriated stables that houses many individuals. Used to house miners during the gold rush.



Scrap yard

- Door frames
- Window frames
- Steel scraps

Up cycled scrap steel yards are within close proximity to the site and provide an opportunity to use the leftover within the project.



Taxi rank

-Taxis
-Food stalls

Taxi rank directly across from the site is a transportation hub and space where taxis collect during non-busy times.
This influx of people creates opportunities for food stalls to spring up.



open soccer field

-Soccer field
-Goal posts
-Club house

Soccer field used for recreational purposes. Promoting community activity though sports.



natal spruit

-Water flow
-Trees
-Pollution

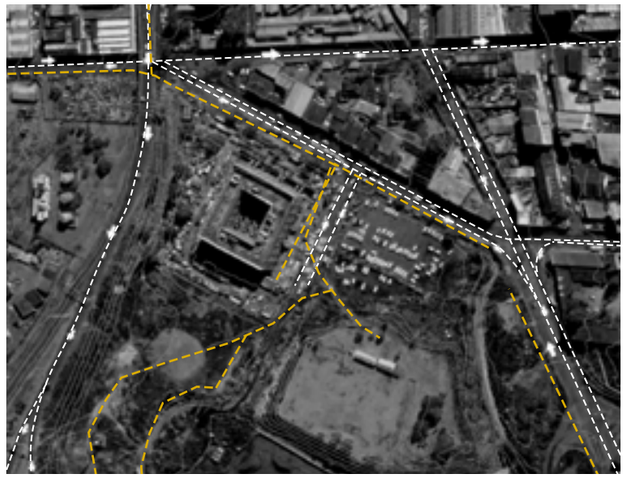
Water flows in a man made canal through to the city.
Rubbish collects along the canal.

98-103.

Images selected from drone footage shared by Counter Space Architectural Firm. Circa 2019.

Urban Characteristics.

Movement.
Vehicular + pedestrian.



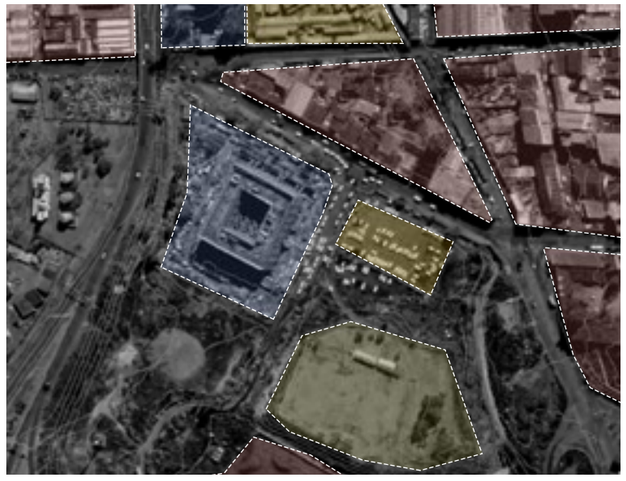
Vehicular movement is predominantly on the main roads, however, taxis do drive along the pavements and into the space behind the tarred taxi rank.

Pedestrian movement is organic and along the pavements.
There is also routes along the open pieces of land which show the nature of people to select he quickest route.

Vehicular movement

Pedestrian movement

Zones.
Public vs private.



The building, along with the individual informal dwellings private. There is no access apart from the residents .

There is a sense of community whereby all residents know who can and cannot access the site.

The sidewalks and spaces surrounding the site are accessible to the public and act as short cuts through spaces.

Private

Publicly accessible

Sports ground Private

Informal Occupation

Natural elements.
Vegetation + Water



104-106.
All maps from Google Earth. (Edited by Author, 2020)

Sports grounds

Open land

Natal Spruit

Natalspruit.

The site is surrounded by open land which act as sports facilities, common prayer grounds and walking roots. They are more prominent to the south of the site, as one would move towards the highway and mine dumps.

The Natal spruit is situated to the right/ East of the site. The Natal spruit weaves through and under the developed area and is controlled by canal walls.
The catchment of the Natalspruit is part of the Vaal River Barrage catchment area. (Digby Wells Environmental, 2011)

With the gold mining, the required water was taken from both the Natalspruit and Fordsburg spruit. Over time, with the growth in population and means, water was then taken from the vaal Dam.

There is a slight fall from the site towards the spruit and shows the natural fall and favouring of natural elements within the landscape.

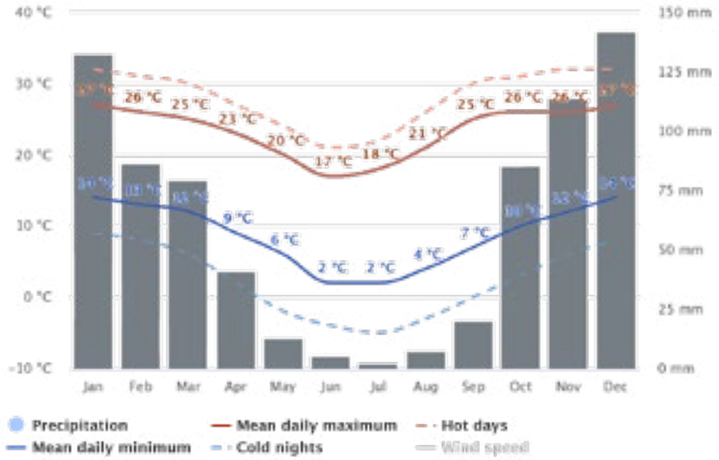
Climate information.

\+

Climate data according to weather results of Fairview.
Located within a 1km radius of the site.

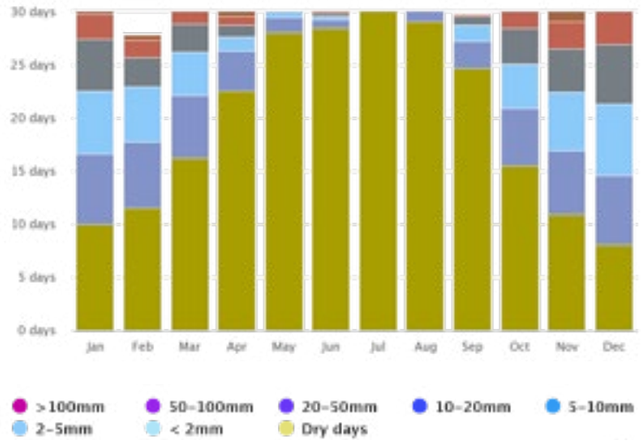
Temperatures and precipitation.

Yearly averages



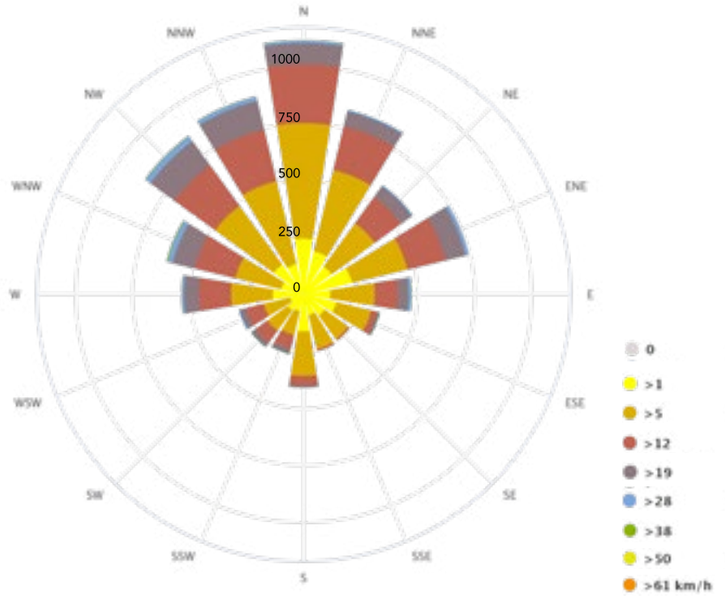
107.
Average temperatures and precipitation of Fairview. (Meteoblue 2020)

Precipitation amounts.



108.
Precipitation amounts for Fairview. (Meteoblue 2020)

Wind study.



109.
Fairview Wind rose (Meteoblue 2020)

Johannesburg has a mild, mostly warm and temperate climate.
Judging from the graphs collected, the most rainfall occurs during the warmer summer months. There is an average annual rainfall of 790 mm and an annual temperature of roughly 16°C.

Wet summers and dry winters are common.

The Johannesburg lies 1757m above sea level
Within the southern parts of Johannesburg, prevailing winds are from the North, and found to be higher during the months of October and September.

The existing building + site

26°12’32.6”S
28°03’32.2”E
Jeppestown /
City & Suburban

+

The unlawfully occupied building serves as a place for those that cannot afford privately owned accommodation rental.

Ad-hoc approach to the infill that is based on survival and what is readily available.



110.
Axonometric drawing of site and surrounding conditions.
(Authors own, 2020)

The building.

Kaserne office building.
+ Situated along the outskirts of the city.

+ Modernist styled building.
+ Free walls
+ Horizontal planes and vertical structure as taking on the load.

Ad hoc infill housing.
+ Materiality is temporary and found.
+ Made up of roof sheeting, shutter-board and canvas signs.

The existing building - physical

\+

The unlawfully occupied building serves as a place for those that cannot afford privately owned accommodation rental.

Ad-hoc approach to the infill that is based on survival and what is readily available.

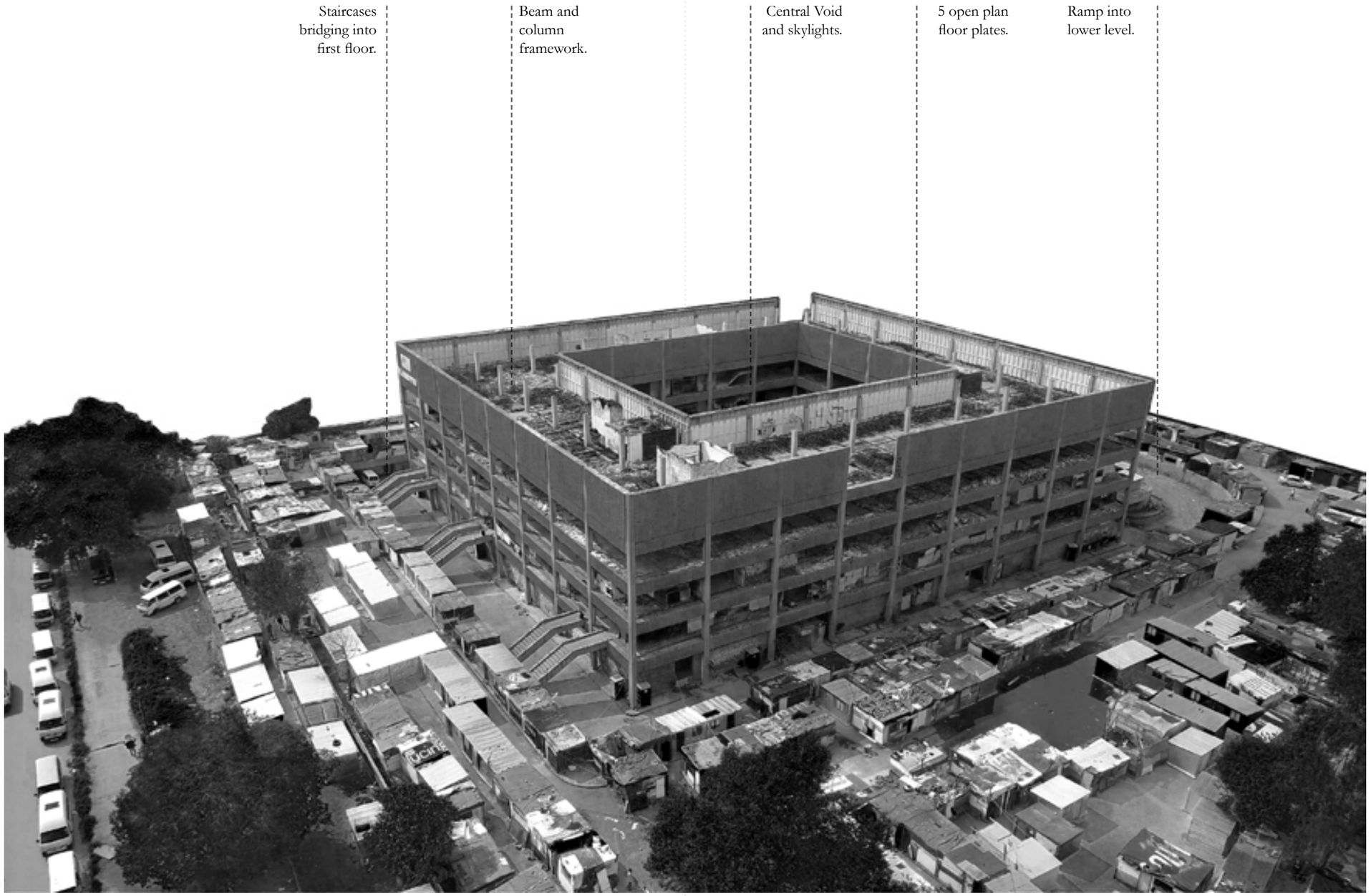
Staircases bridging into first floor.

Beam and column framework.

Central Void and skylights.

5 open plan floor plates.

Ramp into lower level.



111.
Pulling out the structural elements of the building and placing emphasis on the vertical and horizontal.
(Authors own, 2020)

Stripped structure.



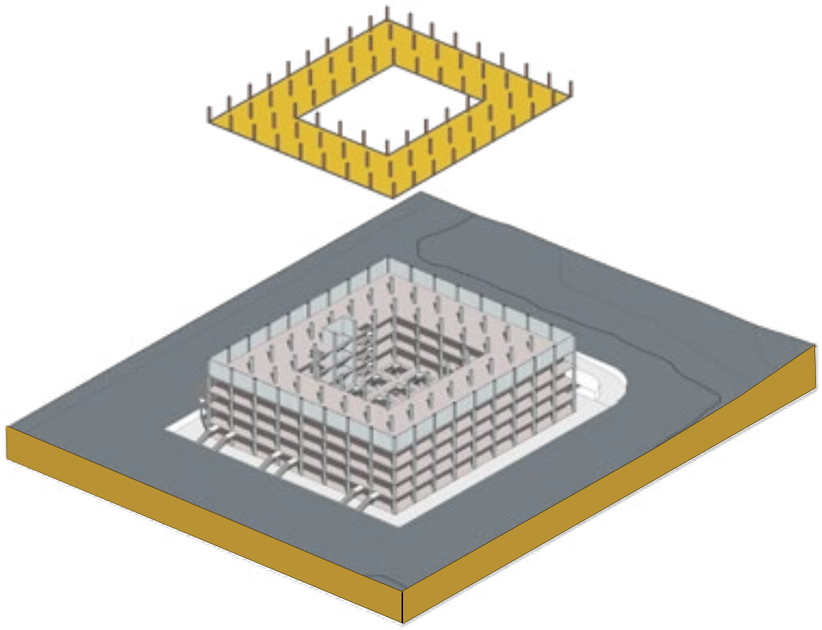
The existing building can be compared to the likes of the **Dom-ino**. A housing prototype that was designed by Le Corbusier. The structure was seen as the minimum that is required of a building. Reduced to horizontal planes and pilotis (The Dom-ino Effect, 2014).

The structure has become an icon of the modernist age through its reduction of form.
In the post-apartheid environment, the a-contextual spaces provide platforms for opportunity and potential for critical design (Le Roux, 2014).

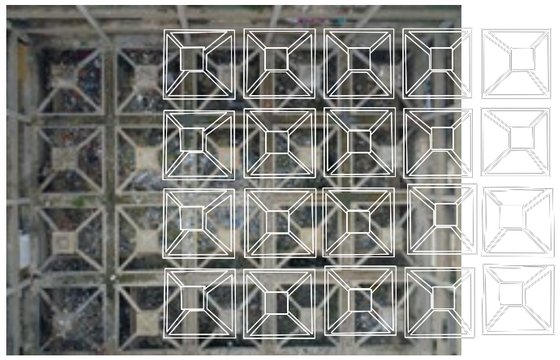
The current building that has been leftover, has been appropriated to cater to the needs of marginalized communities.

There is the need to assess the form from a structural point of view, and how it has been conducive to the occupation.

112.
Diagram of Le Courbusiers Dom-ino structure. (Authors own, 2020)

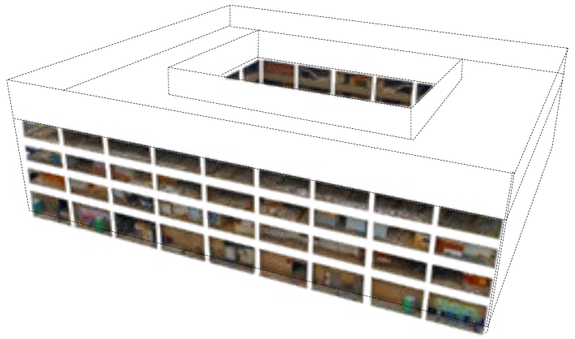


113.
Diagrammatic axonometric of the existing building. Deconstructed to show the open plan floor plate. (Authors own, 2020)



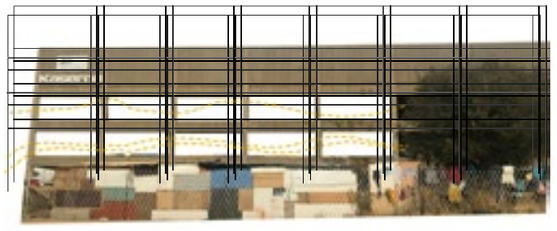
central void.

The central void within the building starts at the first floor and is open to the sky.
At the base (the first floor) it has beautiful concrete skylights that allow light into the basement level.
The void allows light int central space that can radiate into all floor area.



open plan. .

The open floor-plan of each of the levels is seen as being easily adaptable. The columns act as the only structural elements that must remain.
This allows for the easy weaving an infill of varied programmes.

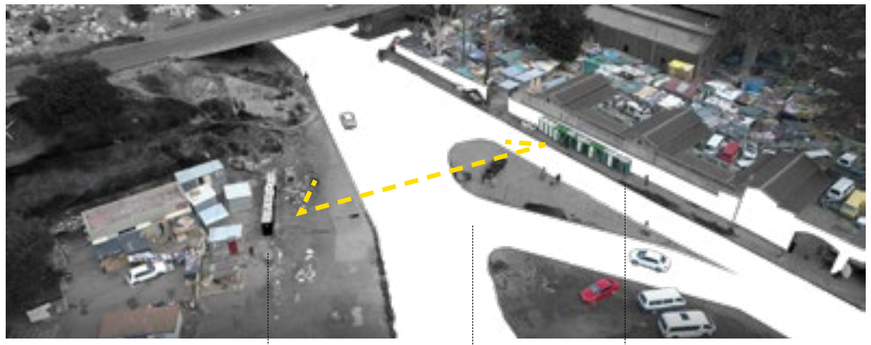


column and beam.

The structure is a platform that allows for activity to take place within.
The column and beam structure allows for modification due to the loading abilities.

114-116.
Images analysed to represent the structural and physical components and design opportunity. (Authors own, 2020)

On-site living conditions.







The services that have been provided are chemical toilets along the edge of the site. They lie along the street edge.

There are more toilets across the road that serve the Mai Mai hostel and the inhabitants of the Kaserne building if needed.

The only access to running water is through illegal means where a water meter has been altered/amended.

All ablutions and water access is a concern for the health and wellbeing of those that have occupied the spaces.



117-120.
Pulling out the structure of the building and placing emphasis on the vertical and horizontal presence.





There is a taxi rank situated East of the site. The space is a buzz with people during the early hours of the morning and during the late afternoon.
The rank is one of the main forms of transport within the area, apart from the train located within a 1km radium.

The spaces that are occupied surrounding the building are suject to flooding due to the lack of drainage provided along the edges. The surface acts as a catchment area.

The dwellers often have to walk through water to get in and out of the area, as well as place furniture and goods on items such as bricks so not to get damaged.

121-122.
Drone images of Kaserne building and surrounds. Sourced from Counterspace Architectural. (Authors own edit, 2020)





The community living within the building is predominantly from KwaZulu Natal and Lesotho.

The main materials used for the informal infill is corrugated iron roof sheeting. There is also the presence of chipboard, cardboard, sheets of plastic and much more.

123-124.
Structure and image of the taxis and informal shelters.
+ both photographs taken by the author using
+ 35mm Asahi Pentax Film Camera.
+ Fim type varied.

Site and me.







I have always been incredibly interested in the area of Jeppestown and how the industrial workings of the space make and shape the place.

Delving into the reasoning behind the formation of various spaces during this research, it took me down a path that I never knew would touch me and drive me to want to know and do more.

R1 cookies and R5 scones for breakfast.
Single pieces of fruit and coconuts.
The toasted peanuts, eaten everyday.
The smell of tripe and chicken feet.













There were days were I'd be driving home and seeing a man pushing a trolley with a cow head up a street. It was the firt time that I was shocked and knew that I wanted to figure the workings of the place out.

125-131.
Photograpsh of surrounds of site.
+ All photographs taken by the author using
+ 35mm Asahi Pentax Film Camera.
+ Portra 400 film
+ (Authors own, 2020)

Warmth and services.
+ 29-02-2020
+ Pentax Asahi 35mm on Expired Kodak
+ Authors own.



Chemical toilets provided- no water supplied but temporary ablutions.
Hanging of laundry - belongings that are part of a private realm are put on display.



The modernist structure acts as a framework for “informal” structures to be erected within from found materials. There is a lack of permanence expressed through the material choice which could indicate the idea of settling in a temporal state.

Infill.
+ 29-02-2020
+ Pentax Asahi 35mm on Expired Kodak
+ Authors own

Dropping off.
+ 29-02-2020
+ Pentax Asahi 35mm on Expired Kodak
+ Authors own



Deliveries of goods such as beds.
The space within contains personal belongings that form part of homes and individual spaces.



A walk outside of the home and across the street is the distance to running water for laundry and cooking, as well as hygienic purposes.

The walk for water.
+ 29-02-2020
+ IPhone 10
+ Authors own

132-135.
+ (Authors own, 2020)

Inner City
Eastern Gateway

Urban Development Framework.

City Of Johannesburg &
Johannesburg Development
Agency

The selected site falls into a developmental framework known as the Inner City Eastern Gateway.

It is proposed by the Johannesburg Development Avengy and aims to create opportunities for residential potential for city densification and community upliftment.

The current site falls into the scheme and is proposed as a residential development as per Urban Development Framework & Implementation Plan Report of 2016

The placement selection is due to the proximity to the city center.
A proposal of an improvement of public has been suggested.

The site being zoned for purely residential misses the opportunity to create more complex naighbourhoods.

The approach to densify sees people as purely a mass number of people requiring a home without any community activators.

There should be an aim towards more of a mixed use planning stratergy.

This project is aimed at the implementation of multiple programs in the single building.



Residential
Densification
opportunity.

Residential
Formlization

136.
+ Map showing the area in which the Eastern gateway is to function. (Google map and Authors own, 2020)

4. Programmes



137.
"Lunch time."
+ 03-08-2020
+ Kwa Mai Mai Market.
+ +Pentax Asahi 35mm on Portra 400 film
+ Authors own,

The role as an architect.

As a designer working within an academic setting, I often reflect on the ultimate role of an architect within South Africa.

What will I do when I am let loose out into the world? Will all my dreams, theories and reasoning be applied to realistic projects?

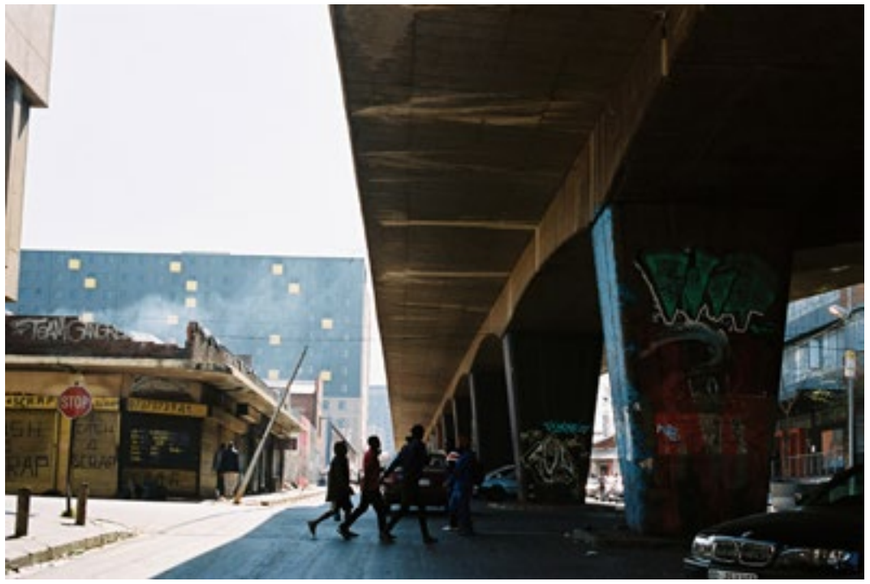
When asked the daunting question,
"So what are you thinking of doing when you're done with your studies?".
All that I am sure of, and can respond is -

"I'd like to make this place a little bit better."

Ultimately, I feel as though there should be a relationship between the social consideration that we are expected to acknowledge and enforce within the academic realm and the application to practice.

As an architect, there needs to be an understanding of the responsibility for the social repercussions and implications that arises through the manipulation and creation of spaces.

We need to give a damn about the ultimate user of spaces and understanding the balance between profitability and experience.





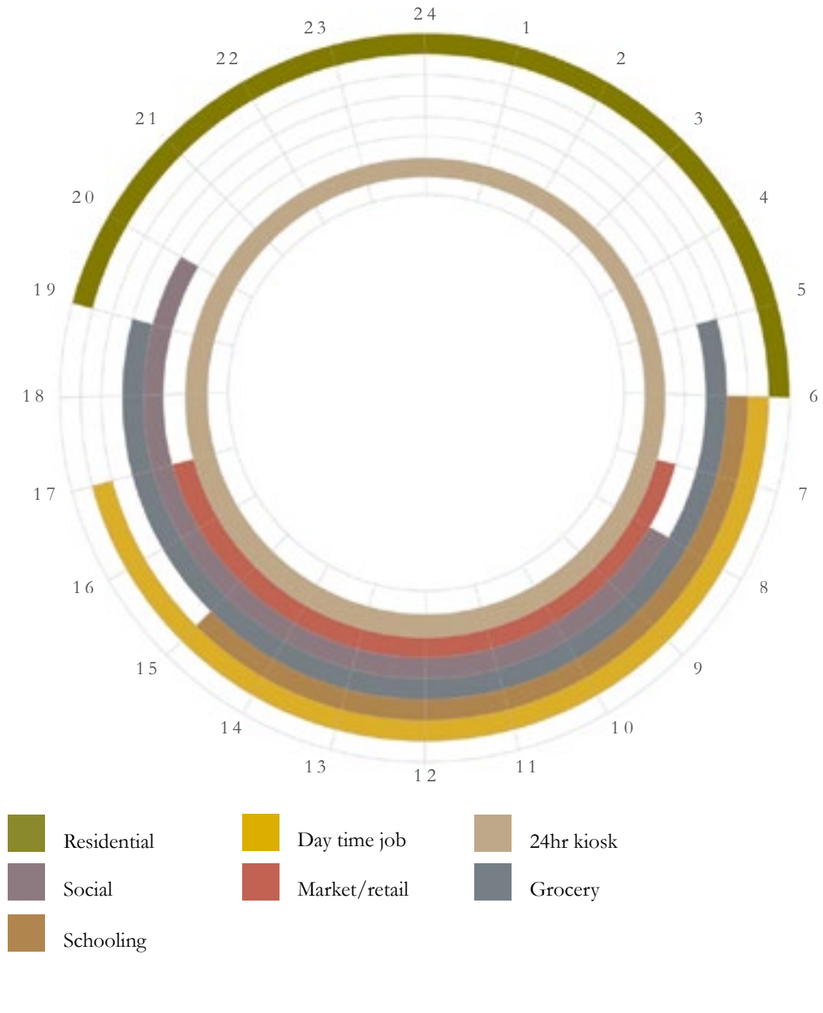
138-139.
"Lunch time."
"Make do"
+ 03-08-2020
+ Kwa Mai Mai Market.
+ +Pentax Asahi 35mm on Portra 400 film
+ Authors own,

Programming.

Multiple programmes.

The programming intention of the existing building is reliant on the place-making model mentioned in the theoretical chapter.
The building is to provide for the community in such a way that it promotes well-being and longevity.
It is to be programmed so to allow for multiple programmes to function within and be seen a *building as a city.*

This is an attempt to engage all aspects, the material, community involvement and the element of time.
The objective of this intervention is to provide an option for implementation in vertical derelict buildings within the city.
Exploring the possibility whereby the needs of those that have no choice but to reside in unlawfully occupied buildings can be granted with connectivity and opportunity.



140.
Spatial use during various times of the day.
(Authors own, 2020)

Building as a City.

Architecture and planning within South Africa has been problematic and still bares the injustice of the apartheid rule and physical segregation and poor spatial diversity,

The building is to be approached in such a way that it is seen as a social and economical condenser (Matsipa 2014).
The intent is for the layering of multiple programs to grant opportunities to a vast variety of spaces to the users..

Mixing of programs attempts to create spaces that are diverse and reject the traditional spatial planning ideals whereby singularly planned zones refuse to acknowledge a flexible society.

Our society that is constantly changing due to the varying inhabitants throughout time and there is the need for our buildings to change throughout the occupants or buildings life time.
Design should cater to fluidity and flexibility within built form.

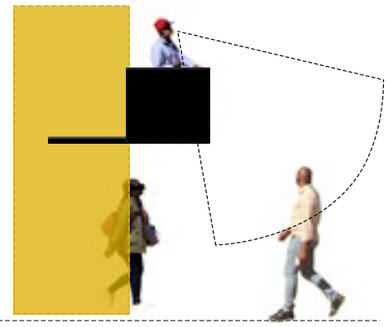
Buildings, and this building in particular, needs to become a spatially diverse vertical form that houses 'individual privacies' (Koolhaas,1978) (Matsipa, 2014).

The existing shell is to act merely a veil of the modernist period and to provide a platform for diverse and interchangeable programming of spaces.
Through the application of the multi-programmatic, an ideal situation would arise through the varied physical and phenomenological spaces that co-exist to create complex and rich networks.



The multi-programmatic approach to spacial planning should consider the community as a factor for safety and acceptance.

The diagram on the previous page displays the various times when generic activities occur. In the creation of mono-programmatic spaces, designers create zones that are left under utilized for extended periods of the day, and can contribute to a lack of community integration and no "eye on the street" human based surveillance (passive surveillance). 24 hour spaces.



141.
Passive surveillance
(Authors own, 2020)

There needs to be a shift towards a better and more efficient use of space in this world.

The allowance for self-organized communities withing the built environment. The opportunity to follow the needs dictated to by the inhabitants and users of the space.
Through the distribution of knowledge over space, the quality of environments have the ability to prosper and grow.

Interference and interventions of space become a design that is adaptive and responsive to the conditions.

142.
Diagrammatic explanation of a multi-programmed building. Viewed in plan, section or elevation.
The relationships of each space make part of a whole.

(Authors own, 2020)

Open building theory and auto-construction.

The ability to encourage multple programmes within spaces and allow for incremental growth and flexibility can be captured in Open building Theory.
It is a concept that was developed by Architect NJ Habraken, as a contribution to mass housing and the need for participatory design.

The concept does not provide exact material but rather allows for an adaptable environment that acknowledges conatnt change (McGuirk, 2014).

The changing nature of the social and physical needs of users should be applied in spatial design

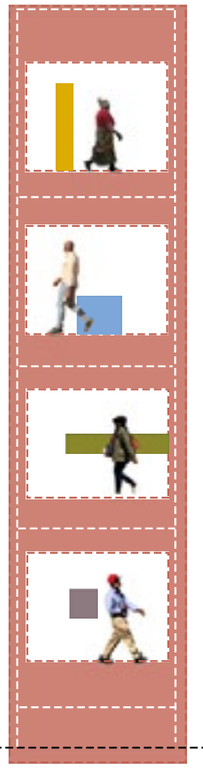
It is near impossible to predict certain outcomes and needs of individuals as each individual is unique and has a varied perception. (See social experiment on page to follow).
By providing permanent and static environments, it places a lifespan on the material and the active involvement from users.

The open building theory approach provides a platform that allows for change. If executed within a somewhat informal manner, which this project aims for, it caters to the element of change whilst being provided with knowledge and support. When architecture caters to, considers and allows for the reflection of a user in a space, the architecture becomes sustainable, It allows for a new and continuously transformative state of space.

This creates environments that are resilient and buildings that have extended life-spans that reject the western notion of destruction and rebuild (Le Roux, 2014).

The reoccurring displacement of communities that occur within the city, create indistinct environments that lack place identity, community interaction and opportunity.

Through the reuse and adaption of the existing within the city limits, there lies an opportunity for buildings and communities to be integrated into the urban fabric.
The collective production of space through participation sees buildings as becoming organisms. Growing and adjusting to the context and conditions.



143.
Conceptual diagramme of various spaces adapted and a reflection of various needs. (Authors own, 2020)

The selected programmes.

The programming of the Kaserne modernist building aims to act as a **framework** for the flexibility of needs and interactions are within the city.

The current ad hoc approach to unlawfully occupied buildings reflects the re-appropriation of modernist forms that disregard the original intent, as well as the need to lan for change.

As previously stated, designers need to learn from the "informal" sector as a way to create innovative designs that reject the exclusionary nature of the apartheid city.

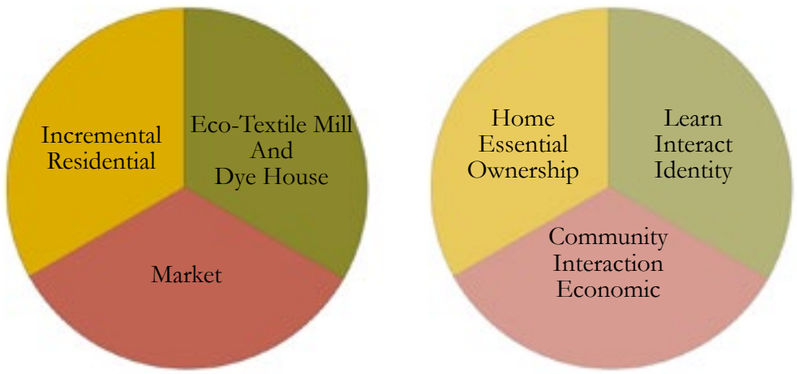
The selected programming of the building is to viewed as an option of possible schemes that encourage participatory design, spatial and social upliftment as well as encouraging a didactic architectural approach.

The programming can adapt. The current programmes are simply a vessel to convey the multi-programmatic approach to design within large scale buildings and the development of place and communities.

didactic
(adj)
designed or intended to teach.
(didactic. n.d)

The selected programmes are:

Residential
Textile market
Textile mill + Dye House



144.
Programme selection and potential reasoning. (Authors own, 2020)

Experiment

TEKS-

+

Friends provided designs through sketches that i then recreated and "stitched" together to create a whole.

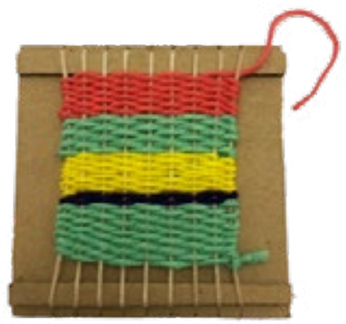
Proto-Indo-European root meaning "to weave, to fabricate, to make

Hittite taksh- "to join, unite, build."
Latin texere "to weave, fabricate,
Latin tela "web, net, warp of a fabric



1. Set up a mini-loom by wrapping a thread around a piece of card at regular intervals.

2. Choose your first wool colour and cellotape a piece of wool to a lolly stick. This piece should be quite long. The longer the piece, the more of a colour you'll be able to . Thread the stick from one side of the cardboard to the other, crossing over and under the wool threads.





3. Keep adding rows, alternating the over and under threads until you're happy with the thickness of your first colour.
Add more colours.

Creating a tangible and experiential activity that shows the varied perceptions.

Each individual that I had asked to design a square provided a different design.

When people are provided with the same materials, the outcomes are never alike. People are provided with options and formulate their own personal preference. This shows the individuality and acts as a base for providing for varied users.

Spaces take on the identity and needs of the perspective user due to preferences.



145-149.
The putting together of the varied designs to reconstruct the existing buildings footprint. Weaving exercise. (Authors own, 2020)

Residential.

The need for better living conditions in Johannesburg is evident.
The Kaserne building itself has no provided services apart from chemical toilets and water is accessed from an altered water meter.

The housing crisis in South Africa_ has a backlog on RDP houses of up to 20 years with the locations beyond the city edges. This proves to be an issue for job opportunities and ulimately livelihoods (Van Noorloos et al., 2019).

The implimentation of residental into the Kaserne building is a direct link to the existing occupants settling within the building.

The approach to the residential is placing emphasis on flexibility and adaptability within the marginalized communities.
As families grow or situations change, moving is not always the most ideal option.
With flexibility and auto-construction being an essential in design, there is the potential to create stronger and more durable communities and residential developments.

This "grassroots approach to housing sees a shift in mindsets from residents being providers to supporters. This allows for input to be regarded and a creation of improved social environments and a sense of moral ownership (Hamdi, 2004).



150.
+ Quilted
+ 29-02-2020
+ Pentax Asahi 35mm on Expired Kodak
+ Authors own

Vertical + incremental.

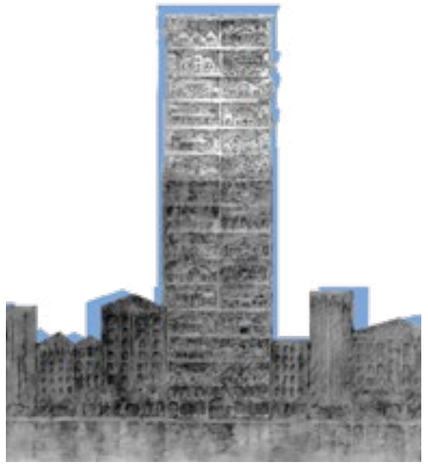
The reuse of buildings in the city should be viewed as an framework for future housing projects.

Vertical incrementalism or vertical auto-constructivism, when looked at through a macro lens, tackles issues such as infrastructure, proximity to services and location for job opportunities (Van Noorloos et al., 2019).

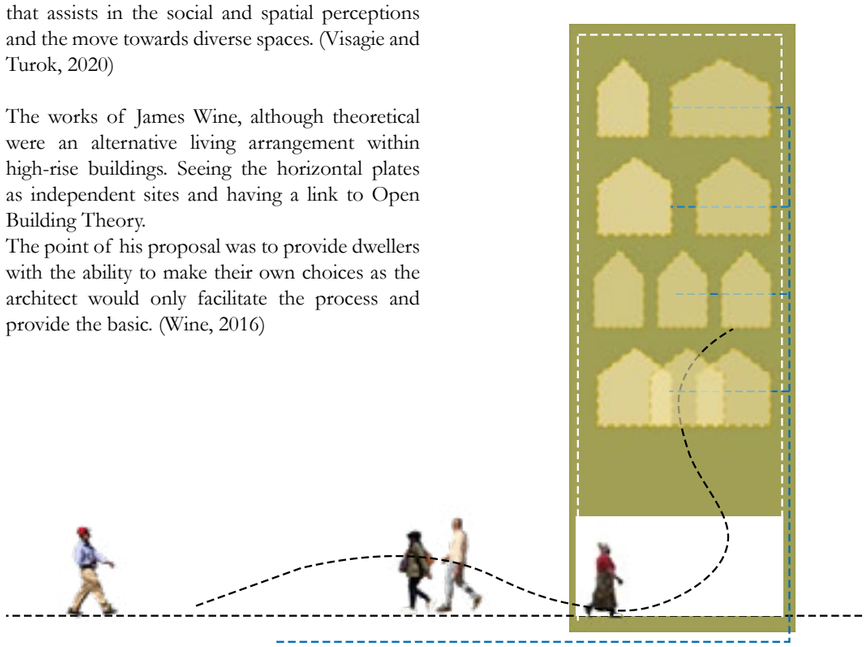
The reuse of the existing can assist in the reshaping of the urban environment and address the leftover and abandoned (wasted) structures.
The reuse of structures provides a sustainable approach to housing due to the nature of the materials that are popular within lower costing projects.

The multistory nature of vertical incrementalism also deals with the freeing up of the ground floor which promotes varying degrees of privacy through circulation
In the ability to programme the ground floor, there is the promotion of a mixed use building that assists in the social and spatial perceptions and the move towards diverse spaces. (Visagie and Turok, 2020)

The works of James Wine, although theoretical were an alternative living arrangement within high-rise buildings. Seeing the horizontal plates as independent sites and having a link to Open Building Theory.
The point of his proposal was to provide dwellers with the ability to make their own choices as the architect would only facilitate the process and provide the basic. (Wine, 2016)



+ 151.
+ Highrise of homes.
+ (Wine, 2016)



152.
+ High rise incremental living.
+ Showing the ground floor open for
+ (Authors own, 2020)

Residential.

Housing in Jeppestown. South Africa.

Housing is one of the most highly debated topics within South Africa, with problems stemming from political corruption, income and unemployment to materiality and location.

Section 26 of South Africa's Constitution states that access to housing is a Human Right, and therefore holds the state accountable for much of the housing (issues) within South Africa.
It is however, important to note that the state must provide within its means, and to take reasonable measures to not only provide access to "housing", but rather that there needs to be access to adequate and safe housing.



153.
+ Collection (1-3)
+ 14-07-2018
+ Pentax Asahi 35mm on Expired Kodak
+ Authors own

"Kaserne condition."

This thesis is based on the conditions within the lower/lowest income bracket where households are earning less that R1500 per month. Individuals such as car guards, painters, informal traders etc. are amungst those and could be characterised as the beating heart of the cuty, vital for functioning SERI (2013:52).

This low income prevents individuals form having access to safe and adequate housing and somewhat forces them into perceived "Bad Buildings" that are no longer structurally and infra-structurally sound, but provide a roof over head.
These buildings threaten the safety and wellbeing of those that have no choice but to live within. (Zack et.al, 2009).

According to SERI (2013), it is estimated that 40% of households in the Inner City of Johannesburg that pay rent, live in conditions that could be likened to slums.
These living conditions show the desperation for housing and need for an increase in social and affordable housing within the city context.

Within housing, there are many brackets that individuals fall into based on monthly and yearly incomes.
Subsidized Housing within South Africa is a government based programme that allows a beneficiary to acquire a house that jas been built by and through governmental subsidy. These are what are commonly known as "RDP" houses.
They are placed within the social housing definition.

The selected programming for the proposed building aims to address the lack of housing available to households earning less than R3000.00.

Making use of unused infrastructure allows for costing to be reduced as well as locality to places of work and amenities.

What is social housing

"A rental or co-operative housing option for low income persons at a level of scale and built form which requires institutionalized management and which is provided by accredited social housing institutions or in accredited social housing projects in designated restructuring zones."

-(Department of Human Settlements, 2019)

Social housing should follwo a certain criteria so to meet the standards of adequate housing that serves the occupants and the greater context.

Common chriteria are as follows:

+ It can incorporate a range of other services, which include community development and empowerment benefits and the promotion of a lifestyle conducive to community living.
The SHI may provide social services (health, education, recreation), economic services (like financial counselling), and/or community envelopment (training and empowerment programmes, capacity building and job creation.)
Special attention is paid to the public space around a social housing project

+ As a policy instrument its primary purpose is city restructuring, particularly social, economic and spatial
restructuring, with a focus on integration of class and race and creating access to economic opportunity
for low-income people, previously excluded from well-located areas.

+ Residents participate to a greater or lesser degree in the overall management of their living arrangements. Usually this is done through formally established structures, such as a tenant committee

+ It can provide for mixed-use development, including residential, commercial and even light industrial.







154.
+ City living (1-3)
+ 29-02-2020
+ Pentax Asahi 35mm on Expired Kodak
+ Authors own

Textile market.

The proposal of a market within the space is to act as a mediator between the "industrial textile mill and dye house" and the public and/or suppliers.

The design is to be based on the temporal nature of the city whereby stalls that are provided are the bare bones i terms of the structure. This allows for the tenant to personalize the space.

Markets are spaces in South Africa where there are complex connections and networks that create the community.
Simone (2004) refers to markets in African urban settings as public interfaces with high energy and a space for unique interactions to take place.
Where residents of the area invest in social interactions and opportunities.
The informalities of the markets themselves simply add to the experience of the spaces and the "magic" of markets and the spaces that are formed between the per-determined.

The market is to be the platform for public interaction with the building. The craftsmanship involved in textiles brings to life the identity of each seller within the space.

What this aims to achieve is to attract the textile suppliers into the space without being seen as a gentrified environment.
The sustainable nature of the provides the market with the unique appeal that sparks interest.

The markets in South Africa retain an element of survival, and encompass the ephemeral nature of trends and needs. The spaces of selling speak to the state of the world and the ability to adapt to needs.

A market physically close, the Yeoville Market along Rockey street is a space that combines the hopefully nature of the city as well as the despair.

Acting as a space where varying individuals meet for a common goal.



155.
Diagram conveying the public inclusion into the space.
The people and the content define the space, rather than the physical.
(Authors own, 2020).

Market spaces are spaces for interaction between individuals or groups of individuals.
These unique interactions grant the spaces with the ability to define place and create unique perceptions.

The Dandaji Market in Niger provides sellers with booth type spaces that are shaded by canopy structures. The simplicity of the structures and space are not the defining elements, but more a platform for networks and connections to be formed.

Dandaji Market

Atelier Masomi | Dandaji, Niger



156.
Dandaji Market
(Atelier Masomi, 2018)

The Kariakoo Market is a large scale market in the heart of Dar e Salam. It considers the needs of the ever changing space and the maintainability of the space as a whole.
The spaces are seperated by the goods on sale. This produces a spacial hierachy that is invisible but present through the actual product.

Kariakoo Market

B.J Amuli | Dar e Salam, Tanzania



157.
(Kariakoo Market, 2020) Architectuul.com. 2020. Kariakoo Market. [online] Available at: <http://architectuul.com/architecture/kariakoo-market> [Accessed 13 August 2020].

The Yeoville market is a space filled with colours, smells and interesting goods.
It is a place that has adapted overtime through the tenants of the spaces wishes to personalize and stock as much as possible so to entice shoppers.

Yeoville Market

Johannesburg, South Africa.



158.
Yeoville market.
(Mark Lewis ,0000)

Textile Mill.

Textile industry in South Africa.

+

Inspired to look into the textile industry through the appearance of the quilted facade as a result of the infill housing and the incremental nature.

The considering and questioning of the craft and skills within Southern Africa.

The textile industry within South Africa has been in a slow decline since 1993 with the new incoming government attempting to perform on a global scale through the lowering of labour wages and the result was that of a lowered protection over the clothing and textile industry.

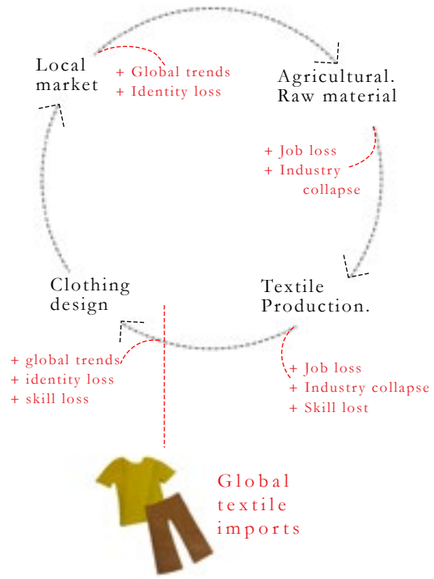
During the time of the decline, China had begun creating a textile and clothing empire aimed at global appeal and cost-effective exports (Patel, 2016).
The result of the sudden growth in the Chinese industry was that of a flood of imports into South Africa.

For many years, locally produced textiles and garments were considered too expensive. In a world where capitalim rules, the cheapest bargain wins the bid. (Hilliard, 2018).

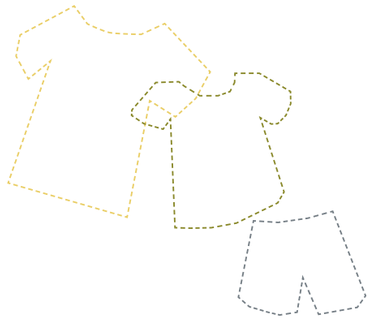
The access to cheaper textiles lead to a near destruction of the South African textile industry. The numner of those employed by the industry had dropped by ober 50% from the beginning of 1996 to the end of 2011 (Patel, 2016).

The globalisation of the textile industry promoted a prominent and western identity (Greef, 2019).Not only is there an issue with the globaisation of clothing. The cheap costs and constant production of garments create a waste based society. The promotion of fast fashion.

159.
Diagram explaining the cyclical nature of the textile industry and the repercussions of global cheap imports.



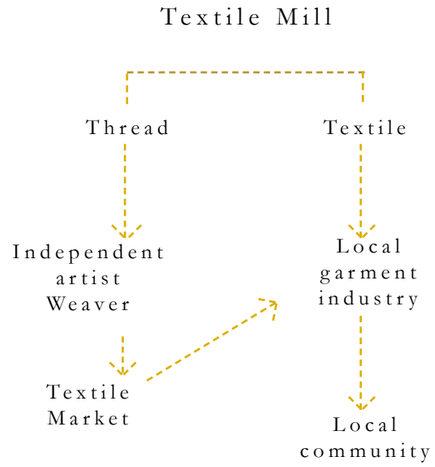
Fast fashion
(adj)
The production of evolving trends that create the fast production of clothing through cheap labour and poor environmental consideration.
(Greef, 2019).



A textile mill into the building and area is an attempt to encourage and bring back the manufacturing of textiles to South Africa.

In restoring the industry, the local retailers and communities have the opportunity to take back the local market (May, 2018)

The mill and the market.



160.
Connections within the building.
Seeing the textile process as a "co-op"/ cooporative.
(Authors own, 2020)

The introduction of a textile based industry is aimed towards community upliftment, education as well as a platform that promotes place, community and individual identity

The literal interpretation links to the weaving of the technique into unknowing leftover spaces so to act as a community unifier. To provide a link to the traditional form of craftsmanship as a premise to develop for the future.

Community activator as well as a greater community infill.
The implementation of a specialized final program aims at the creation of new skills to be introduced.

In providing a need for something that is uncommon and environmentally enriching, people within leftover spaces that are considered leftovers themselves, gain self-worth due to the "need" and place for them within society. Providing jobs is a point of importance and providing places for dignity and privacy and permanence.
Ultimately, there is to be a co-operative nature to encourage a shared interest and active investment.

The program of the mill and dye house is to go hand in hand with the market as to be seen as a co-corporative environment.

Those working within the building partake in the creative process and rely on pooled resources. This aims to act as a community unifier. Binding creatives together through the concept of together and shared interests.

Textiles today. Fashion.

Textiles make up common everyday items such as our clothing and upholstery choices. This integrated nature of textiles into our lives can lead to one seeing them as an extension of our selves through the choices that we make. It becomes somewhat of an outward aesthetic reflection of our identity.

Through the s=racial segregation, globalisation and unjust actions that have plagued South Africa, many crafts collapsed and the skills of many declined (Greef, 2019).

The current condition of African inclusion in the global garment fashion industry speaks of a layered society. The immense amount of politics, post-apartheid freedom and historical references run through creations (Greef, 2019).

Creators within the global south need to explore how it to access the global stage and give the deserved importance of a culture and tradition that has been undermined by consumerism and capitalism (Greef, 2019).

The artist Mary Sibande addresses the globalisated and colonial assosiations that are carried through elements such as dress style and colouring in the fashion indusry. It can be seen that her work brings about the disassosiation of traditional and cultural assisiation. The importance of independent identity is to be considered and brought to light.

Royal blue.
Virgin Mary
Domestic uniform
Traditions collide



161.
Mary Sibande "In the midst of chaos there is opportunity. (Collage Authors Own, 2020)

Fashion designers such as Thembe Magugu have entered the world with passion and the underlying messages of identity as a South African.
He has embraced his identity and the craftsmanship needed to create.

Another designer, Laduma of Maxhosa, has delved into his cultural identity and created knitwear garments inspired by the tradition Xhosa bead work.

In the textile industry, in South Africa, there is a need for a re-emergence so to capture the beauty associated with identity.

The comment of identity relates to the kinetic city as it too is not static, it is dependent on an individual and their personal stance at any given moment in time.
There is a need to adapt and grow and as South Africans we need to survive.

We need to redefine the role of fashion in society. Textiles and garments are so ingrained and integrated into our identity (as stated prior). It holds a huge amount of power, and needs to be viewed in all aspects, social and environmental.

As South AFrican designers defining themselves in the current climate, there needs to be again, looking into the iindustry and viewing it in a sustainable manner, sustaining the identities and the environmental.



162.
Thembe Magugu 2020.



163.
Maxhosa. 2018

Fibre choices.

Flax.
+ Linum Usitatissimum

Flax (Linum Usitatissimum) is a dicotyledon of the Linacea family. There are many varieties and most are used in the fiber production.

The plant itself is not only used in the creation of fibers in textiles, but paper and other items known as compositing items.
It is also used in for linseed oil which is a raw bi-product of the plant.

Flax fiber comes from the stem, that grows throughout the sub-tropics of the world. It is an annual grower, so grows throughout the year.

Flax is soft and has a luminous finish and is hardier/stronger that cotton.
Flax is processed and creates linen as the product. The molecular structure contributes to it being a good conductor of heat.
Ideally worn in hot temperatures in garments (Franck, 2005).



164.
Flax biological image.

Hemp.
+ Cannabis Sativa
+ Hibiscus cannabinus

Hemp is a plant that grows year round.
It is harvested and processed in a manner near to that of flax. (Hence the selection of the two together.)
The fiber is used in all types of textiles and can be 'cotonized' so that it has a similar soft feel to linen and cotton.

The environmental impact of hemp exceeds that of many other plants as it is bio0degradable and is a great absorbent of pollutants in the soil, such as metals. It grows at a rapid pace and requires no insect control. It is one of the most sustainable fibres that are in production.



165.
Hemp biological image.

Dye choices.

+ Natural dyes.

+

Putting the "waste" to good use.

Avocado pits & skin			
Eucalyptus			
White Onion skins			
Turmeric			
Pomegranate Skins			
Carrot tops			
Mint			
Spinach			
Rosemary			
Pomegranate Skins			
Black beans			
Red Cabbage			
Beetroot			

166.
Colour gradients of easily accessible leftover vegetable waste.
(Adapted using Sasha Duer Seasonal colour chart and Authors exploration.)
(Authors own 2020)

Natural dying process relates directly to the concept of leftovers and items often rejected.

The dye matter is composed of the bi-products and leftovers of consumed produce.
Items such as onion skins, carrot tops and avocado pits have the ability to produce beautiful colour results.

The process of dyeing using natural produce grants the leftovers a "second life" and purpose.
The commentary on the unknown and overlooked potential of something as simple as wet food waste links to the consuming culture and mindset of society.

The natural process is not as impactful on the environment as conventional methods due to the lack of chemicals.
The conventional dye methods make use of dye consisting of non-biodegradable organiccomponds. (Lellis, Fávaro-Polonio, Pamphile and Polonio, 2019)

Mordants which act as a binding agent for colour to the fibres can be run through swoles to purify any water during the entire dye process.
this industrial sectoris one of the biggest global polluters.

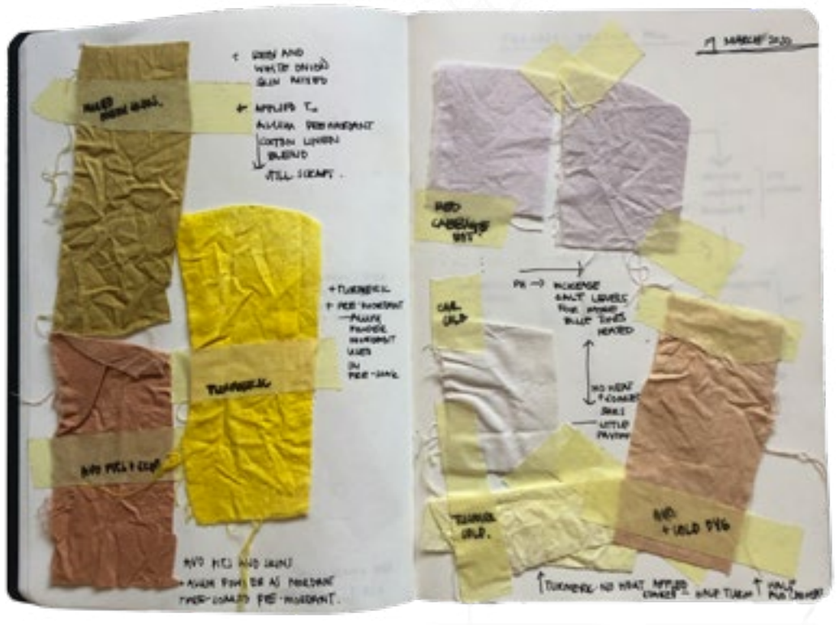


The variations of colours are dependent on the pH level of the water and dye itself.

Natural additives such as salt and vinegar can be added which ultimately provide a varied colour.

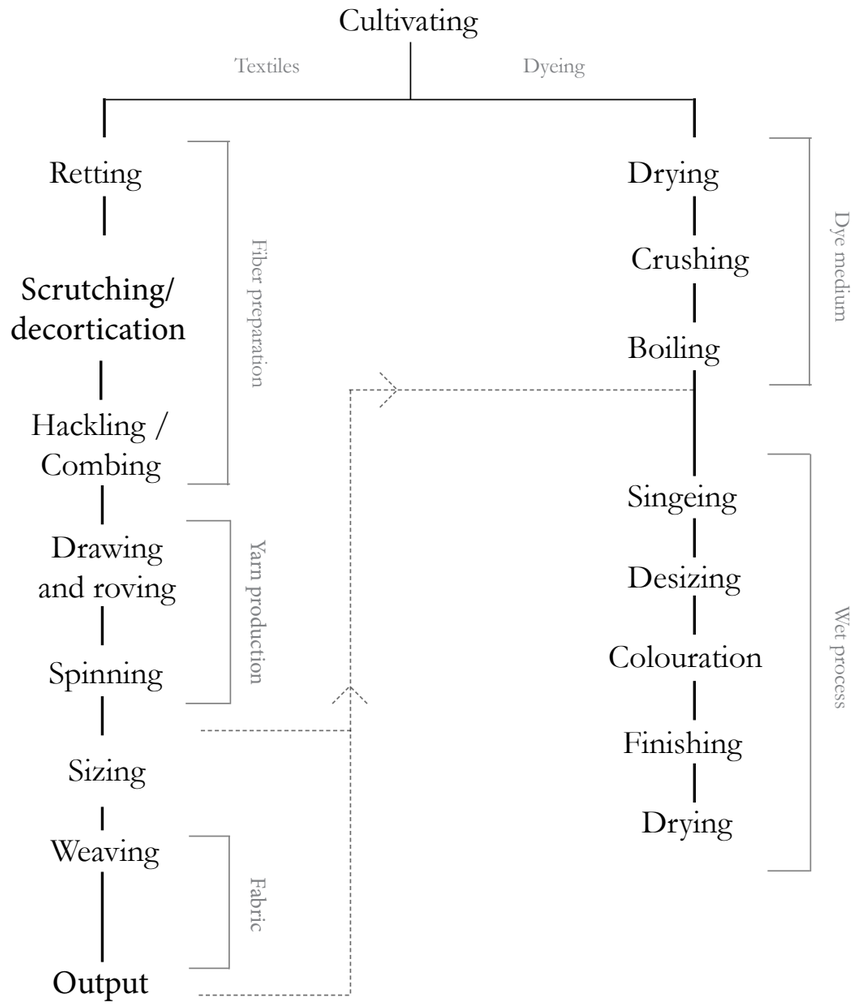
Through the physical exploration, there was a realization that the outcome is not always guaranteed to be the same.

167.
Colour pieces.
(Authours own 2020)



168.
Pages of colour exploration.
15- 19 March 2020.
(Authors own, 20202)

Textile and dye process.



Process terminology.

+ Basic.

Retting.

"The decomposition of pectins that bind fibres to the other parts of the stems or leaves, usually by the action of enzymes produced by bacteria or fungi."

Water Retting-.
Tank Retting.

"Retting by placing bundle of flax straw in water.
The de-seeded straw, tied in bundles, is packed into concrete tanks which are filled with water and artificially heated to about 30°C. Retting is completed in about three days. Some of the best and most uniform fibre is produced by this process.

Dew Retting

Dew retting Retting by laying swathes of flax/hemp straw in the fields as they are pulled.

Scrutching/ decortication.

The process of removing line fibres from tow and extraneous matter such as shiv, earth, pebbles and weeds.
The stem is initially broken and then "scrunched" which separates the unwanted woody matter from the fibre.
The Shiv can be used as fuel by burning.

Hackling.

"The operation of combing the fibre in order to remove short fibres, parallelise the remaining long (line) fibres and also remove any extraneous matter which might be mixed up. The fibre leaves the hackling frame in the form of slivers."

Drawing.

"The forming of a single draw frame sliver collected into a Cylindrical receptacle about 1m high."

Weaving.

"The decomposition of pectins that bind fibres to the other parts of the stems or leaves, usually by the action of enzymes produced by bacteria or fungi."

Loom.

"Various types -hand-looms and power looms in which yarn is threaded through to form a fabric/textile."

+

Basic terminology to explain the processes involved in the production of textiles from natural plant fibres.

All terminology: (Franck, 2005).

5. Concept Development.

169.
"Corner Scenesi."
+ 03-08-2020
+ City & Suburban.
+ +Pentax Asahi 35mm on Portra 400 film
+ Authors own,

Leftovers and a program.

+

The act of doing. Physically exploring and experimenting with the process that is to be the program within the building.

Exploring leftovers through the dyeing of fabric using vegetable scraps.

The scraps came about after using the vegetables themselves to feed myself. The use of scraps ties into the concept whereby there is potential in the overlooked and leftovers.

Knowing the requirements for the process granted me the ability to understand the processes that are essential to the spatial design.



Avocado skins and pits are cleaned and cut up before placed into boiling water.
They need to boil for up to 30minutes before per-mordanted fabric is placed into the hot pigmented water.



Powdered turmeric spice is added to boiling water and boiled for 30 minutes before pre-mordanted fabric is placed into the water.





Beetroot is cut up before placed into boiling water.
They need to boil for up to 30minutes before per-mordanted fabric is placed into the hot pigmented water.



Red cabbage is added to boiling water and boiled for 30 minutes before pre-mordanted fabric is placed into the water.



Fabric that has been soaked in Alum powder as a mordant is places into boiling pigmented water and left to absorb for up to two hours.

+

Exploration: Colour extraction and dye process.

170.
Dye explorations (Authours own 2020).

Stitch, patch, quilt-

DESIGN
CHARETTE

Exploring the concept of spatial and informality.

FABRICATION - use the definition as the starting point to discovering the putting together of the various.



Naturally dyed fabric to represent the various materials that are appropriated in the building of the homes within the modernist structure. Layering of materials and methods of joinery as a way to express the built form as a result of necessity and survival. The use of found objects through innovation and newly found creativity.

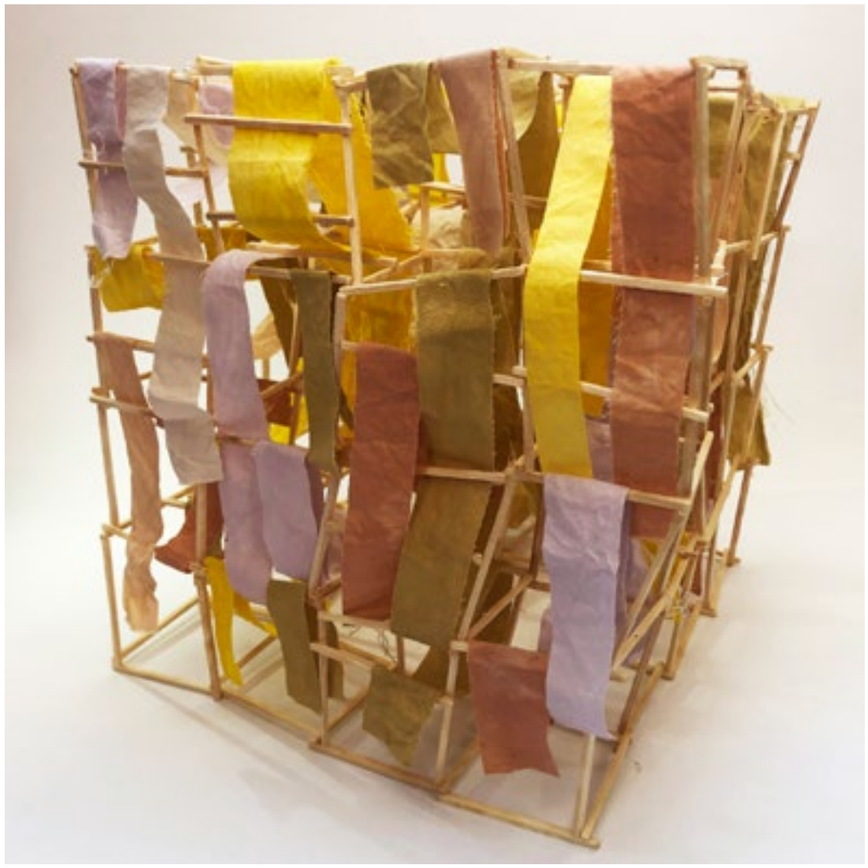




The quilted technique of sewing is a representation of the joinery between materials. The lack of prescribed methods.
The colourful and organic human created forms sit behind/within a rigid structure.

This portrays the open plan platform that is provided for people to create as they need. There is very little structural limitations and so the infill is dynamic and responsive to the residents.

171-173.
Sewing explorations (Authours own 2020).



+

+ Organic in movement

+ Moving through spaces in the rigid spaces that are formed through the modernist movement.

+ Literal softness introduced though habitation of the spaces that are presented and created.

Creation of an interpreted representation of the colourful and organic growth within a defined structure.
A comment on the organic growth of people and the ephemeral nature of the infill within modernist and structured environments.

The fabric speaks to the existing condition within the structure through the use of materials that do not evoke a sense of permanence.





174-187.
Design charette building exploration.
(Authours own 2020).



Breaking through the horizontal and seeing the existing building as its basic structure.
The horizontal planes are broken and one begins to explore the possibility of breaking defined and typical modernist structures.



The colour contrasting to the structure.
Spatiality of the space being formed by free-flowing forms that have the ability to be moved.

Ephemeral



Hanging natural dyed fabric from the basic structure plays with the idea of organic and rigid form meeting each other and complimenting each other.



Volumes being changed and played with while varying objects hand into these spaces from others-



The natural textiles hanging from the bare structure and spilling into varying spaces.
The product that is produced becomes part of spatially defining areas.
The product contributes to place-making.

The temporal nature of the fabric portrays more of a ephemeral image.

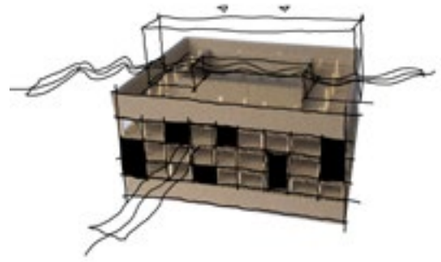


The organic and fluid nature of the interior continuing beyond the structure.
Moving into the landscape so that all surrounds and contents become an extension of one another



The modernist structure is contradicted with the lines that contract the strict vertical and horizontal.

This can continue out into the landscape and shows the connection to varying external elements.



Cutting into the building - down the middle is implied as well as removing certain spaces to create varying voids and volumes.

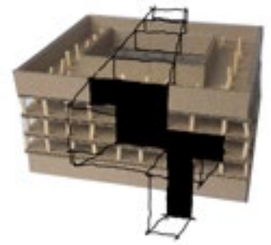
The notion of the organic and fluid fabric remains string throughout, hanging from the structure and contradicting it in a way.



Simple intervention of hanging fabric in the structure.
The fabric has the ability to move and flow in the natural surrounds while it is still part of the program process of drying the textiles.



Pulling the planes out vertically and horizontally as a way to expand on the current structure.
Still incredibly rigid however the beginning of exploring possibilities of cutting away at the horizontal slab to reveal varying volumes and spaces.



Cutting the building in a way to split the programs of housing component and textile mill and dye house.
This can be interpreted as either literal of figurative..
The splitting of the program within the building or literally cutting and separating.



The exterior of the strong harsh structure is more fluid and organic in nature.
A recurring theme is the contrast and sometimes perceived “incompatibility” over certain elements.

Taking the leftovers and discarded and introducing them into the space.

188-199.
Design charette building exploration.
(Authours own 2020).

6. Design Development.

200.
"Groovy ride."
+ 03-08-2020
+ Kaserne Building
+ +Pentax Ashanti 35mm on Portra 400 film
+ Authors own,

Urban response.

+

The project needs to act as an urban catalyst and intergrate into the urban fabric.



Connections.

The implementation of a new intervention requires consideration for the surrounds.

A multi-programmatic building being inserted into the urban fabric should consider all aspects.
Connecting each programme to the greater context so to justify the placement and seek further opportunities.

Mai Mai Market.

Positioned directly opposite from the site is the Mai Mai market. The market acts as an event space and open air food court.

The Market is to act as a space that **promotes social activity,** not only for the residents and dye house employees/artisans, but for outside textile buyers and designers that would need to interact with the Textile Mill and Market.

Fashion District.

The Fashion District sees global imports of textiles. These textiles are used in the creation of unique fashionable pieces.
The locality to the textile mill and market would grant businesses within the District the opportunity to sell and create fashion items that are made from sustainable and locally produced textiles.

Maboneng.

The Maboneng Precinct sees a mixed demographic entering the city edges. The intention is for a link between the precinct and the mill.
The radical appeal of the textile market aims at drawing a mixed array of users into the space.

A social activator for the surrounds.
The Mai Mai market would capitalize on the influx of opportunity.

Wolhuter Hostel.

Simple notion to provide jobs and attempt to contribute to removing the negative stigma attached to the sapce.

Informants.

+

Each component and programme within the structure is provided with a "kit of parts"that aims to speak to the programme itself.

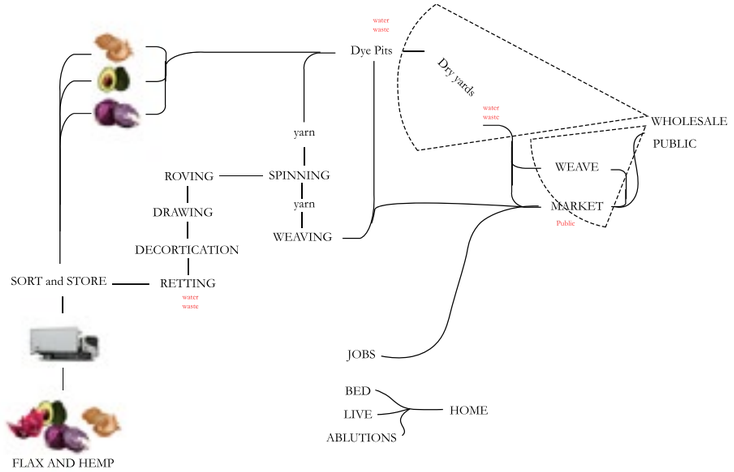
The modernist structure provides a platform for an alternating and self organizable infill.
The original intention within the strict grids does not result in creative spatial design.
Through "informal" infill, spaces that over time have the ability to morph and change, gain identity and create a space and purpose that is appropriate to the time and user of the space.

The architectural response that could go on to influence and alter the lack of spatial and community inclusion within the greater framework of Johannesburg, is to give worth to those living within leftover spaces.
In upliftment of communities and providing choice for self-improvement, ownership and care for the physical areas promotes the creation of place and spatial control.

There is to be a manipulation of components that make up place. Common elements that are vital for spatial control and community wellbeing can be drawn from theories and exploration and analysis. Elements that are to be highly regarded when looking to design and alter the urban fabric.

An approach that reactivates the areas through multi-disciplinary spaces in an attempt for the immediate to be self-sustaining and self-sufficient. (J Jacobs) with a conscious effort to serve the users of the area first and foremost. Where foreign entities and "outsiders" are not the primary benefactors. Smaller more manageable communities result in a better sense of environmental and community control (Oscar Newman). Smaller changes (Hamdi)

The implementation of a specialized final program aims at the creation of new skills to be introduced. In providing a need for something that is uncommon and environmentally enriching, people within leftover spaces that are considered leftovers themselves, gain self-worth due to the "need" and place for them within society. Providing jobs is a point of importance and providing places for dignity and privacy and permanence.
Ultimately, there is to be a co-operative nature to encourage a shared interest and active investment.



+

The process is split into the various components that work at various times with varying actors.

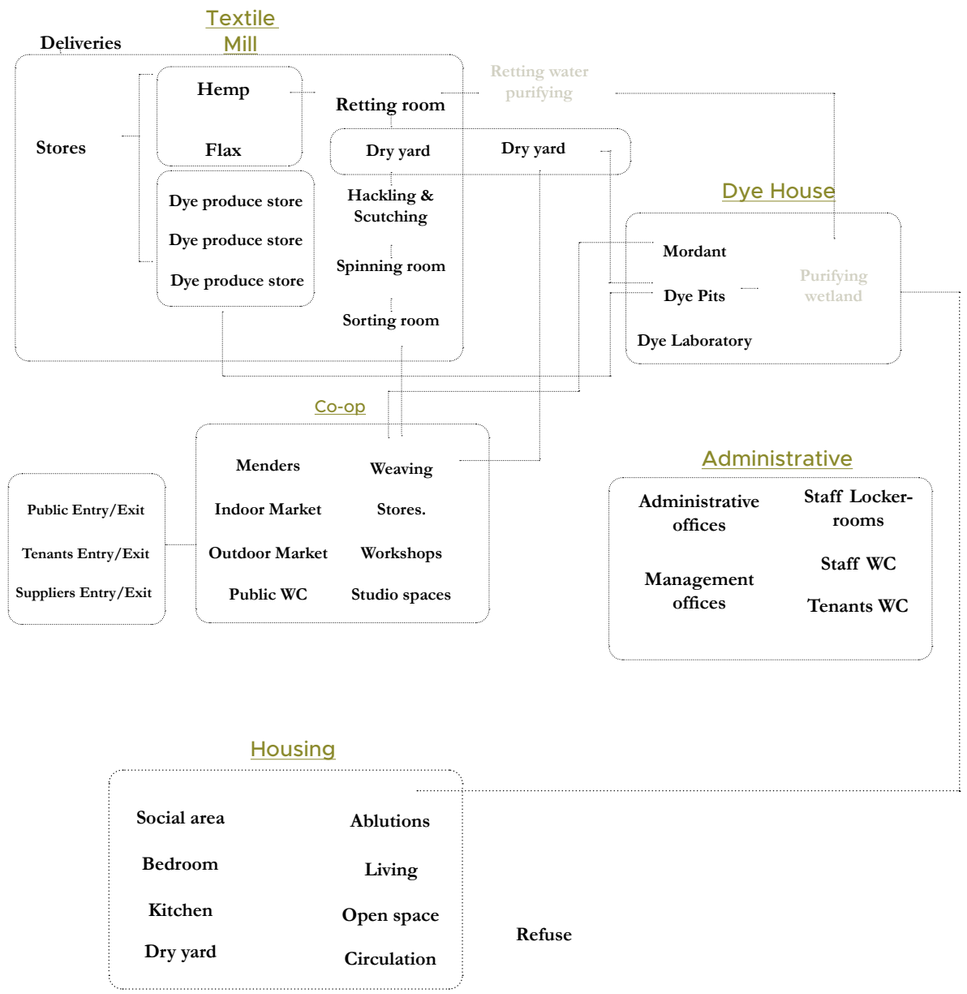
The actions that are expected and assumed to take place are overlaid onto the programmes and systems.

Programming.

\+

the dependency on the required spaces within the programme grants opportunities through the connections that can be formed.

Multiple programmes.



Programming and spatial requirements.

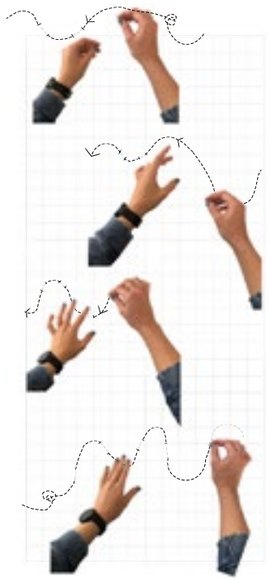
		sq.m	
Housing			
Living		6	Housing determined by floor area and unit design. Efficient use of space.
Bedroom		6/12	
Ablutions / bathrooms		4	
Kitchen/kitchenette		4	
Addition		6	
***Approximate space: 20-30sq.m per unit.**			
Textile Mill			Mill to produce yarn to be sold to vendors within the workshops and large corporations.
Retting Room + 3 tanks		300	
Fiber storage room	Hemp	50	
	Flax	50	
Drying room		*	
Scrunching/Decortication room		400	
Hackling/Combing Room		300	
Drawing/Roving/ Spinning room		400	
Sorting & Storage of yarn		200	
Change rooms	Female (30)	50	
	Locker room	50	
	Male (50)	50	
Kitchen and cafeteria		200	
Circulation		**	
Dye House			Dye house accessible to yarn producers and vendors for dying of customized/ large quantities of material.
Dye material storage		200	
Basins		50	
Gas store/ Heating		**300	
Dye house	Desizing tanks	50	
	Dye pits	50	
	Rinsing tanks	50	
	Dry yards	**	
Change rooms / Restrooms	Female	20	
	Male	20	
Dye Laboratory	Store	50	
	Basins	20	
	Heating	50	
Workshops			
Individual rented work spaces	*	10	
Enclosed skill development space	3	50	
Change rooms/ Restrooms	Female	30	
	Male	30	
Market			Public spaces to be
Indoor		**	
Outdoor		**	
Circulation		**	
Public restrooms	Female	50	
	Male	50	

Components.

Industry.

“Baste” -

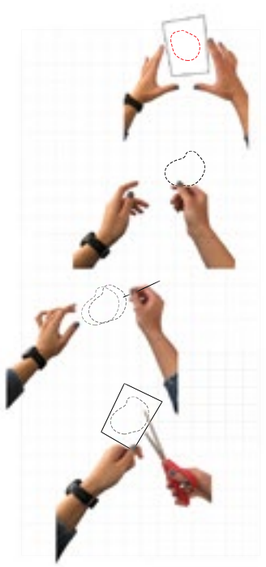
+ temporary stitching intended to be removed
+ baste is to make quick, temporary stitching intended to be removed.



Market.

“Fussy Cutting” -

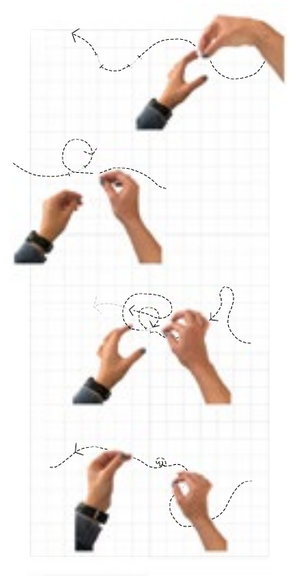
+ a piece of fabric that has been cut to target a specific area of a print, rather than cutting the yardage into random pieces

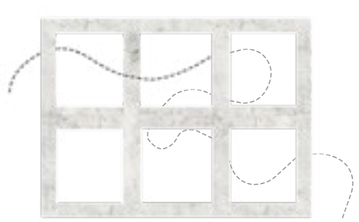


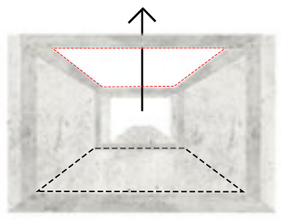
Residential.

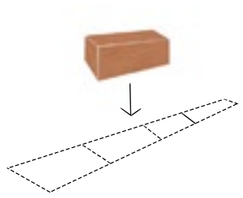
“Anchoring” -

+ Stitches made with the shortest stitch length at the beginning or end of stitching to keep them being from pulled out











Over layering each of the components to create a rich and textured built form.

The movement of the activity and programme is to be carried out into the layering of the five floor building. Each of the programmes that are within each are to

201-207.

All diagrams explained: Each portraying the way in which the building is to be designed and explored (Authors own 2020).

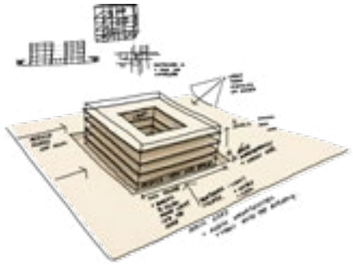
Design-
Model exploring.

Initial exploration.

+

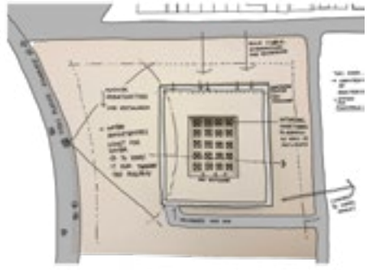
Form exploration through model interpretation. And sketches.

Considering the existing building as a land mass/ site with a set of restrictions. The built form is seen as landscape to add and manipulate.



+Entrance off the main vehicular and pedestrian active road.

+Horizontal planes reduced to basic structure. Grid structure

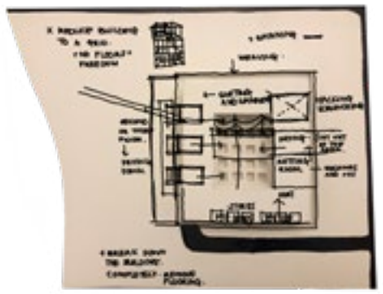


+Main entrance.

+Views from the highway into the building.

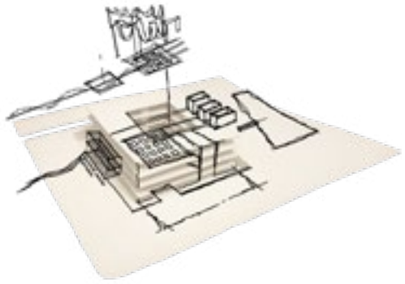
+Link to spruit.

+Water retention pool on Western side of site.



+Link to Natal Spruit and placement of programme so to encourage water movement through the buildings.

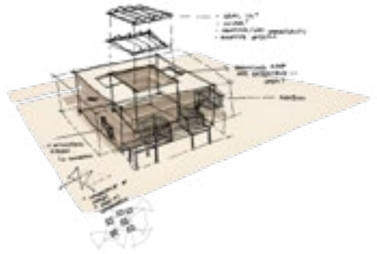
+Keeping the internal courtyard with skylights.



+Introducing the idea of fabric and internal dry yard.

+Dye pits western edge of the building.

+Internal skylight courtyard for lighting into raw material sorting room.



+Roofing opportunities. To enclose or not to?

+Opening up areas in the roof to allow for more light into the building.

+Programmes inserted into grid and connected through vision.



+Retention pool/wetland opportunity.

+Adding programmes within the grid structure.

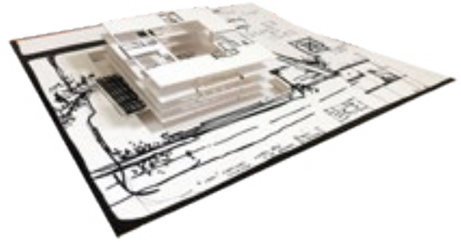
+Programming of structure.



+Roofing opportunities. To enclose or not to?

+Opening up areas in the roof to allow for more light into the building.

+Programmes inserted into grid and connected through vision.



+Retention pool/wetland opportunity.

+Adding programmes within the grid structure.

+Programming of structure.

208-215.
Exploration on model of form and additions. (Authors own 2020).

Developing.

+ Review 1

Inserting.

+

PHASE 1.

The exiting skeleton is filled with varying components that are connected through circulation that weaves through the shell and visibility.



The objective of the design is to touch the existing building lightly so that it able to be easily modified and changed over time.

This is due to the ever evolving condition of the city and the inhabitants.

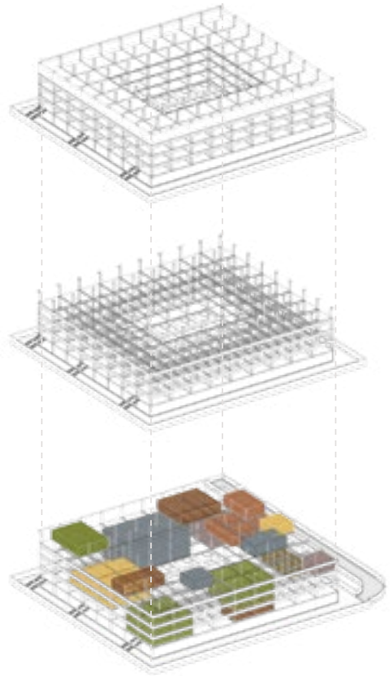
Pockets of programmes are inserted into the building and unused spaces are stripped and material is reused.

The informal and incremental builds are often reused materials.

This way, the construction uses **leftover** and becomes a sustainably sourced material build.

In using an existing build to pump life into the old and allow for it to be adaptable, the rubble should too be incorporated.

216.
Insertion of programmes atrandom"
(Authors own 2020).



1. The horizontal planes along with the vertical columns provide the strong modernist structure of the existing building. There is little to no additional structure of components that make up the built form.

2. The removal of the horizontal planes allows for the ability for one to remove any strict spaces that need to be used. The plan becomes free and open to further development.

3. Inserting programmes into the structure whereby they are "floating" within and can be connected through various means. Circulation to be heavily considered and weave through the building

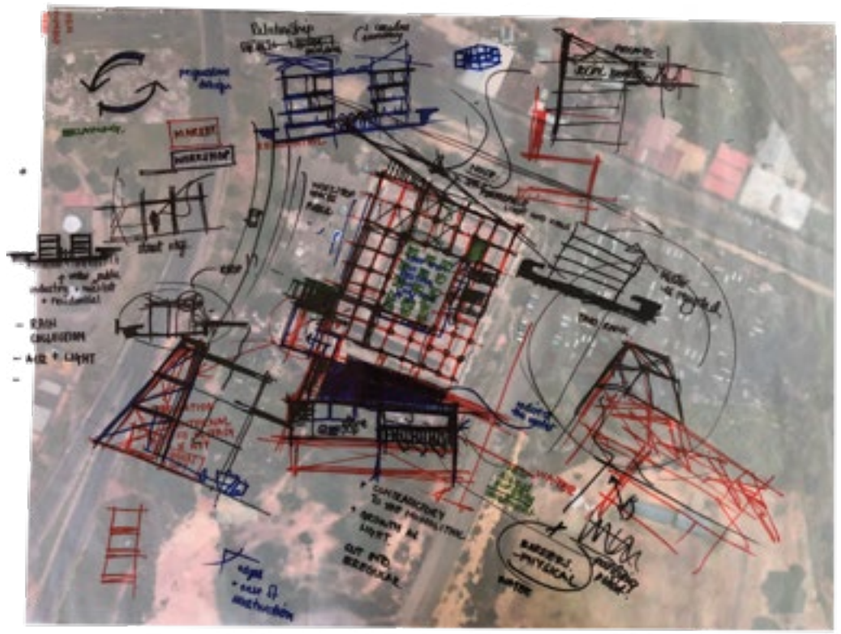
217.
Insertion of programmes atrandom"
(Authors own 2020).

Sketch exploration.

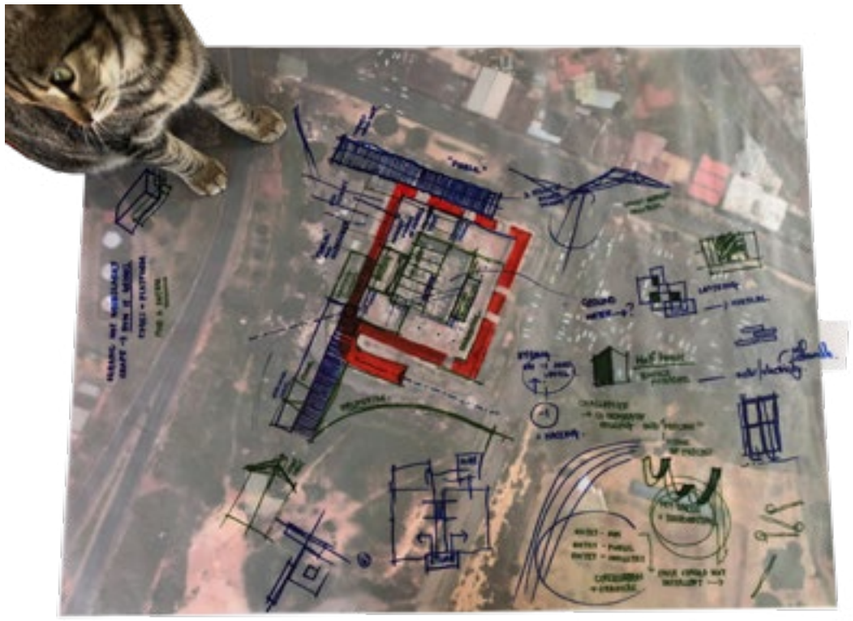


+ Both drawings were the initial ideas of adding and pulling form the building. Exploring the nature of the spaces: such as
Water into the building from the spruit to be cleaned? (Possibly) and then return to the spruit as purified.
The Highway on ramp creating noise and therefore residential would not be ideally positioned.

218.
Sketch exploration 1
(Authors own 2020).

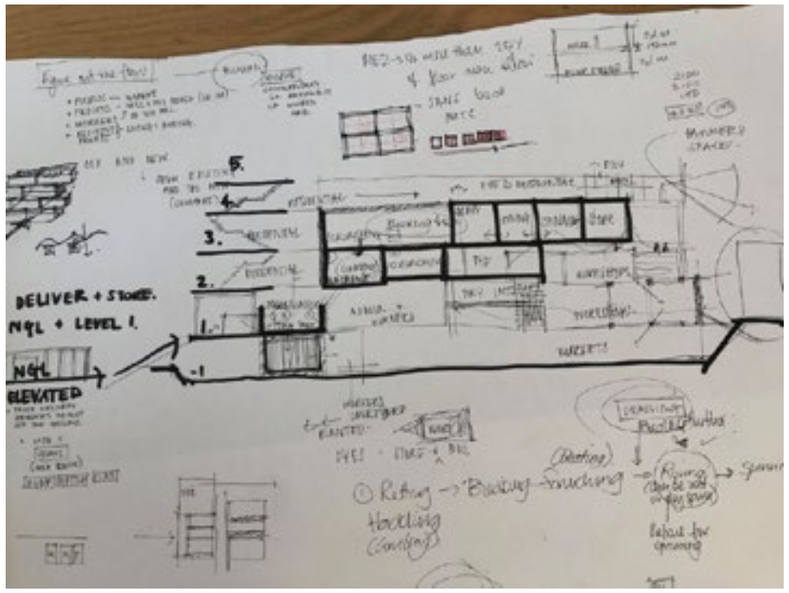


219.
Sketch exploration 2
(Authors own 2020).



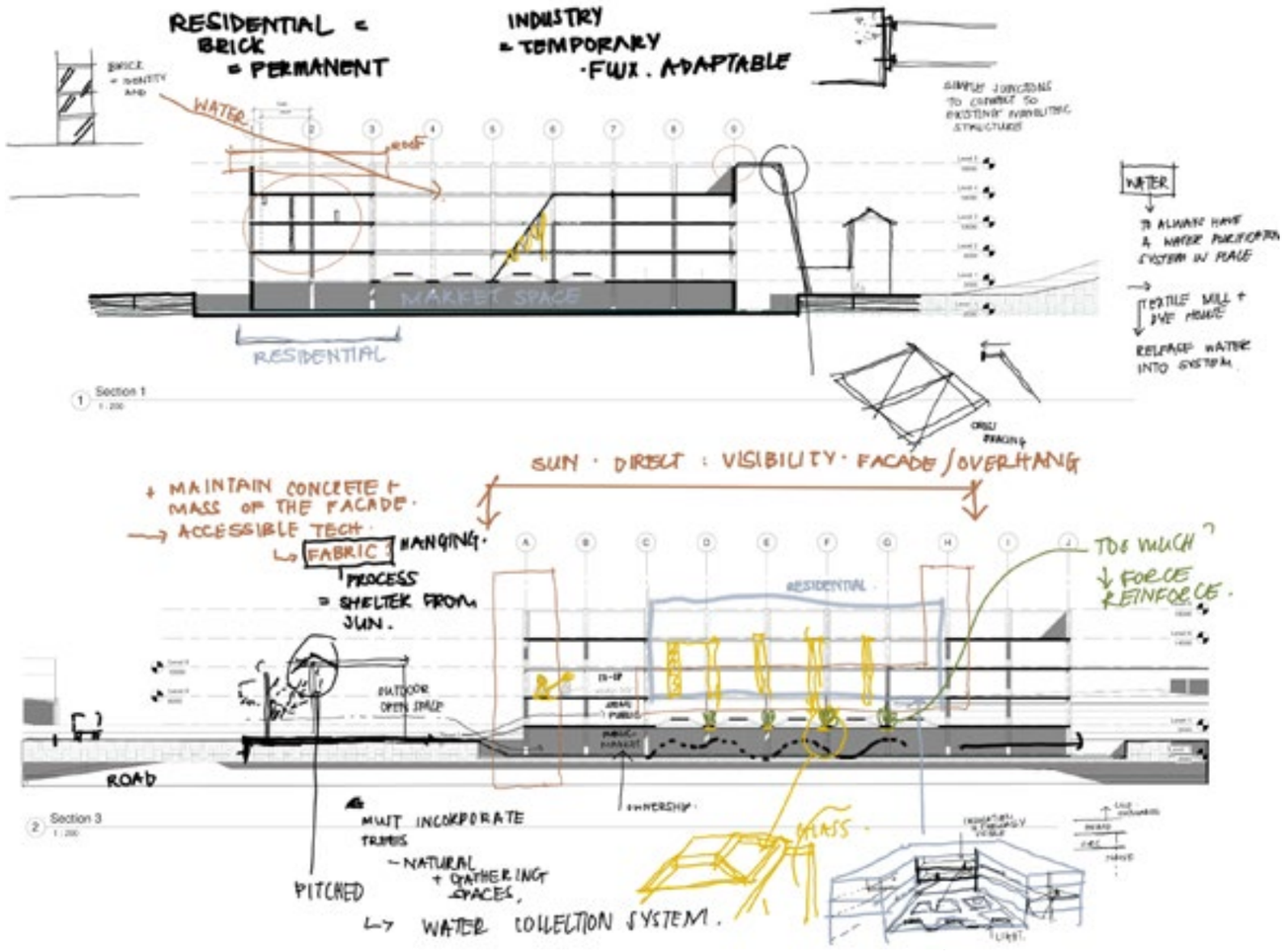
+ Exploring the plan and possibility of additions that draw users from the street into the market space.
+ I wished to explore the addition of steel that latched onto the building. Seeing the ability for steel to be added with less effort than concrete and speaking to the idea where the new additions are constructed from a “conceptual lleftover.” Steel in are is mainly from scrap yards and have potential.

220.
Sketch exploration 3.
(Authors own 2020).



+ Sectional exploration and the idea that programmes float within the structure of the building.
+ Large voids are created so the building is made up of views from spaces into others. Connectivity through vision.
+ VISUAL CONNECTION.

221.
Sketch exploration 4
(Authors own 2020).



Chaos and confusion.

Attempting to understand the spaces that are to be designed and the feeling within.

The idea of fabric and thread that has been dried in large open spaces. Hung from steel structures that are added to the permanent existing structure.

222.
Exploring the volumes and fabric hanging.
(Authors own 2020).

+ Review 2.

Spatial planning.

The programmes are placed so that it is vertically considerate in terms of the volumes that are to protrcue into other, as well as respects the levels of privacy.

The lower levels are more public and higher become more private where access should therefore be restricted.

The process of planning where the various programmes were to go.
Through the exploration of the textile producing process and the various requirements, the ability to separate and split up the existing mass begins.

The public is able to move along a plane, as well as through others.
The main objective of the massing is to determine the circulation routes that are to move in, around and through the building.
Taking the existing built form and applying conceptual principles that respond directly to the textile industry.

+ basting
+ weaving
+ cutting out
+ overlaying.

Public market.

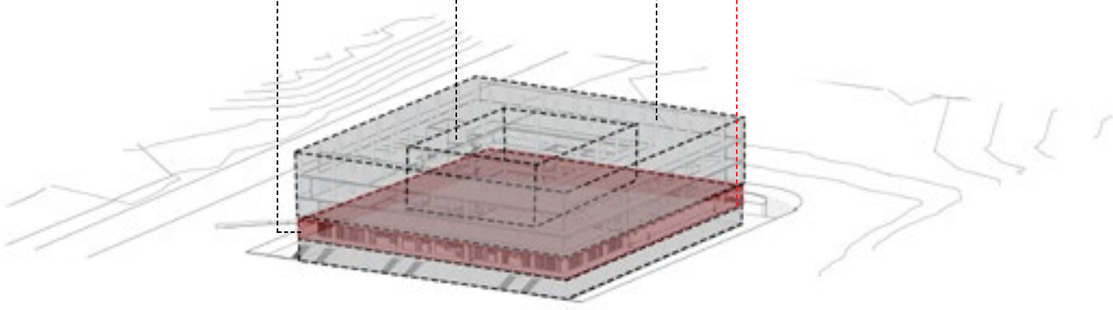
Open for public infiltration. Public and wholesale to purchase fabrics.

Private Industry + housing

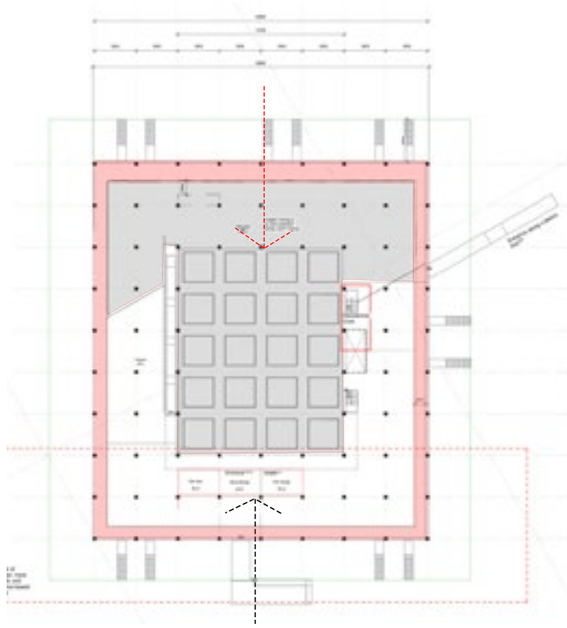
Private spaces that are connected to public through sight- public move around external of building.

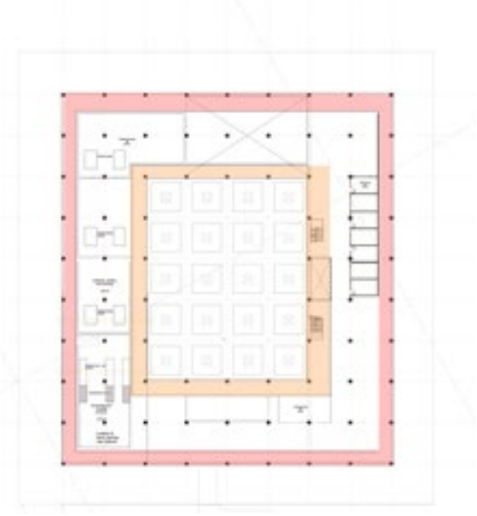
Weaving workshops.

Private work spaces with views from market to production by individuals.



Existing cutout void left open for light and visual connections.

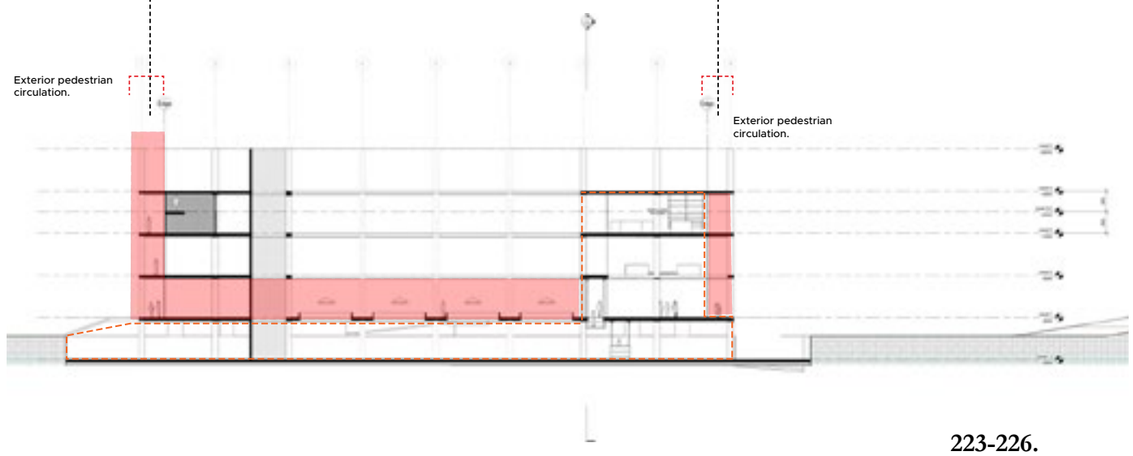




Public circulation spaces.

Exterior is wrapped in pedestrian activity.

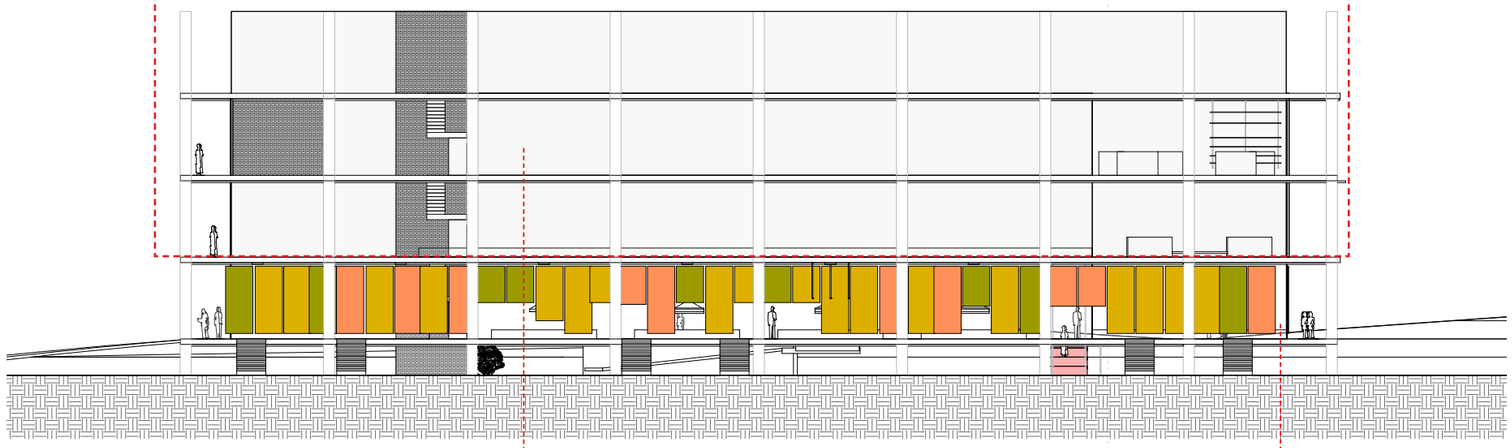
Public circulation spaces.



223-226.
Spatial plaaning of the existing built form. (Authors own 2020).

Glass -recessed “patched” facade.

Visuals in- Re-purposed steel frame windows - FOUND IN AREA.



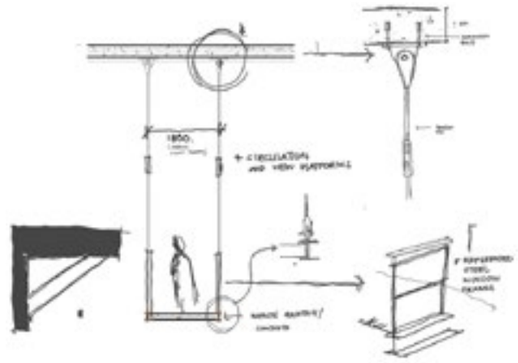


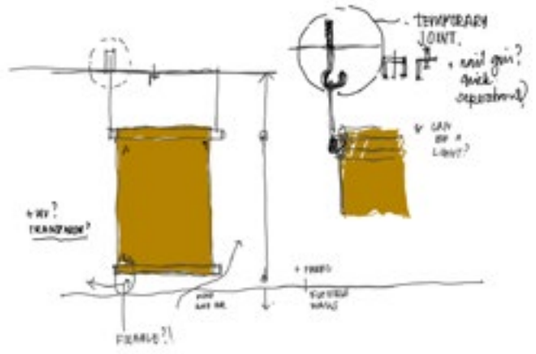
Beauty of the industry on show.

Volumes are opened and public walkway allows for viewing.

Soft edge. Fabric boundaries.

Permeable.
Speaks of the internal.
LIGHT.





Working with the idea of temporarily and ephemeral spaces.

+

Creating a facade that is constructed out of fabric made within the factory space. The the fabric brings in the idea of permeability.

+

The stair cases to connect spaces will hand from the soffits. Making use of the existing structure and the stability of material.
Steel to be used as the area has a dominant steel trade industry.

227-230.
Spatial plaaning of the existing built form. (Authors own 2020).

Rotation.

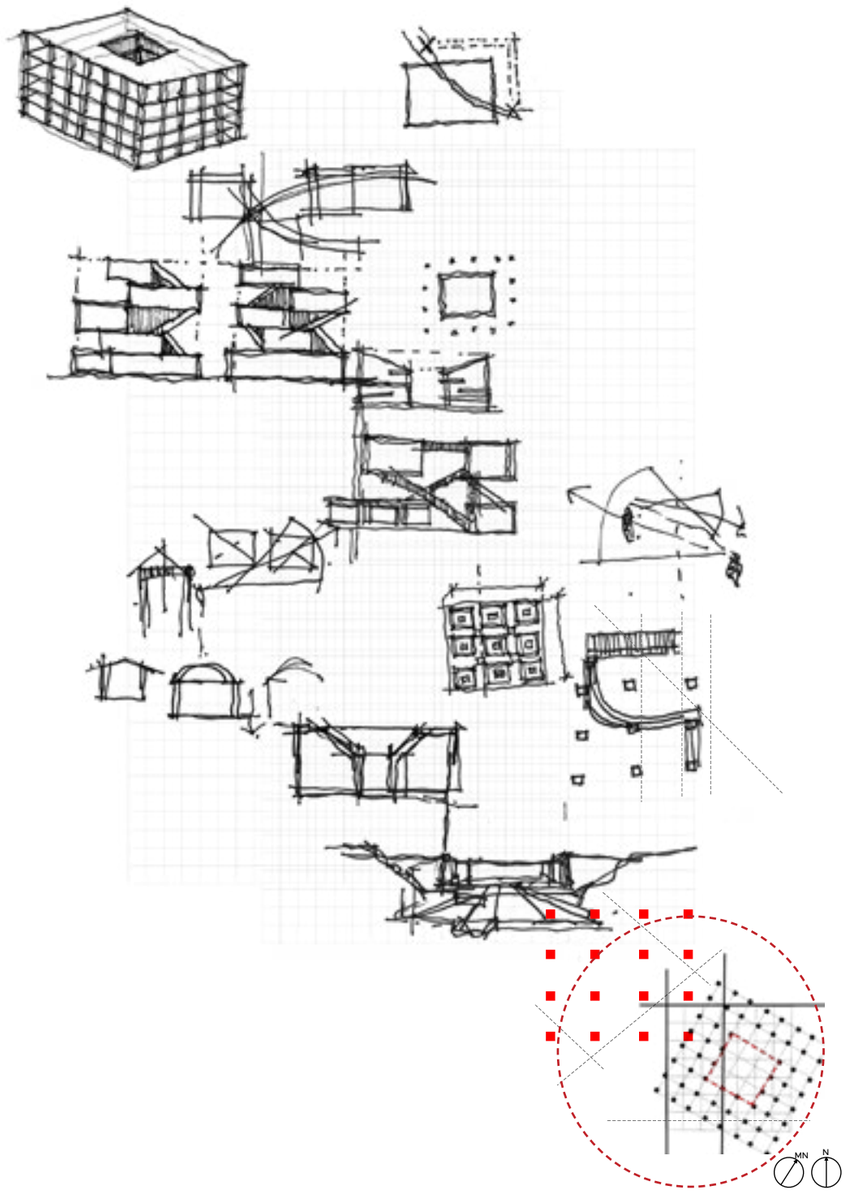
Beginning to explore the options of rotating the existing grid.

Not responding to the 8 x 8 grid that determines the building.

The existing building grid runs NE to SW whereas the grid of Johannesburg runs North to South.

Commentary on the modernity and universal design of the existing and the overlaying of the contradictory.

Overlaying the grid that rules Johannesburg.

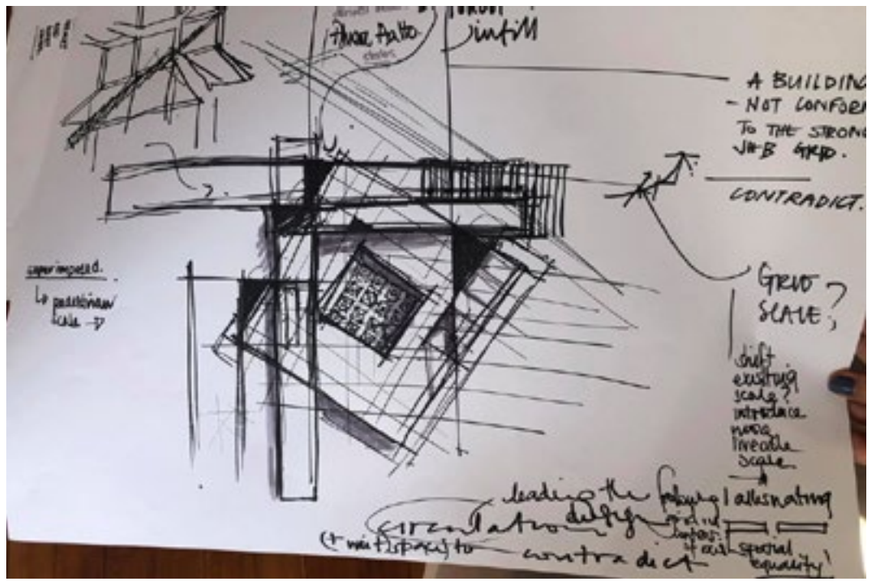


231.
Sketch exploration (Authors own 2020).

The City grid being overlaid onto the existing building grid brought to the foreground the idea that in designing the building as a whole, if I were to remain within the linear column structure, it would be contradictory to the concept and I would be caving to and complying with the modernist norms and the Apartheid copy paste principle.

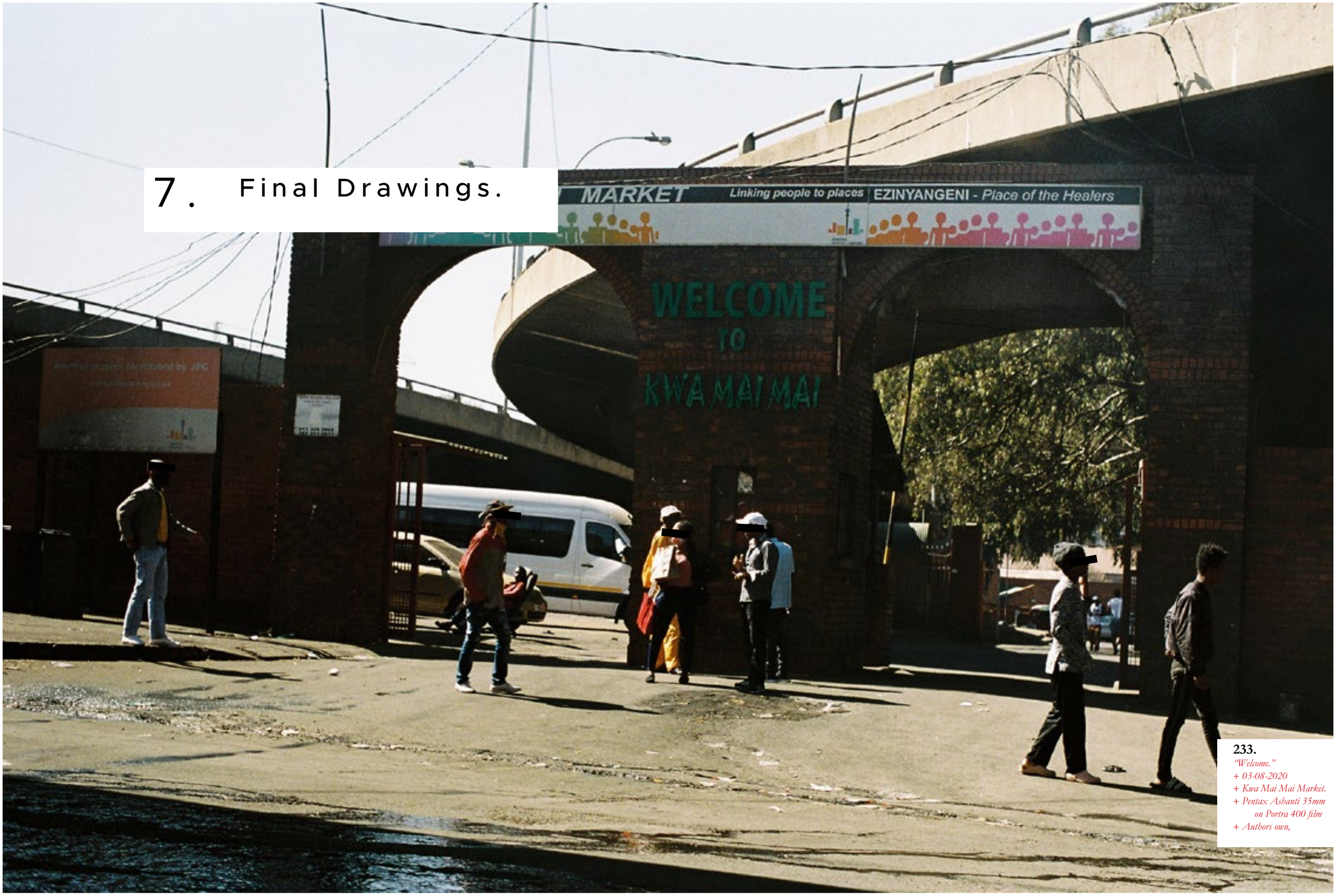
The Design of he building is specific and the spaces that are created are entirely unique to the specific space and the needs and requirements of the selected site.

Each space is to have its own view - and should be considered as an independent entity that is a part of the whole.
There would be no point in designing the whole as it would exclude the infill and specific needs that are required by people.



232.
Possible addition to existing through entry and public interface.
(Authors own 2020).

7. Final Drawings.



233.
"Welcome."
+ 03-08-2020
+ Kwa Mai Mai Market.
+ Pentax Ashanti 35mm on Portra 400 film
+ Authors own,

Site Plan.



234.
Context map.
(Authors own 2020).

The additions to the building are restricted to the footprint of the existing due to the need to reuse what is available.
Up-cycling and re-purposing buildings and structures in the search for reawakening spaces and creating productive and positive place identity.

The steps and ramps that "spill"from the building, speak to a gradual transition into the space, and into the public plane that is the ground floor market space.

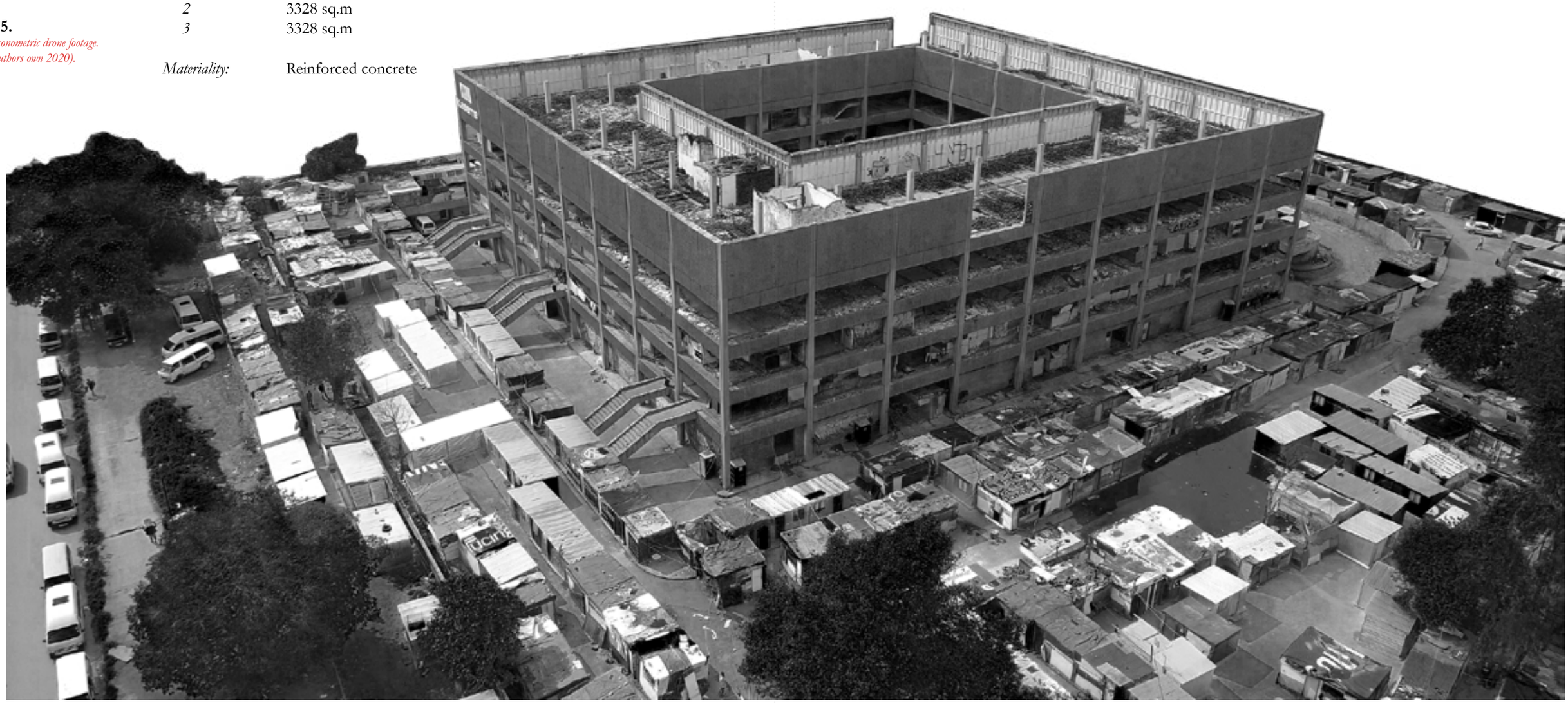
The intention is for the surroundings to grow and bleed into the building so that it becomes completely integrated with the physical context as well as the community.

The immediate designed surrounds are easily adaptable so to allow for continuously changing surrounds and actors to take ownership.

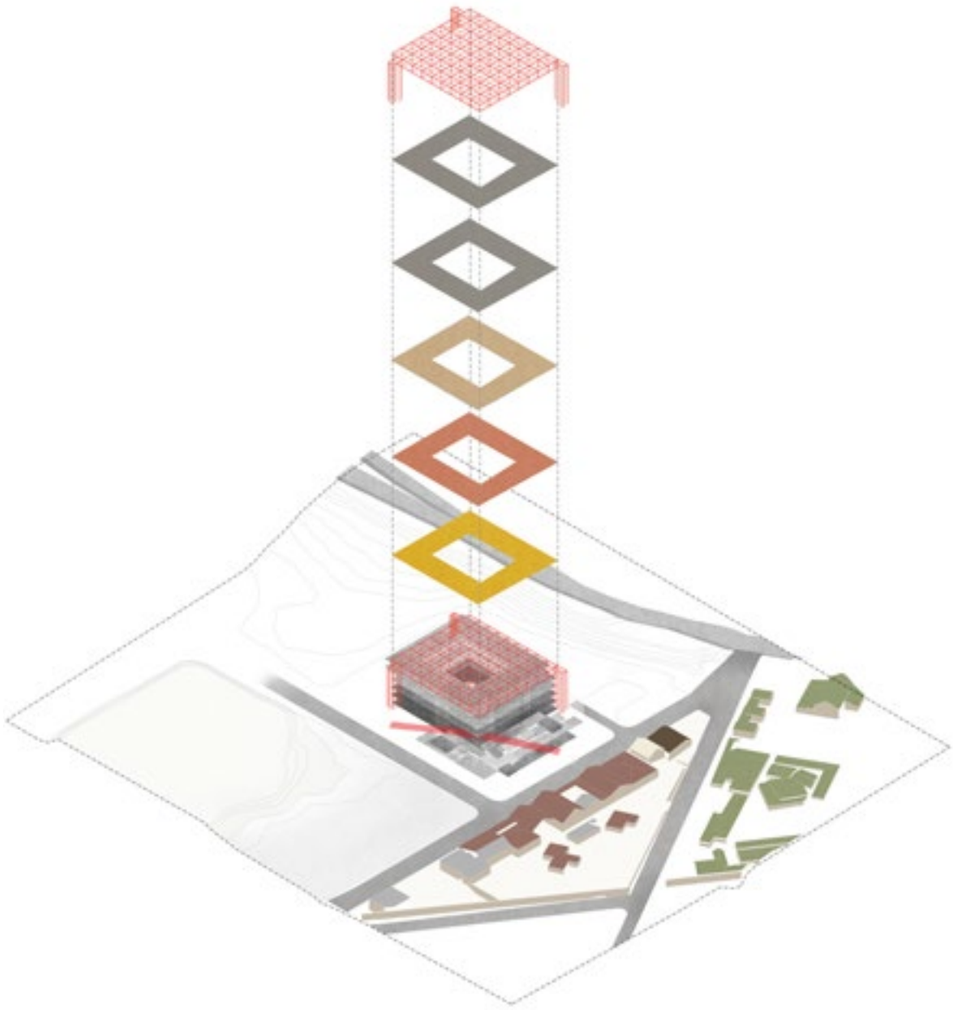
Existing building.

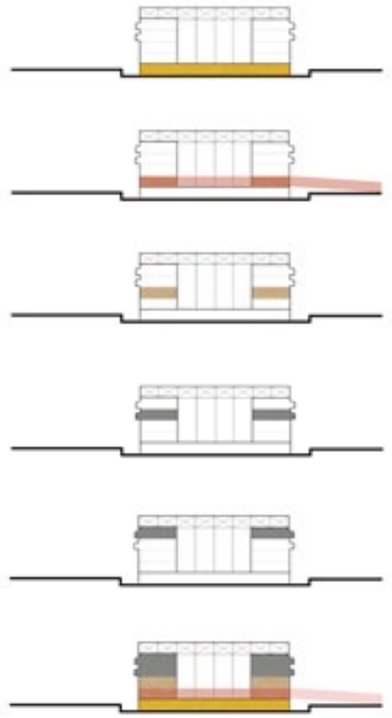
Site:	**14500 sq.m**
Building:	17 920 sq.m
-1	4608 sq.m
0	3328 sq.m
1	3328 sq.m
2	3328 sq.m
3	3328 sq.m
Materiality:	Reinforced concrete

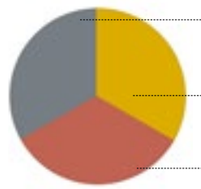
235.
Axonometric drone footage. (Authors own 2020).



Spatial planning.







Incremental Residential — Home, Essential, Ownership

Eco-Textile Mill + Dye House — Learn, Interact, Identity

Market — Community, Interaction, Economic



Residential

Residential

Weaving + workshops

Market

Mill + Dye house

The existing five floors of the structure are programmed to hold varying purposes that contribute to a self-sustaining environment.

Each program serves a purpose within the community, from housing to job creation and skill development.

The ground floor becomes an open platform accessed by the public. It blurs the boundaries and allows for community incorporation into the building and market space.

The public platform is placed between the basement and first floor so to allow for a barrier between the public and more private spaces of the residential on the higher levels.

236-240.
Spatial planning diagrams (Authors own 2020).

Spatial planning.

The programs are placed so that it is vertically considerate in terms of the volumes that are to protrude into other, as well as respects the levels of privacy.

The lower levels are more public and higher become more private where access should therefore be restricted.



Textile Mill and Dye House.

Produce and manufacturing floor.
Basement.
Industrial aspect to the building that provides a job and manufacturing platform that acts as a injection of tangeble.



Market and Public square.

Market space as an extension of the public street.
Allows for the inclusion of surrounds and the public.



Weaving and workshop.

Open plan floor hosts commercial and artisan weavers and workshop spaces.

Allows for skill and knowledge development.

Spatial Requirements

Textile Mill.
Storage rooms
    Textile
    Dye
Retting
    Store
    Tanks
Hackling
Scutching
Carding
Drawing
Roving
Spinning
Yarn storage

Dye House.
Dye pits
Dye laboratory
Dry yard

Rain water storage
Water filtration room
Water reticulation room

Women's locker room
Men's locker room

Market stalls
    Sales front
    Built store

Internal courtyard

Circulation

Outdoor raised stair platforms

Women's restroom
Men's restroom

Lobby space
Yarn store

Weaving
Workshop 1
Workshop 2
Workshop 3

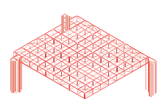
Co-operative storage
    (Individual storage)

    Women's restroom
    Mens restroom



Residential.

Residential floors provide a plane for incremental housing and valuable interventions such as crèche playgrounds, planting areas and varied social and stay spaces.



Residential.

Steel structure inserted into the void of the existing concrete structure.
Structure acts as frame that holds systems.
Water harvesting, agricultural produce, solar panels.

Housing.
Large Unit
    Kitchen
    WC

Small Unit
    Kitchen
    WC

Dry yard

Crèche
    Outdoor play space.
Multi-sport court
Planted platforms
Planted slab edges

Solar panels
Water harvesting
    membranes

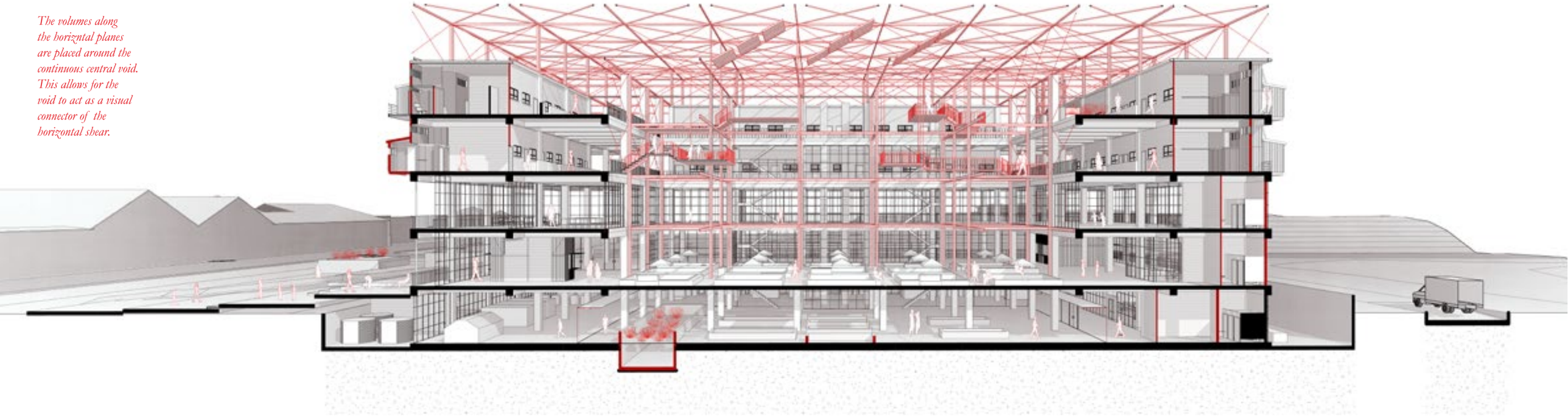
241.
Spatial planning diagrams (Authors own 2020).

Cross Section

Active section.

The section cuts through the center of the orthogonal building along North-South with a view East.

The volumes along the horizntal planes are placed around the continuous central void. This allows for the void to act as a visual connector of the horizontal shear.



Public interactive gardens and platform steps.

Land to the South of the building is open and zoned for mining.

This allows for expansion of the agricultural and community valued interventions that begin within the building courtyard.

Plaza used to collect rain water.

Water collection and Mill plant rooms.

System based edge acts as a "service core" for the basement level mill and dye house. Further away from the living.

Floor space hosting varying programmes per floor.
"Building front"

The floors allow for living inward and wrap around an open courtyard.

Internal open courtyard.

Inverting of the living edge inward and allowing the internal space to become a space of networking and connections, through interventions and visual.

Internal courtyard acts as a visual connector.

. Floor space hosting varying programmes per floor.
"Back of building"

Each level reflective of the level of privacy and safety that is related to the programming.

Sunken wrapped private courtyards.

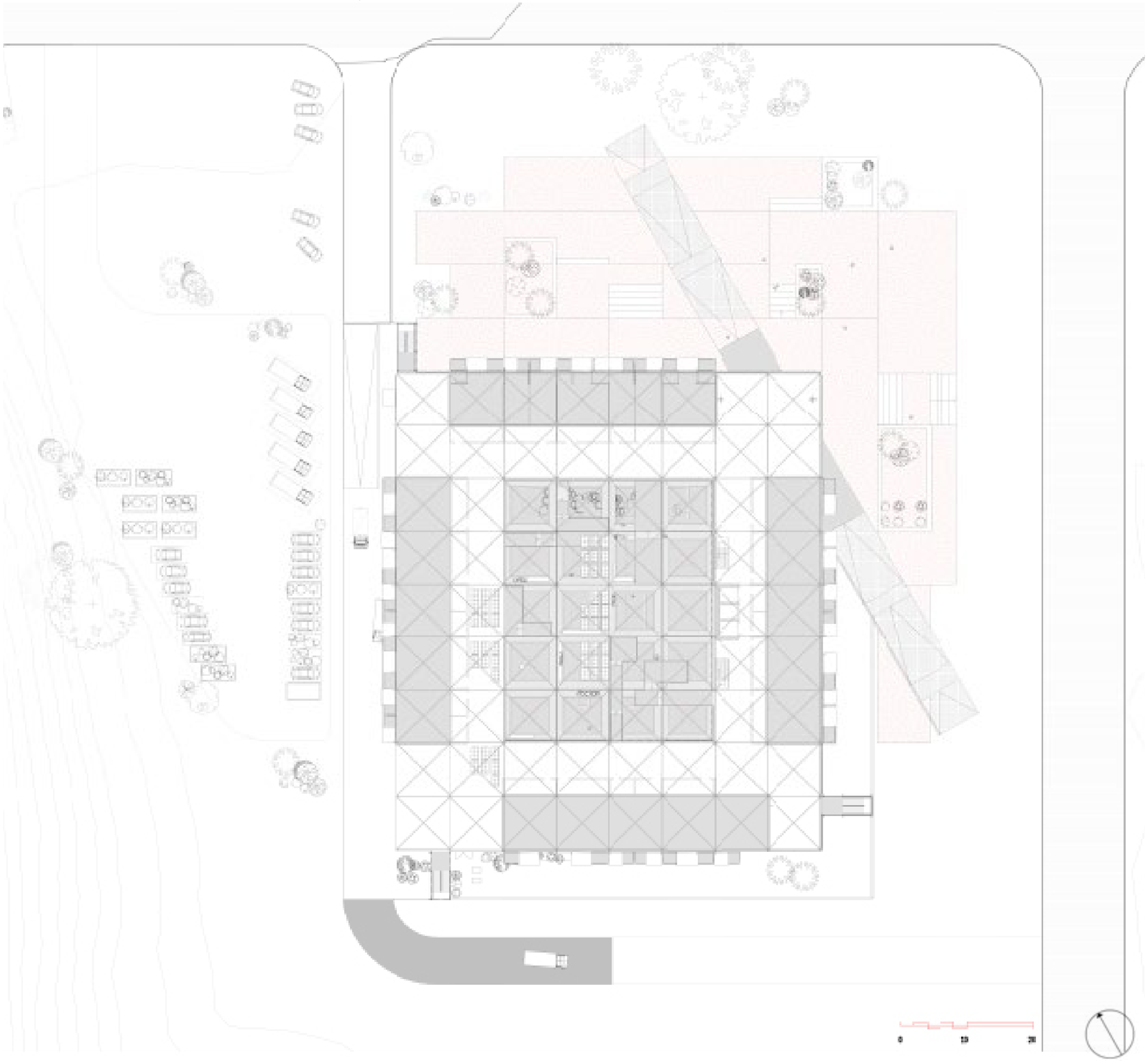
Outdoor spaces for individuals working within the mill.

Proposed growth land.

The public stairs into the raised market space act as platforms for unplanned market spaces.
(TBC)

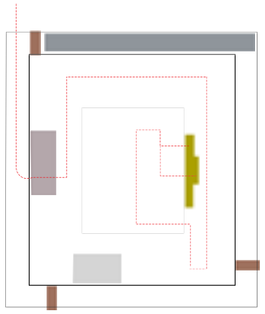
Roof/ site plan

view from above



Basement Plan

Textile production.

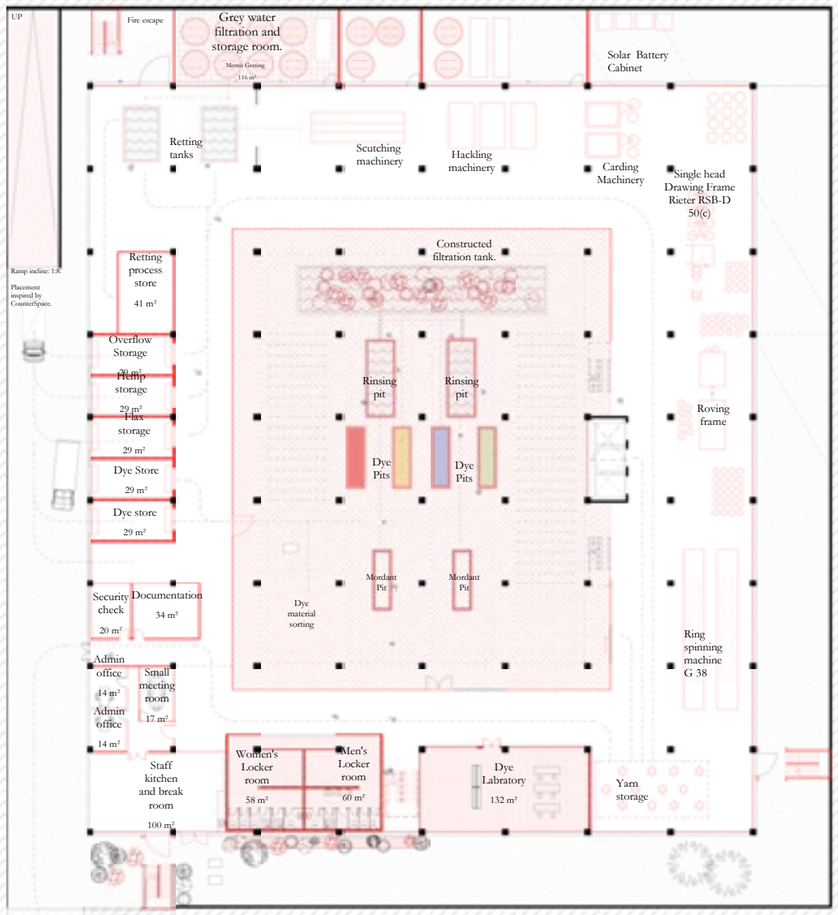


Central circulation core.

Grey water collection and filtration

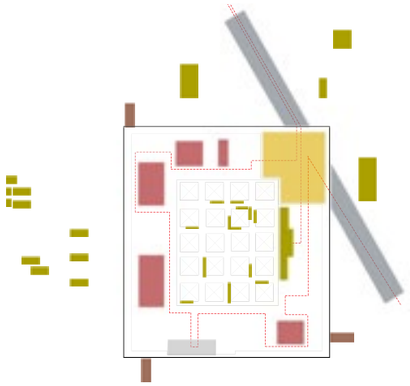
Storage
Delivery zone

Fire escape



Ground floor Plan

Market space.



Central circulation core.

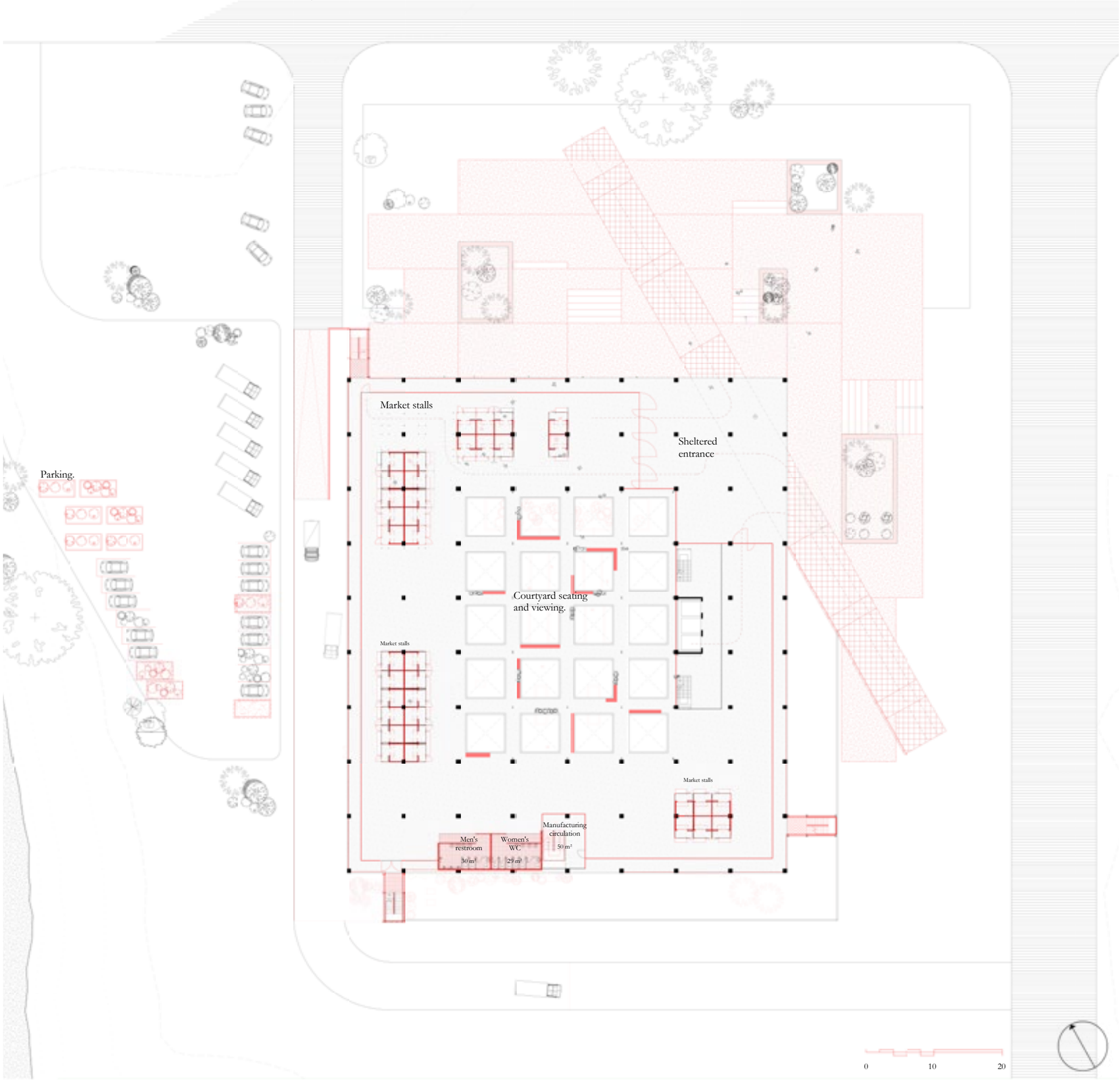
Meeting - Entrance

Entrance ramp

Fire escape

Market stalls

Planters



Market.
stalls

The market serves the people of the community as well as those interested in textile production.

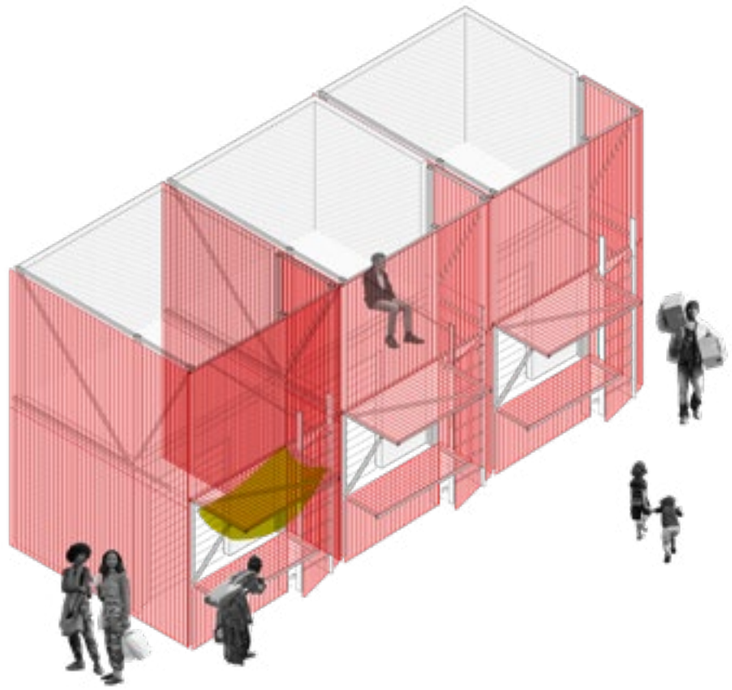
The market space and stalls are designed so to allow for growth, modification/personalisation and adaptation.
The materials are readily available and the design is based on standard dimensions and fixing methods.

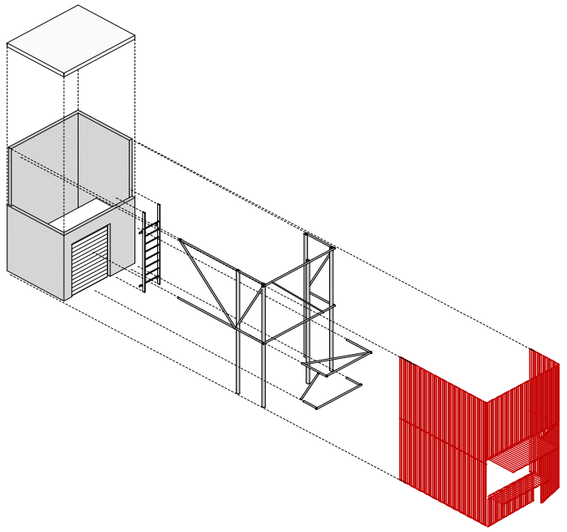
The market space is intended to be a continuation and extension of the street edge.

The public has the ability to move through the space freely and thus can be easily integrated into the community.

The platforms leading up to the market floor provides a platform and place for additional informal vendors to set up and sell to those visiting the market or residents living within the building.





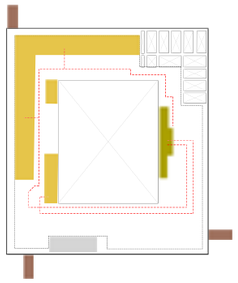


+ Permanent cement brick storeroom space.
+ Metal stud framework
+ Clear polycarbonate corrugated sheeting

The storeroom is constructed out of materials that will reduce the ability for the theft of property. The addition to the front of the storeroom allows for adaptability of the open space.

First floor Plan

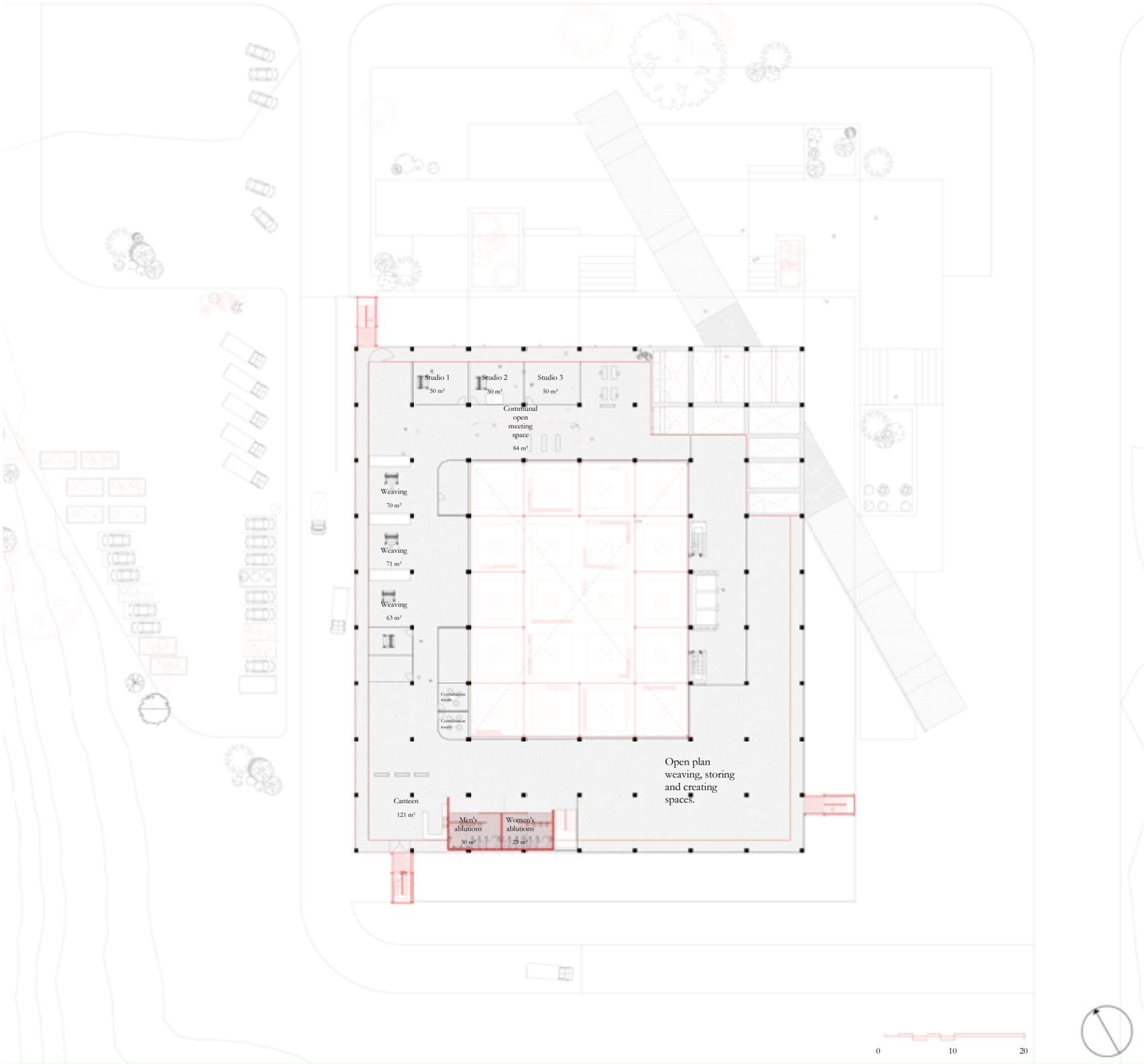
Makers floor.



Central circulation core.

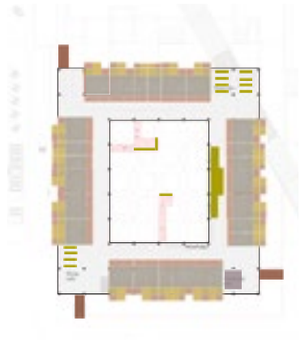
Workshop and consult spaces

Fire escape



Second floor Plan

Residential.

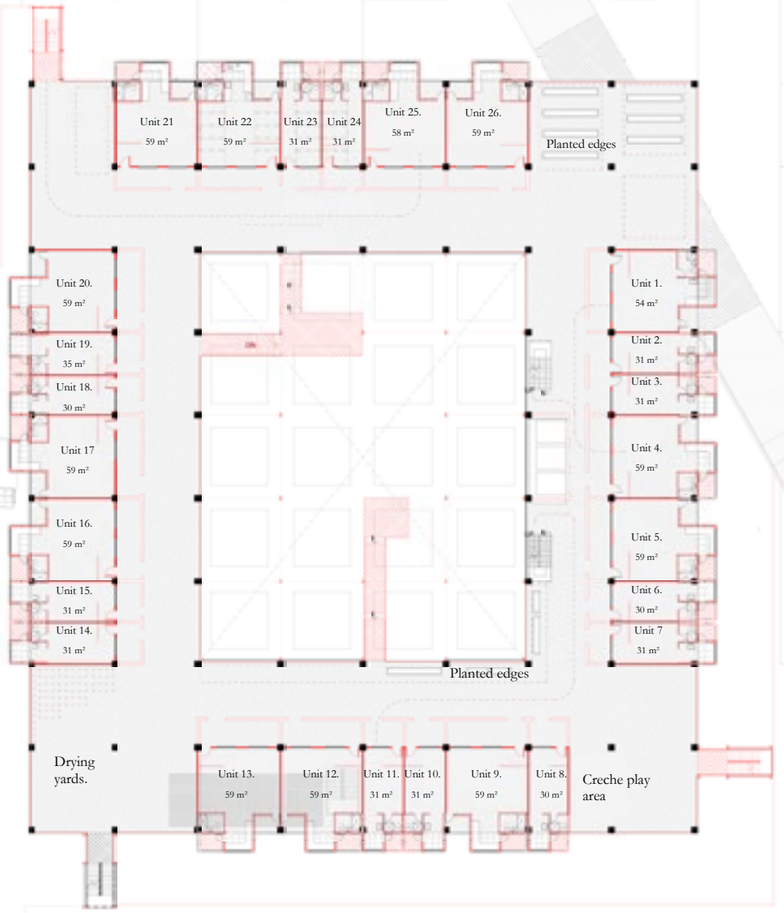


Central circulation core.

Small unit x 13

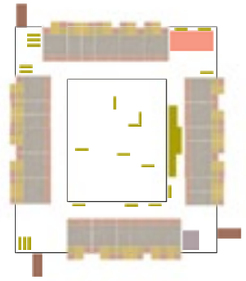
Large unit x 13

Fire escape



Third floor Plan

Residential.



Central circulation core.

Small unit x 12

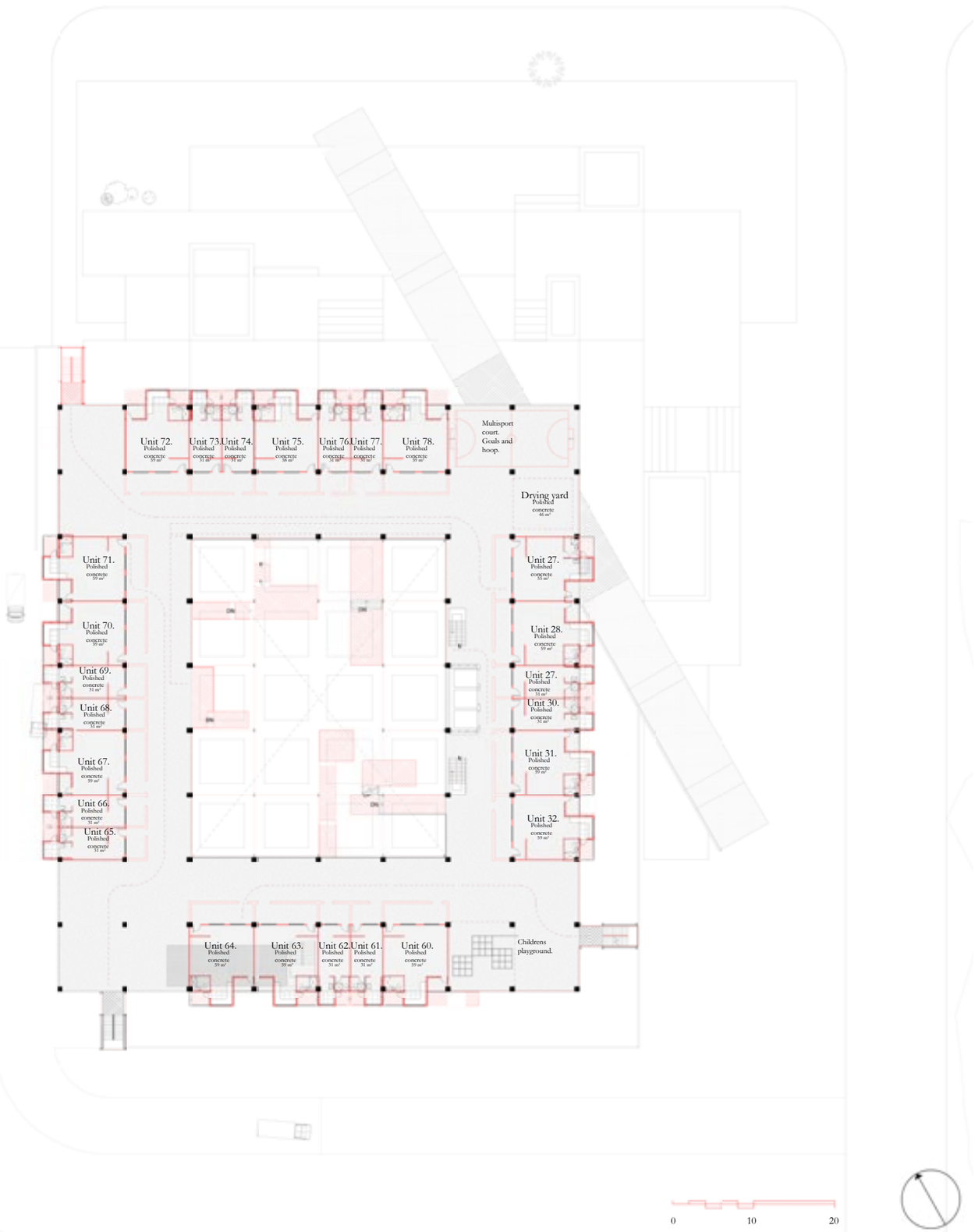
Large unit x 13

Fire escape

Planters

Sports court

Creche/after care



Residential units

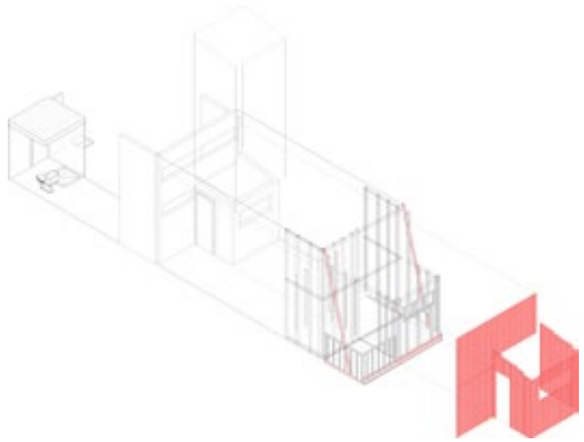
Residential.

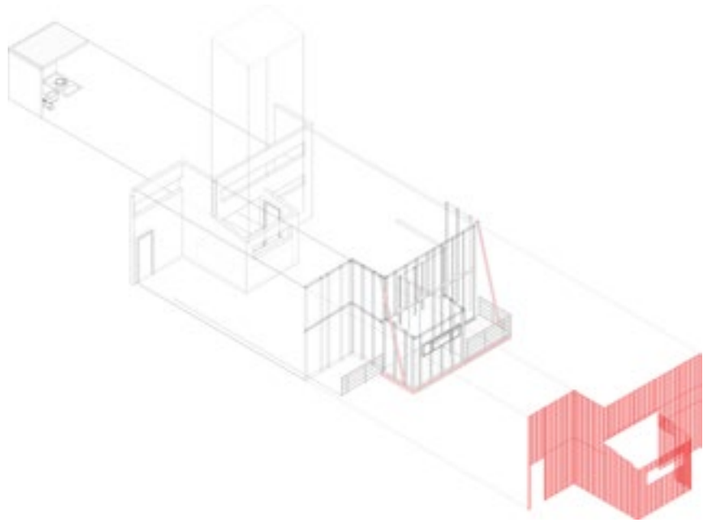
The residential units are modular components that can be manufactured off-site and fixed to the existing framework of the structure.

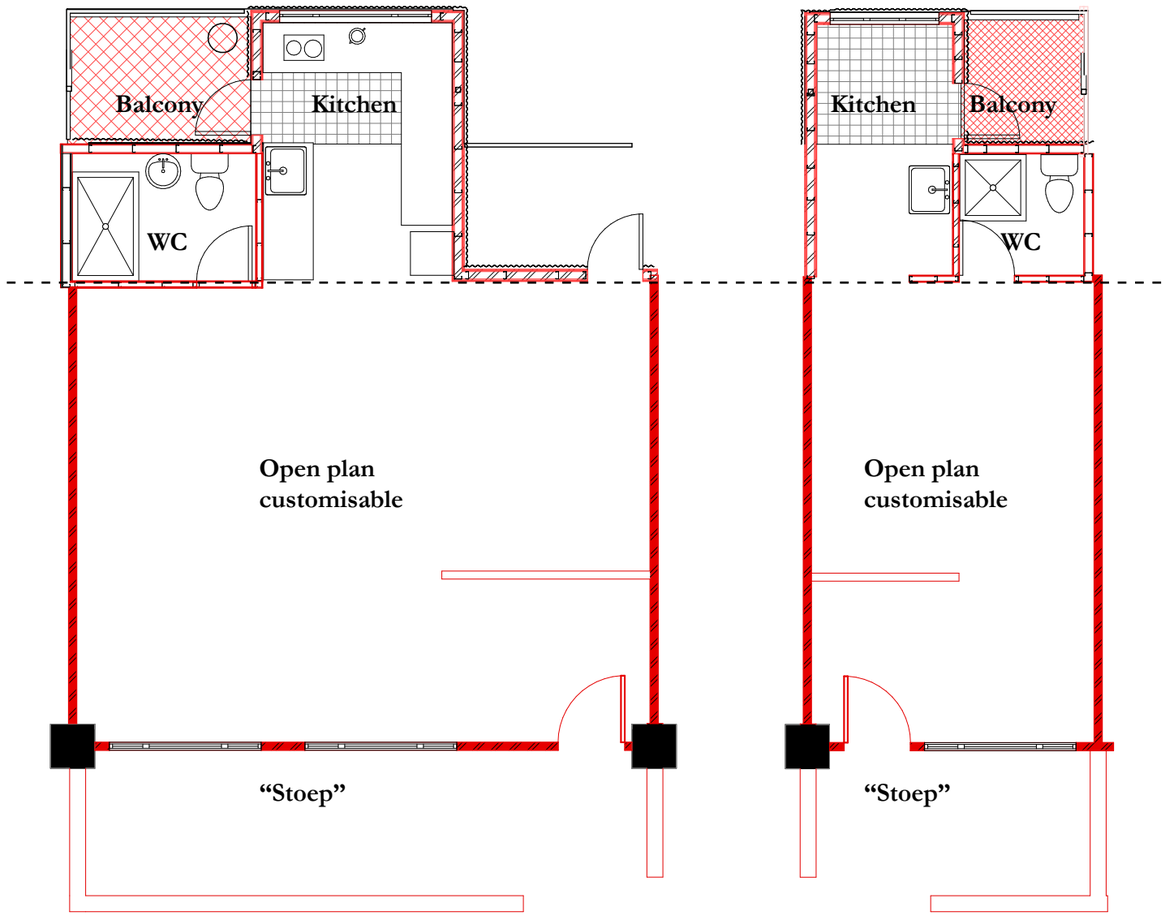
The modular additions are constructed out of light weight framing and acoustic and fireproofing board. This is to allow for ease of construction and prevent fires common in dense residential spaces.

The interior spaces are customizable and allow for alterations that are based on the individual residents needs and wants.

Partial walls are built with a angle built into the wall at 2,3m which allows for a 2,1m loft above. The angle serve as a physical guideline that lets residents place materials along it to create spaces that are sustainable.









59sq.m
4-6 people

31sq.m
2-4 people

Living and customisable internal space.

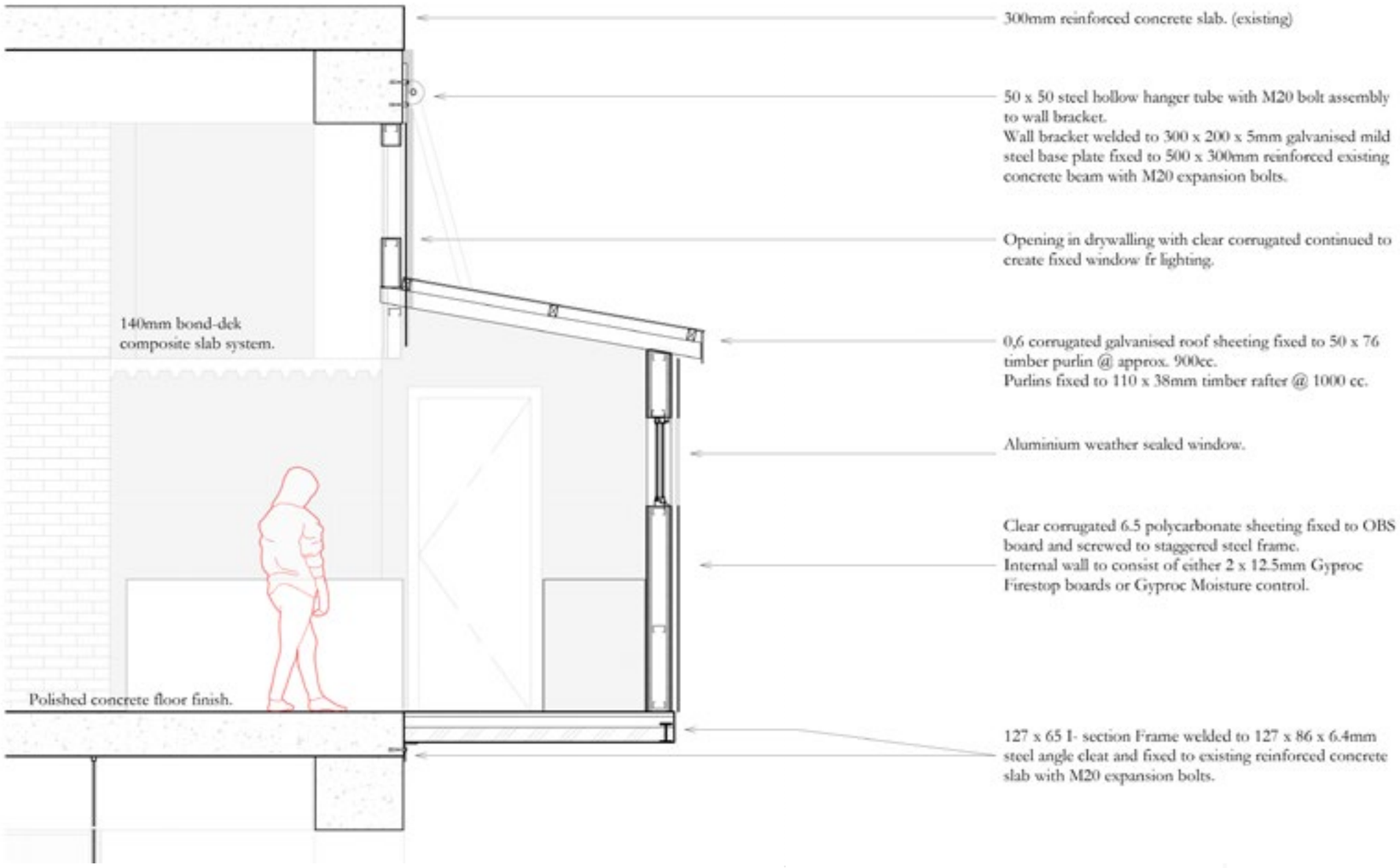
External.
Balcony or stoep.

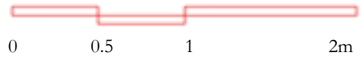
Kitchen.

WC.

Residential unit

Section through modular addition- fixing.





Residential units

Possible living options with personalised and adaptable open plan spaces.





Interventions

Various interventions placed within the areas.

Planted spaces provide residents with the opportunity to grow food produce for retail and community consumption.

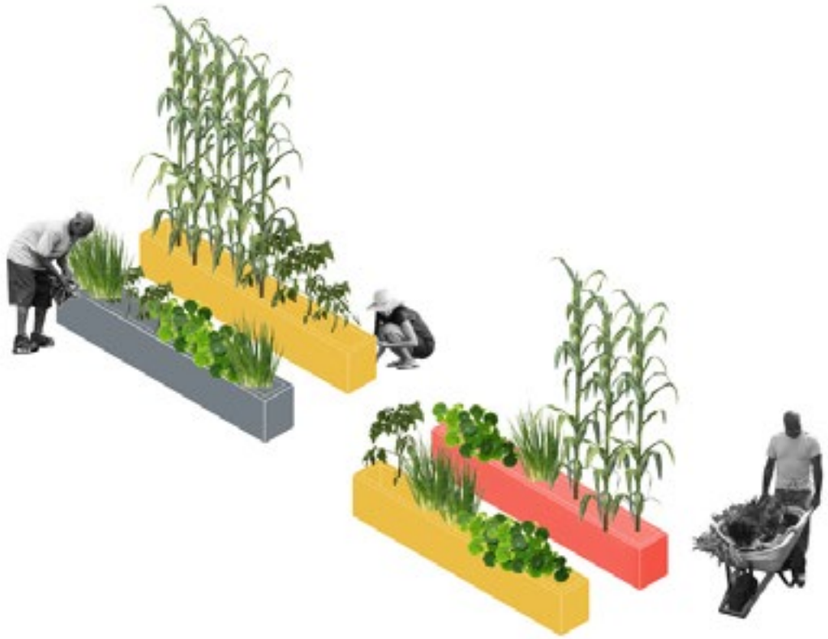
The small intervention allows for the introduction of an additional element that contributes to a closed, circular economy.

The space becomes accepted by the wider community due to the additional purpose that the building and the open internal spaces serve.

The purposeful spaces encourage community interaction and ownership that rejects the possibility for unwanted and harmful densification.

Community acceptance

Spatial upliftment and ownership





Community explored and enjoyed recreational spaces such as sports spaces, much like the planters, have the opportunity to be accepted and protected by the residents.



Creche spaces and play opportunities become integrated within the community due to the need for community support and upliftment.
Residents provide employment opportunity through child support initiatives.

Edge condition

Edge condition and community integration



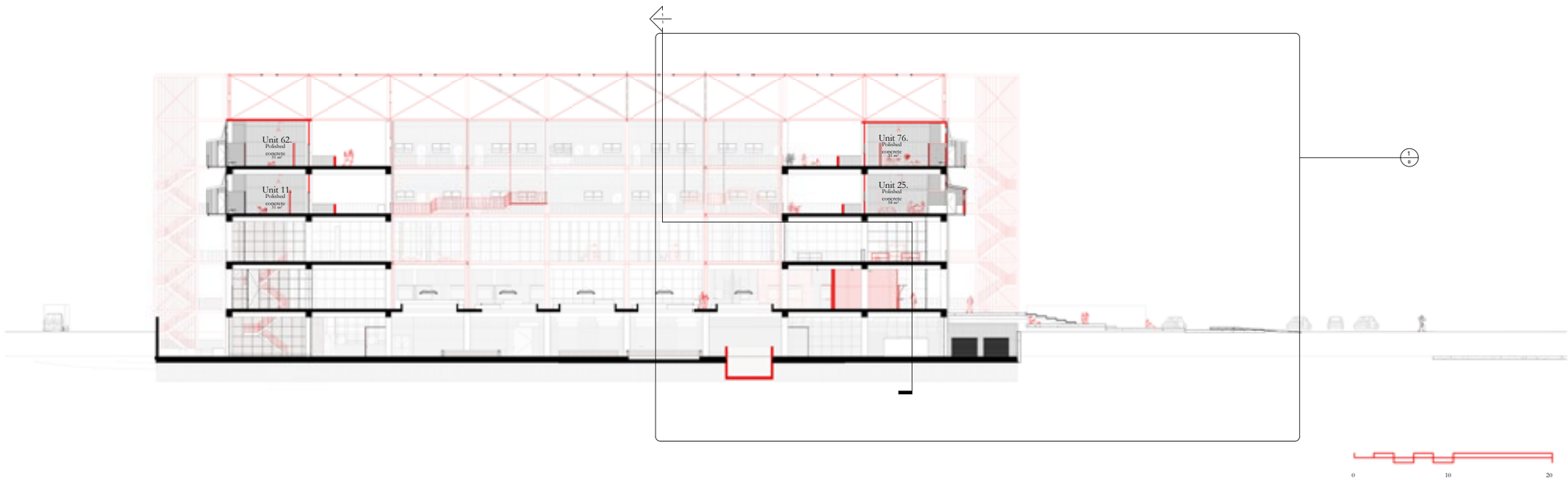
Section

Section through building N-S.

Section A.

The section cuts through the center of the orthogonal building along **North-South** with a view **East.**

The volumes along the horizontal planes are placed around the continuous central void.
This allows for the void to act as a visual connector of the horizontal shear.



Section
Perimeter

Section- street condition

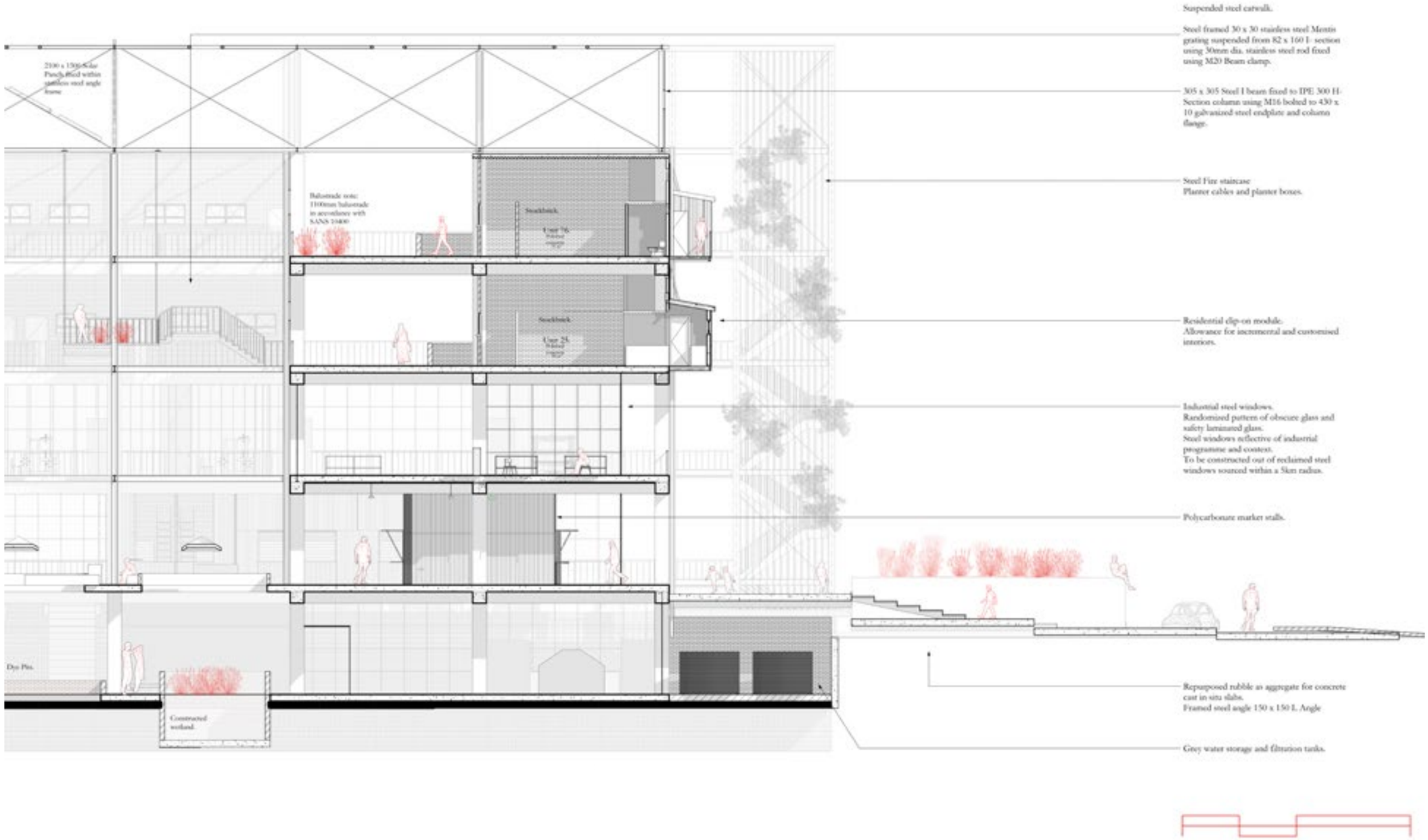
Service frame.
+ Solar panels
+ Agricultural framework.

Residential Levels.
+Valuable programing.
+Urban farming.
+Residential stay spaces.
+Incremental housing.

Weaving and workshopping.
+ Artisinal weaving and skill development.

Market space.
+ Publically accessible textile maket.
+Incremental market stalls constructed so to allow for adaption.

Textile mill.
+ Raw produce processing with final product being
yarn.
+ Dye pits.
+Water filtration and purification.
+Water harvesting plant.



Internal view



Exterior view

Street - interaction



5. Referencing.

+ List of figures
+ Bibliography
+

217.
"Life all around."
+ 03-08-2020
+ Kaserne Building
+ +Pentax Ashanti 35mm on Portra 400 film
+ Authors own,

List of Figures.

All figures are authors own unless otherwise stated.

12. *Area plaan of a part of Johannesburg - 1897 (Lewis, 1966)*
13. *old maps site*
14. *and aerial of a section of the mining belt in 1959*
15. *and aerial of a section of the mining belt in 1969*
16. *and aerial of a section of the mining beltin 1959*
17-18.*and aerial of a section of the mining belt in 1969*
21.*Aerial photograph of soweto taken from the west. (Lewis, 1966) Lewis, P., 1966. A City Within A City - The Creation Of Soweto.*
22.*A communal stove and concrete beds in a mining compound.(Maclennan, 1985)*
23.*Photograph of a view of Soweto. (Lewis, 1966)*
24.*NE 51/# house design. (Maclennan, 1985)*
26.*Panopticon example. (Friman, 2005) Friman, 2005. Inside One Of The Buildings Of The Presidio Modelo.. [image] Available at: <https://commons.wikimedia.org/wiki/File:Presidio-modelo2.JPG> [Accessed 15 September 2020].*
29. *Chung Mansions stairwell (Masiteng, 2020) SERI*
30. *Chung Mansions relocation. (Masiteng, 2020)*
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