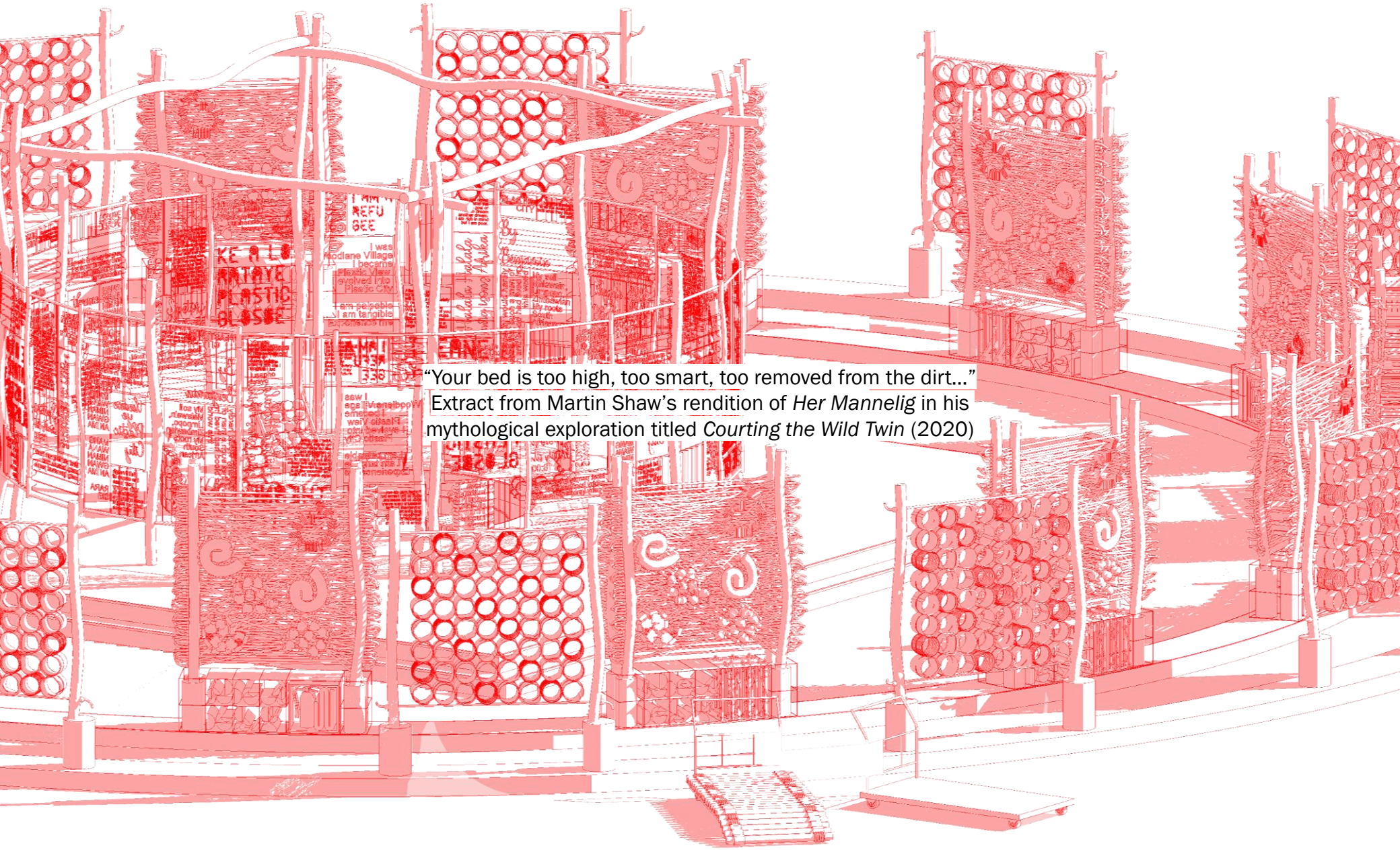
Indexicality & Interiority

ADDRESSING THE ROLE OF INTERIOR ARCHITECTURE IN INFORMAL SETTLEMENTS THROUGH A SEMIOTIC APPROACH TO MEANING-MAKING WITHIN A NARRATIVE INQUIRY TO ETHNOGRAPHIC RESEARCH.

M(INT)PROF MASTERS PRESENTATION

DHANE HERBST U16004338



"Your bed is too high, too smart, too removed from the dirt..."
Extract from Martin Shaw's rendition of *Her Mannelig* in his mythological exploration titled *Courting the Wild Twin* (2020)

Submitted in partial fulfilment of the requirements for the degree Master of Interior Architecture (Professional) to the faculty of Engineering, Built Environment and Information Technology.
Department of Architecture
University of Pretoria
2021

TITLE: Indexicality & Interiority: addressing the role of interior architecture in informal settlements.
PROGRAMME: "Disassemblable" Community Office with Deployable Interfaces and Objects.
SITE: Moreleta Park and Woodlane Village (referred to as Plastic View)
LOCATION: 25.8295° S, 28.3079° E
RESEARCH FIELD: Urban Citizenship & Inhabitation
CLIENT: SA Cares for Life NGO
THEORETICAL PREMISE: Semiotics, Meaning-making, multi-scalar spatial agency and Participatory Action Research
KEYWORDS: Indexicality, Linguistics, Interiority, Cultural Production, Semiotics, Meaning-Making, Collaborative Design, Spatial Agency, Informal Settlements
PROJECT INTENTION: Establishing a role for interior architecture in informal settlements as an agent of meaning-making.
STUDY LEADER & SUPERVISOR: Anika van Aswegen
CO-SUPERVISOR: Dr Carin Combrinck
YEAR CO-ORDINATOR: Anika van Aswegen

In accordance with Regulation 4(e) of the General Regulations (G.57) for dissertations and theses, I declare that this dissertation, which I hereby submit for the degree of Masters of Interior Architecture (Professional) at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution.

I further state that no part of my dissertation has already been, or is currently being, submitted for any such degree, diploma or other qualification. I further declare that this thesis is substantially my own work. Where reference is made to the works of others, the extent to which that work has been used is indicated and fully acknowledged in the text and list of references.

Dhané Herbst

Addressing the role of interior architecture in informal settlements through a semiotic approach to meaning-making within a narrative inquiry to ethnographic research. A community office in Plastic View - a known space of mediation, knowledge transferal and expression - will serve as an intrinsic case study for this research. Through a collaborative process and on-site prototyping, the project aspires to evoke the subjective phenomena of meaning-making through a series of objects, interfaces and spatial compositions.

- indexicality

/ɪnˈdɛksɪk(ə)l/

noun

1. the phenomenon of a sign pointing to some object in the context in which it occurs
2. relating to or denoting a word or expression whose meaning is dependent on the context in which it is used (such as here, you, me, that one there, or next Tuesday (Dictionary, 2006).

- informal settlement

/ɪnˈfɔːm(ə)l/ /ˈsɛt(ə)lm(ə)nt/

noun

1. a place, typically one which has previously been uninhabited, where people establish a community carried on by self-employed or independent people on a small scale, especially unofficially or illegally.
2. an approach to spontaneous urban strategy (Dictionary, 2006).

- disassemblable

/dɪsəˈsɛmb(ə)l/

adjective

1. a composition that can be taken apart or broken down into smaller pieces that assemble the larger composition (Dictionary, 2006).
2. in this project it refers to the spatial composition that can be broken down into a series of interfaces and deployable objects (Author, 2021).

- interiority

/ɪnˌtɪərɪˈɒrɪti/

noun

1. the quality of being interior or inward.
2. subjectivity in space in terms of the connotations, denotations and appropriations of its inhabitants.
3. inner life or substance : psychological existence (Dictionary, 2006).

- s'pitori

/s-pi-tawr-ee-uh/

lingua franca

1. a linguistic composition of lexical items from multiple recognised languages
2. an appropriation of terms, words and phrases that an agent of amalgamation where conflict arose between the various cultures and languages (Bornman et al, 2018:30).

- interface

/ˈɪntəfeɪs/

noun

1. a point where two systems, subjects, organizations, etc. meet and interact (Dictionary, 2006).
2. a spatial device that enables an interaction between users, rituals, systems, and appropriations. In the project it serves as a mediator or touchpoint between concepts, people and phenomena (Author, 2021).

- ethnography

/ɛθˈnɒgrəfi/

noun

1. a branch of anthropology and the systematic study of individual cultures from the point of view of the subject of the study
2. the scientific description of peoples and cultures with their customs, habits, and mutual differences (Dictionary, 2006).

- meaning-making

/ˈmiːnɪŋ/- /ˈmeɪkɪŋ/

noun

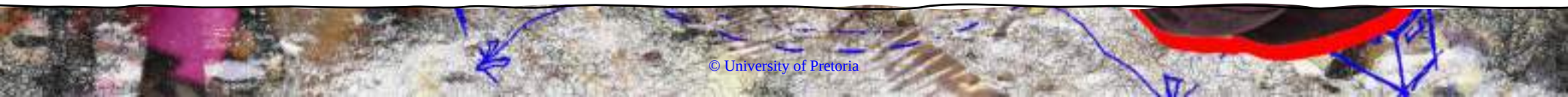
1. the process of making or producing something significant that is not directly expressed, an object of importance or a worthwhile quality; purpose
2. the essential qualities needed for something to put parts together or combine substances (Dictionary, 2006).

- sit-thing

/sɪt/ - /θɪŋ/

noun

1. a mechanism that can be used as a sitting device. Building on the notion of a chair, a sit-thing becomes an adaptable element that can be used in various scenarios as an element of comfort (Author, 2021).

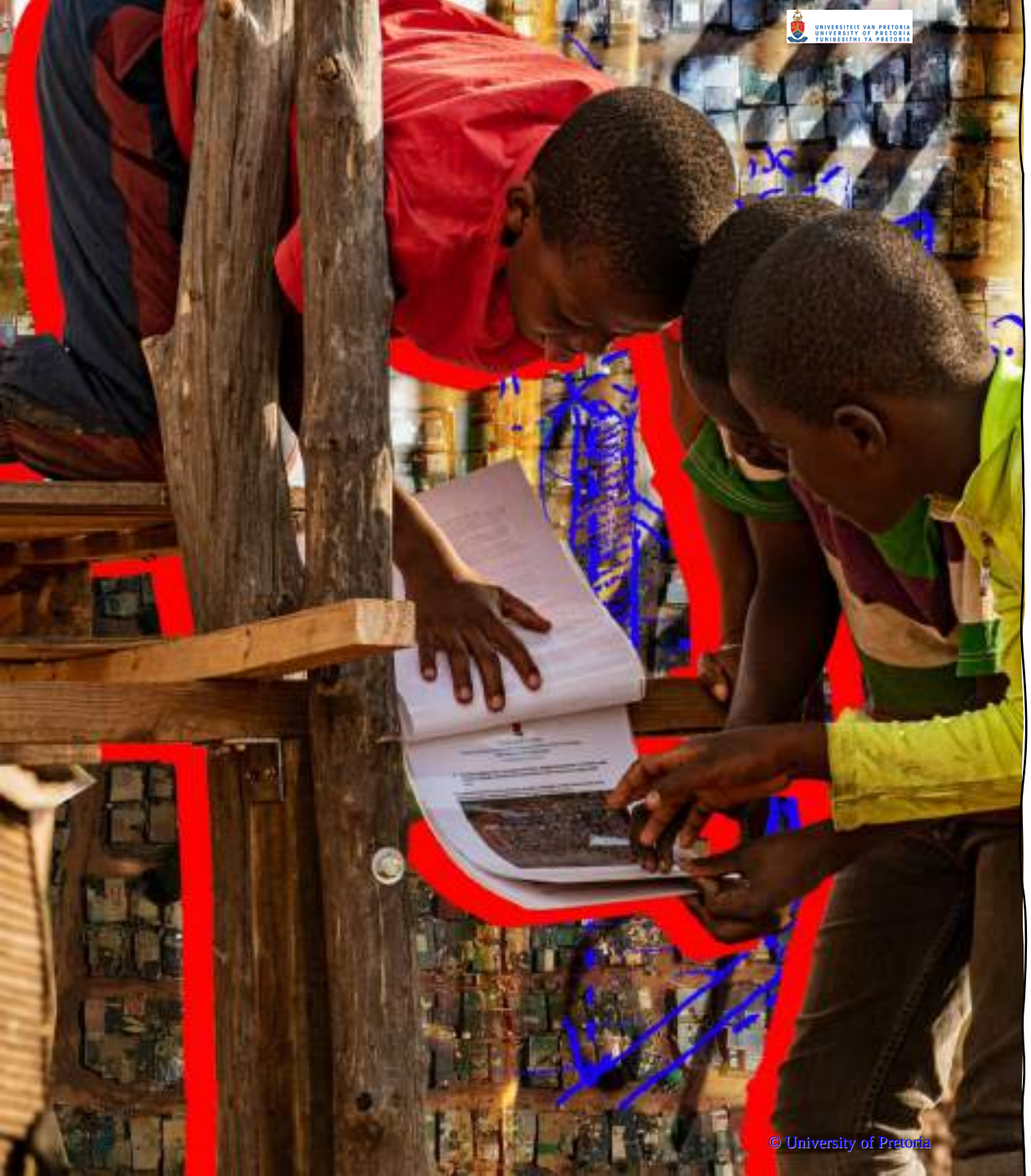


Ethical Declaration

ETHICAL CONSIDERATIONS

All sensitive imagery used are published and in the public domain. Images taken on site were done so with permission and used to depict the realities of life in the settlement. The intention is not to romanticise these scenarios nor to provoke. The project merely aims to respond to these realities. The research falls within the Urban Citizenship Studio's ethical clearance as an extension of the Department of Architecture of the University of Pretoria. The research conducted was done so in compliance with the University of Pretoria's code of ethics conduct.

All information gathered is stored safely and all published information was done so with the permission of the collaborators and participants. . When conducting the research on site participants were given a clear choice to participate and could terminate the conversation at any point during the process. The intent of the research was declared up front and the researcher tried to sustain a transparent relationship about the use of information and implications of participation. Please see the ethical addendum for further details.



Declaration

DECLARATION OF INTENTIONS AND BIASES

I am undertaking a professional masters in interior architecture as an attempt to create a platform for myself to continue working therein after completion of the year. I truly enjoy all that the industry has to offer and strive to contribute to that. I do not intend to ever stop learning but this year will serve as the pinnacle of my academic career, and I hope that it equips me with all the tools I need to voice my beliefs and amplify my views. I also hope to meet and engage with like-minded people in the strive to expand our industry. I'm confident that this masters will expand my knowledge, bring together some aspects and theories still floating around in my head and above all supplement my love for the creative integration of information taking form.

The projects' intention is to **ESTABLISH A ROLE FOR INTERIOR ARCHITECTURE IN INFORMAL SETTLEMENTS THROUGH AN INVESTIGATION OF A COLLABORATIVE DESIGN PROCESS THAT AIMS TO ENABLE AGENCY THROUGH A RESPONSIVE SPATIAL OUTCOME TO DEMONSTRATE A HUMAN-CENTERED NORMATIVE APPROACH TO POETIC PHENOMENON.**

To overcome potential biases presented by the project intentions there will be several intervals of critical reflection as well as continuous sessions with external parties, members of the community, professionals and peers.

Declaration

STAKEHOLDERS AND INVOLVED PARTIES

CLIENT: SACARESFORLIFE NGO

INTERNAL

COMMUNITY LEADERSHIP STRUCTURE

WILLING PARTICIPANTS

FOREIGN CITIZENS

SOUTH AFRICAN CITIZENS

SUPPORTIVE

OTHER NGO'S ACTIVE IN THE SETTLEMENT

UNIT OF URBAN CITIZENSHIP

URBAN CITIZEN STUDIO

Me!

MORELETA PARK HOMEOWNERS

CONTESTANT

ORGANISATIONS OPPOSING THE SETTLEMENT

TSHWANE METROPOLITAN POLICE SERVICE

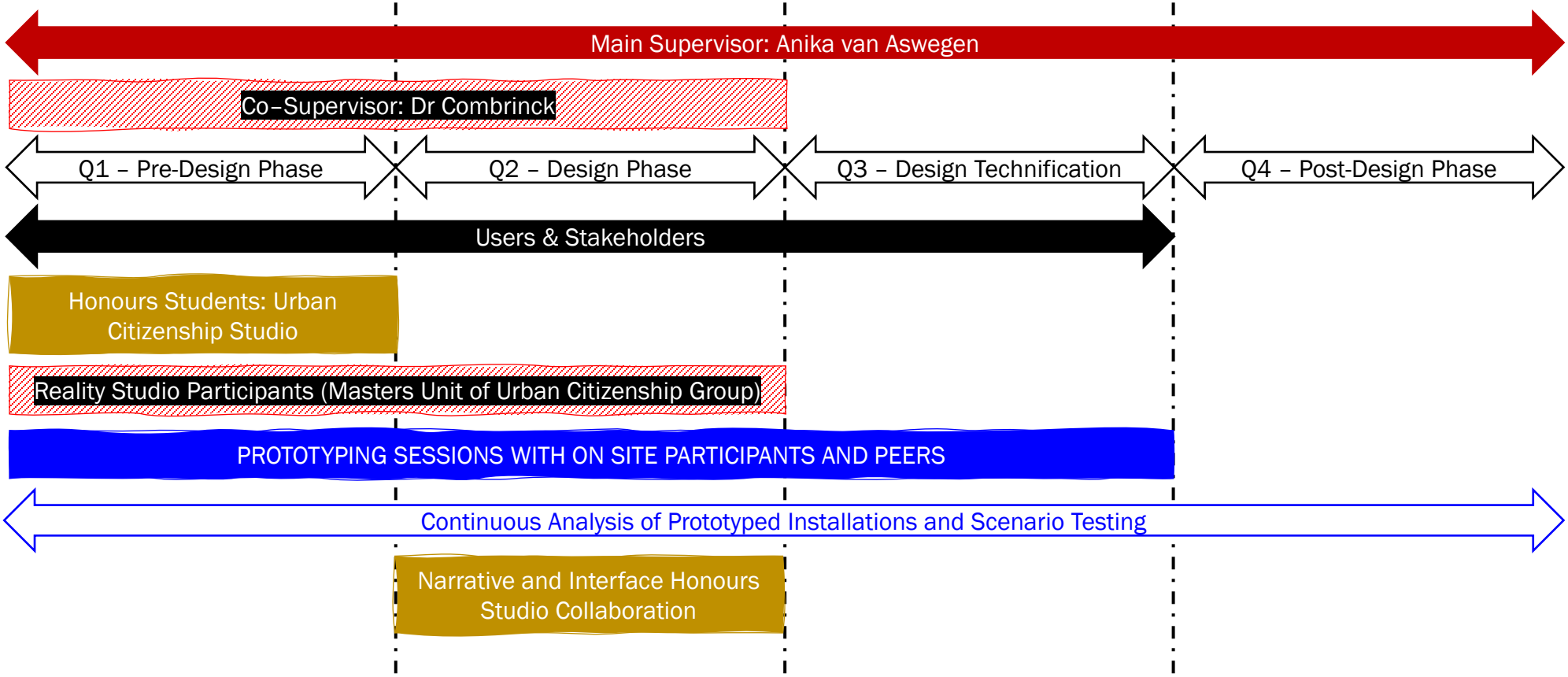
COMMUNITY CARING FORUM (CCF)

COMMUNITY CARING FORUM
Together We Make a Difference

EXTERNAL

Declaration

COLLABORATORS AND PARTICIPANTS



Declaration

Demolition of on-site structures that caused tension between inhabitants and external parties

Third wave of the global pandemic freezing all on-site work and altering the design process

Fourth wave of the global pandemic impacting on-site prototypes and live build

Co-Supervise[illegible]

Q1 – Pre[illegible]

Q2 – Design Phase

Q3 – Design Technification

Q4 – Post-Design Phase

Ethical Roadmap to Student engagement with vulnerable communities accompanied by an EXTREME EXISTENTIAL CRISIS

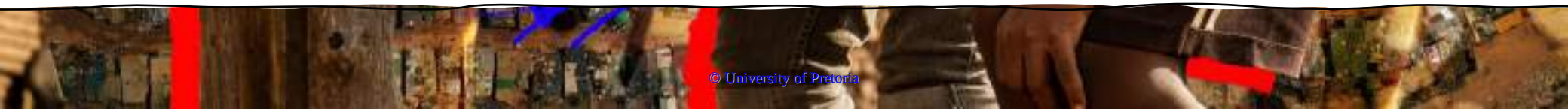
Nationwide unrest, looting and rioting actions.

Devastating fire in the settlement

PROTOTYPING SESSIONS WITH ON SITE PARTICIPANTS AND PEERS

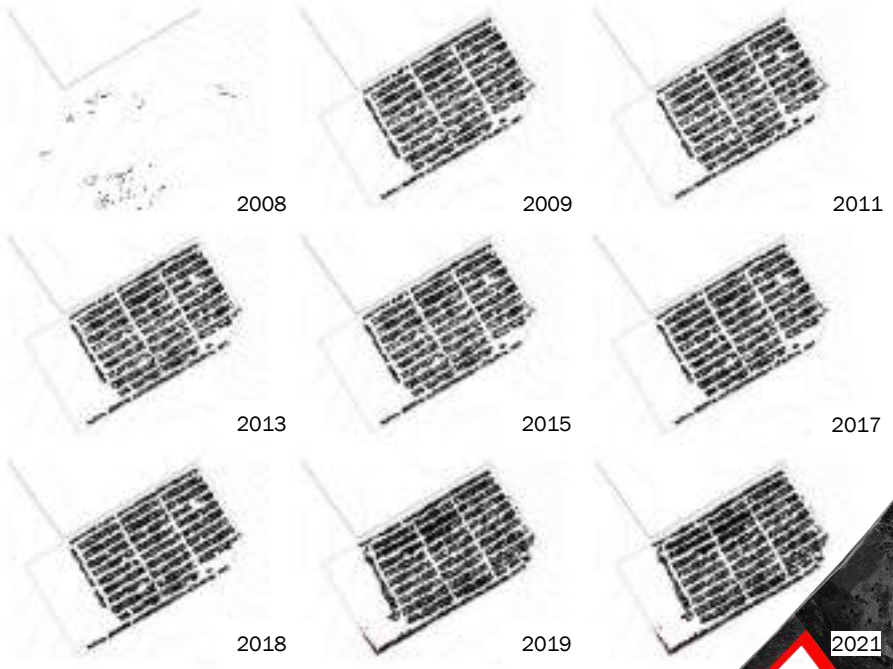
Continuous Analysis of Prototyped Installations and Scenario Testing

Narrative and Interface Honours Studio Collaboration



Introduction to Site

PLASTIC VIEW, MORELETA PARK



(Moreleta Park Integration Project, 2020)

Plastic View is a spontaneous urban settlement in Moreleta Park, Pretoria, that developed due to various complex systemic injustices. The settlement is currently home to various local and foreign inhabitants that rely on the settlement for jobs, shelter and basic resources. The settlement has a history of eviction and conflict with the surrounding communities but has since been legitimised. There are instances of inhabitants preferring the settlement as a home, with others merely using it as a solution. There are also both temporal and permanent settlers within Plastic View.

Lack of opportunity, Work.

GENERAL ISSUE

Only living in plastic view as a **solution** to transport (high rates of transportation to work). Not home.

Method of **COMMUNICATION** (language as currency)

SEMIOTIC approach to association and interpretation of space

SPI TORI

MEANING MAKING

Doesn't empower spatial agency.

Refugees living in the area, tension between cultures

URBAN ISSUE

The **integration** of refugees into the South African Rainbow Nation. The disconnect between Plastic View and Marietta Park?

No **threshold** spaces, common grounds or places of expression

SPATIAL ISSUE

Spaces don't regulate or enable inhabitants. No platform for **Meaning-making** to manifest. Focus on basic provision, nothing more.

The Apartheid regime's spatial planning of exclusion still holds various cultures and geographically placed groups on the outskirts of Pretoria's metropolis. This is a contributing factor to the establishment of informal settlements in Pretoria as people need to be closer to work and opportunities of work. This cumulates to the general issue as a large component of people living in Plastic View are only doing so as a solution or means to an end. Its not home or their dwelling but merely a space to survive.

The spatial issue links directly to both the urban- and the general issue that stems from the generalisation of informal settlements as a whole. The housing schemes, urban development and education was a generic response that does not take into the consideration the lively existence of the residents. There are no platforms for meaning to physically manifest or any provided notion of spatial agency (as an extension of interiority).

Woodlane Village, also known as Plastic View, is at present a mixed pot of various cultures that can become a point of tension on an urban scale. This seeps through their behaviour and takes form in acts of violence, exclusion, demolition, looting and creates social imbalance. There is also a large disconnect between the settlement and the surrounding area that booms with estates and lavish new developments. The platform for integration of both refugees and residents falls short of the richness and layered constitution that they sought refuge from.

As a response to the contextual issues the informal settlement Woodlane Village was chosen. The site is ideally situated as a potential link between the various culture groups (much like the lingua franca, S'pitori) and provides opportunity for expanding into the communities.

Looking at the diagrammatic representation of the contextual issues there are clear overlaps between all the contextual issues and at the centre of it all is the lingua franca, S'pitori.

Bornman et al. (2018:30) defines S'pitori as a linguistic composition of lexical items from multiple recognised languages found in the South African constitution. A study conducted by the honours Urban Citizenship Studio in February 2020 brought to light the rich foundation for language within Mamelodi's educational landscape (Urban Citizen Studio Mamelodi, 2020). S'pitori acted as an agent of amalgamation where conflict arose between the various cultures and languages found in the school. The scenario in Plastic View becomes the case study wherein the research can be conducted. In this way the research proposal intends to tackle the contextual issues through a semiotic approach and provides an opportunity for interiority to manifest through indexicality by doing so.

Problem Statement

"WE RAN OUT HERE TO MAKE A LIFE. I MEAN THERE IS NO PLACE LIKE HOME. BUT IF HOME NO LONGER FEELS LIKE HOME, WE ARE LOST. WE ARE A LOST GENERATION."
(De Vos and Banda, 2019)

"A place of promise and heartache, a place of perseverance and faith, a place where personal histories reveal complex social truths."
(De Vos and Banda, 2019)

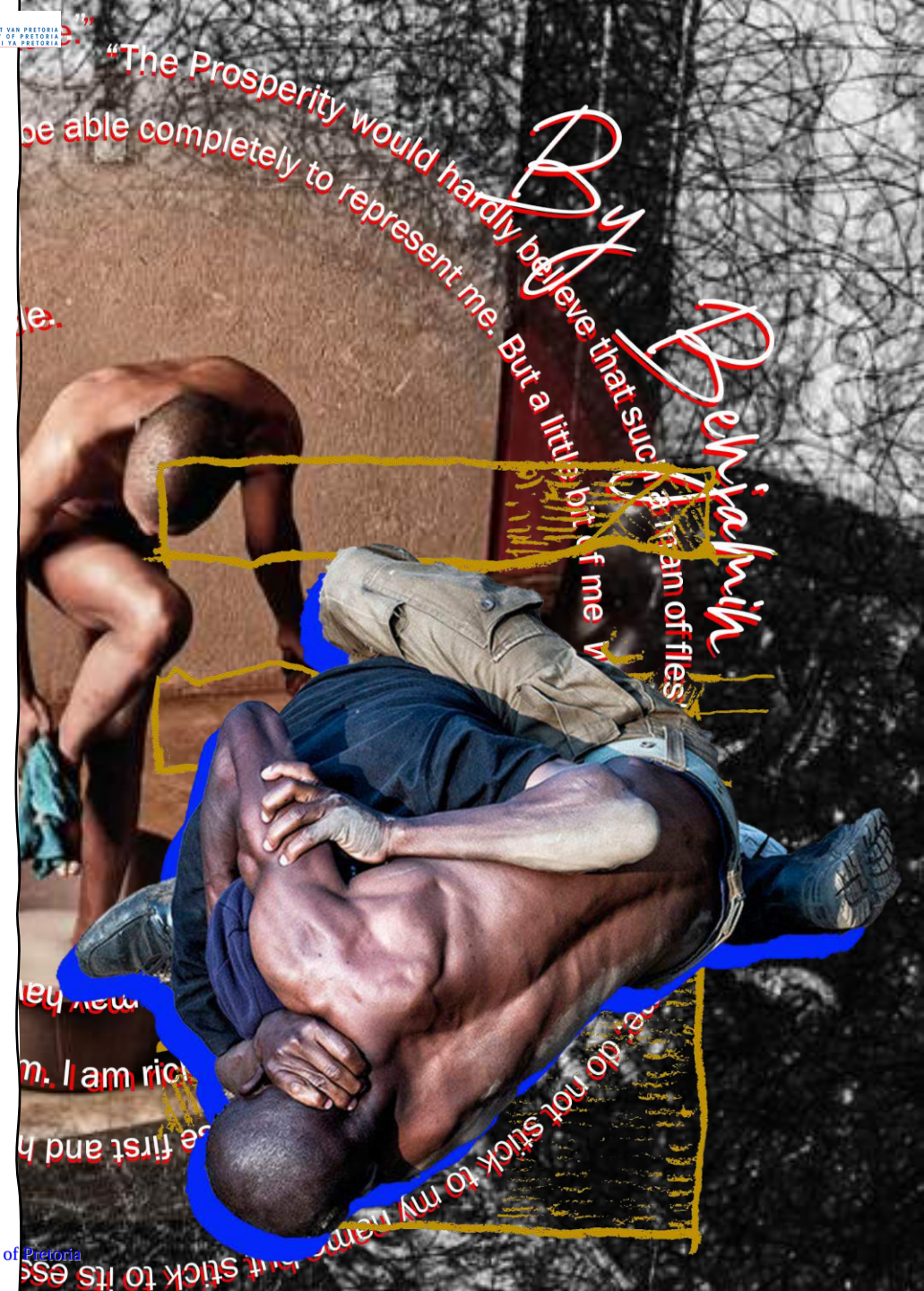
"To my compatriots, I have no hesitation in saying that each one of us is as intimately attached to the soil of this beautiful country as are the famous jacaranda trees of Pretoria and the mimosa trees of the bushveld.

Each time one of us touches the soil of this land, we feel a sense of personal renewal. The national mood changes as the seasons change.

We are moved by a sense of joy and exhilaration when the grass turns green and the flowers bloom.

That spiritual and physical oneness we all share with this common homeland explains the depth of the pain we all carried in our hearts as we saw our country tear itself apart in a terrible conflict, and as we saw it spurned, outlawed and isolated by the peoples of the world, precisely because it has become the universal base of the pernicious ideology and practice of racism and racial oppression.

We, the people of South Africa, feel fulfilled that humanity has taken us back into its bosom, that we, who were outlaws no so long ago, have today been given the rare privilege to be host to the nations of the world on our own soil."
(Mandela, 1994)



Research Question

WHAT IS THE ROLE OF INTERIOR ARCHITECTURE, AS AN AGENT OF MEANING-MAKING, IN AN INFORMAL SETTLEMENT THAT IS HOST TO BOTH TEMPORAL AND PERMANENT INHABITANTS OF ETHNOGRAPHIC VARIETY?

Design Question

HOW CAN THE SEMIOTIC/INDEXICAL NATURE OF S'PITORI INFORM THE PHYSICAL MANIFESTATION OF MEANING – MAKING THROUGH A COLLABORATIVE EXPLORATION OF SPATIAL AGENCY IN AN INFORMAL SETTLEMENT WITH ETHNOGRAPHIC VARIETY?

Technical Question

HOW CAN AN ITERATIVE TECHNIFICATION PROCESS THROUGH PROTOTYPING AND ANALYSIS SERVE AS AN AGENT OF SEMIOTIC CULTURAL PRODUCTION BY INCLUDING THE USERS AS CONTINUOUS CORE INFORMANTS AND COLLABORATORS?

Theoretical Influence

- CULTURAL PRODUCTION
- SPATIAL AGENCY

HOW CAN THE SEMIOTIC/INDEXICAL NATURE OF S'PITORI INFORM THE PHYSICAL MANIFESTATION OF MEANING – MAKING THROUGH A COLLABORATIVE EXPLORATION OF SPATIAL AGENCY IN AN INFORMAL SETTLEMENT WITH ETHNOGRAPHIC VARIETY?

- PUBLIC INTEREST DESIGN
- EXHIBITION DESIGN

SPACE AS DIALECT BETWEEN MEANING AND USER

SEMIOTIC APPROACH TO MEANING-MAKING

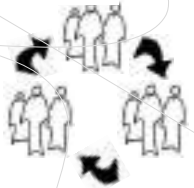
IDIOSYNCRATIC INTERPRETATIONS

MEANING MAKING THROUGH PARTICIPATION

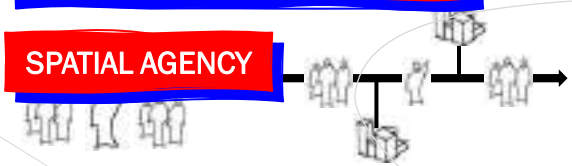
POWER STRUCTURES

SWITCHING POWER TO GIVE ACCESS TO RESOURCES THAT GENERATE MEANING

Themes Emerging



- CULTURAL PRODUCTION
- SPATIAL AGENCY



INDEXICALITY AS AN INCARNATION OF INTERIORITY

HOW CAN THE SEMIOTIC/INDEXICAL NATURE OF S'PITORI INFORM THE PHYSICAL MANIFESTATION OF MEANING – MAKING THROUGH A COLLABORATIVE EXPLORATION OF SPATIAL AGENCY IN AN INFORMAL SETTLEMENT WITH ETHNOGRAPHIC VARIETY?

- PUBLIC INTEREST DESIGN
- EXHIBITION DESIGN

HAMDI'S SMALL CHANGE

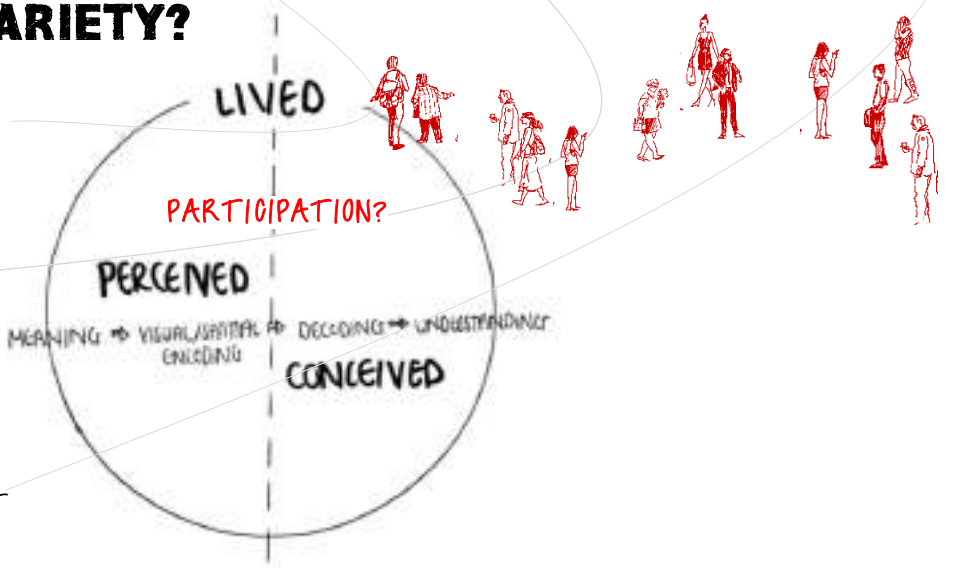
MULTI-SCALAR SPATIAL AGENCY

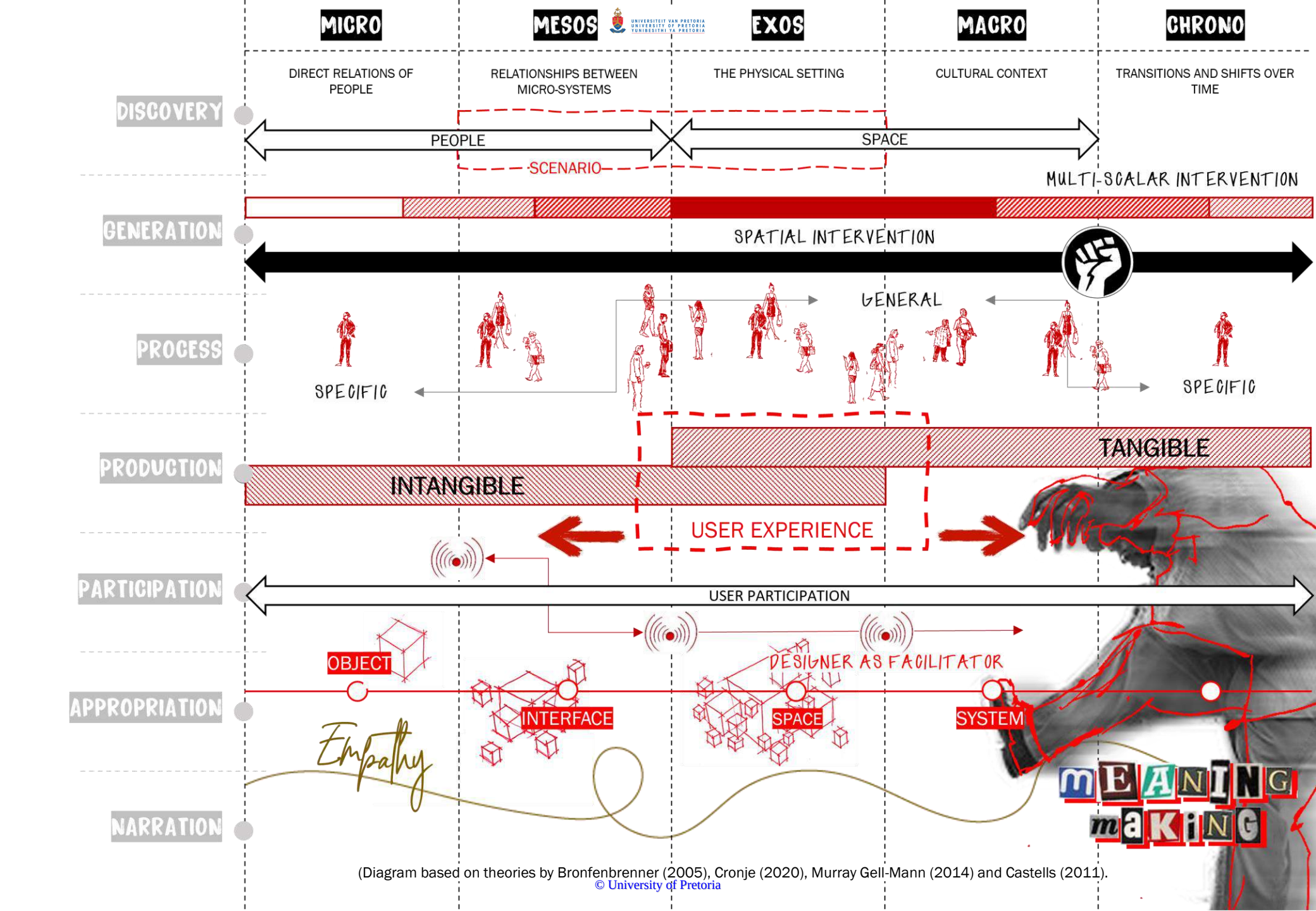
INTERIORITY

CELEBRATIONS OF EPHEMERALITY

INTERIOR ARCHITECTURE AS AN AGENT OF CULTURAL PRODUCTION

DEFINING THE ROLE OF AN INTERIOR ARCHITECT

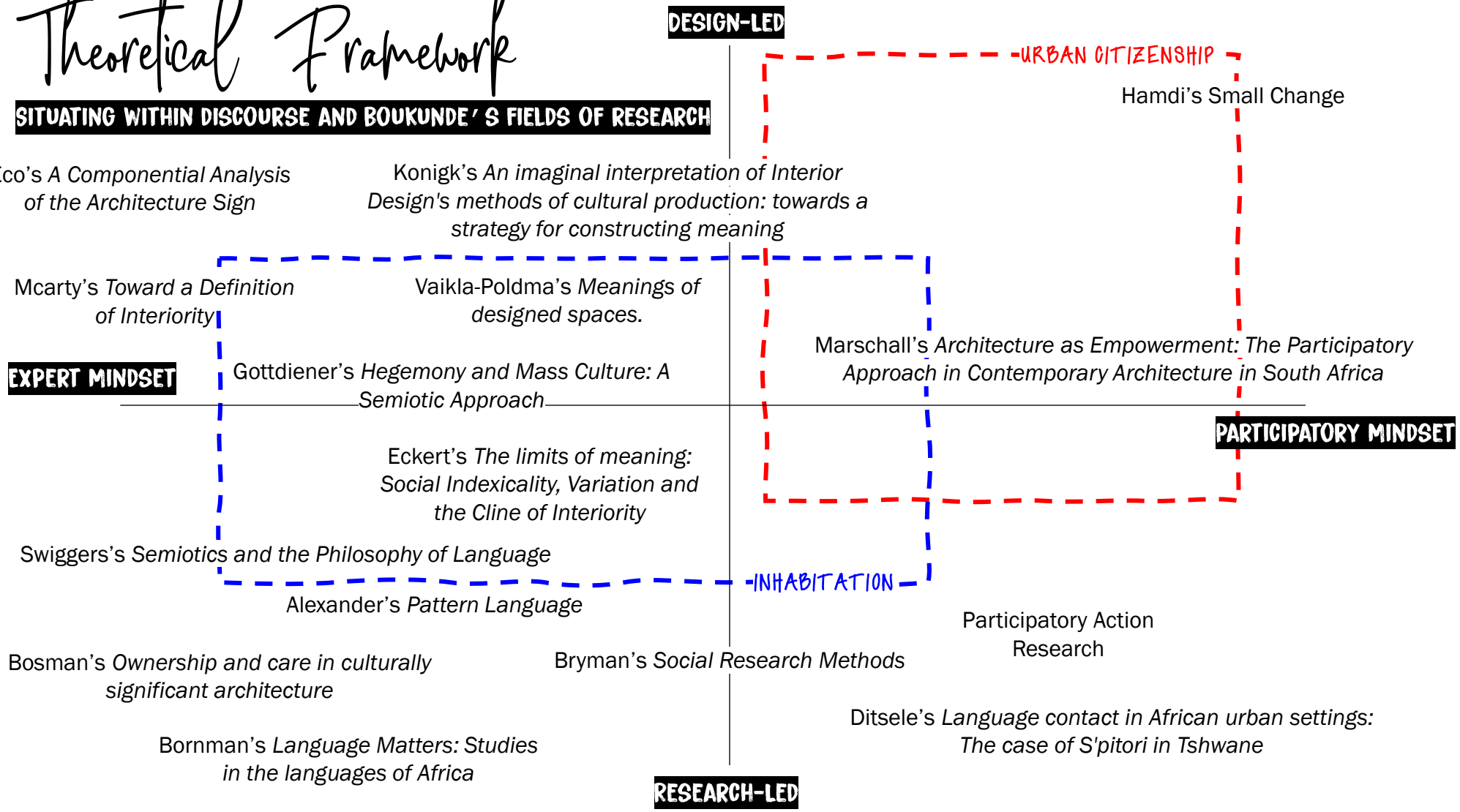




(Diagram based on theories by Bronfenbrenner (2005), Cronje (2020), Murray Gell-Mann (2014) and Castells (2011).

Theoretical Framework

SITUATING WITHIN DISCOURSE AND BOUKUNDE'S FIELDS OF RESEARCH



Theoretical Framework

SITUATING WITHIN DISCOURSE AND BOUKUNDE'S FIELDS OF RESEARCH

DESIGN-LED

URBAN CITIZENSHIP

Hamdi's Small Change

The contribution of the research lies in the overlapping nature thereof that serves as a bridge between various theories, research fields and methodologies.

Eco's *A Componential Analysis of the Architecture Sign*

Konigk's *An imaginal interpretation of Interior Design's methods of cultural production: towards a strategy for constructing meaning*

Mcarty's *Toward a Definition of Interiority*

Vaikla-Poldma's *Meanings of designed spaces.*

EXPERT MINDSET

Gottdiener's *Hegemony and Mass Culture: A Semiotic Approach*

Marschall's *Architecture as Empowerment: The Participatory Approach in Contemporary Architecture in South Africa*

PARTICIPATORY MINDSET

Eckert's *The limits of meaning: Social Indexicality, Variation and the Cline of Interiority*

Swiggers's *Semiotics and the Philosophy of Language*

INHABITATION

Alexander's *Pattern Language*

Participatory Action Research

Bosman's *Ownership and care in culturally significant architecture*

Bryman's *Social Research Methods*

Ditsele's *Language contact in African urban settings: The case of S'pitori in Tshwane*

Bornman's *Language Matters: Studies in the languages of Africa*

RESEARCH-LED

Research Methodology

COMBINED METHODOLOGY - CONSTRUCTIVIST PARADIGM

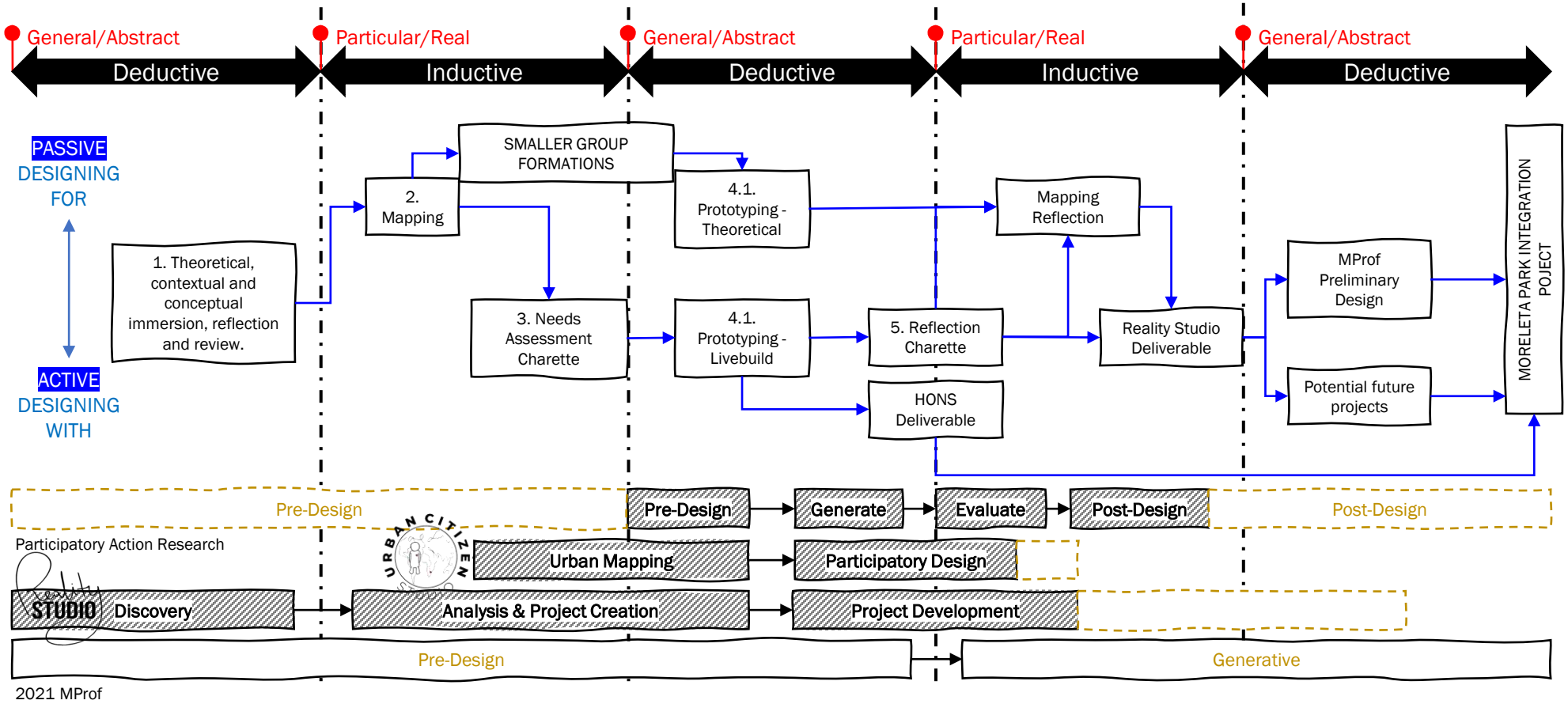
The project is situated within a larger ongoing research project conducted by the University of Pretoria's Department of Architecture, Unit of Urban Citizenship called **The Moreleta Park Integration Project**. This project had the privileged of being apart of the annual Reality Studio as hosted by the Chalmers University of Technology in Sweden. The theme for this year's Reality Studio projects is 'Designing for Dignity' and encourages a collaborative design process to generate human-centered, responsive design outcomes.

Together with students from the Chalmers University of Technology , honours students from the University of Pretoria who take part in the Unit of Urban Citizenship and fellow masters students we undertook vigorous mapping with the intention of undertaking a **process of prototyping.** All the work done as a larger unit contributes to the individual project and provides a valuable platform for communal growth that stems from the **Participatory Action Research Methodology.**

Along with the group methodology, my individual methodology is based on work done by Teo Yi Siang & The Interaction Foundation (2020) that structures the design process as outlined alongside. This process becomes more rhizomatic than linear and allows a iterative design and technification process. The project required a deep immersion into site and context throughout and thus the research methodology might adapt based on the needs of the project. The research is situated within the constructivist paradigm as it focuses on phenomena and meaning.

Research Methodology

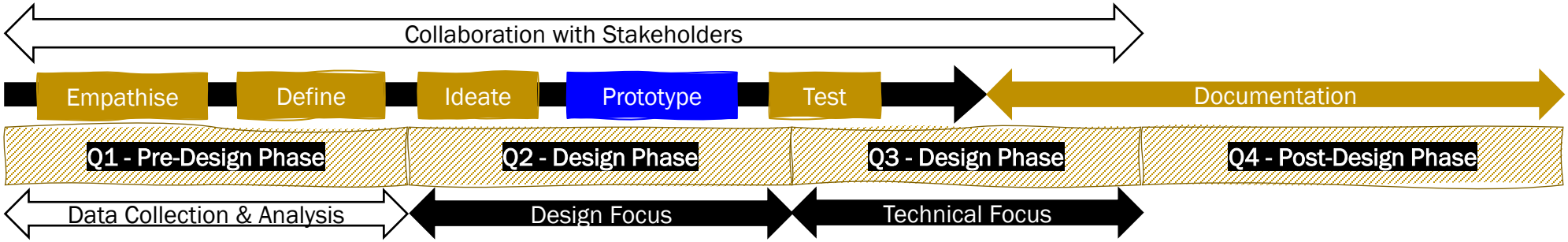
MORELETA PARK INTEGRATION PROJECT GROUP METHODOLOGY



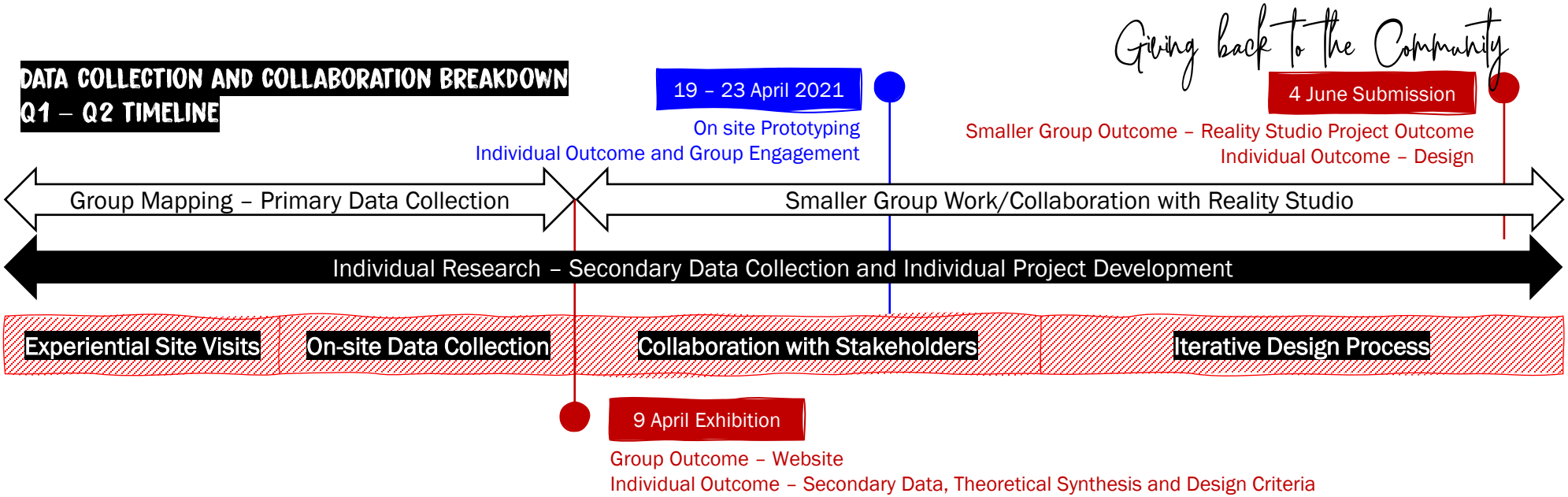
(Adapted from Howard and Somerville 2014, Sanders and Stapers 2014, Saldana 2013)

Research Methodology

YEAR TIMELINE



DATA COLLECTION AND COLLABORATION BREAKDOWN Q1 – Q2 TIMELINE



Research Methodology

THE JOURNEY TO PARTICIPATORY ACTION RESEARCH

DESIGN-LED

EXPERT MINDSET

PARTICIPATORY MINDSET

RESEARCH-LED

ITERATIVE DESIGN PROCESS

PROTOTYPING

1

2

3 ...

THEORETICAL FRAMEWORK AND DESIGN CRITERIA

SECONDARY DATA

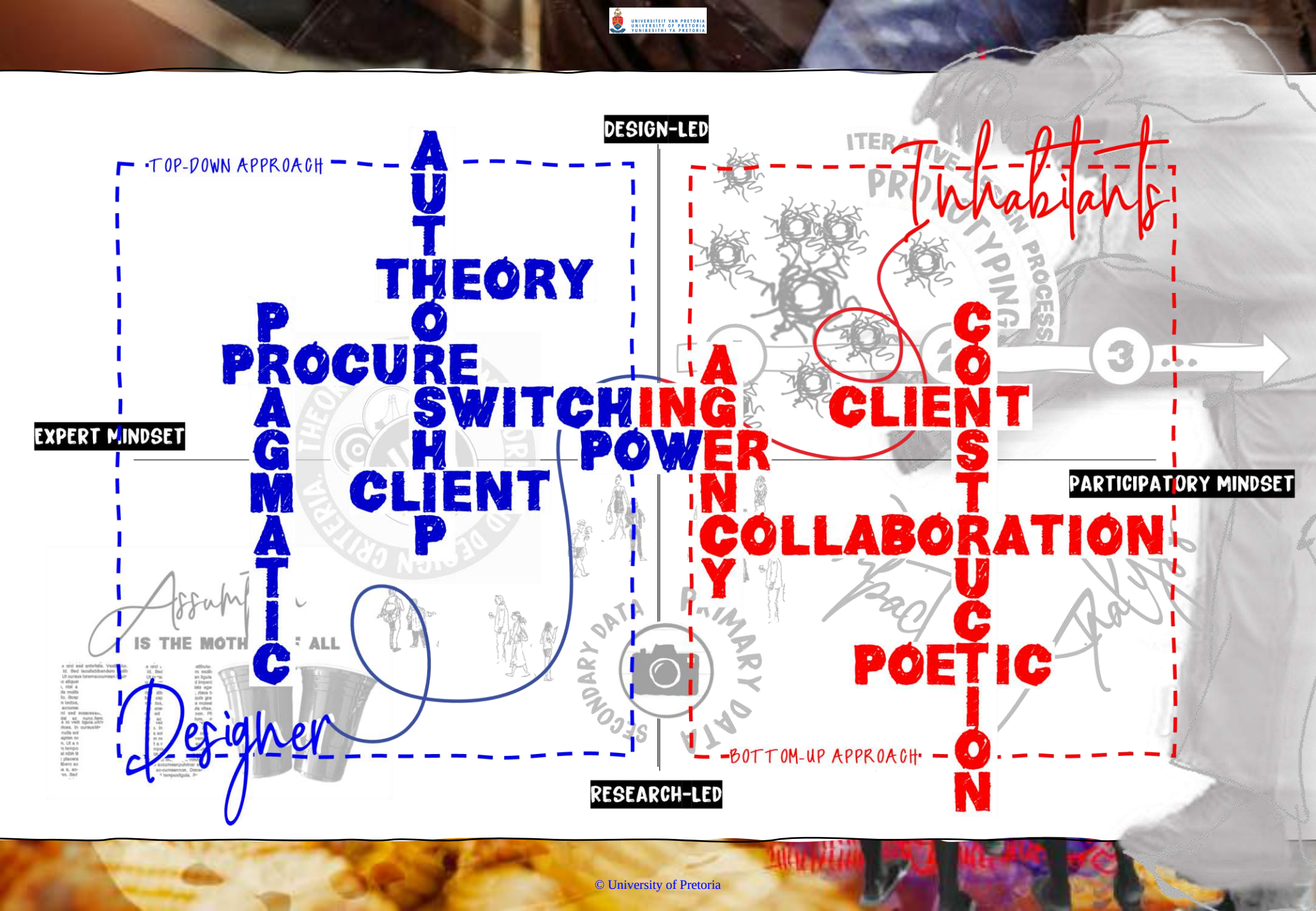
PRIMARY DATA

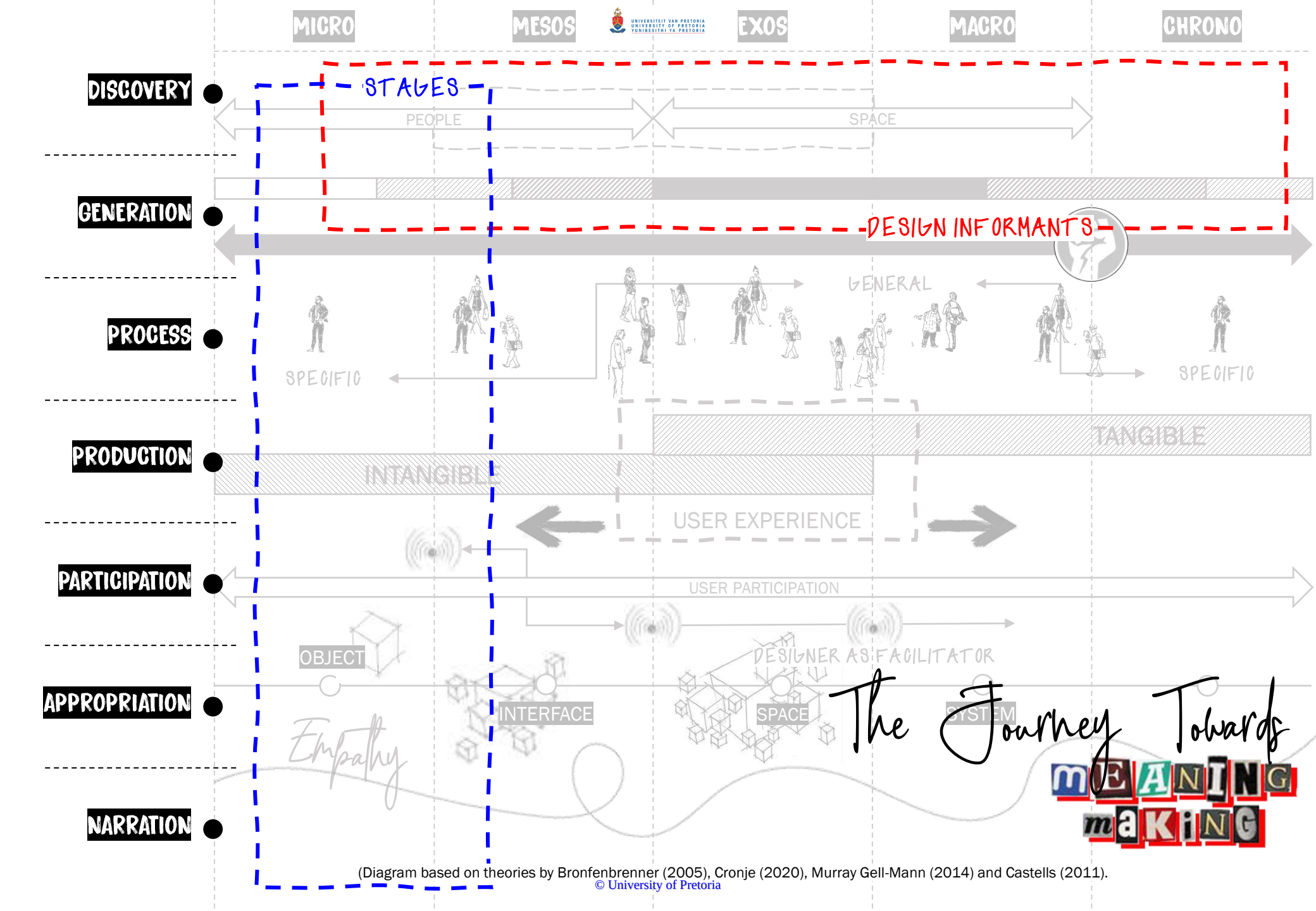
Assumption

IS THE MOTHER OF ALL

FU

Impact





(Diagram based on theories by Bronfenbrenner (2005), Cronje (2020), Murray Gell-Mann (2014) and Castells (2011).

Delineation & Limitations

ON-SITE DATA COLLECTION

DATA COLLECTION LIMITATIONS

DIGITAL TECHNOLOGY

STRENGTHS
- Fast
- Effective
- Pre sorted
- Location-based
- Multi-user

LIMITATION
- Impersonal
- Cant read body language
- Privileged outsider

FIELD WORK

STRENGTHS
- On site understanding
- Immersed
- Interact with community
- Observations
- Leave behind bias
- Break assumption

LIMITATION
- Safety within a unknown location
- Covid-19 pandemic restrictions
- Sanitation and air quality
- Outsider

INTERVIEWS

STRENGTHS
- Open and honest
- Intention research
- Conversation
- Empathy
- Data collection
- In depth conversation

LIMITATION
- Language barriers
- Detailed questions
- Formal interviews
- Set interviews were not flexible
- to conversation making

DELIMITATIONS

INTERVIEWS:
Eppicollect interviews were changed to paper interviews after it was found that semi-structured interviews worked better. Allowing for a flexible conversation.

QUESTIONNAIRES

STRENGTHS
- Privacy
- Large quantities

LIMITATION
- Language barriers
- Lack of phones or data
- No contact base

VISUAL RESEARCH

STRENGTHS
- Photographic evidence
- External review
- Visual book

LIMITATION
- Not all want photographs taken
- Wrongly interpreted
- Can be used against community

(Moreleta Park Integration Project, 2021)

Data Collection

MORELETA PARK INTEGRATION PROJECT

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Chalmers M(Arch)

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Nick Ramsey
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Alexander Mbedzi
UP M(Arch) Prof

Chris De Bruin
UP M(Arch) Prof

EMPATHY MAPPING

1. People-Scenario-Space
   Greater Ritual
   Understanding
   Knowledge Transferal
   Language

SOCIO-SPATIAL CATALOGUING

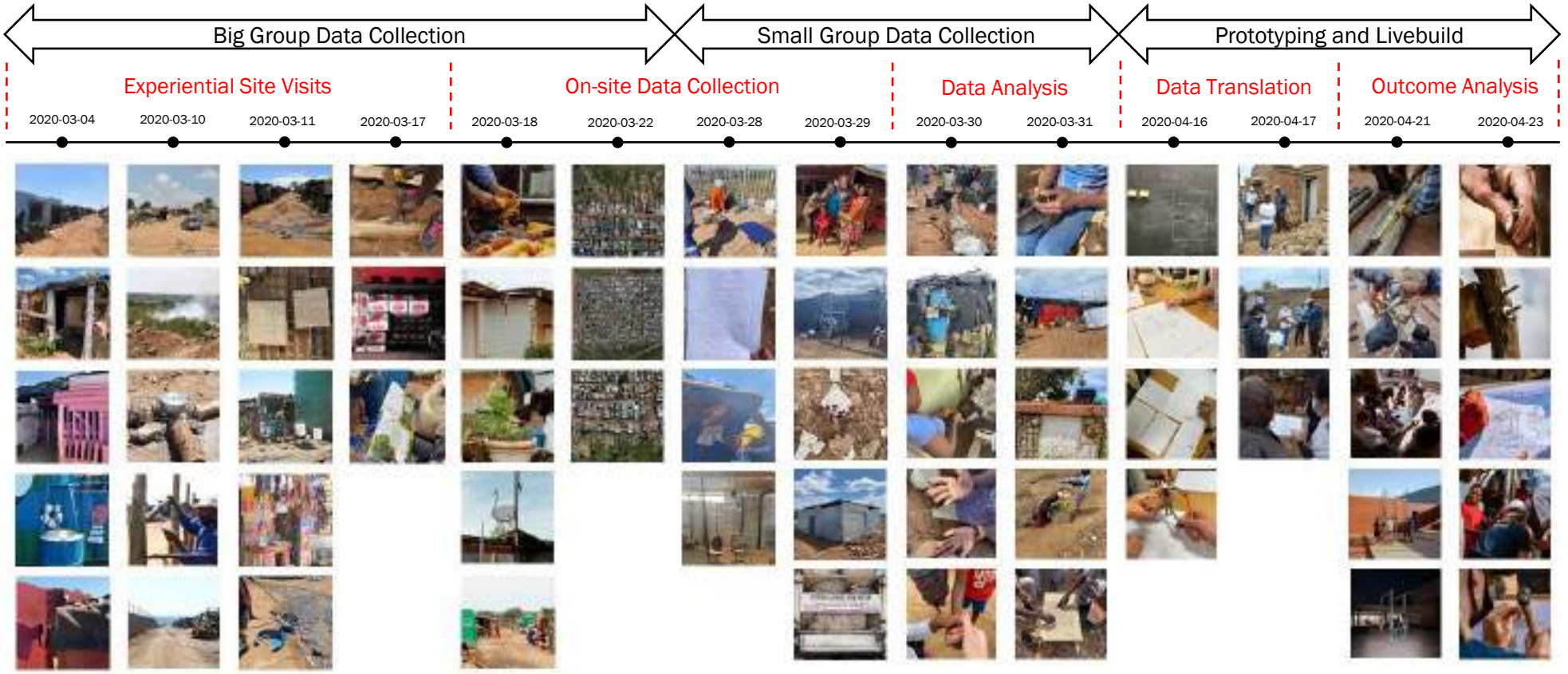
2. Predicting the Future City
   The inherent act of hyper-optimisation
   Third Spaces and Places
   Safety, Surveillance and (IN)security
   Role and Potential of Architecture

CIRCULAR MATERIAL FLOW

3. Knowledge Capital
   Augmented Built Forms
   Potential for Upgrading
   Spatial Recommendations

Data Collection & Analysis

TIMELINE



Prototyping Process

LIVEBUILD – PLATFORM FOR ENGAGEMENT

INFLUENCE

1. PRACTICAL : TRANSPORT
   - MODULARITY / MOBILITY
2. CONSTRUCTION RUBBLE FOUND ON SITE
3. NOT ALLOWED TO BUILD PERMANENT STRUCTURES
4. LACK OF SERVICES
   - FUTURE PLANNING
5. RESIDENTS STORE THINGS ON THEIR ROOFS / IN FRONT / ALLEYS
6. DENSIFIES EACH YEAR
   - URBAN SPRAWL
7. SOLUTIONS ON SITE WITH WHAT THEY HAVE
   - RESILIENCE

PRINCIPLES

DESIGN FOR DECONSTRUCTION

USE AVIALABLE/AFFORDABLE MATERIALS

ADDRESS TEMPORALITY/MOBILITY

ACCOMMODATE FUTURE SERVICES

ACCOMMODATE NEED FOR STORAGE

ADDRESS DENSIFICATION

DESIGN FOR APPROPRIATION

(Moreleta Park Integration Project, 2021)

EXECUTION

1. DESIGN OF CONNECTIONS
   - MATERIAL CHOICE
2. COST ESTIMATE
   - MATERIALS/TOOLS USED
3. NO WET CONSTRUCTION
   - REPLACEABLE MATERIALS
4. RAISED PLATFORM
5. RAISED PLATFORM
6. STRUCTURALLY SOUND SECOND FLOOR
7. MODULAR STRUCTURE
   - OPEN FOR INTERPRETATION

PREDESIGN

Coming together as a large group to discuss opportunities and needs within the settlement.

DESIGN

Designing a platform for engagement between community and researchers.

MATERIAL SOURCING

Sourcing local materials found in the settlement and surrounds to enable accessible construction.

CONSTRUCTION

Testing various methods of construction to ensure intentions can be materialised.

ASSEMBLY TESTING

Assembling the pavilion at Boukunde to ensure stability and test full scale implications.

DISASSEMBLY

Disassembling the structure to test the mobility and accessible deconstruction of the structure.

ON-SITE ASSEMBLY

Transporting the disassembled members to site and constructing the structure.

REFLECTION

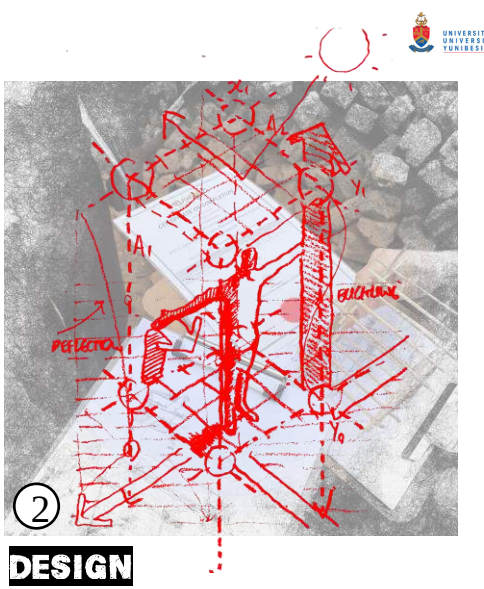
Reflecting on the process as a whole as well as analysing the implications thereof.

(Moreleta Park Integration Project, 2021)

1

PREDESIGN

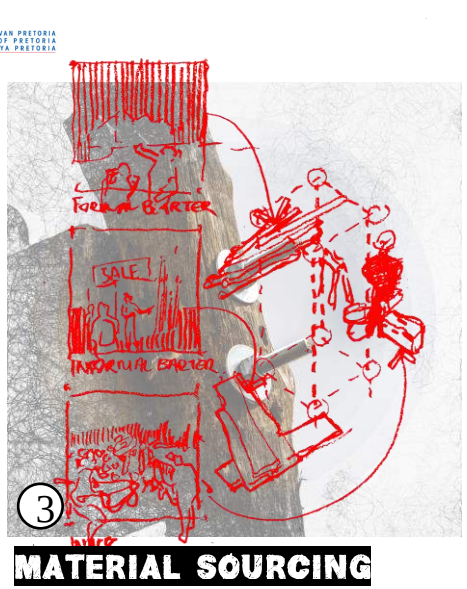
Coming together as a large group to discuss opportunities and needs within the settlement.



2

DESIGN

Designing a platform for engagement between community and researchers.



3

MATERIAL SOURCING

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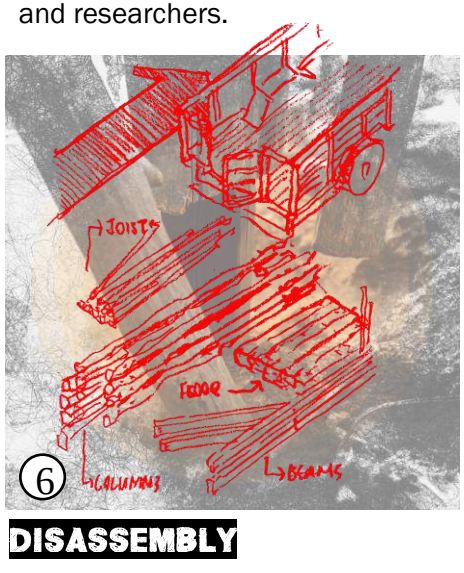

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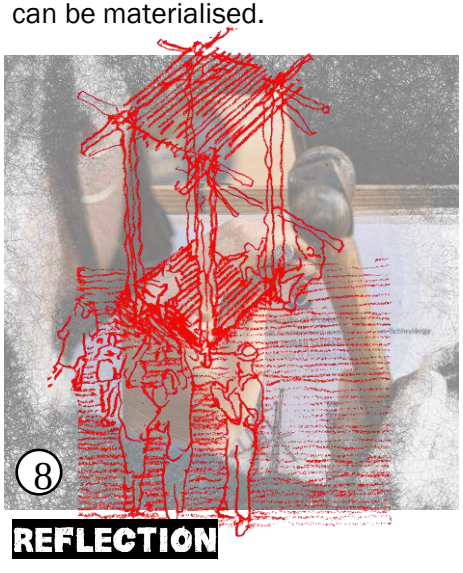
DISASSEMBLY

Disassembling the structure to test the mobility and accessible deconstruction of the structure.

7

ON-SITE ASSEMBLY

Transporting the disassembled members to site and constructing the structure.



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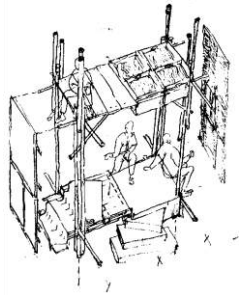
REFLECTION

Reflecting on the process as a whole as well as analysing the implications thereof.

(Moreleta Park Integration Project, 2021)

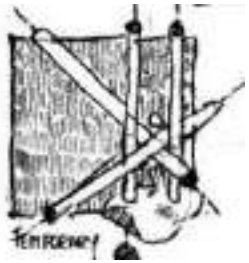
Prototyping Process Reflection

IMPORTANT LESSONS LEARNT



Co-Design vs Spatial Agency

As a large unit the intentions of the prototyping process was to include the community throughout but unfortunately circumstances didn't allow for such collaboration. There was a feedback session with community members that allowed for an iterative design process, but the end product remained a design that allowed for spatial agency. This provides a platform for engagement for us and the community throughout the year.



Design Intent vs Execution

The intention of the prototype was that is can easily be assembled, disassembled and reassembled but throughout the construction process we learnt saw that the joints were a lot more difficult to disassemble in reality than in theory. This becomes a crucial informant and also justifies the prototyping process to ensure that the human-centered aspect of the project gets pulled through to the execution thereof.

The story of Jacob's Pants

A member of the community made pants for Jacob as a birthday gift. When learning that the pants ripped at his birthday party the community member smiled and said, "we will design the next pants to rip". This serves as a precedent (and comparison to our on-site prototype) of an iterative design process that responds to the phenomena it addresses. It also highlights the significance of meaningful objects and the experiences it elicits.

Design Informants

KNOWLEDGE TRANSFERAL

Through outside knowledge gained from labour the expertise needed were appropriated to be built from available material with tools found on site.

The social interaction at a hairdresser's working station provides an opportune moment for knowledge exchange and teaching the profession.

Access to local TV shows and stories provides the platform for learning from an external point. This also becomes a powerful tool to learn languages from an external source.

Through practical application with some supervision handy work is taught through an experimental approach to construction.

Games are a social convention in the settlement and provides many platforms for conversational learning and knowledge exchange.

On the outskirts of Plastic view are gardening efforts by residents, bags of sand were bought by Lift at NG Mondeta and has been appropriated by others.

Mothers do washing together in the streets and socialize, telling stories and experiences. Children learn from their mothers.

A trade, whose expertise were brought from her native homeland, is exchanged on the streets of the settlement.

Through engagement and interaction methods of communication are taught with external parties in the settlement.

A space shop provides the social space for learning, socializing and training. Here a group of women can share tricks and tips of the trade.

Children building a house in the streets enables a practical, hands-on, approach to learning. The cognitive and fine motor skills are developed through play.

Through practical application and previous experience a fence is built from materials found on site.

Street meals cooked by residents on open fires. The axe old metal frames creatively to elevate their cooking.

A craftsman, working in the street building food shelves from reclaimed wood. Skills came from home, but have been advanced through time.

Hair salon with a skilled hair braider who makes her own wigs and weaves from scratch, during the day she learns new languages from customers and teaches them her languages.

The settlement is host to various nationalities, cultures and belief systems that create an opportunity for various scenarios of knowledge exchange. Depicted on this page are various examples of these scenarios of knowledge exchange.

Due to the diverse range of indigenous knowledge found in the settlement the various inhabitants started to combine parts of these indigenous knowledges and appropriated it to suit the needs and 'new' culture of the settlement itself.

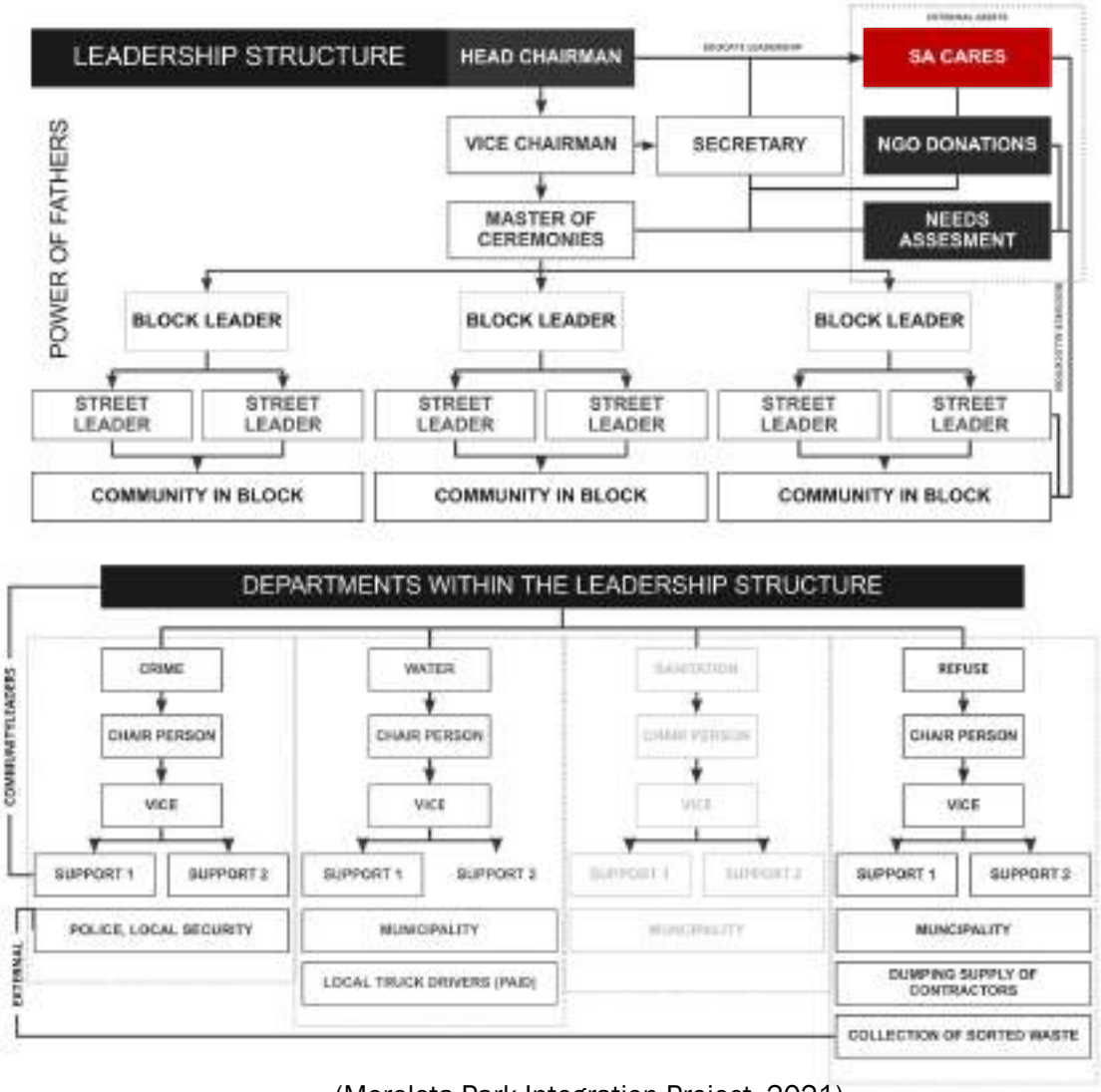
Design Informants

COMMUNITY LEADERSHIP STRUCTURE

In a context of vast diversity and possible conflict the role of communication becomes a crucial tool of mediation. Communication becomes a crucial aspect of life in Plastic View and manifests in various scenarios that ranges from dire need to pure recreation. In case of need there are methods of besting communication barriers: finding common words or relying on a translator. In many cases of violent anticipation the Community Leaders act as mediators and tranquilises the situation.

Like the appropriated communication system, the leadership structure offers clarity support to the in the settlement. Whenever there is a situation of distress in the community there are certain protocols, as developed by the community with input from the NGO SACaresForLife, to follow.

Within the Community Leadership Structure there are various tiers of members involved to offer support and aid in project development and execution. There are categories that were derived from ruling challenges on site. All Community Leaders are chosen by popular vote after a candidate has volunteered for the position. Even though the Community Leaders are faced with many challenges they beat on, boats against the tide, to ensure a safe environment for the residents.



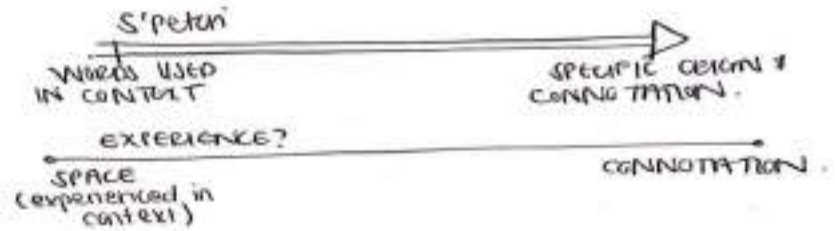
(Moreleta Park Integration Project, 2021)

The Language Model

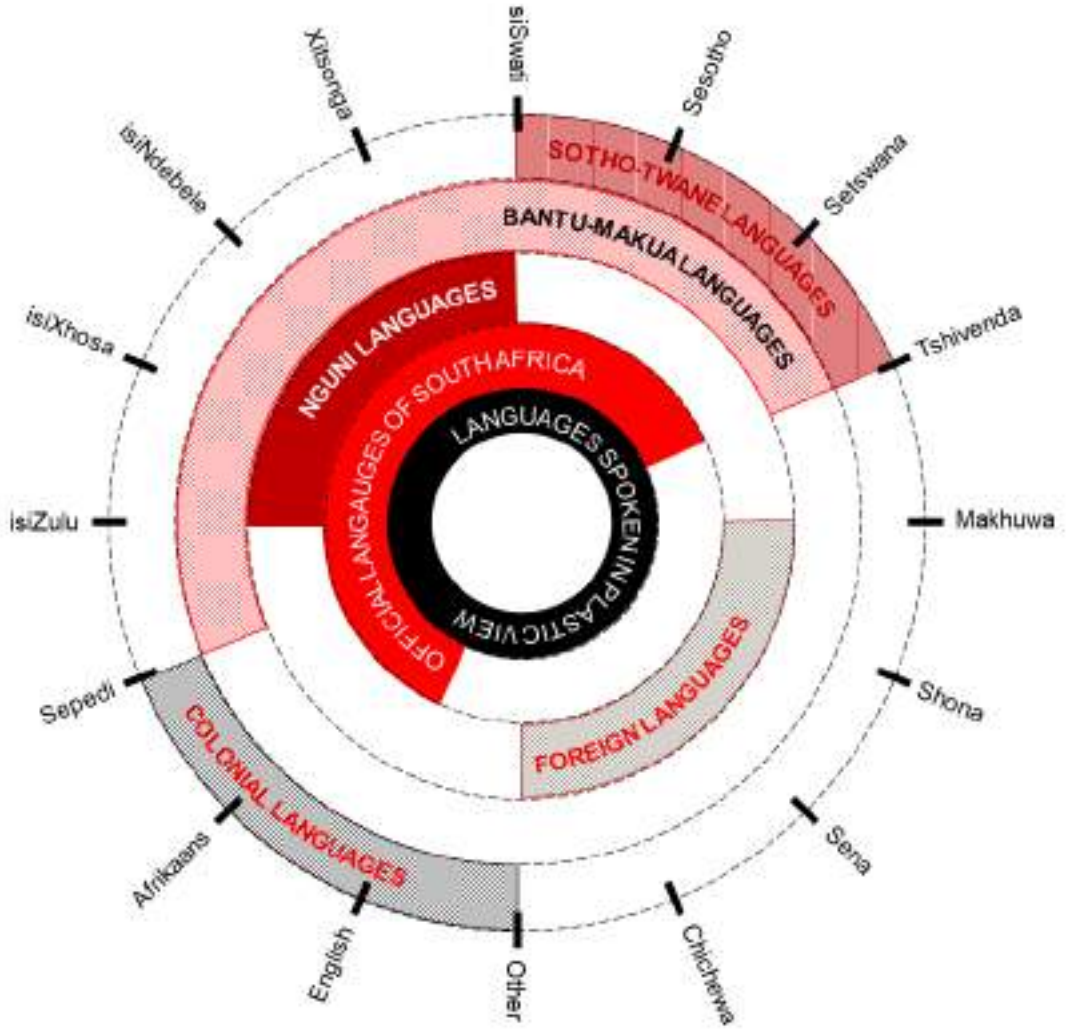
INDEXICALITY AND INTERIORITY

The main lens that the project aims to adopt is a **semiotic approach to meaning-making**. The investigation into the language used (and appropriated) on site has contributed to the question of how language can be used as a model for semiotic design.

Plastic View is host to various nationalities and languages and in an attempt to overcome language barriers people have started learning words and sounds in an attempt to understand their co inhabitants. This lead to a language model that is based on appropriation and association. This is enabled by the origins of the various languages that have overlaps and the effort from the community to learn and teach language.

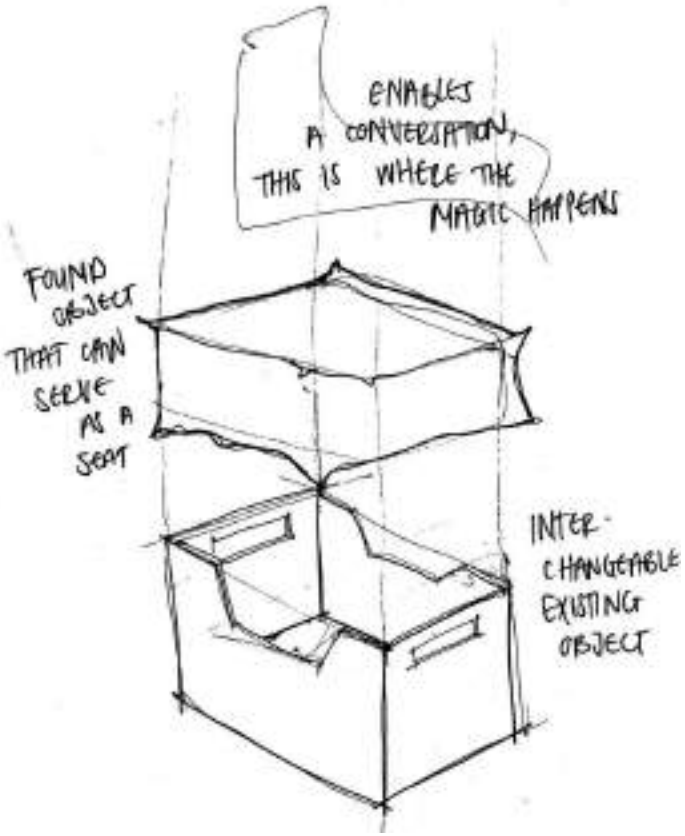


The intention is to use this model in the design process as a method of designing for idiosyncratic interpretation. This is still a very initial understanding of the language landscape in the settlement and will still expand and clarify with further investigation.



Plastic City-ing

THE LANGUAGE OF SIT-THINGS



MICRO

MESOS

EXOS

MACRO

CHRONO

DISCOVERY

INDIGENOUS KNOWLEDGES

APPROPRIATIONS

A NEW INDIGENOUS?

Knowledge Transferal

CHOSEN LEADERS

POWER OF THE FATHERS

Leadership Structure

CLIENT: SACaresForLife

POTENTIAL FOR MEANING-MAKING

Communal Spaces

THROUGH PARTICIPATION

Demolished Community Office

Community Office

LANGUAGE ORIGIN

GENERAL

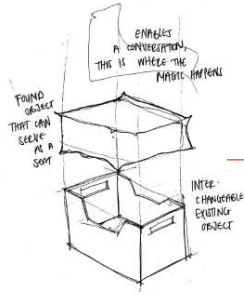
HOME LANGUAGE

OVERCOMING LANGUAGE BARRIERS

SPECIFIC

NEW SPECIFIC

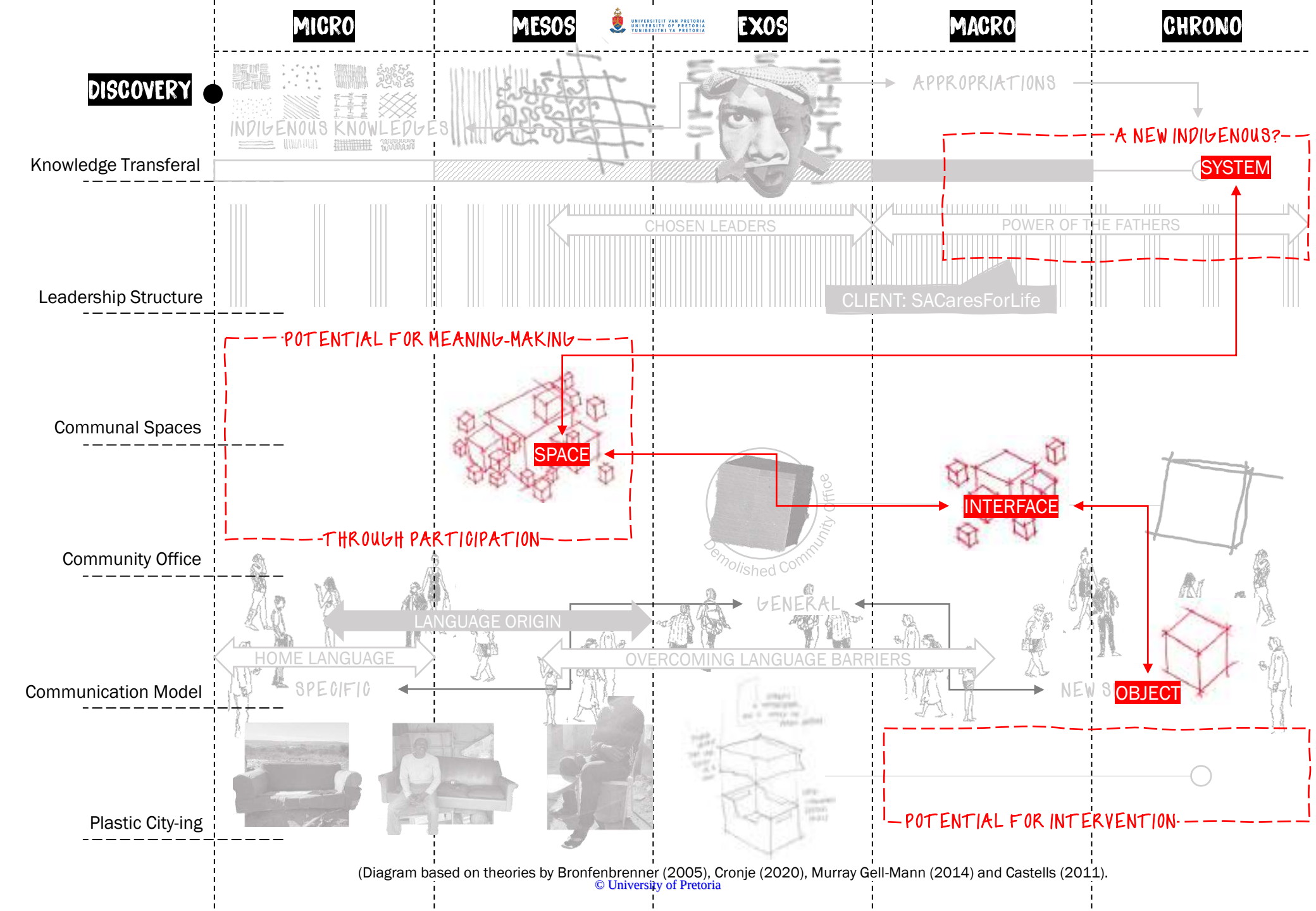
Communication Model



POTENTIAL FOR INTERVENTION

Plastic City-ing

(Diagram based on theories by Bronfenbrenner (2005), Cronje (2020), Murray Gell-Mann (2014) and Castells (2011).



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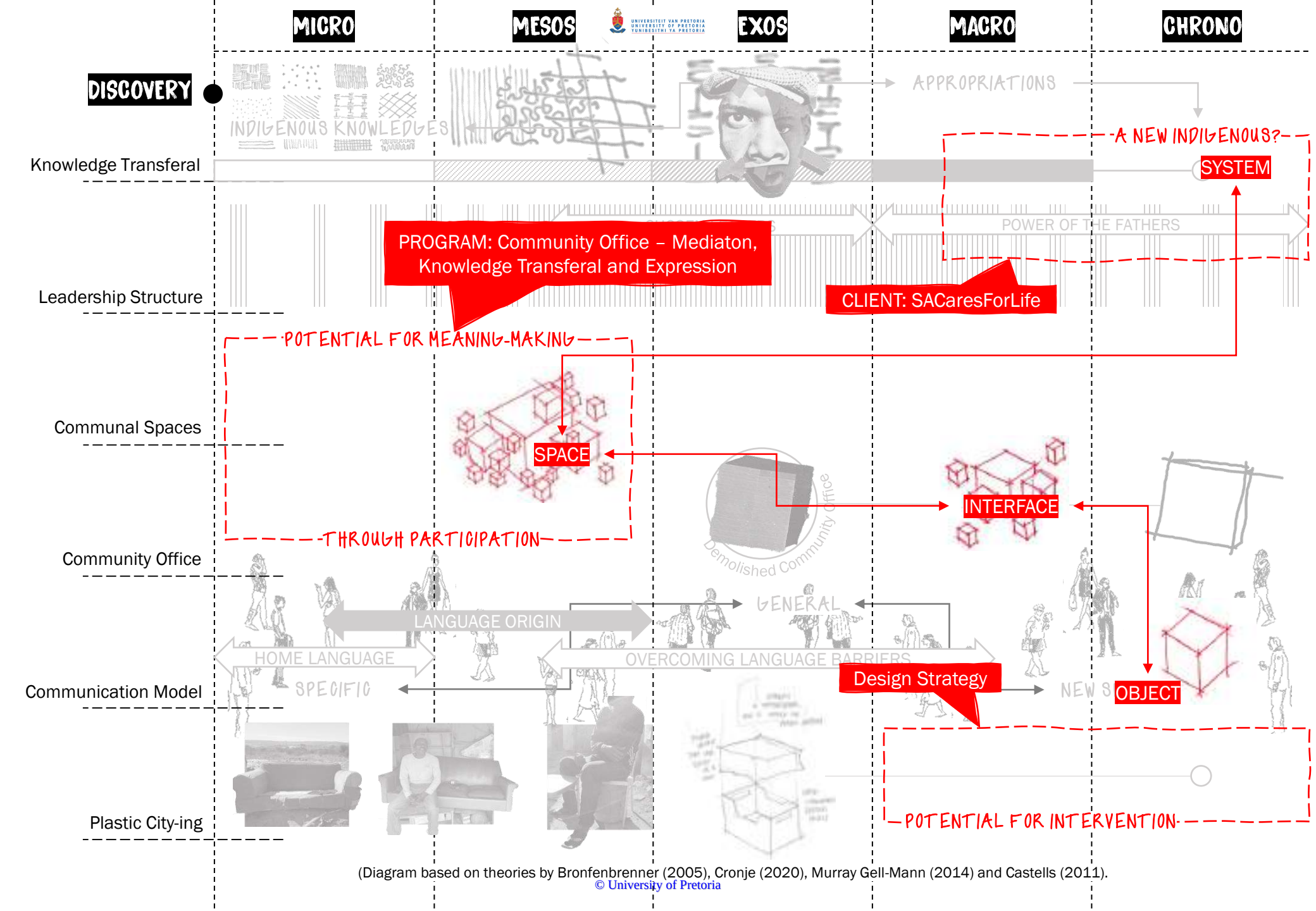


(Diagram based on theories by Bronfenbrenner (2005), Cronje (2020), Murray Gell-Mann (2014) and Castells (2011).

The Community Office

A CASE STUDY

As the settlement is host to a complex dynamic of the inhabitants and the project targets meaning-making, case studies will be used to analyse the self-made environment at the hand of existing meaning in the settlement. These will serve as key informants in the design process as it will give an insider's peek at how spaces in the settlement are composed and used and appropriated. The case studies were chosen throughout the first phase of the project whilst spending sufficient time on site by taking phenomena that is often repeated or found regularly throughout the settlement. This serves to represent the '*bottom-up*' end of the spectrum in the design informants.

The community office is situated on the far end of the settlement next to a large open space that is used by the community for large gatherings and events. The structure serves as a base for the community leadership to conduct their business from. The leadership structure in the settlement developed as a response to problems faced by the community and has since become a beacon of familiarity and safety in the community.

The Community Office

A CASE STUDY

MARCH 2021 — AUGUST 2021

CONSTRUCTION | USE | DEMOLITION

The community office was built as a response to the need for a communal space for the leadership structure of the settlement to work from.

The structure was built by the community leaders in collaboration with SACaresForLife. It was built with easily available materials.

The community office was equipped with chairs to host conversations and meetings.

Unfortunately the community office was demolished by the client after learning about misconduct that took place inside the structure without the supervision of the community leadership structure.

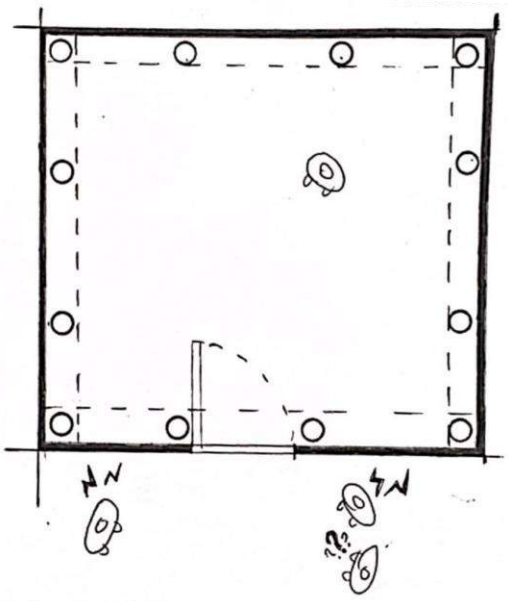
MEDIATION

KNOWLEDGE TRANSFERAL

EXPRESSION

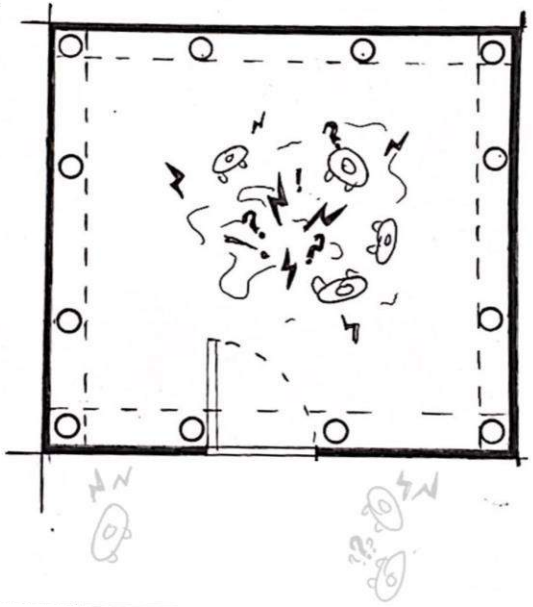
COMMUNITY OFFICE USE

1. SCENARIO OF DISAGREEMENT



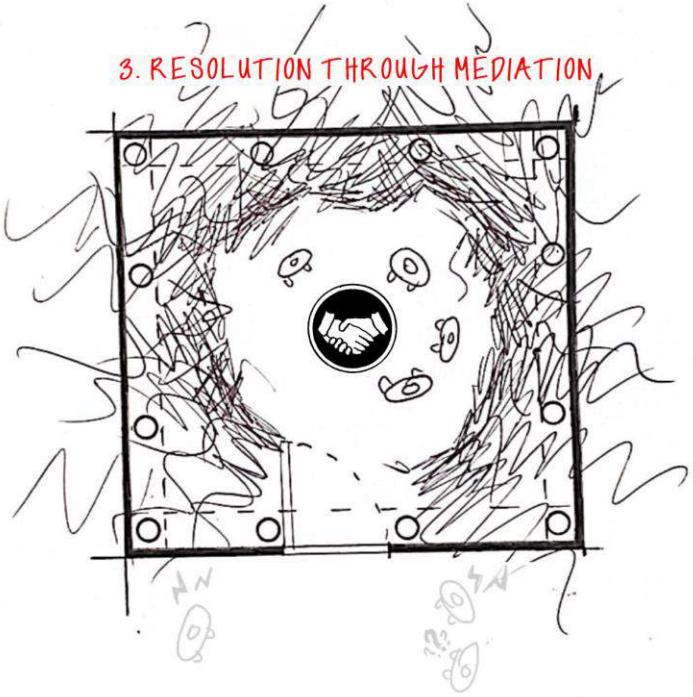
The process of mediation begins with two parties either approaching the community office of their own volition or being called to the community office by the community leaders.

2. ENABLED CONVERSATION



Depending on the situation and level of tension members of the community leadership structure would be present to mediate the situation. There will always be at least one community leader present.

3. RESOLUTION THROUGH MEDIATION



The mediation process takes place in the community office as it is known as a safe space where concerns can be raised and discussed through with a mediator present (that being a community leader).

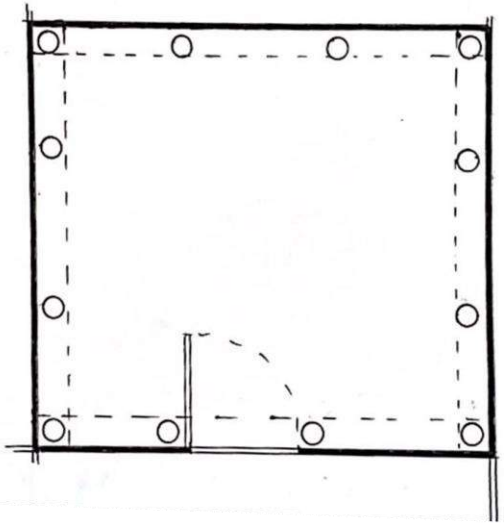
MEDIATION

KNOWLEDGE TRANSFERAL

EXPRESSION

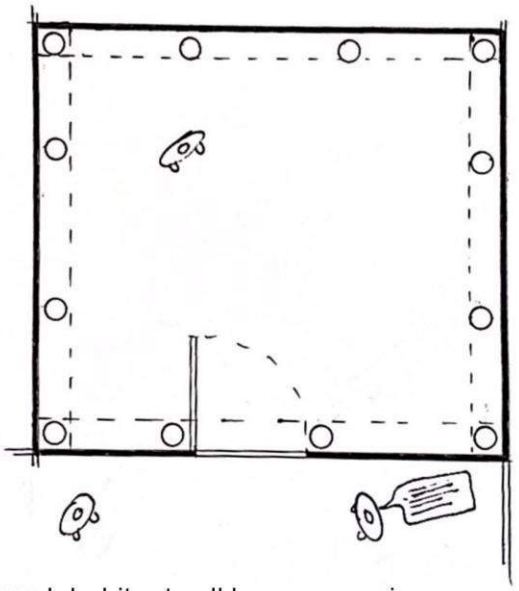
COMMUNITY OFFICE USE

1. DESIGNATED SPACE



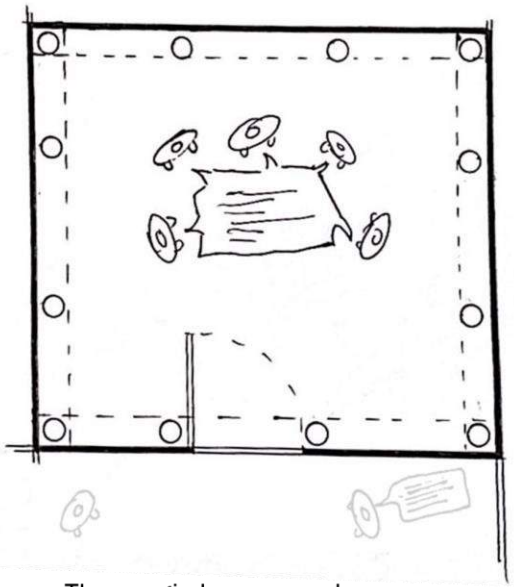
The notion of knowledge transferal is found throughout the entire settlement. The community office serves as a space that allows for knowledge transferal initiatives to take place.

2. UNIQUE SKILL SETS AND KNOWLEDGE



Inhabitants all have very unique skills that come from their upbringing, life experiences and, in some cases, the settlement itself. Due to the variety in knowledge to be shared and appropriated, knowledge transferal happens in any form of conversation.

3. KNOWLEDGE TRANSFERAL



The magic happens when inhabitants from various background and indigenous knowledges come together to share and adapt knowledge to enhance the current environment.

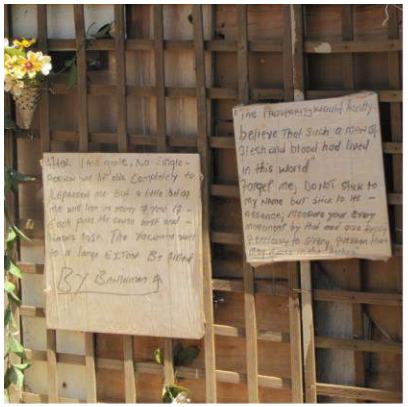
UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

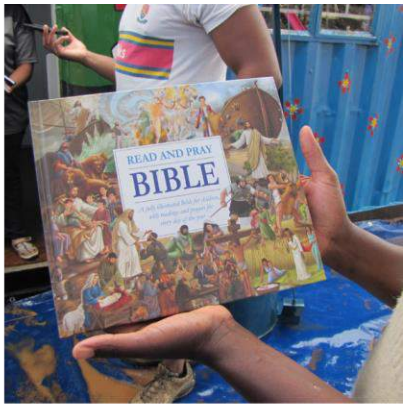
MEDIATION

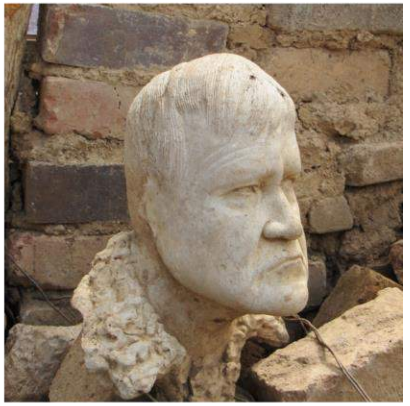
KNOWLEDGE TRANSFERAL

EXPRESSION

COMMUNITY OFFICE USE







The Communal Fire

A CASE STUDY

This spatial composition is present throughout the entire settlement. As there are very limited services in the settlement a fire becomes a key element in the daily domestic activities of the inhabitants such as cooking and heat production. It also demonstrated becoming a universal symbol of communal engagement. Social gatherings, talks, education, gameplay and many key moments in the settlements happens around a fire.

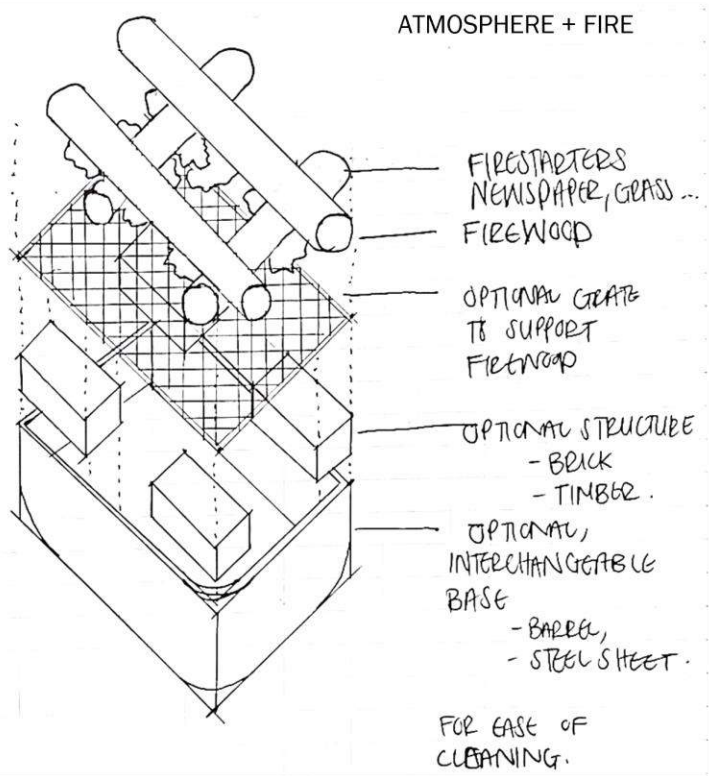


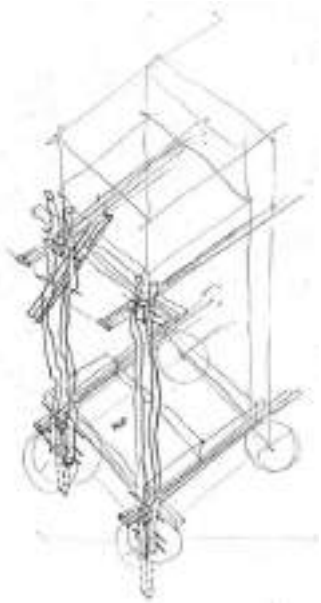


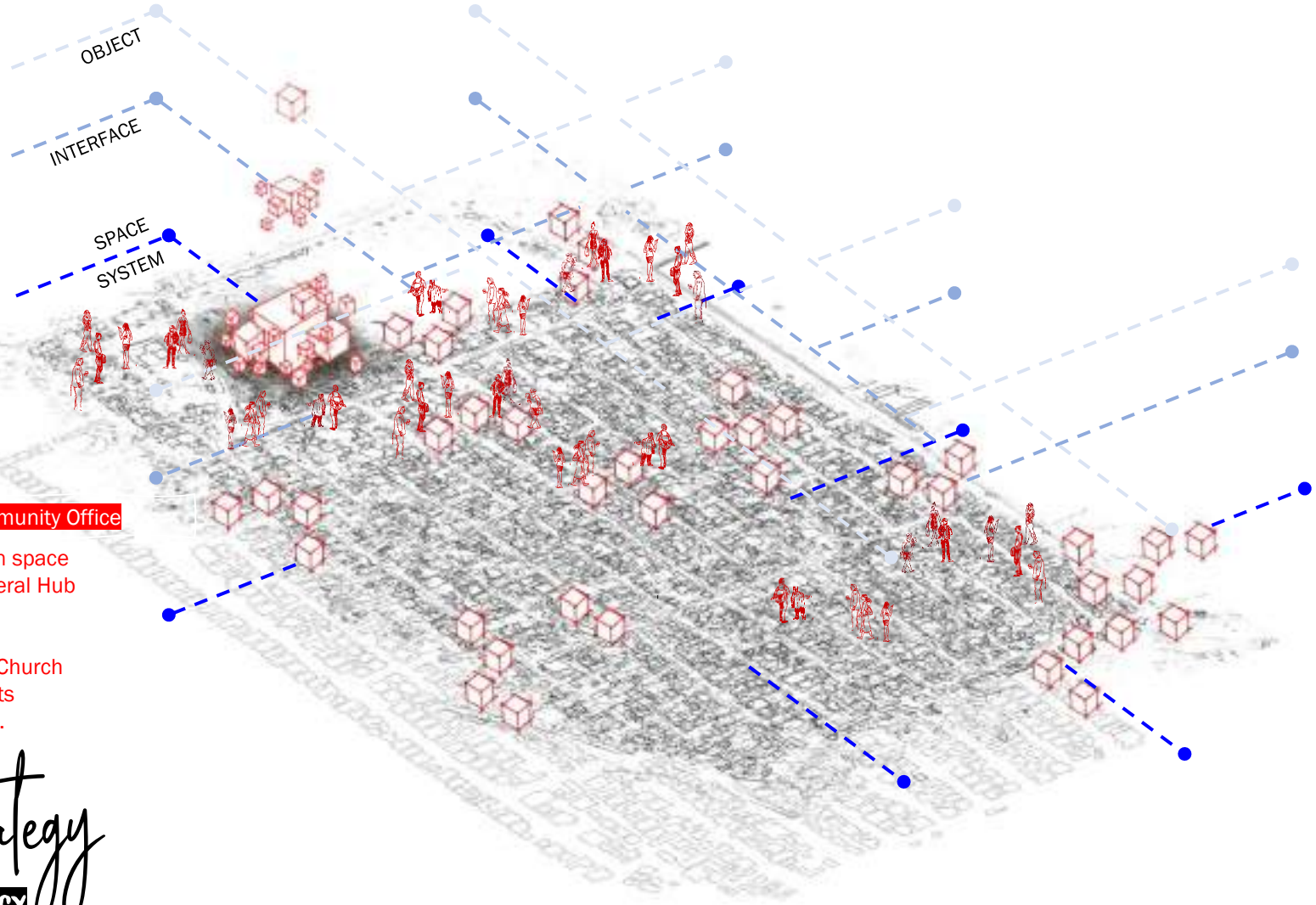



Atmosvuurtjies

THE ART OF SOCIAL COHESION THROUGH FIRE







SACares For Life NGO: Community Office

- MAIN PROGRAM: Mediation space
  - Knowledge Transferal Hub
  - Expression space
- Scenarios of Appropriation
  - Sit-things used at Church
  - Pubs & Restaurants
  - Sports Viewing etc.

Design Strategy

MULTI-SCALAR SPATIAL AGENCY

Design Criteria

A COMMUNITY OFFICE

PROJECT CRITERIA

PROCEDURAL CRITERIA

RESPOND TO THE RICH AND LAYERED NATURE OF PLASTIC VIEW

RELEVANT LEGISLATION

1913 NATIVES LAND ACT
PROHIBITION FROM BUYING/HIRING LAND FOR ALL PERSONS CLASSIFIED AS 'NATIVES'.

1996 CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA
HUMAN DIGNITY THROUGH EQUALITY AND HUMAN RIGHTS
THE RIGHT TO ALL BASIC NEEDS

2011 COURT ORDER AGAINST PLASTIC VIEW
LEGITIMATION OF INFORMAL SETTLEMENT, BUT PROHIBITS THE CONSTRUCTION OF FURTHER PERMANENT STRUCTURES

SANS 10400 BUILDING REGULATIONS

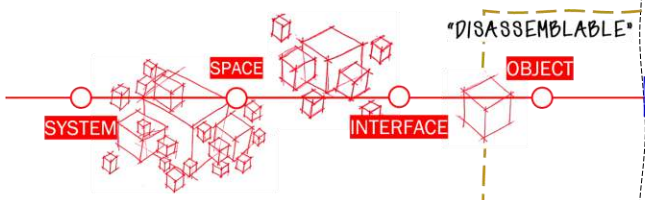
HUMAN-CENTERED DESIGN APPROACH

COLLABORATIVE PROCESS

Empathise → Define → Ideate → Prototype → Test

FEEDBACK SESSIONS
CLIENT INPUT

CATER FOR THE EVER ADAPTING SITE CONDITIONS



"DISASSEMBLABLE"

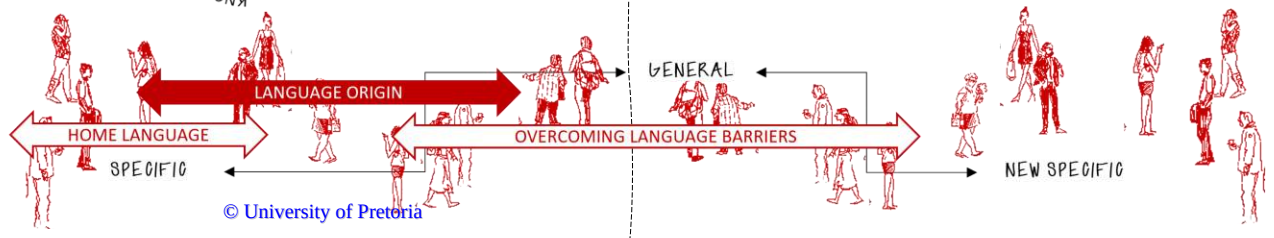
BUILDING WITH FOUND OBJECTS

ASSEMBLY & DISASSEMBLY
NOT RELIANT ON
PROFESSIONAL PRESENCE

SPATIAL AGENCY

BUILD ON AND ENHANCE EXISTING RITUALS

SCENARIOS OF APPROPRIATION

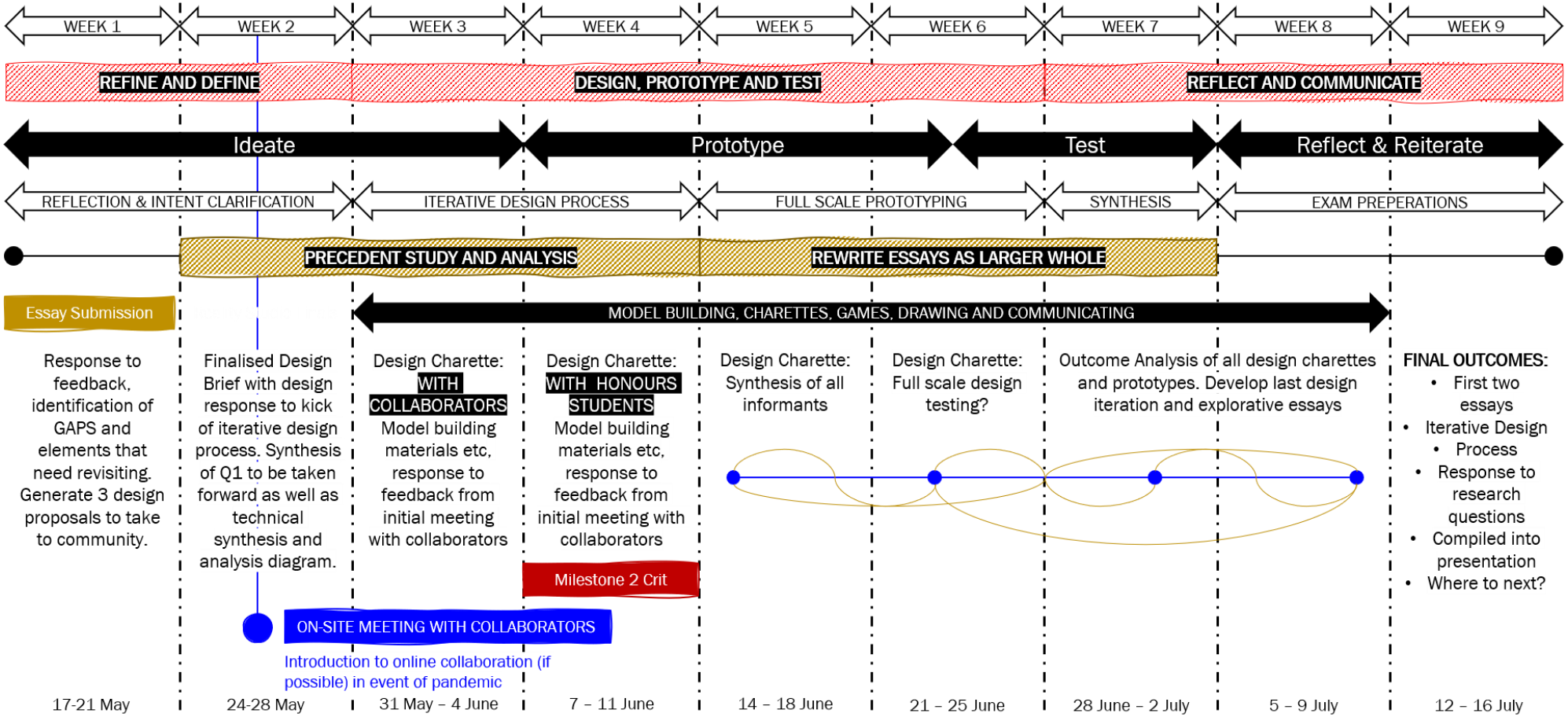


Programming

A COMMUNITY OFFICE

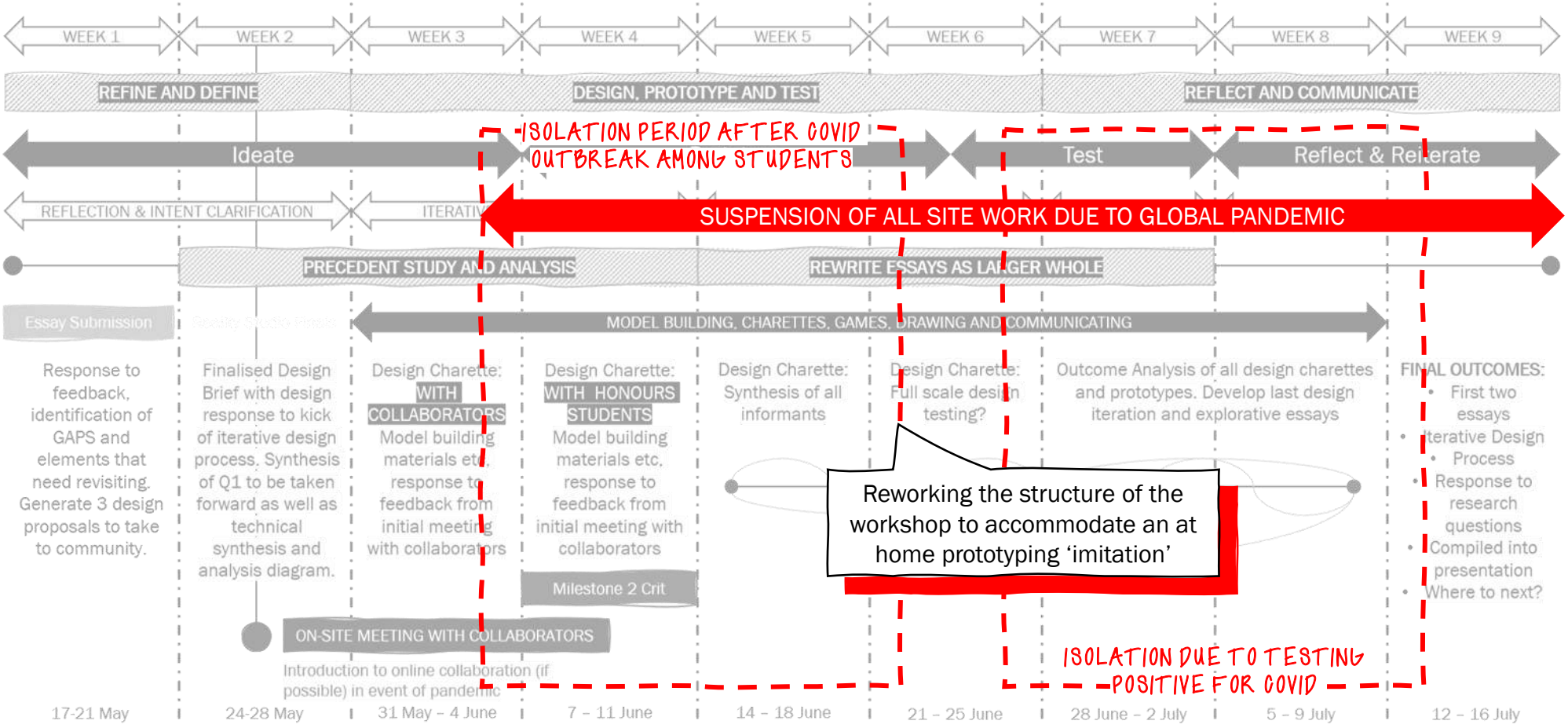
Design Strategy

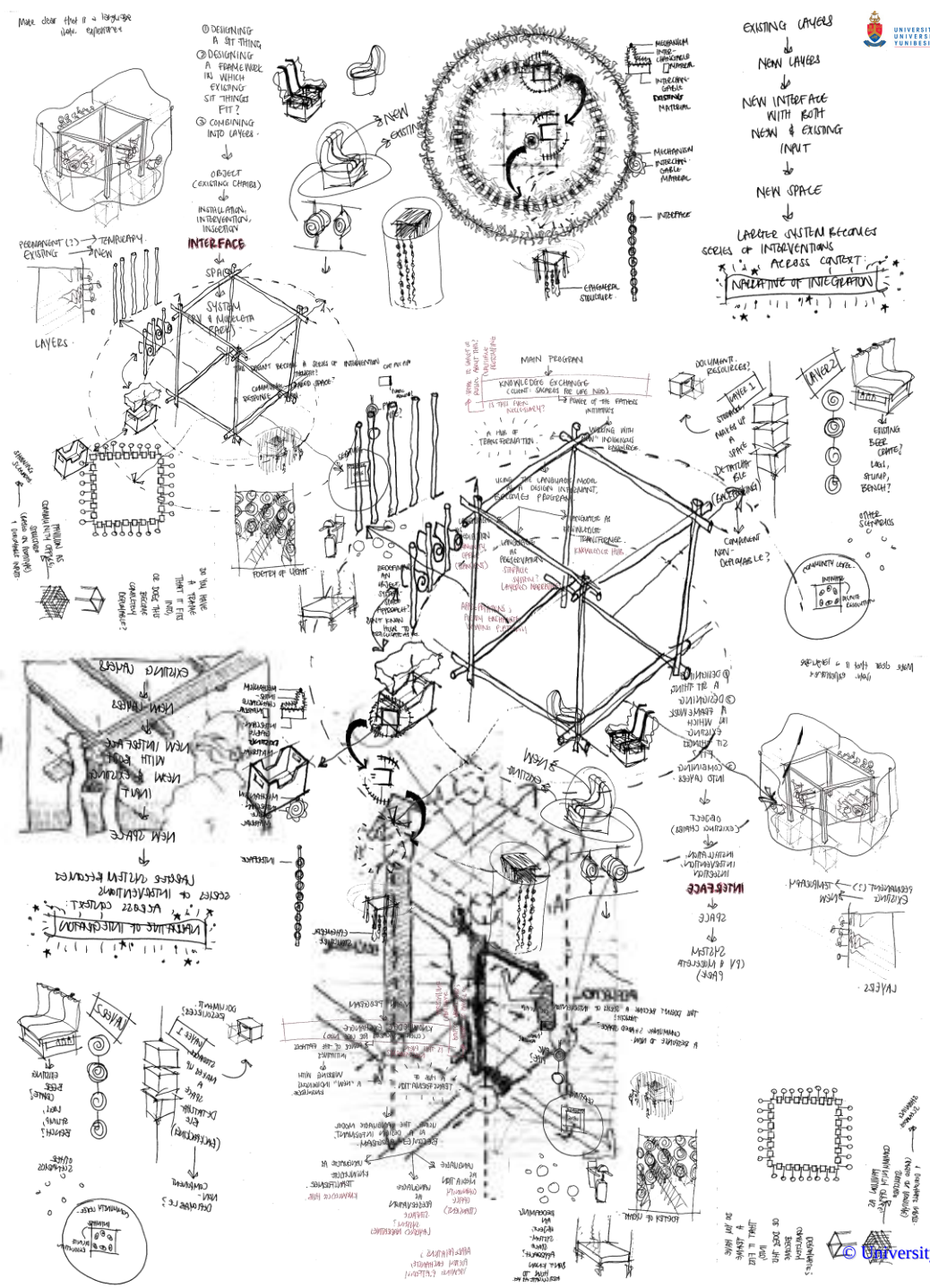
ORIGINAL DESIGN PHASE TIMELINE



Design Strategy

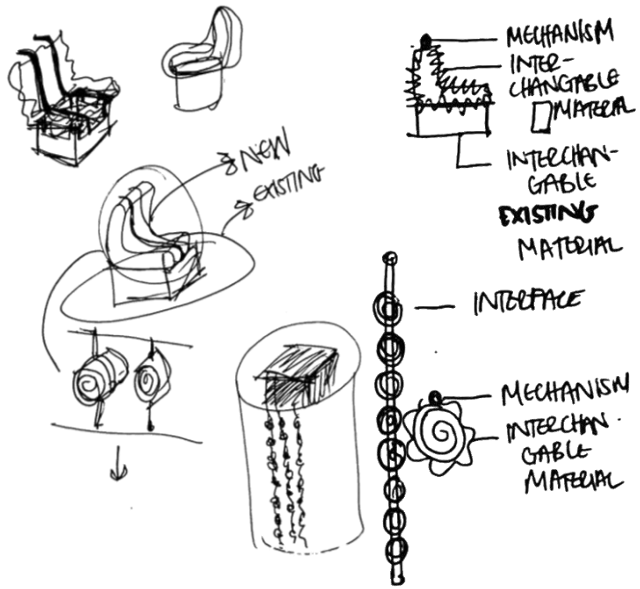
ADAPTING TO CIRCUMSTANCES





Design Response

OBJECT-INTERFACE-SPACE-SYSTEM APPROACH

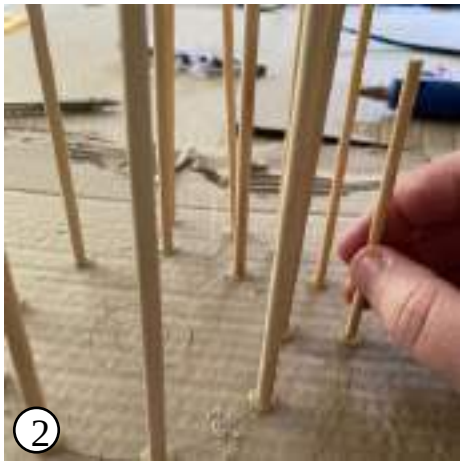


As a response to the object-interface-space-system approach to the proposed community office as well as the design informants the initial design response was creating a sit-thing that fits into an interface that makes up a pavilion that becomes the community office.

The community met the initial response with great enthusiasm and the design process continued with an at home ‘mock’ prototyping charette (due to circumstances) that serves as the second step in the iterative design process.

IMITATING

Gathering materials that represent found materials on site to imitate the prototyping process.



STRUCTURING

Creating a structure that responds to the various layers of the design.

EXPERIMENTING

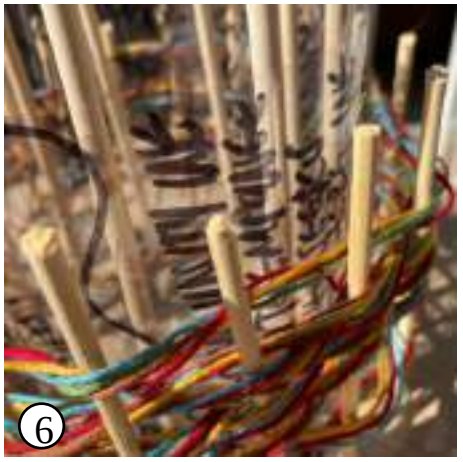
Playing with various ‘found objects’ towards creating a conceptual response.

CONCEPTUALISING

Exploring notions of ephemerality, layered interfaces and expansion.

DEVELOPING

Investigating the notion of transparency as an inner sleeve of mediation.



TESTING

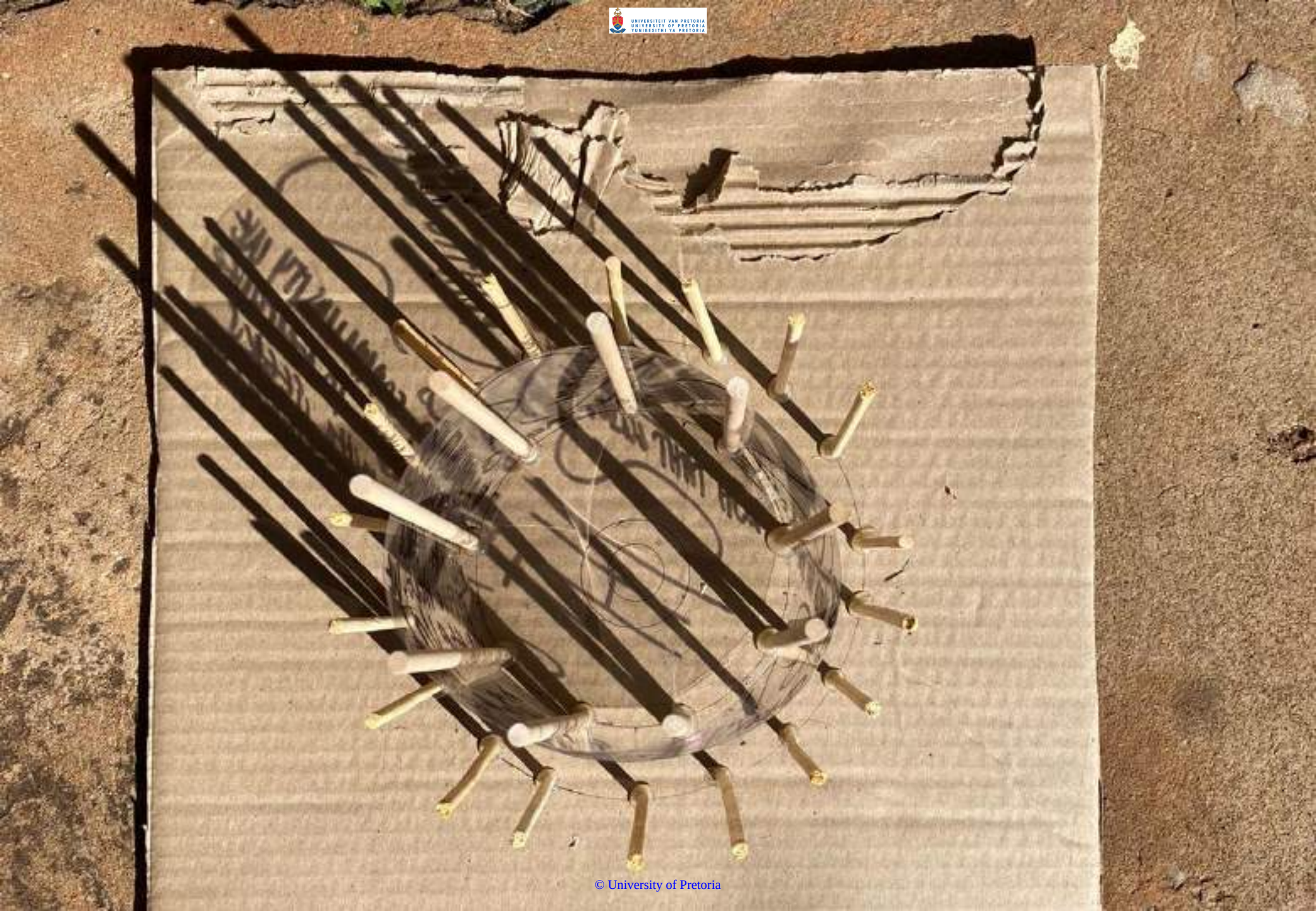
Building on the object-interface-space-system approach testing interfaces.

ITERATING

Playing with interchangeable mock interfaces and reiterating due to lack of stability.

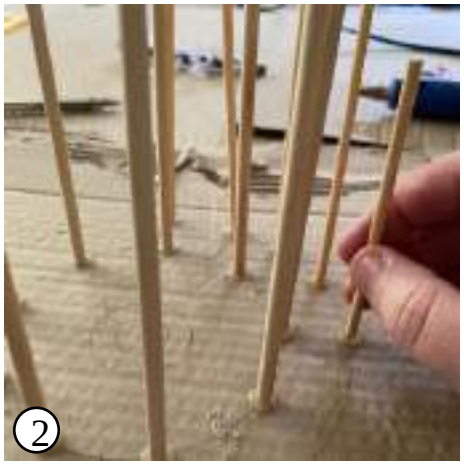
APPROPRIATING

Applying mock ‘objects’ into the interface as an extension of the design intentions.



IMITATING

Gathering materials that represent found materials on site to imitate the prototyping process.



STRUCTURING

Creating a structure that responds to the various layers of the design.

EXPERIMENTING

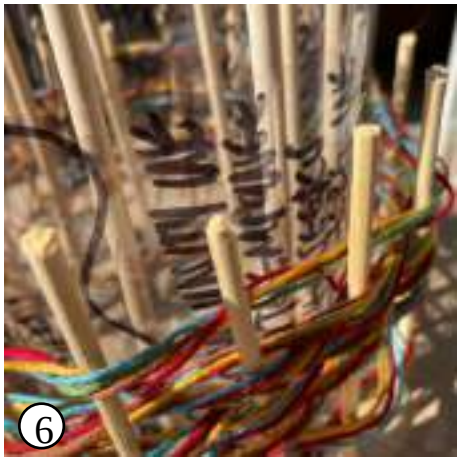
Playing with various ‘found objects’ towards creating a conceptual response.

CONCEPTUALISING

Exploring notions of ephemerality, layered interfaces and expansion.

DEVELOPING

Investigating the notion of transparency as an inner sleeve of mediation.



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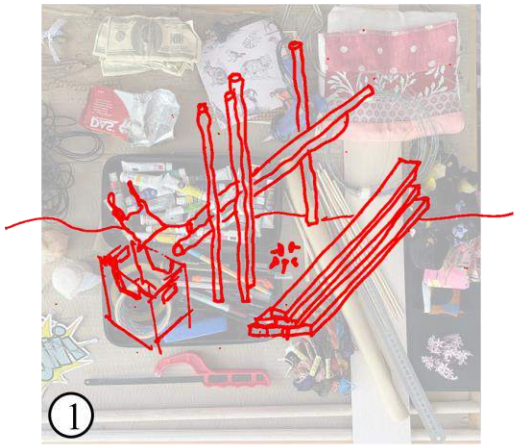
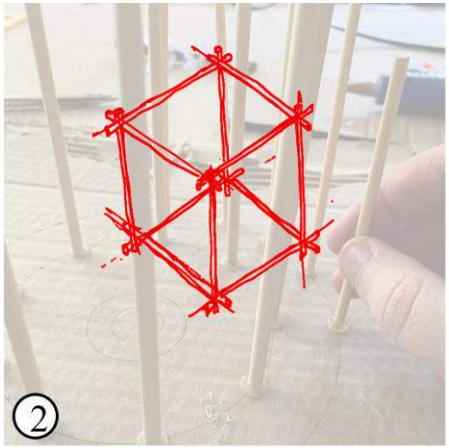


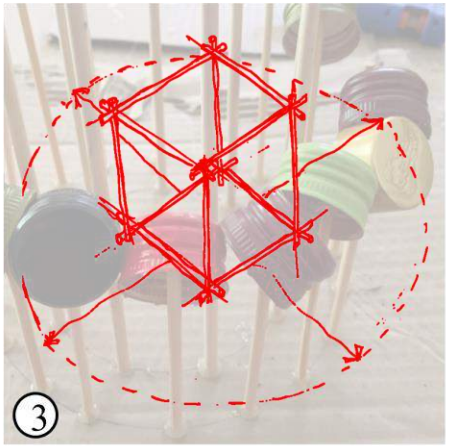
FOUND OBJECTS

The design development begins with the collection of found objects to build with.



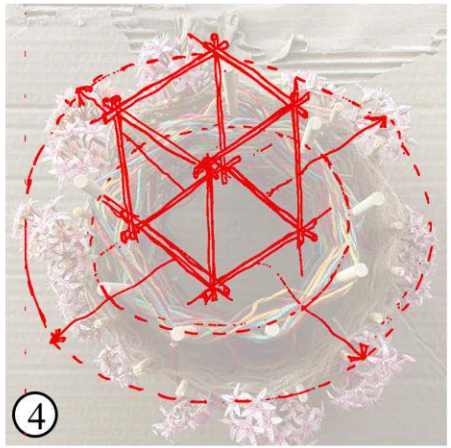
TRANSPARENCY

The inner mediation layer resembles transparent communication.



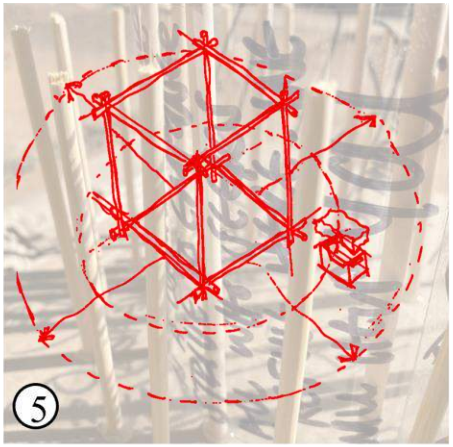
EQUALITY

From the inner layer the interfaces are set out in a radial sequence to reflect equality.



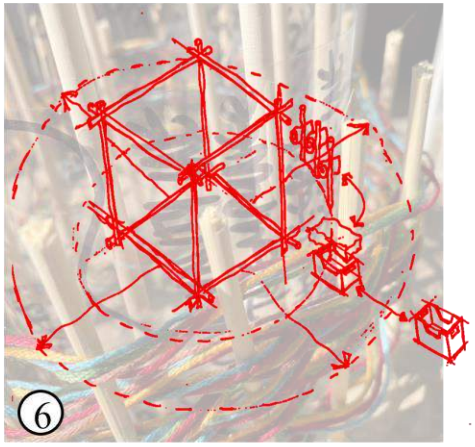
LAYERS

Exploring notions of ephemerality, layered interfaces and expansion.



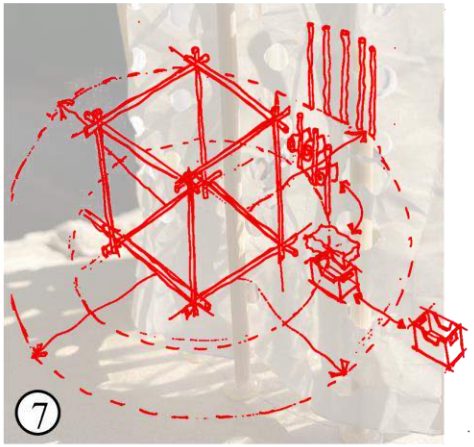
DEPLOYABLE OBJECTS

The sit-things become deployable objects that can be placed into a storage interface.



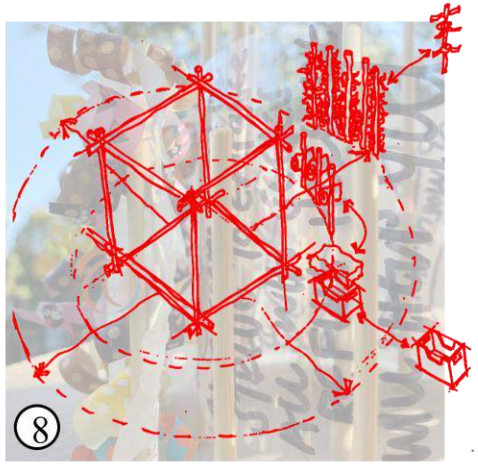
LINK WITH EXISTING

The deployable sit-things interfaces with existing objects such as beer crates and buckets.



INTERFACES

The deployable objects all fit into interfaces that become interchangeable.



AGENCY

The mobility of the elements reflects the notion of spatial agency in the design intervention.

Design Synthesis

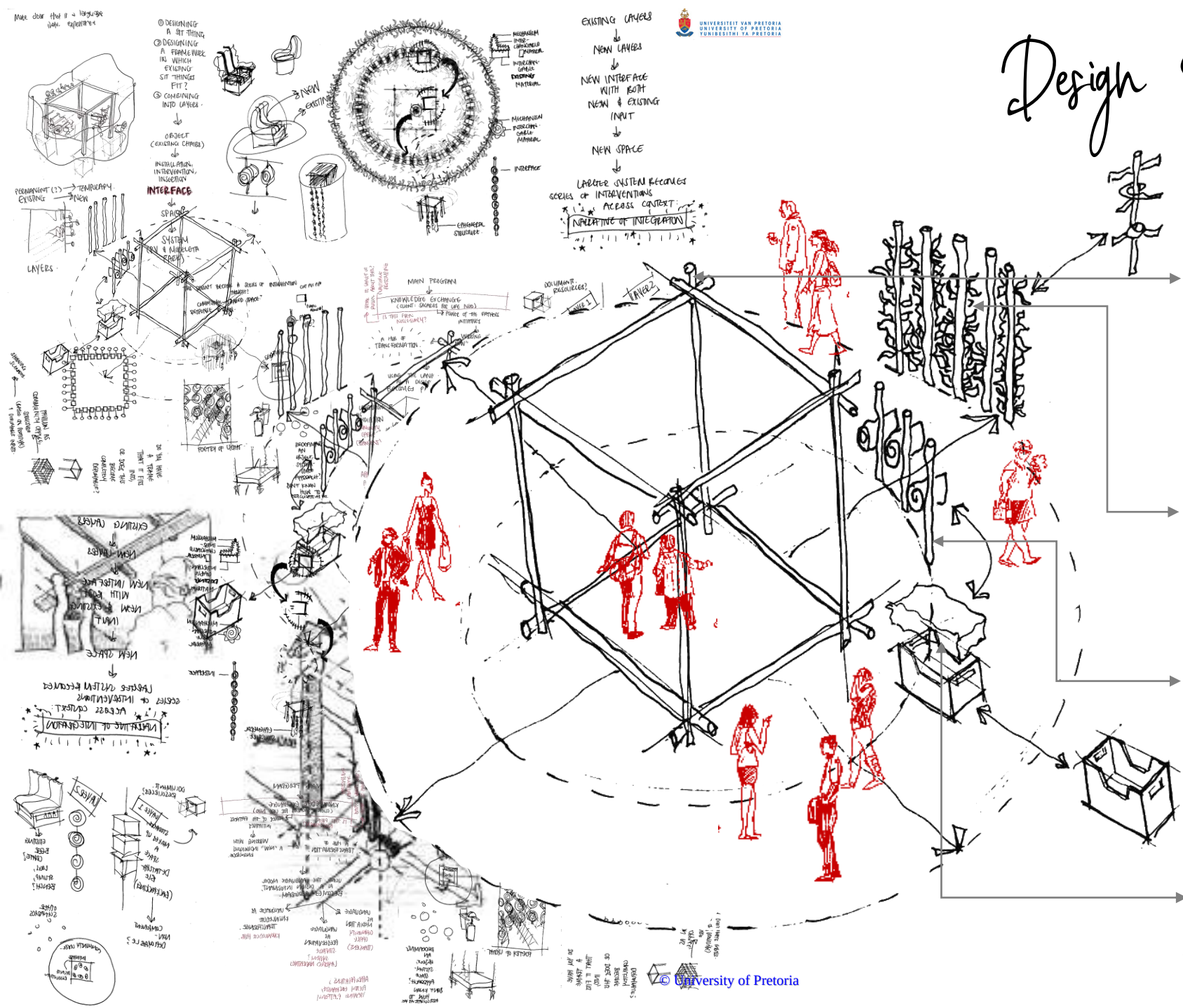
COMMUNITY OFFICE

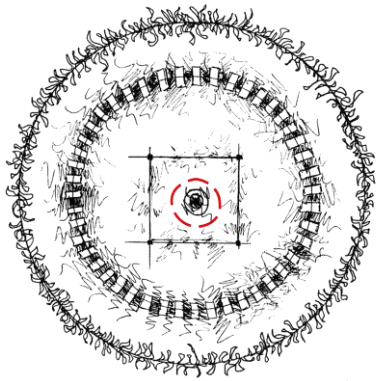
MEDIATION 'POD'
Mediation 'pod' reflecting the original Community Office. Two-way interface with transparent surface to enable open communication.

OUTER SLEEVE: INTERACTIVE EXHIBITION
Still to be explored and developed but would serve as a threshold for parties from the larger context.

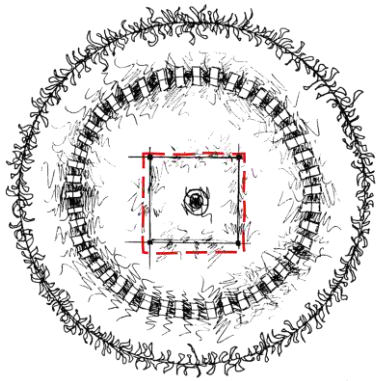
MECHANISM:
Mechanism that allows the sit-thing to be placed into the interface or rolled up and unfold for other appropriations.

INNER SLEEVE: INTERFACE WITH DEPLOYABLE OBJECTS
Sit-thing to interface with existing objects as a response to Plastic City-ing.

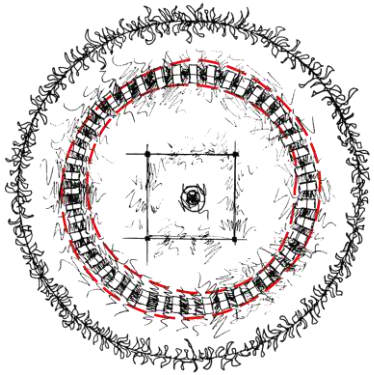




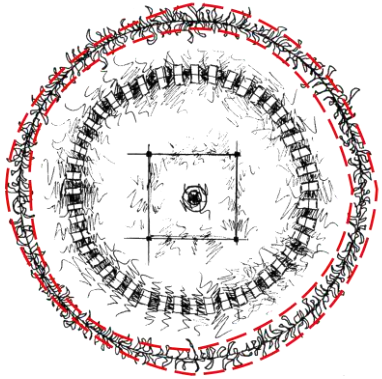
COMMUNAL FIRE PIT



TRANSPARENT MEDIATION POD



SEATING INTERFACE WITH DEPLOYABLE OBJECTS

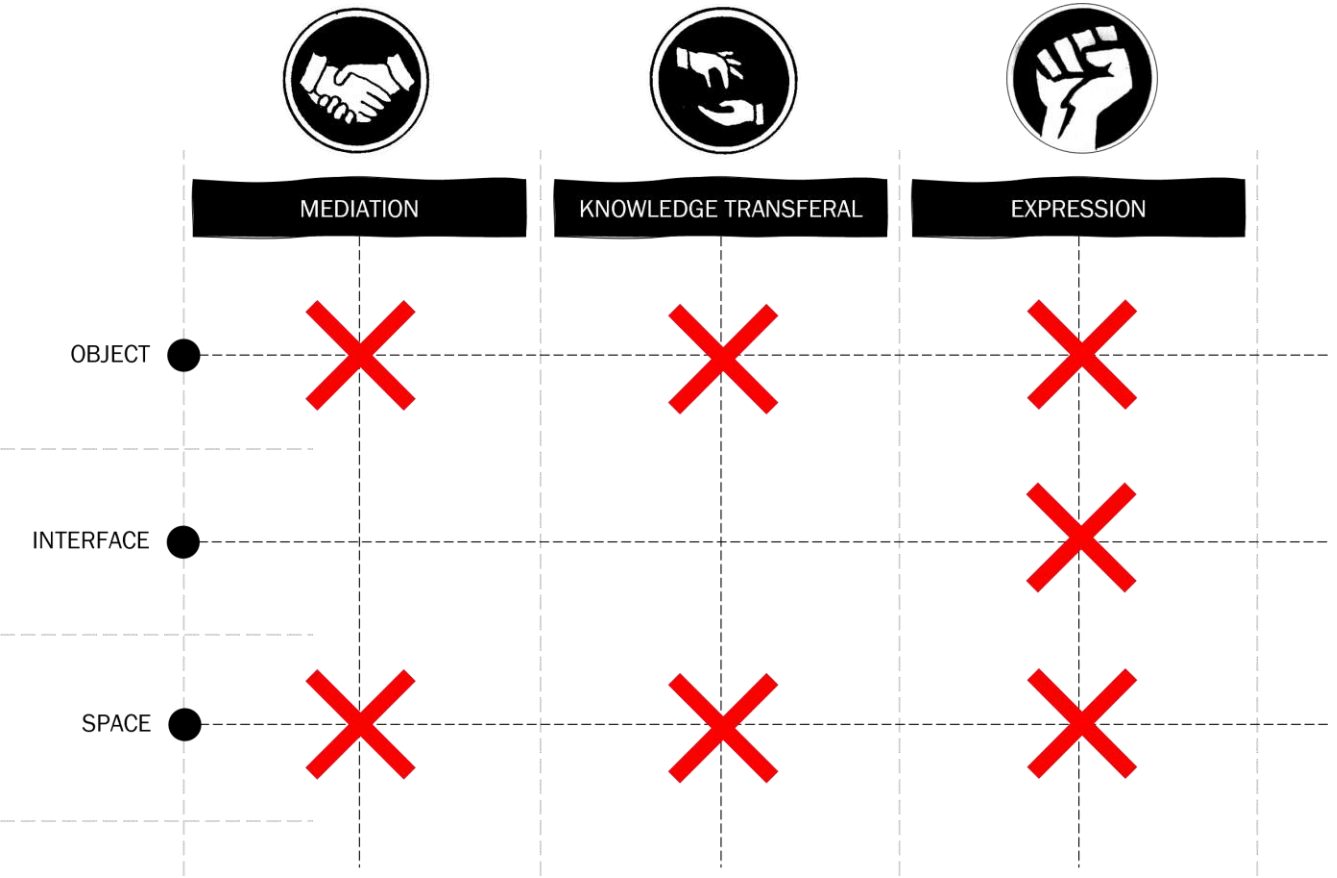


OUTER EXPRESSION INTERFACE

Spatial Requirements

ANALYSING THE NEEDS OF THE COMMUNITY OFFICE

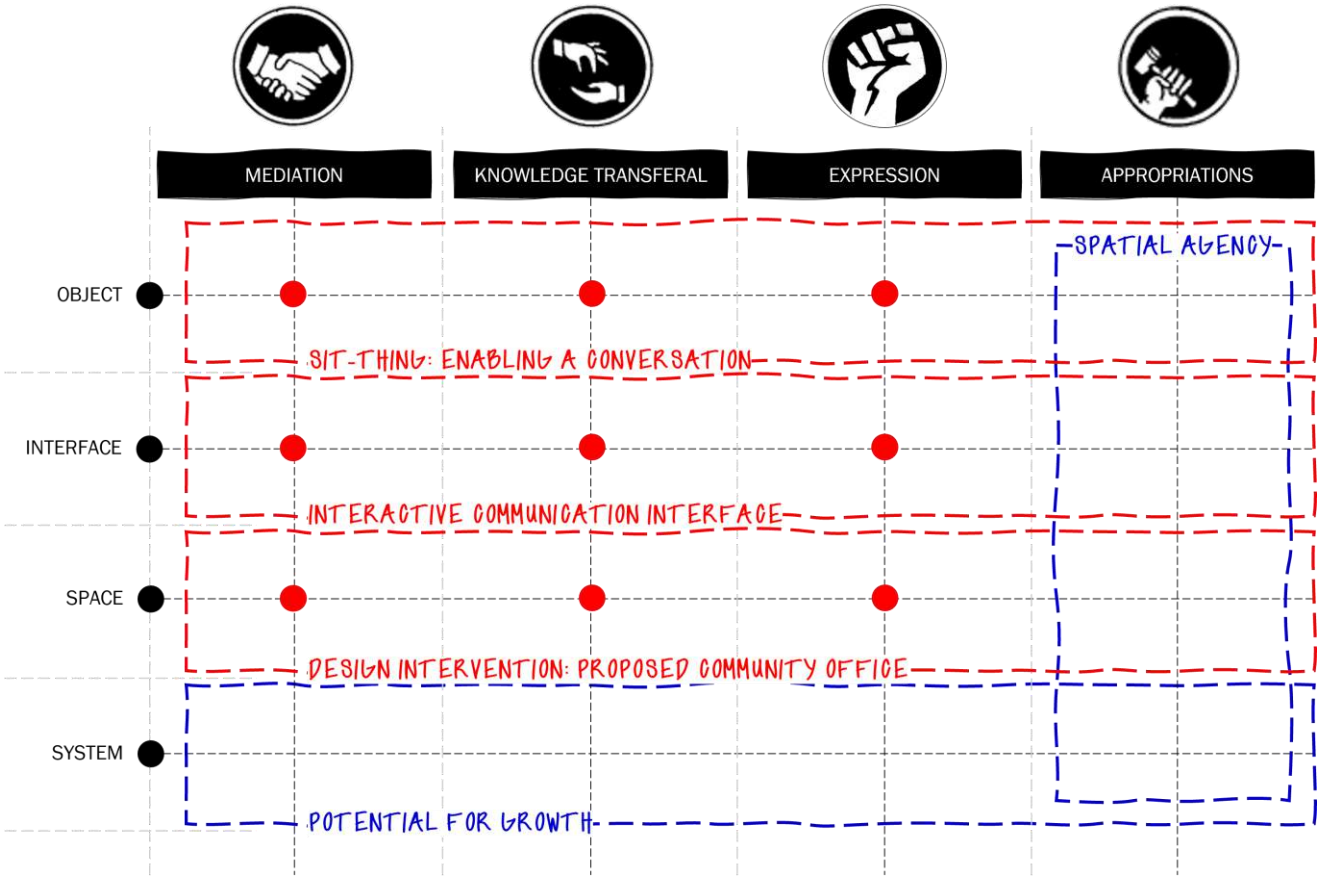
The spatial requirements of the existing community office mapped out across the various programmes and design approach of an object-interface-space approach to space making

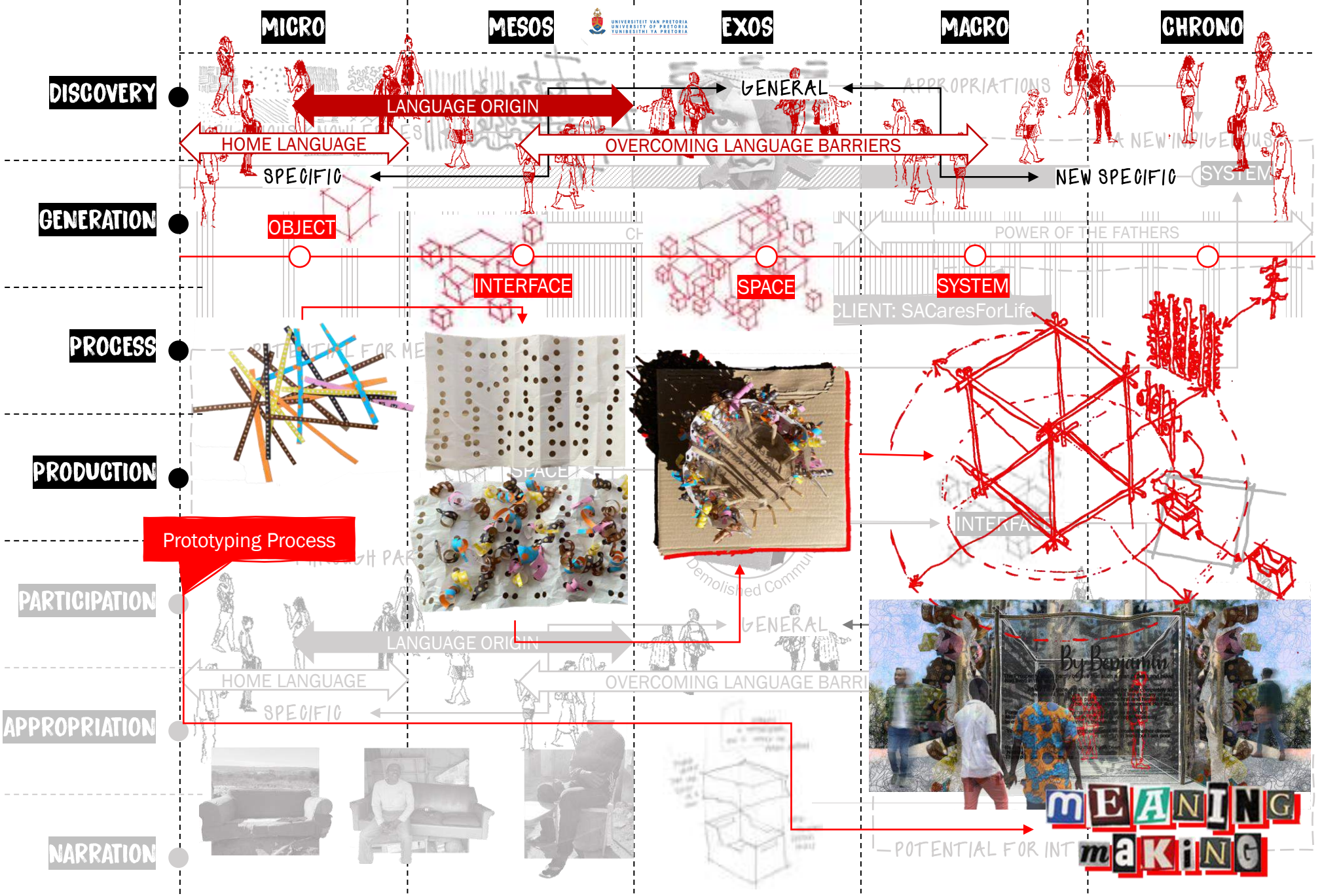


Programme Development

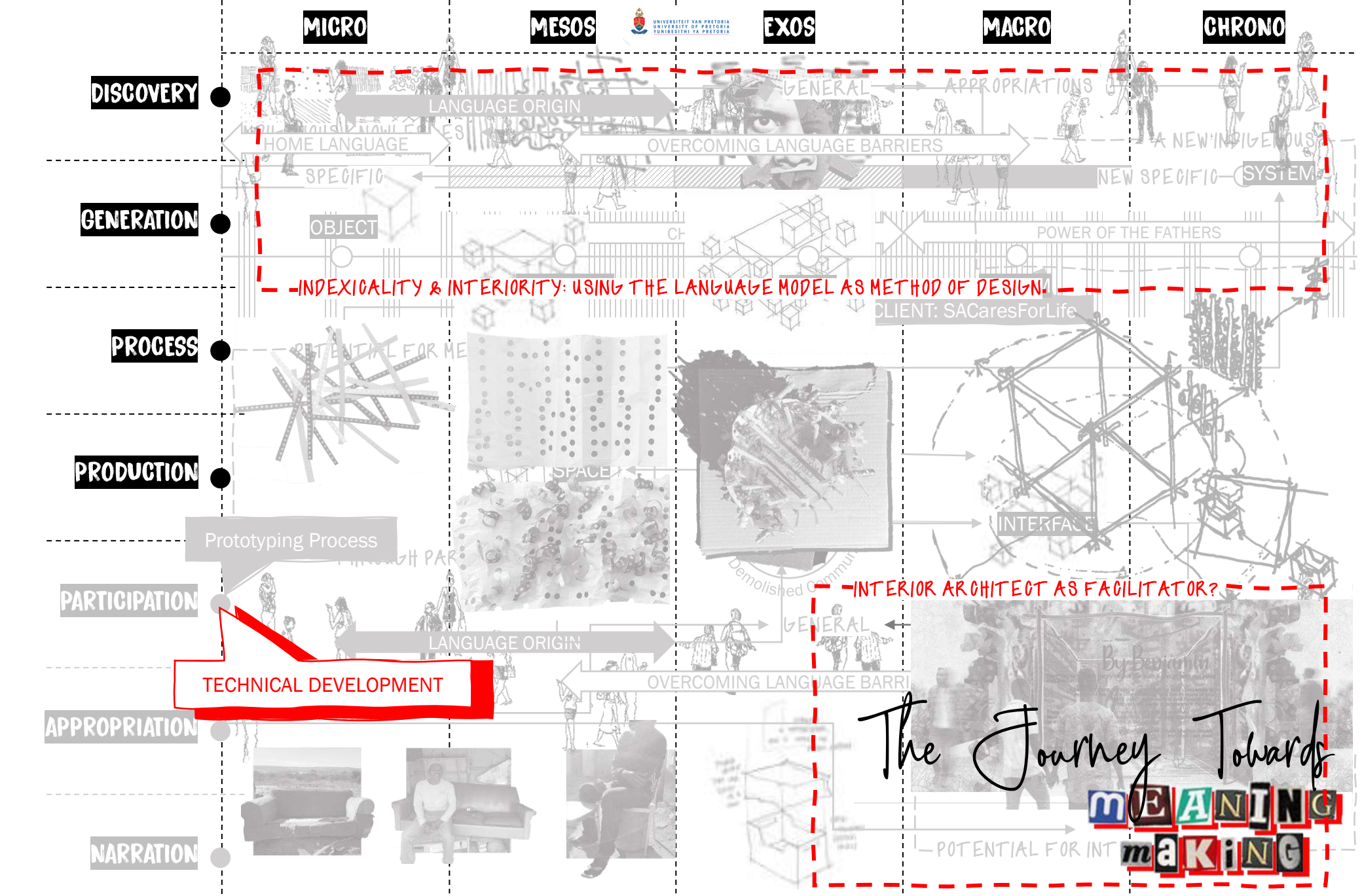
SUGGESTED PROGRAMMING FOR COMMUNITY OFFICE

The case studies informed the design intervention's proposed programme as extensions of the existing community office space. This is overlayed with the design approach of an object-interface-space-system approach to space making. The figure depicts the spatial requirements of each and spatial agency and potential for growth become possible expansions of the programme





(Diagram based on theories by Bronfenbrenner (2005), Cronje (2020), Murray Gell-Mann (2014) and Castells (2011).



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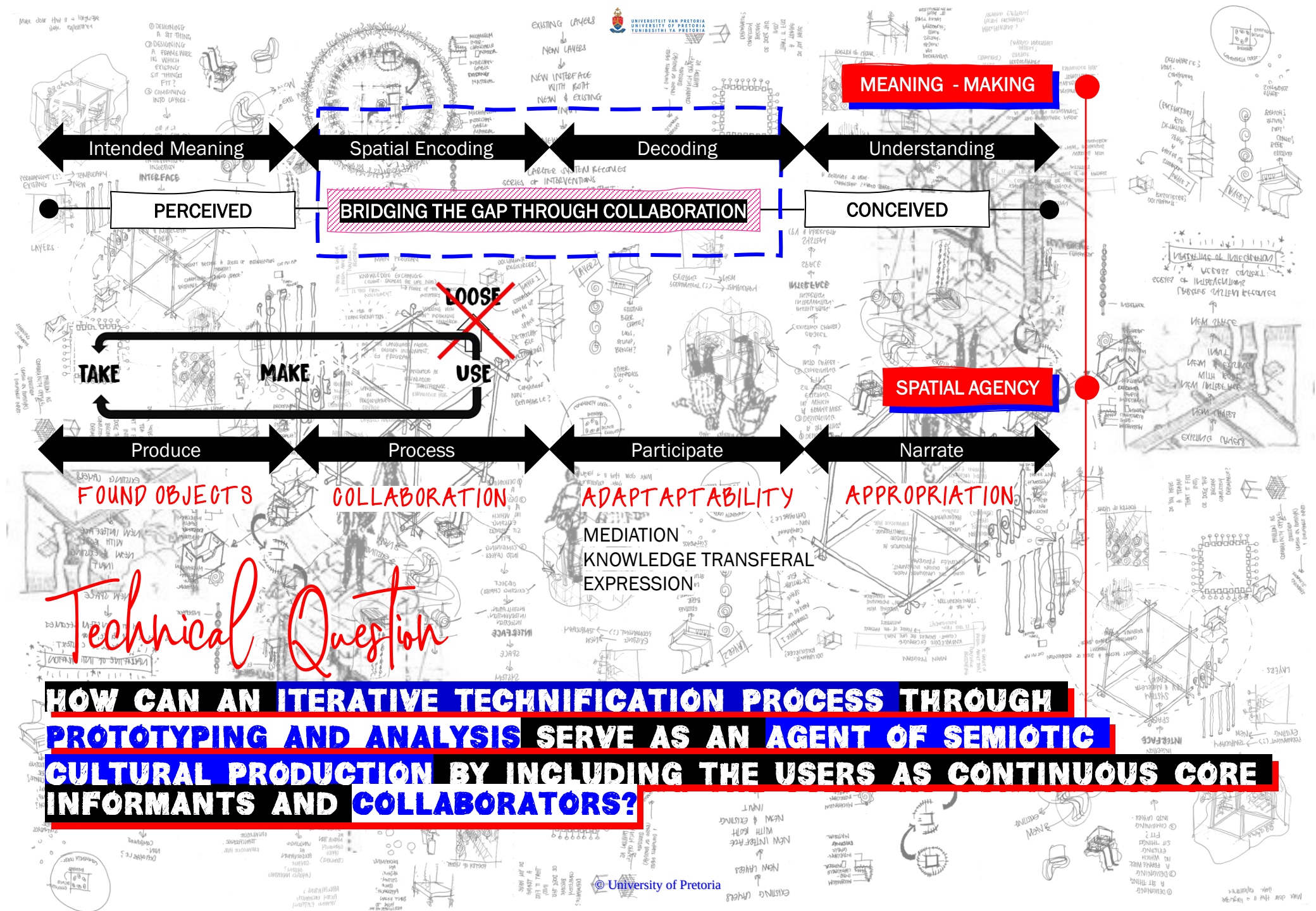


Research Methodology

YEAR TIMELINE

Collaboration with Stakeholders

Empathise | Define | Ideate | Prototype | Test | Documentation

Q1 - Pre-Design Phase | **Q2 - Design Phase** | **Q3 - Design Phase** | **Q4 - Post-Design Phase**

Data Collection & Analysis | Design Focus | Technical Focus

TECHNICAL DEVELOPMENT TIMELINE

WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6
23 – 27 August	30 Aug – 3 Sept	6 – 10 September	13 – 17 September	20 – 24 September	27 Sept – 1 Oct

DEFINE AND REFINE | **DESIGN, PROTOTYPE AND TEST**

Ideate | Prototype | Test | Reflect & Reiterate

REFLECT & REVISE

Milestone 4 Crit

EXTERNAL

KIMMI KLOES

COLLABORATIVE WORKSHOP 1

Prototyping with existing materials, experimenting with fixing methods and general design feedback.

SYNTHESISE

EXTERNAL

KIMMI KLOES

COLLABORATIVE WORKSHOP 2

Embedded meaning-making, design intention, user association and appropriation scenarios.

TECHNIFICATION

TECH CRIT

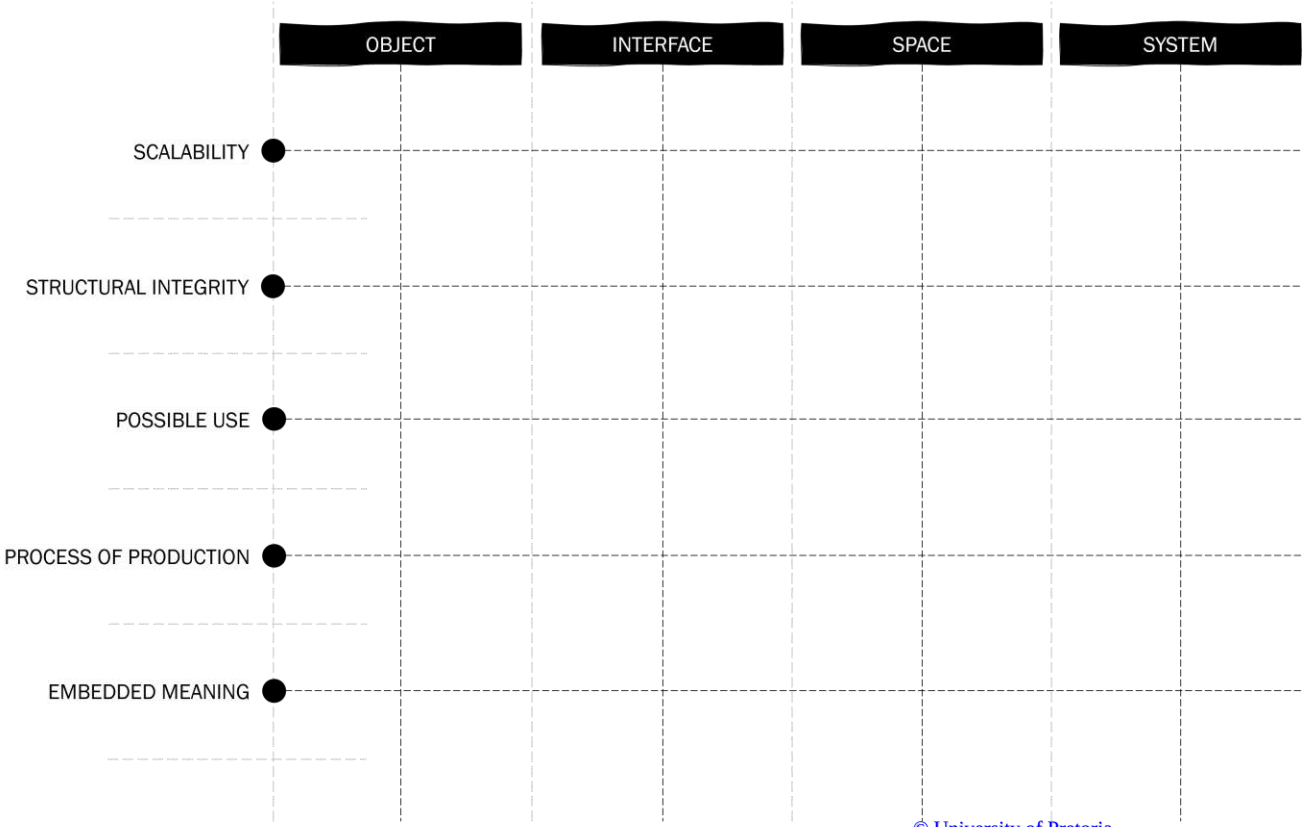
ESSAY 3

Technical Criteria

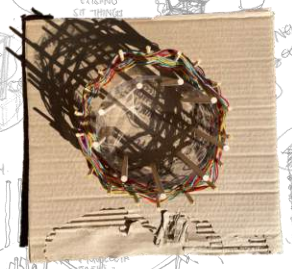
MEANING-MAKING THROUGH PROTOTYPING AND PARTICIPATION

To ensure the prototyping process translates into a spatial design intervention, the basic spatial and technical requirements informed the technical criteria that will be used to iterate and refine each prototype accordingly so that the narrative continues into the final design intervention.

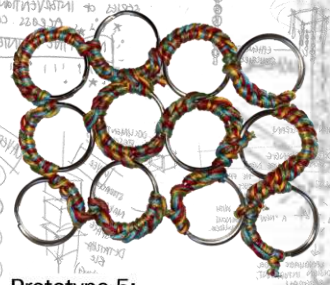
The prototypes were made on site with found materials and documented. The prototypes remains in the custody of the collaborators.

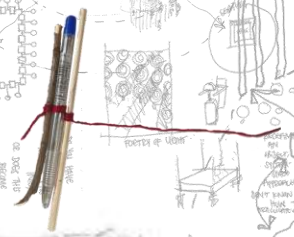
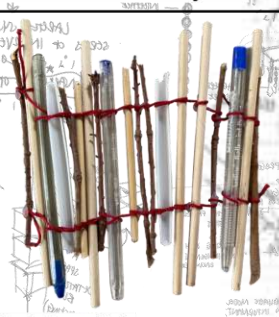


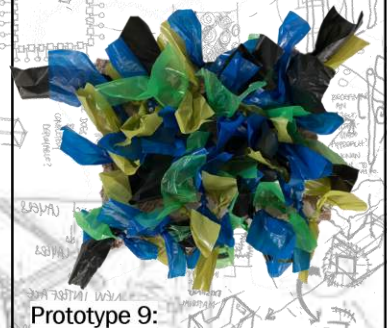
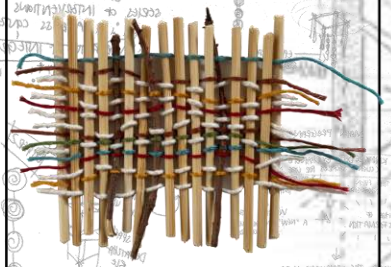
PROTOTYPE	MATERIALS	MEANING EMBEDDED	MEANING INTERPRETED	POSSIBLE USE
 **Prototype 1:** Built by The Moreleta Park Integration Project (2021) in April. Demolished in July by the Tshwane Municipality.	100mmØ Timber gumpoles, procured on site. 100mm Timber spacer cut from a 228mm x 114mm timber batten M20 Bolts procured on site	The client, SaCaresForLife, has been involved in various built projects throughout the settlement. All of these are constructed with gumpoles as it is an easily procurable product and a known construction material on site.	Generic: The association of the gumpole construction with client involvement in the settlement as safe spaces of aid and resources. Specific: Construction that relies on found materials and speaks to indigenous methods of building.	The gumpole construction is very useful as a structural framework in which interfaces can be interchanged. The materials are easily accessible throughout the settlement.
 **Prototype 2:** Built by the author as an at-home exploration of space making with found objects as representation of site conditions du to the pandemic.	Cardboard base Timber dowel sticks Different colour yarn and thread basket woven through the dowl sticks Flowers picked from the garden Bottle caps Glue	The intention of the conceptual model was to reflect the layered nature of the settlement by having different layered frameworks with interchangeable interfaces. The interfaces reflect indigenous methods of basket weaving and the flowers represent a temporary element as a celebration of ephemerality.	Generic: The maquette was interpreted by the community as a decorative element that makes use of familiar crafting methods and connected these methods with natural elements. Specific: This was a reminder of ancestral phenomena with craftmanship and being one with their environments (nature). The notion of transience was picked up after the flowers started to wilt and decay.	This series of explorative prototypes was intended to serve as design informants and possible design iterations.
 **Prototype 2.1:** Built as an iteration on Prototype 2 as layers of interfaces. Starting with the inner sleeve as a layer of transparency with text to create a play on light	Cardboard base Timber dowel sticks Transparency paper Poems and quotes written on the transparency layer	The conceptual model developed into something more practical and with the focus of the first layer representing a possible interface the intended meaning was aimed at equality through transparency. The play on light through the interface manifested itself through the prototyping process and became a poetic outcome of the intended mediation process.	Generic: The concept of transparency was well received and the immediate association with the maquette was that of a spatial representation of a conversation where there are two sides to view from and perceptions change depending from the point of view. Specific: The specific interpretation lies in the words written and projected by the interface.	This series of explorative prototypes was intended to serve as design informants and possible design iterations.

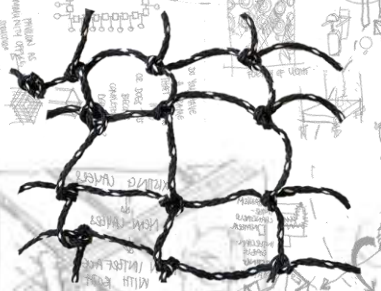
PROTOTYPE	MATERIALS	MEANING EMBEDDED	MEANING INTERPRETED	POSSIBLE USE
 **Prototype 2.2:** Built as an iteration on Prototype 2.1 as layers of interfaces. Adding a layer of potential deployability and playing with light.	Cardboard base Timber dowel sticks Transparency paper Poems and quotes written on the transparency layer Different colour yarn and thread basket woven through the dowl sticks	An addition to the inner sleeve of transparency the notion of the basket weave from the conceptual model was reintroduced as a potential interface to host deployable objects. . The interfaces reflect indigenous methods of basket weaving.	Generic: The maquette was interpreted as a maze of sorts that needs to be woven through as the threads were woven though the framework. Specific: The community immediately recognised the basket weave and interpreted the shadows as residue of their link to indigenous inheritance.	This series of explorative prototypes was intended to serve as design informants and possible design iterations.
 **Prototype 2.3:** Built as an iteration on Prototype 2.2 as layers of interfaces. Alternating interfaces to adapt to structural and object needs.	Cardboard base Timber dowel sticks Transparency paper Poems and quotes written on the transparency layer Paper interface with holes cut-out to host potential objects	To iterate the initial concept of the outer sleeve as an interface that can host objects the meaning embedded was that of temporal intervention. The paper was intended to mimic an interface that is not structural and permanent but possesses characteristics of transparency in the sunlight.	Generic: The maquette was read as a spatial composition and was associated with an enclosed space. This was interpreted as a safe space. Specific: The weave of the paper element through the framework was n a clear reference to the indigenous crafting method and the notions of transparency and transience.	This series of explorative prototypes was intended to serve as design informants and possible design iterations.
 **Prototype 2.4:** Built as an iteration on Prototype 2.3 with objects placed into the interface as representation of interface use.	Paper interface with holes cut-out to host potential objects Paper cut out rolled up to represent objects that can be folded and placed into the interface	The intention with the deployable object was to convey the notions of semiotics in design interventions: individual elements that are placed into an interface. The intended meaning was how diversity makes up a whole.	Generic: The community interpreted the maquette as a decorative element that could be used in a design intervention. The individual elements were read as one simultaneous element that makes up a whole.	This series of explorative prototypes was intended to serve as design informants and possible design iterations.

PROTOTYPE	MATERIALS	MEANING EMBEDDED	MEANING INTERPRETED	POSSIBLE USE
 **Prototype 2.5:** Built as an iteration on Prototype 2.4 as layers of interfaces. Adding the interface with rolled up deployable objects	Cardboard base Timber dowel sticks Transparency paper Poems and quotes written on the transparency layer Paper interface with holes cut-out to host potential objects Paper cut out rolled up to represent objects that can be folded and placed into the interface	The maquette intended to convey the first iterative design: a space that reflects the semiotic nature of the language model on site by catering for idiosyncratic contributions.	The maquette was presented as a spatial composition and interpreted as a layered maze or exhibition space made up from different elements. "This even looks like Plastic View" - Collaborator 2 The only successful interpreted meaning was that of transparency and equality in communication. The notions of indigenous crafting methods were lost in translation.	This series of explorative prototypes was intended to serve as design informants and possible design iterations.
 **Prototype 3:** Built by Collaborator 1 in Workshop 1 as an interface made with found objects.	Plastic bags found on site Filled with found objects like paper, grass, reeds, sponging and newspaper	The intended meaning spoke to the notion of making something beautiful from that which is disposed from everyday life. The author used trash to make something useful.	Generic: The model as is was interpreted as trash, or something that would be thrown away. Specific: Individuals interpreted the prototype as the beginning of a crafting process from available materials.	The stuffed bags were very spongy and yielding which gave it potential that if structured could serve as a cushioning device.
 **Prototype 3.1:** Built by Collaborator 1 in Workshop 1 as an iteration on prototype 3.	Plastic bags found on site Filled with found objects like paper, grass, reeds, sponging and newspaper Old t-shirt used as base to combine loose elements into one interface	With the iteration the intentions remained the notion of making something beautiful from that which is disposed from everyday life. The author used trash to make something useful.	Generic: Once read as a single element the prototype was interpreted as a material to be used in construction of a structure or as an upcycling attempt with an unknown final product. Specific: The notion of crafting something with found objects was recognised and appreciated.	With a base to combine the individual stuffing elements

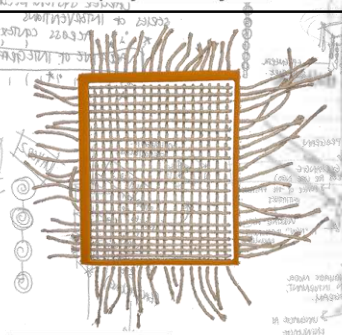
PROTOTYPE	MATERIALS	MEANING EMBEDDED	MEANING INTERPRETED	POSSIBLE USE
 Prototype 4: Built by Collaborator 2 in Workshop 1 as an interface made with found objects.	Plastic bags found on site woven together with a basic weave	The prototype is an example of an indigenous craft taught to the author by their mother. The author tried to replicate a complex weave but was unable to remember the intricate details thereof. The intended meaning was a link back to indigenous crafting methods made relevant to the situation by building with found objects.	Generic: The notion of creating elements with found or available materials resonates strongly with the community as the majority of the settlement is self-made. Specific: The prototype was interpreted as a 'Plastic View' weave: something that developed from indigenous crafting methods made relevant by the materiality and execution.	The plastic weave can be used as a finish or cover. If the weave is left unfixed it is not waterproof but if it is to be fixed (either melted or simply stitched together) it can also be used as a waterproof surface.
 Prototype 4.1: Built by Collaborator 2 in Workshop 1 as an iteration on prototype 4.	Decorative paper woven together with a basic weave	In an attempt to iterate the basic weave into something that speaks to the specific weave taught by the authors' mother the prototype was replicated with decorative paper.	Generic: The prototype was not well received as it was associated with an external creation that seemed irrelevant to the project and the context. Specific: The prototype was associated with a very decorative attempt and seemed distant from the other prototypes presented (intertextuality present here).	The concept of the prototype can be used as a patterned weave as iteration of the previous prototype but paper itself is not a very durable material for external use.
 Prototype 5: Built by Collaborator 3 in Workshop 1 as an interface made with found objects.	Key rings found on site Different colour yarn and thread woven through the key rings	The author of the prototype used the weaving and pattern as a homage to art his grandmother used to produce. It serves as a sentimental homage to his roots and homelands where this technique was a common indicator of craft and value.	Generic: The prototype was interpreted as a meaningful gesture to craft. It was clearly articulated that a lot of time and love went into the construction of the prototype and the community found beauty in the detail. Specific: The prototype spoke to the notion of self-taught craft and love embedded in the objects people of the settlement make.	The prototype itself does not possess very structural properties but the method in which it was fixed becomes a valuable option for binding methods. The notion of using keyrings also creates opportunities for possible fixing methods.

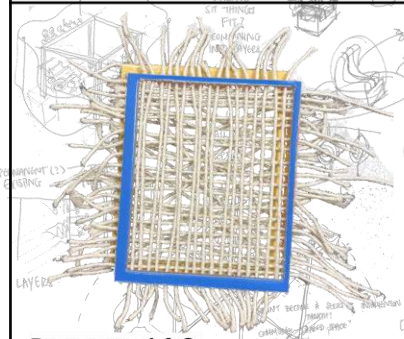
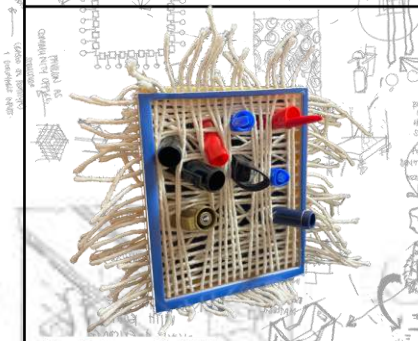
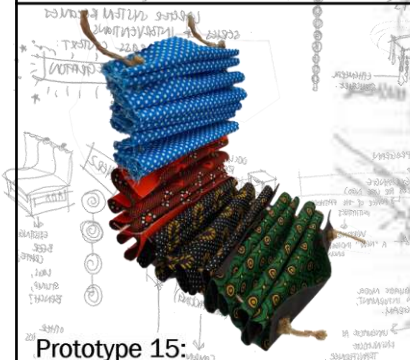
PROTOTYPE	MATERIALS	MEANING EMBEDDED	MEANING INTERPRETED	POSSIBLE USE
 Prototype 6: Built by Collaborator 4 in Workshop 1 as an interface made with found objects.	Cut plastic bottles found on site Industrial cable ties	The prototype was made as an expression of individual elements bound together with a unanimous detail and becomes a pattern.	Generic: The prototype was associated with an upcycling project conducted by the client. Specific: Inhabitants who have attempted crafting with found objects acknowledged the intuition and creativity behind the prototype and pondered the possible functions thereof.	The prototype was created to demonstrate a possible binding elements between found objects. The binding method becomes an option but is restricted by the nature of the elements that it binds.
 Prototype 7: Built by Collaborator 1 in Workshop 1 as an interface made with found objects.	Found objects like timber sticks, broken pens, plastic forks and dowel sticks Different colour yarn and thread basket woven through the found objects	The prototype was intended to reflect the essence of making in the settlement. The found objects are bound together with a non-conventional knotting device.	Generic: The prototype resonated with the inhabitants as a 'Plastic View Construction' and was associated with the methods used to build structures throughout the settlement. Specific: The domestic elements featured in the prototype was associated with the process of building from available materials that resonates on a very personal level of home-building and space making.	The prototype had potential with binding methods and if iterated can showcase structural characteristics. The prototype also needs to be developed to demonstrate scalability to ensure an intervention with found objects is still possible.
 Prototype 7.1: Built by Collaborator 1 in Workshop 1 as an iteration on prototype 7.	Found objects like timber sticks, broken pens, plastic forks and dowel sticks Different colour yarn and thread basket woven through the found objects	The prototype was intended to reflect the essence of making in the settlement. The found objects are bound together with a non-conventional knotting device. After developing from the previous iteration the prototype demonstrates the self-constructed and hand-crafted methods used across the settlement.	Generic: The prototype resonated with the inhabitants as a 'Plastic View Construction' and was associated with the methods used to build structures throughout the settlement. Specific: The development from the previous iteration was acknowledged and the objects in the prototype were recognised as everyday domestic objects.	After iteration the prototype has more structural abilities and can be used as both binding element and base structure to which other interfaces can be fixed to become a design element.

PROTOTYPE	MATERIALS	MEANING EMBEDDED	MEANING INTERPRETED	POSSIBLE USE
 Prototype 8: Built by Collaborator 3 in Workshop 1 as an interface made with found objects.	Plastic bags found on site News papers found on site Magazine papers found on site Different colour yarn and thread basket woven through the found objects Old t-shirt used as base to combine loose elements into one interface	The objects commonly associated with waste was interpreted as an attempt to reuse the waste and turn it into something useful in the settlement by incorporating indigenous methods and combining it with more site-specific objects.	Generic: The basket weave as generic crafting method was immediately recognised and associated with the familiar indigenous crafting methods. Specific: The notion of combining indigenous methods with relevant materials creates an site-specific response to crafting methods.	The interface creates a cushioning element that could be used in the intervention as an element of comfort.
 Prototype 9: Built by Collaborator 4 in Workshop 1 as an interface made with found objects.	Plastic bags found on site and cut to pieces Old t-shirt used as base to combine loose elements into one interface: cut plastic pieces tied to base	The prototype was made with upmost care and consideration as an artistic expression of the potential beauty that can stem from what is considered as waste.	Generic: The effort put into creating the prototype was recognised and appreciated as a labour of love. The notion of crafting with available materials was interpreted as an expression of the settlement. Specific: Inhabitants who have attempted crafting with found objects recognised the method and reflected on the process and outcome thereof.	This prototype doesn't possess very structural characteristics but is rich in meaning. It can be used as a surface treatment or expression of individual collaboration and speak to the notion of the beauty that stems from the mundane.
 Prototype 10: Built by Collaborator 2 in Workshop 1 as an interface made with found objects.	Timber dowel sticks found on site Different colour yarn and thread basket woven through the found objects	The basket weave is a very familiar indigenous crafting method used by many inhabitants of the settlement as a binding method. The meaning embedded in this prototype is a form of unity between various cultures with various backgrounds and methods of construction that all make use of a binding element such as the basket weave.	Generic: Majority of the inhabitants recognise the crafting method as a link to indigenous crafting. Specific: It exhibits the notion of indigenous traits that have been domesticated and surrounds everyday phenomena. The presence of an intangible link to heritage that is still unanimous amongst the inhabitants of the settlement.	The basket weave is a core binding method that can easily be translated into a structural element. It has been used by many inhabitants as much more that just a binding method but as a structural base for objects.

PROTOTYPE	MATERIALS	MEANING EMBEDDED	MEANING INTERPRETED	POSSIBLE USE
 **Prototype 10.1:** Built by Collaborator 2 in Workshop 1 as an iteration on prototype 10.	Timber sticks, reeds and grass found on site basket woven into a basket for domestic use. Built to show the flexibility and strength of the basket weave	The basket weave is a very familiar indigenous crafting method used by many inhabitants of the settlement as a binding method. The meaning embedded in this prototype is a form of unity between various cultures with various backgrounds and methods of construction that all make use of a binding element such as the basket weave.	Generic: Majority of the inhabitants recognise the crafting method as a link to indigenous crafting. Specific: It exhibits the notion of indigenous traits that have been domesticated and surrounds everyday phenomena. The presence of an intangible link to heritage that is still unanimous amongst the inhabitants of the settlement.	In this iteration of the basket weave prototype the collaborator demonstrated the very structural potential of the weave if combined with a framework. Depending on the materials used the basket weave can serve as both structure and binding elements in a design intervention.
 **Prototype 11:** Built by Collaborator 2 in Workshop 1 as an interface made with found objects.	Rope found on site made into a netting device	The prototype was built as a demonstration of skills gained through professional experience. The embedded meaning represents the knowledge transferal that is ever present in the settlement and how it can uplift daily life.	Generic: Specific: The prototype represents a larger system of knowledge transferal in the settlement where inhabitants can use skills learnt to enable themselves.	The rope netting becomes a very valuable construction method that can be used as a fixing device or structural device for more tensile structures. It has potential to act as a binding agent and the technique can be easily adapted to accommodate more project specific needs.
 **Prototype 12:** Built by Emile Cronje (external collaborator) in in movement dedicated to building materials from waste that can be used in the built environment.	Recycled plastic bags woven together to create a 7 strand woven rope	The intended meaning of the prototype is the possibility of self agency through construction with recycled objects and to create accessible resources for the built industry.	Generic: The community interpreted the prototype as a construction mechanism made from accessible materials. Specific: The prototype was associated with a very familiar method of construction that individuals have used to construct their own homes that speaks to hand-made self sustained construction.	The seven strand woven rope possesses various characteristics that makes it ideal for construction purposes. It is very strong, has tensile abilities, is flexible and adaptable in terms of scalability and can be used in various elements in the design intervention.

PROTOTYPE	MATERIALS	MEANING EMBEDDED	MEANING INTERPRETED	POSSIBLE USE
 **Prototype 13:** Built by the author to test materials that mimic transparent materials found on site for interface testing.	Gameboard cut-outs Transparent plastic bag	The intended meaning is that of transparency and equality in conversation. By allowing for written text on both sides of the ideal process of mediation becomes a spatial interface that allows two different perspectives to meet and consolidate.	Generic: As with prototype 2.1 the concept of transparency was well received and the immediate association with the maquette was that of a spatial representation of a conversation where there are two sides to view from and perceptions change depending from the point of view. Specific: The specific interpretation lies in the words written and projected by the interface.	This prototype was built to test the viability of material choice to serve a specific purpose in the design intervention. The surface is writable as intended but distorts the cast shadow of the words.
 **Prototype 13.1:** Built by the author to test materials that mimic transparent materials found on site for interface testing.	Gameboard cut-outs Transparent plastic sheet (to mimic Perspex sheeting)	The intended meaning is that of transparency and equality in conversation. By allowing for written text on both sides of the ideal process of mediation becomes a spatial interface that allows two different perspectives to meet and consolidate.	Generic: As with prototype 2.1 the concept of transparency was well received and the immediate association with the maquette was that of a spatial representation of a conversation where there are two sides to view from and perceptions change depending from the point of view. Specific: The specific interpretation lies in the words written and projected by the interface.	This prototype was built to test the viability of material choice to serve a specific purpose in the design intervention. The surface is writable as intended casts a crisp and clear shadow of written texts.
 **Prototype 13.2:** Built by the author to test materials that mimic transparent materials found on site for interface testing.	Gameboard cut-outs Transparent lined plastic sheet (to mimic reinforced Perspex sheeting)	The intended meaning is that of transparency and equality in conversation. By allowing for written text on both sides of the ideal process of mediation becomes a spatial interface that allows two different perspectives to meet and consolidate.	Generic: As with prototype 2.1 the concept of transparency was well received and the immediate association with the maquette was that of a spatial representation of a conversation where there are two sides to view from and perceptions change depending from the point of view. Specific: The specific interpretation lies in the words written and projected by the interface.	This prototype was built to test the viability of material choice to serve a specific purpose in the design intervention. The surface is writable as intended casts a crisp and clear shadow of written texts.

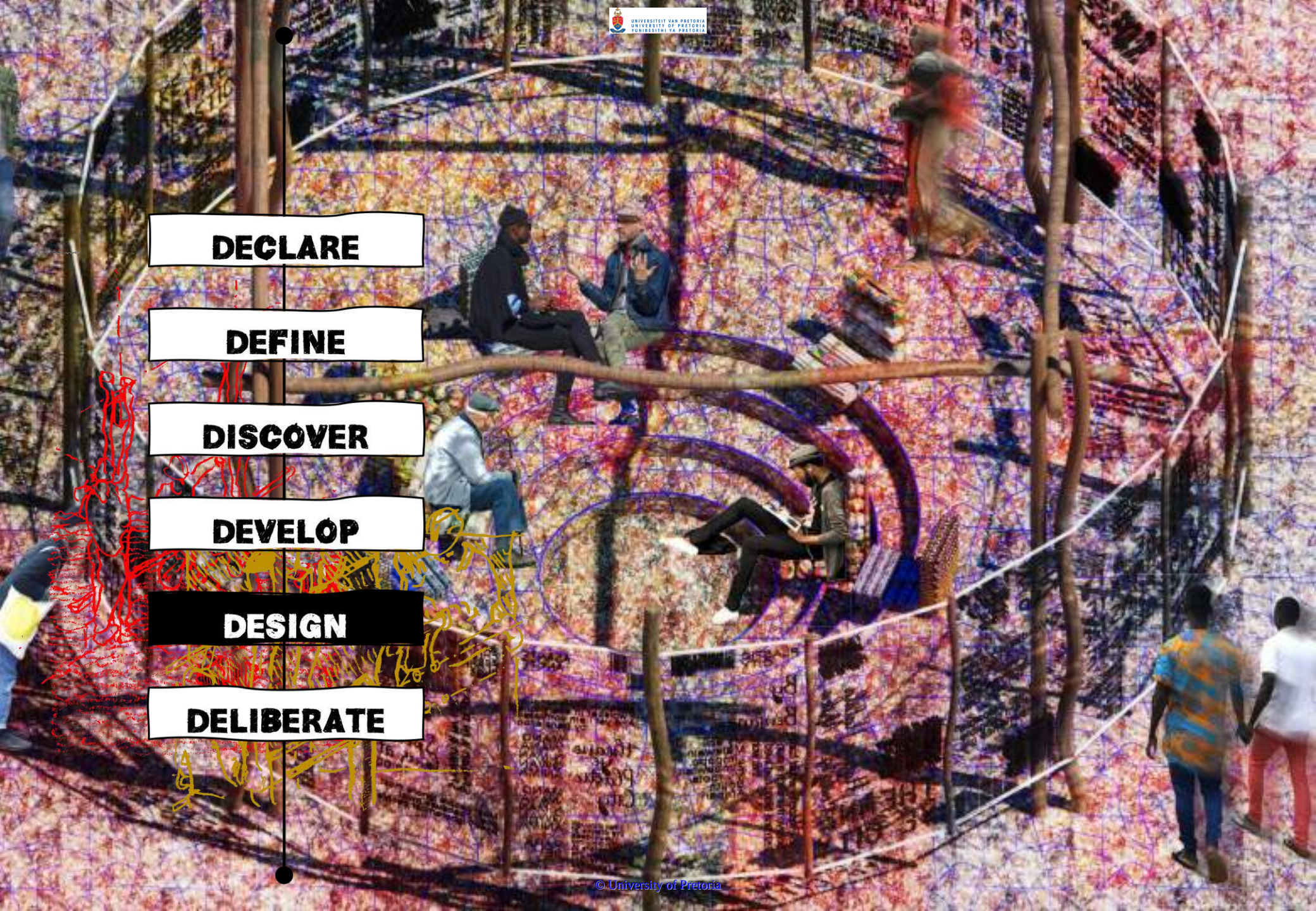
PROTOTYPE	MATERIALS	MEANING EMBEDDED	MEANING INTERPRETED	POSSIBLE USE
 **Prototype 13.3:** Built by the author to test materials that mimic transparent materials found on site for interface testing.	Gameboard cut-outs Transparent plastic sheet folded to mimic corrugated plastic sheeting	The intended meaning is that of transparency and equality in conversation. By allowing for written text on both sides of the ideal process of mediation becomes a spatial interface that allows two different perspectives to meet and consolidate.	Generic: As with prototype 2.1 the concept of transparency was well received and the immediate association with the maquette was that of a spatial representation of a conversation where there are two sides to view from and perceptions change depending from the point of view. Specific: The specific interpretation lies in the words written and projected by the interface.	This prototype was built to test the viability of material choice to serve a specific purpose in the design intervention. The surface is not writable as intended and distorts the written text but can still serve as a transparent 'window' to view the rituals from the exterior.
 **Prototype 14:** Built by the author to test iterated interface design that hosts deployable objects	Gameboard cut-outs Yarn fixed between the gameboard cut-outs	The notion of yarn and thread became a prominent feature during the prototyping process and the intention of the prototype was to speak to all the potential meanings that can be interpreted by the members of the community. The storage unit attempts to speak to the notion of indigenous techniques made contextually relevant.	Generic: The prototype was interpreted as an adaptation of prototype 2.2. The maquette was interpreted as a craft of sorts that needs to be woven through though the framework. Specific: The community still resonated with the notion of the shadows as residue of their link to indigenous inheritance.	This prototype was built to test the viability of design and material choice to serve a specific purpose in the design intervention. The weave is intended to give spacing and triangular support opportunities for deployable objects of various sizes.
 **Prototype 14.1:** Built by the author as an iteration on prototype 14	Gameboard cut-outs Yarn fixed between the gameboard cut-outs	The notion of yarn and thread became a prominent feature during the prototyping process and the intention of the prototype was to speak to all the potential meanings that can be interpreted by the members of the community. The storage unit attempts to speak to the notion of indigenous techniques made contextually relevant.	Generic: The prototype was interpreted as an adaptation of prototype 2.2. The maquette was interpreted as a craft of sorts that needs to be woven through though the framework. Specific: The community still resonated with the notion of the shadows as residue of their link to indigenous inheritance.	This prototype was built to test the viability of design and material choice to serve a specific purpose in the design intervention. The weave is intended to provide structure and support to host deployable objects.

PROTOTYPE	MATERIALS	MEANING EMBEDDED	MEANING INTERPRETED	POSSIBLE USE
 **Prototype 14.2:** Built by the author as an iteration on prototype 14.1.	Gameboard cut-outs Yarn fixed between the gameboard cut-outs	The notion of yarn and thread became a prominent feature during the prototyping process and the intention of the prototype was to speak to all the potential meanings that can be interpreted by the members of the community. The storage unit attempts to speak to the notion of indigenous techniques made contextually relevant.	Generic: The prototype was interpreted as an adaptation of prototype 2.2. The maquette was interpreted as a craft of sorts that needs to be woven through though the framework. Specific: The community still resonated with the notion of the shadows as residue of their link to indigenous inheritance.	This prototype was built to test the viability of design and material choice to serve a specific purpose in the design intervention. The weaves are combined and another iteration is needed to test if the interface could host deployable objects.
 **Prototype 14.3:** Built by the author as an iteration on prototype 14.2.	Gameboard cut-outs Yarn fixed between the gameboard cut-outs	With the addition of the objects into the interface the indigenous aspects hosts the 'new' elements that have developed from the settlement. It serves as a metaphor for the past elements that inform and support the present phenomena in the settlement.	Generic: The storage unit with deployable objects as part of the proposed community office was interpreted as the community leaders catering for the community as the unit caters for the deployable objects. Specific: The interface host all the individual projections of the members of the community.	This prototype was built to test the viability of design and material choice to serve a specific purpose in the design intervention. The combined weaves provided enough structure and support to host deployable objects.
 **Prototype 15:** Built by the author as a design response to the sit-things.	Offcuts of swe-swe material given to the author by collaborator 2 Yarn used to bind the weave together	The single author design sit-thing is intended to represent the unique identity and craftmanship that developed in the settlement. The appropriated indigenous techniques of basket weaving and value in material is combined to create both structure and comfort.	Generic: The prototype was interpreted as a homage to traditional cloths used by a collaborator to make clothing. Specific: The identity of the material was greatly appreciated as it speaks to traditional African prints and the sentimental associations thereof.	This prototype was built to test the viability of design and material choice to serve a specific purpose in the design intervention. The sit-thing will be used as informant to the final iteration of the single-authored sit-thing.

Prototype Analysis

TRANSLATING INDIVIDUAL PROTOTYPES INTO A SPATIAL INTERVENTION

The prototypes all demonstrate the rich process of meaning-making through participation and narrate the extensive levels of interpretation and idiosyncratic associations linked with objects. These initial prototypes serve as informants for certain design elements and set the scene for the iterative design process and final design intervention.



Proposed Intervention

COMMUNITY OFFICE PROGRAMMING

MEDIATION

THROUGH A COMMUNAL FIRE AND AN ENABLED CONVERSATION (SIT-THINGS)

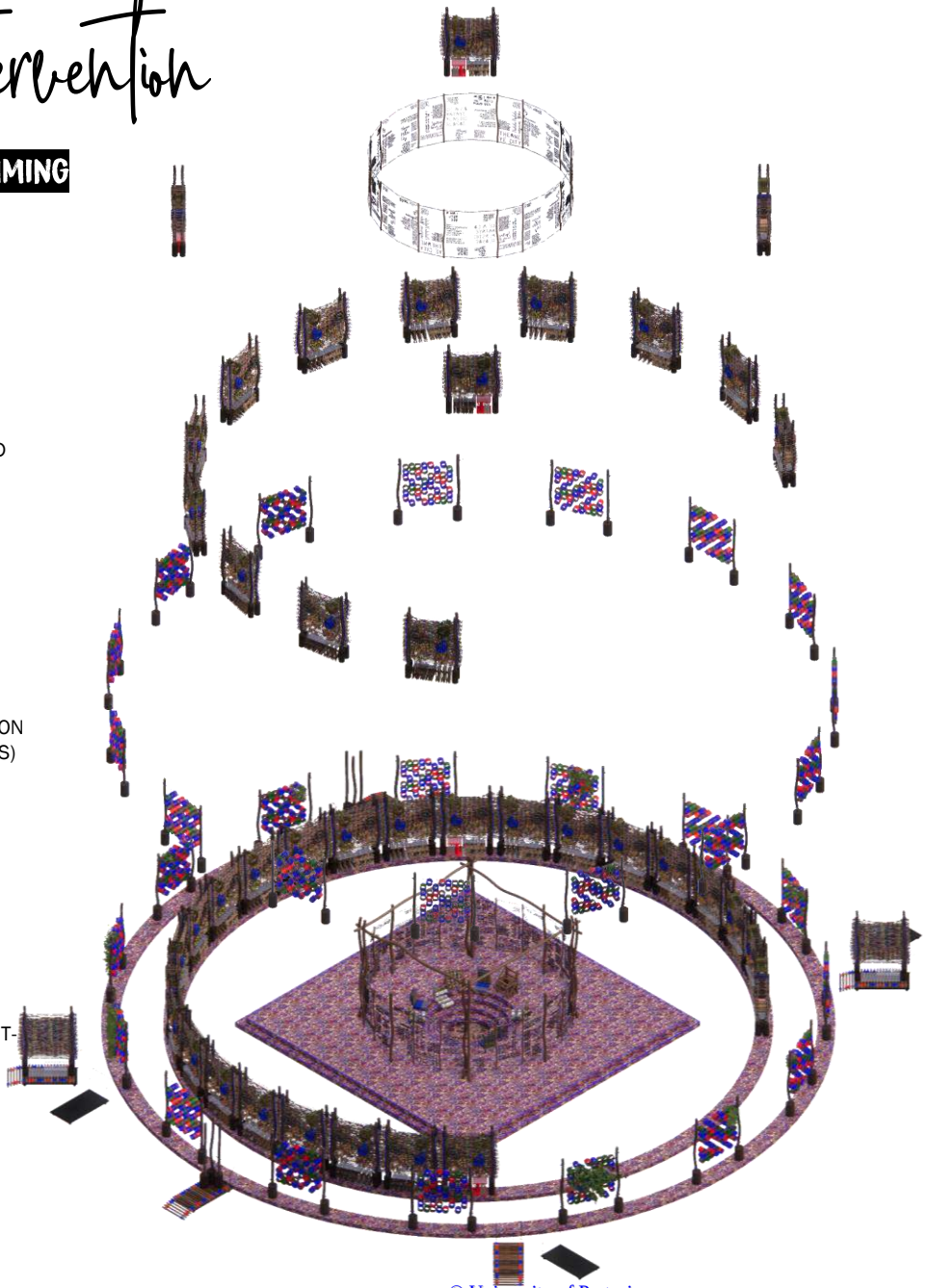
KNOWLEDGE TRANSFERAL

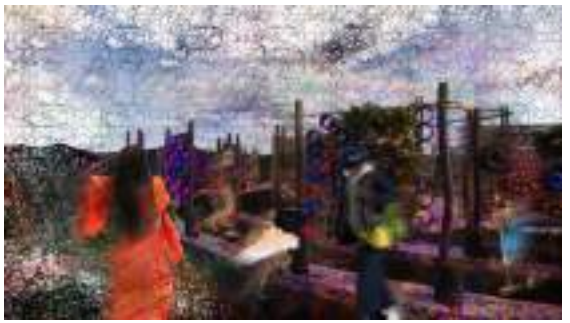
THROUGH A DESIGNATED SPACE OF EXPRESSION AND AN ENABLED CONVERSATION (SIT-THINGS)

EXPRESSION

THROUGH A TRANSPARENT COMMUNICATION INTERFACE AND AN ENABLES CONVERSATION (SIT-THINGS)

APPROPRIATIONS





COMMUNITY SCHOOL

EXISTING STRUCTURES

COMMUNITY OFFICE

NEW INTERVENTION FITTED ONTO EXISTING CONCRETE SLAB

CLIENT: SACaresForLife NGO

OPEN FIELD

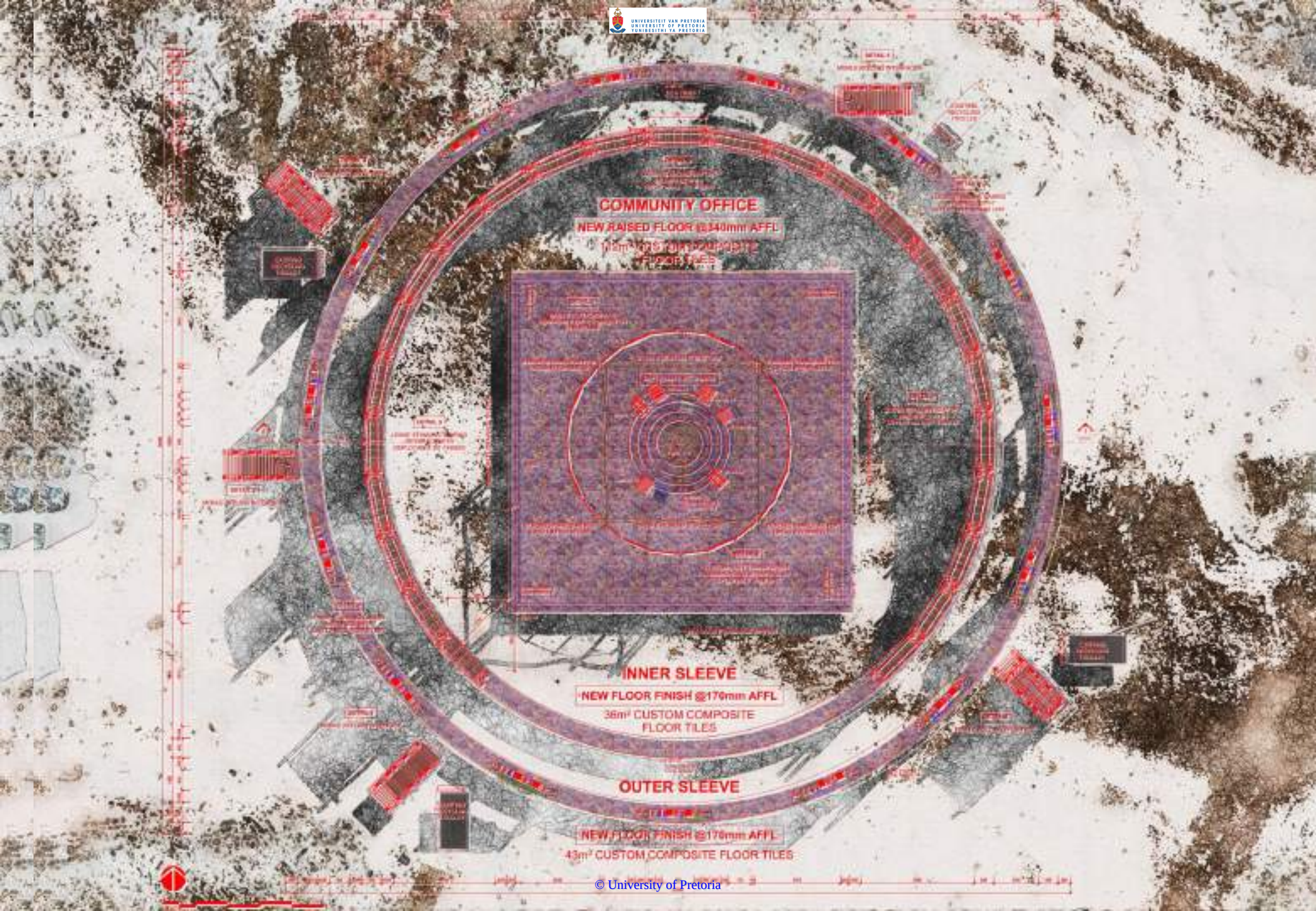
SITE PLAN

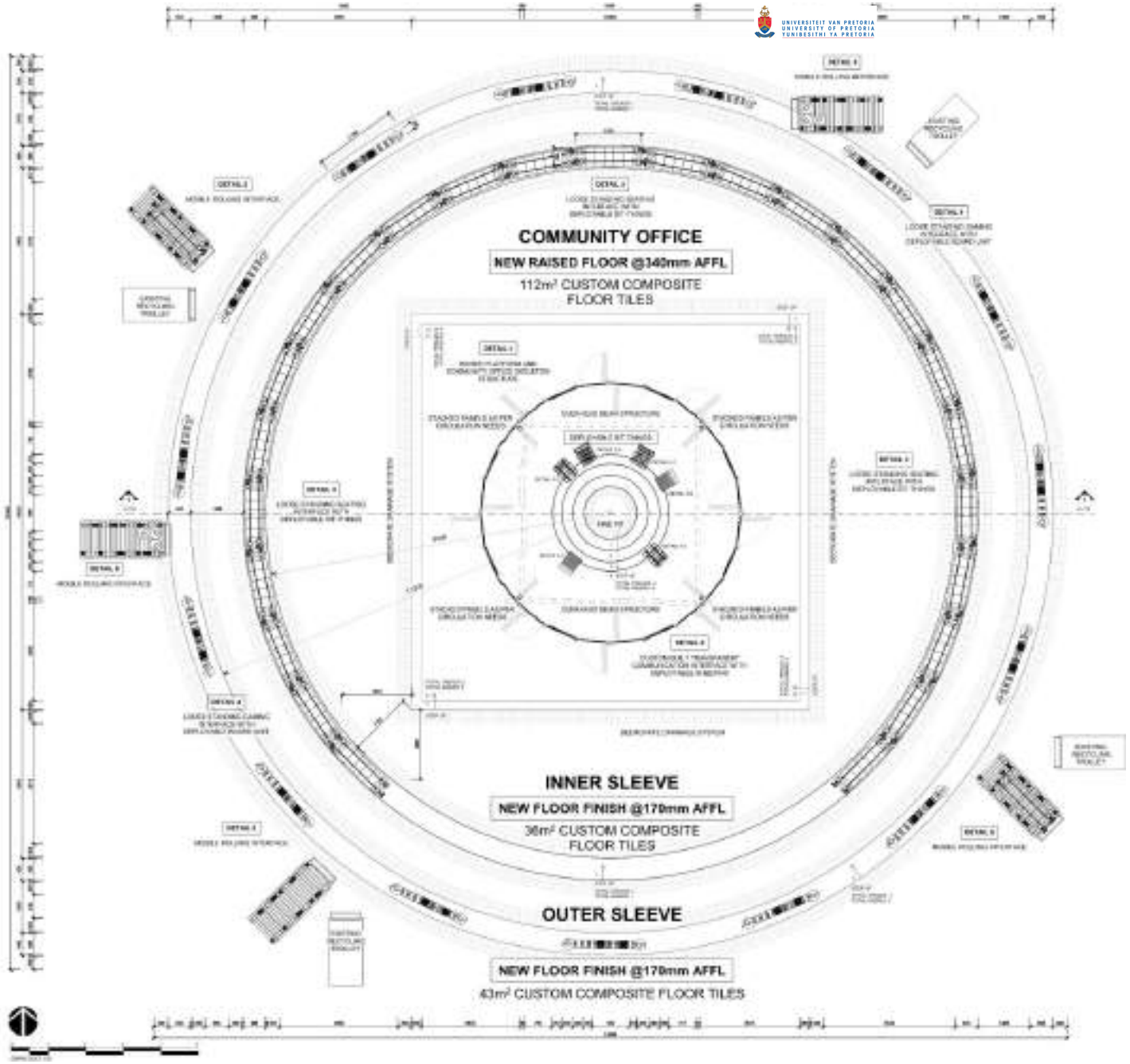
SCALE 1: 100

ORIGINAL COMMUNITY OFFICE

DEMOLISHED COMMUNITY OFFICE

PROPOSED COMMUNITY OFFICE





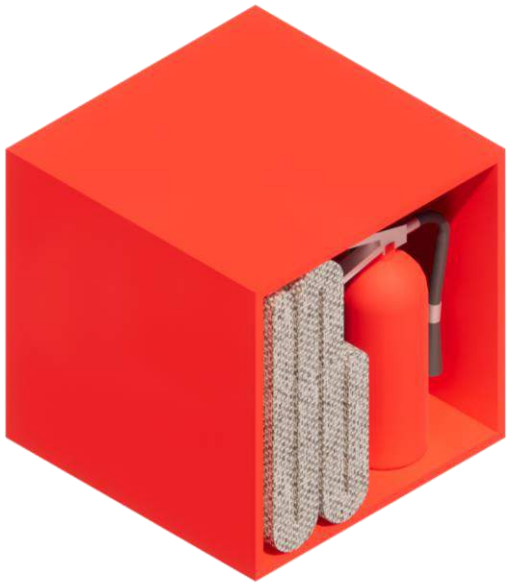
The Plastic View Community Office, a familiar safe space, was demolished during the year (MPIP, 2021).

The initial response was a design that reflected the layered nature of the settlement as a celebration of ephemerality.

The design salutes the heritage of the previous community in geometry and program.

GENERAL LAYOUT

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS

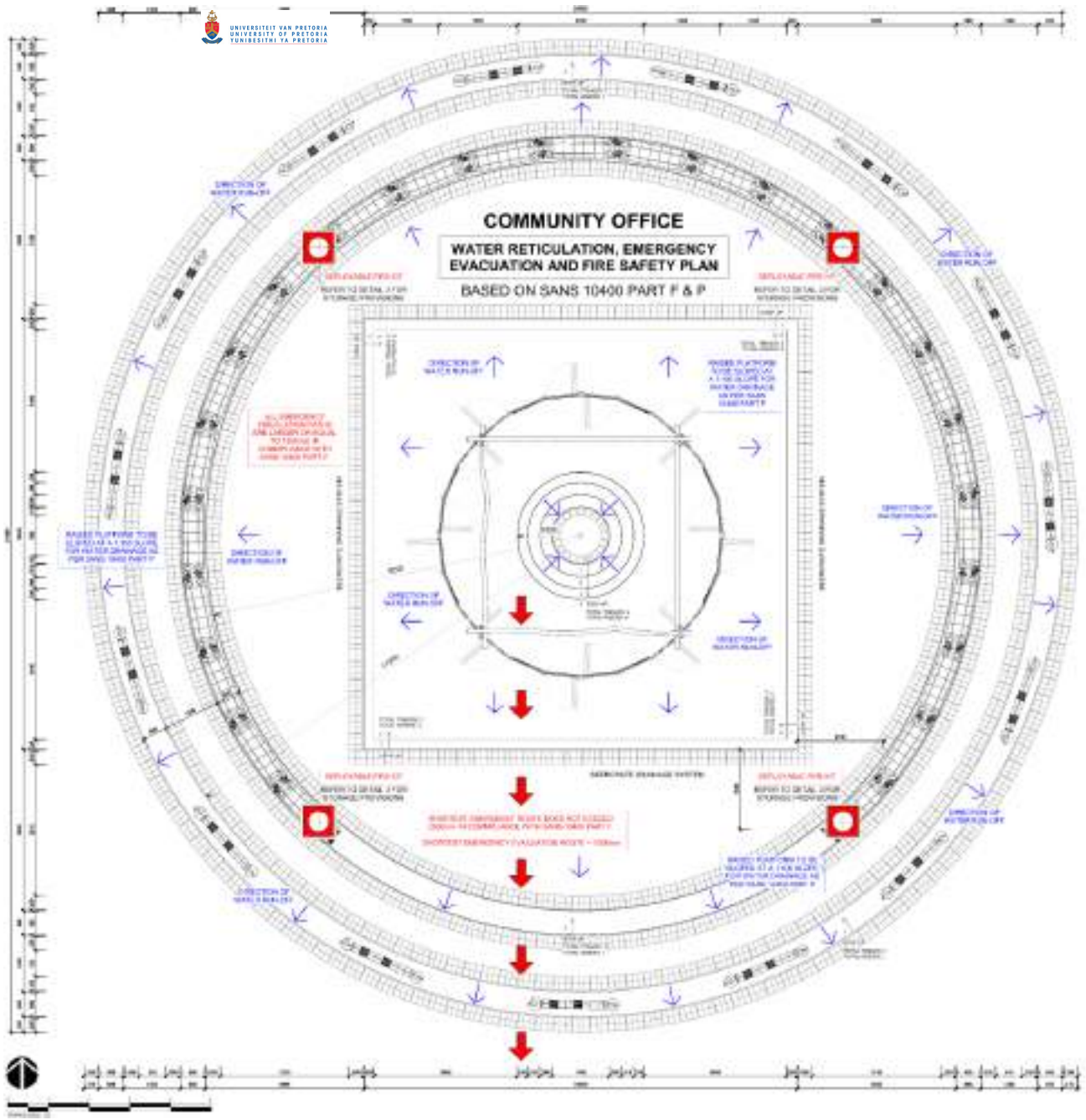


Design response to fire-safety includes a deployable fire-kit equipped with waterless fire fighting methods.

FIRE SAFETY AND WATER RETICILATION KEY	
→	DIRECTION OF WATER RUN-OFF
■	DEPLOYABLE FIRE KIT EQUIPPED WITH: 2X 4.5KG FIRE EXTINGUISHER 1X FIRE BLANKET 1X BUCKET FOR SAND EXTINGUISHING
➡	SHORTEST EMERGENCY EVACUATION ROUTE

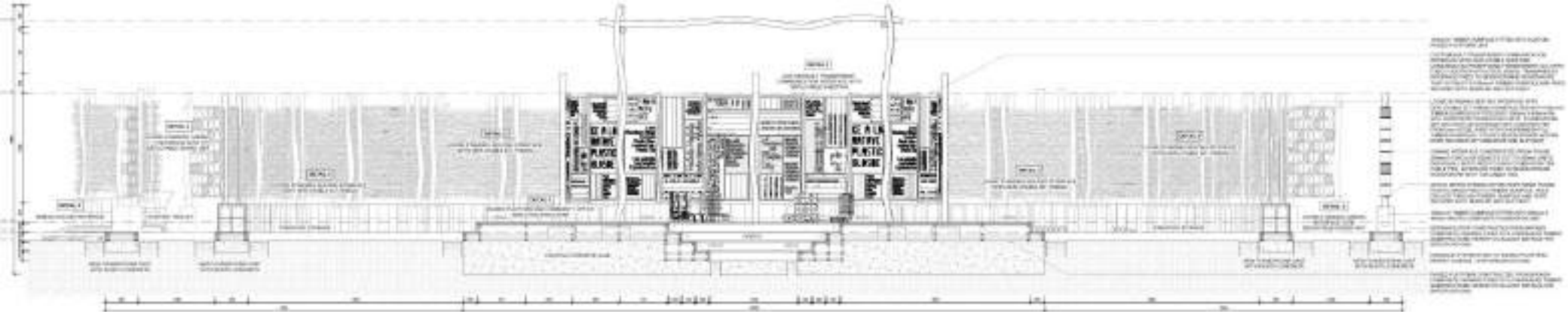
COMBUSTABLE MATERIAL TREATMENTS
ALL TIMBER GUMPOLES TO RECEIVE FIRE RETARDANT TREATMENT AS PER CLIENT SPECIFICATION.

ALL RECYCLED PLASTIC AND FOUND OBJECTS TO LEAVE AS IS - FIRE RETARTDANT TREATMENT AFFECTS MATERIAL INTEGRITY AND WILL INFLUENCE THE CRAFTMANSHIP OF THE FINAL DESIGNS. MAJORITY OF THE COMBUSTABLE OBJECTS ARE DEPLOYABLE. THE FIRE KIT ALSO PROVIDES WATERLESS FIRE FIGHTING METHODS TO COMPENSATE FOR THE COMBUSTABLE MATERIALS.



SERVICES PLAN: WATER RETICULATION AND FIRE SAFETY

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS



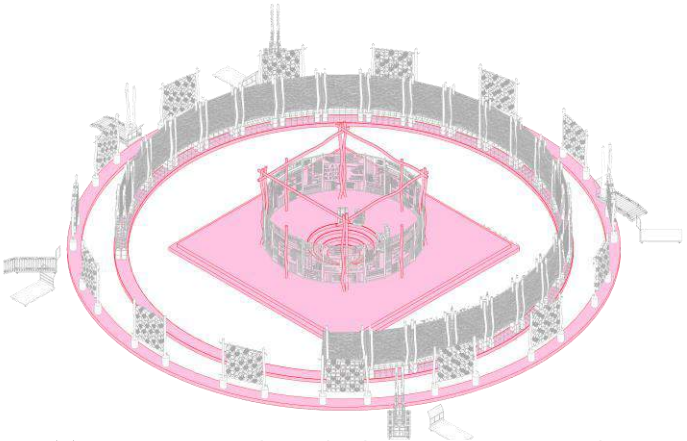
SECTION 1

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS

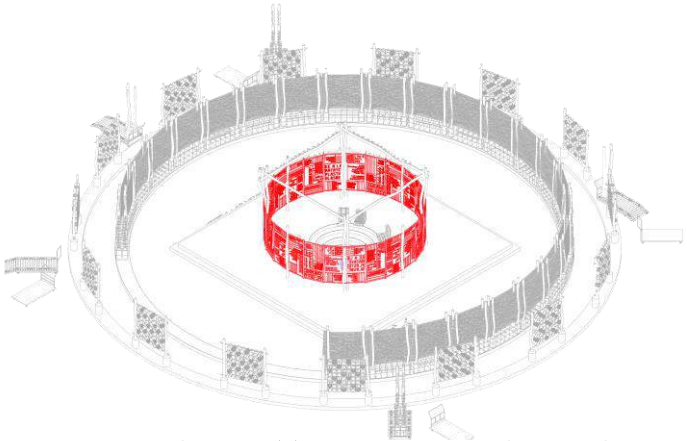
SECTION 1 ARTISTIC INTERPRETATION

Individual Components

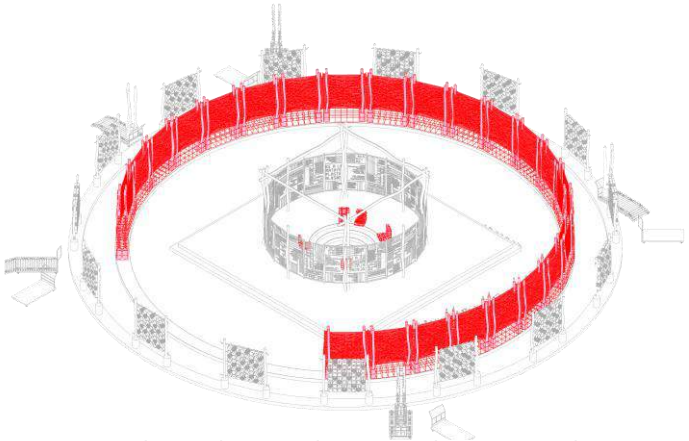
STATIC SPATIAL COMPOSITION



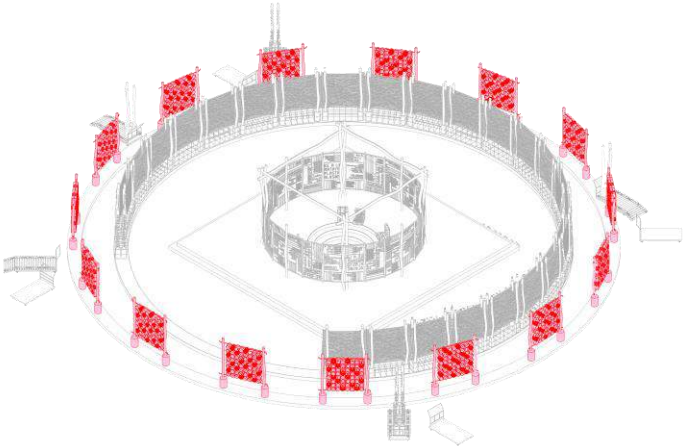
COMMUNITY OFFICE SKELETON STRUCTURE



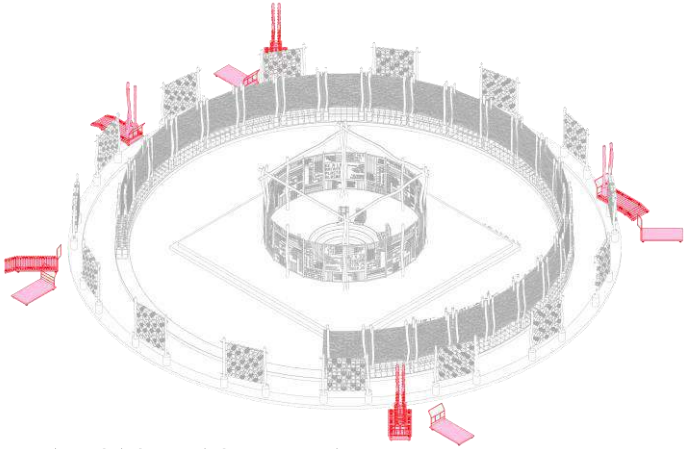
TRANSPARENT COMMUNICATION INTERFACE



STORAGE INTERFACE WITH DEPLOYABLE SIT-THINGS



GAMING INTERFACE



A MOVEMENT MECHANISM

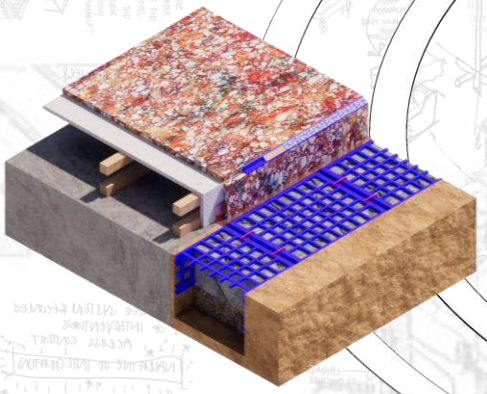
Detail 1

COMMUNITY OFFICE SKELETON STRUCTURE

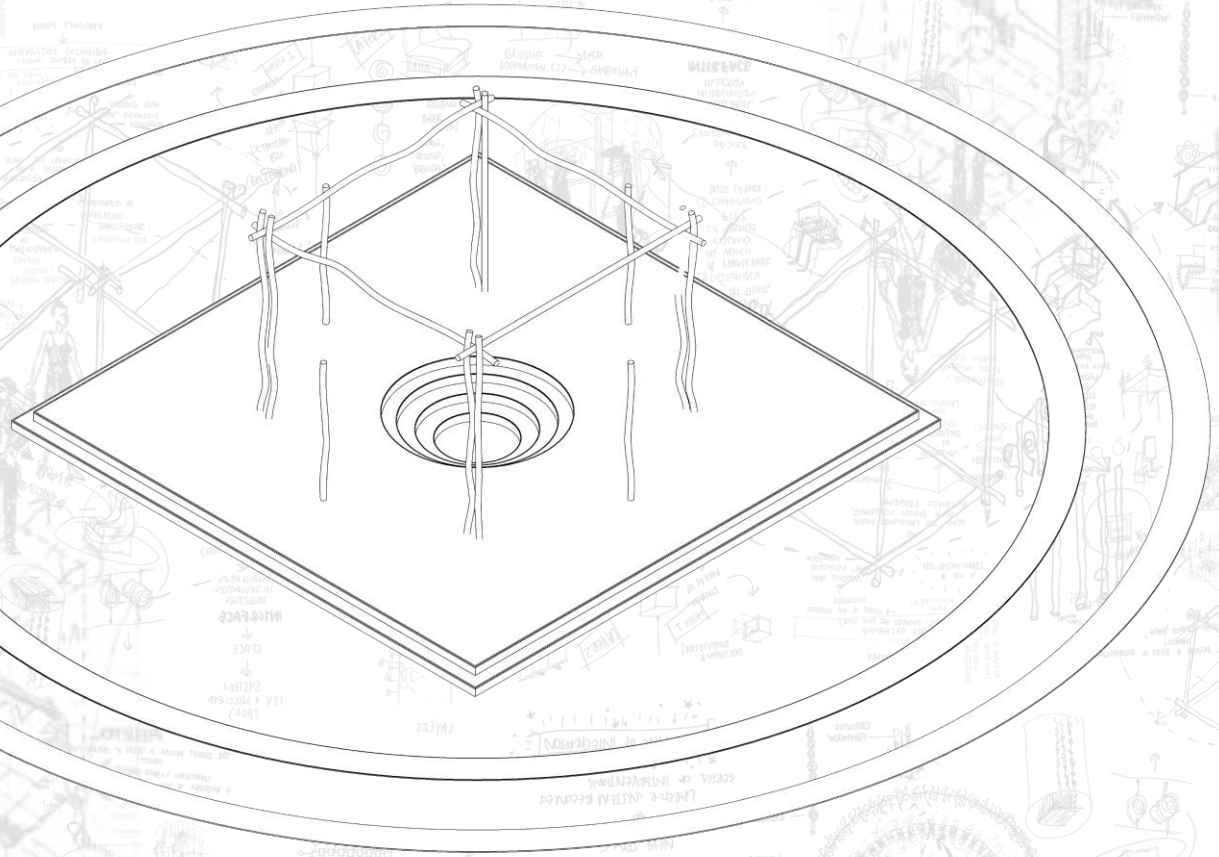
A HOMAGE TO HISTORY:
IMMEDIATE CONNOTATION TO PREVIOUS COMMUNITY OFFICE

$191m^2$ CERAMIC COMPOSITE TILE MADE ON SITE

INNER SEATING CAN HOST MAX 12 SIT-THINGS AND 1 x DEPLOYABLE FIRE PIT.



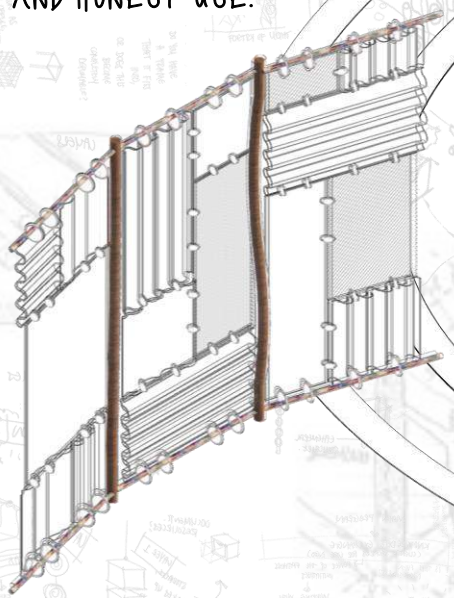
RAISED PLATFORM TO INCLUDE DRAINAGE DETAIL TO ALLOW FOR SUFFICIENT WATER RETICULATION.

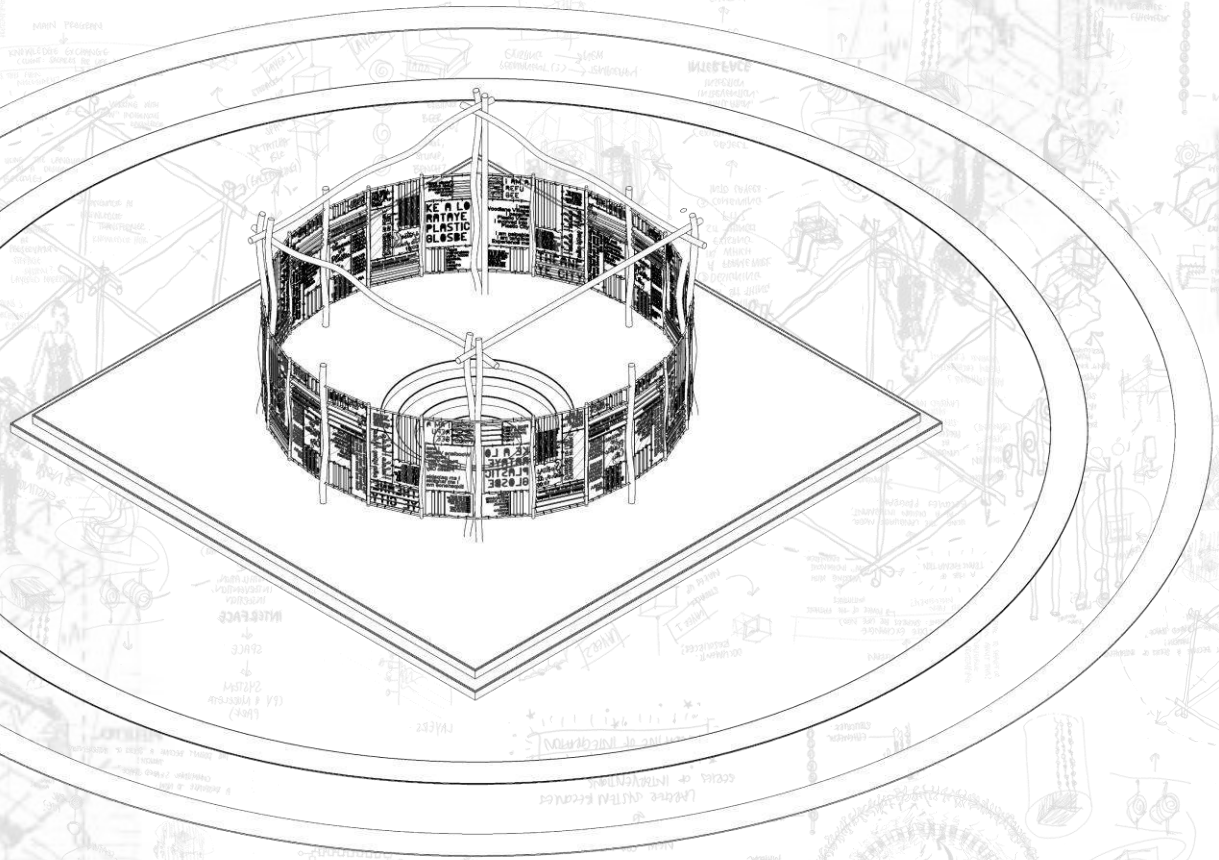


Detail 2

FOLDING TRANSPARENT COMMUNICATION INTERFACE

INTERCHANGEABLE TRANSPARENT INTERFACE THAT ALLOWS USERS TO WRITE FROM BOTH SIDES OF THE INTERFACE: INTERIOR AND EXTERIOR VIEWS CAN BE EXPRESSED AND OFFERS TRANSPARENT COMMUNICATION AND HONEST USE.



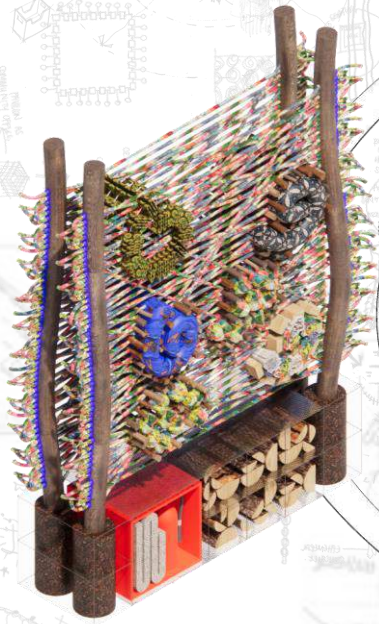


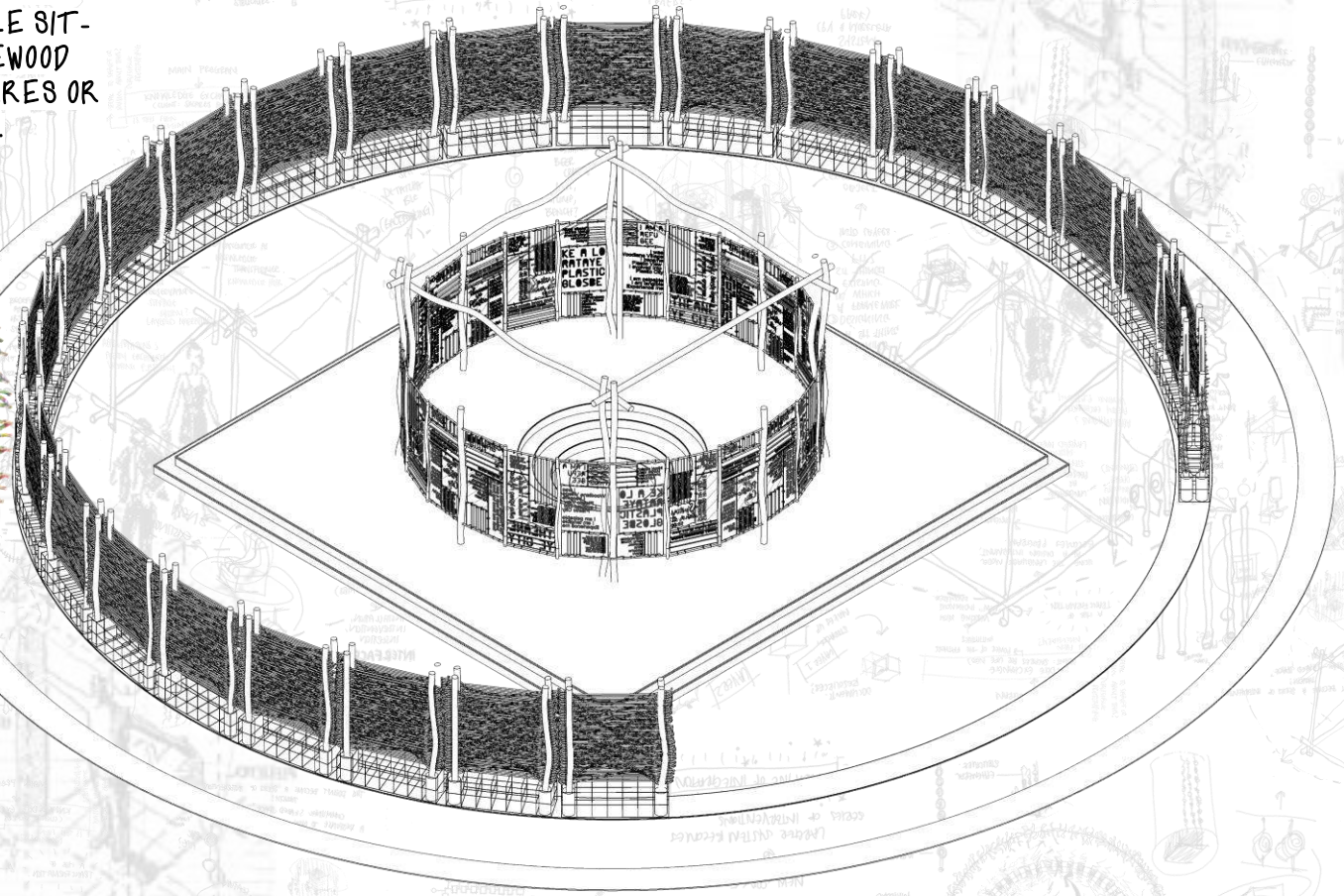
INTERFACE CAN BE FOLDED TO ALLOW OR RESTRICT CIRCULATION AS NEEDED. 8 x PANELS NEEDED TO ENCLOSE THE SPACE

Detail 3

STORAGE INTERFACE WITH DEPLOYABLE SIT-THINGS

A STORAGE UNIT THAT CAN HOST UP TO 7 DEPLOYABLE SIT-THINGS AS WELL AS FIREWOOD AND SIT-THING STRUCTURES OR A DEPLOYABLE FIRE-KIT.





1 STORAGE INTERFACE =
- 7 x SIT-THINGS
- 1KG FIREWOOD
- 7 x SIT=THING STRUCTURES

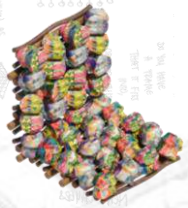
OR

- 1 x DEPLOYABLE FIRE KIT

Detail 3-1 — 3-5

DEPLOYABLE SIT-THINGS

THE STORAGE INTERFACE HOSTS INDIVIDUAL SIT-THINGS THAT REPRESENTS THE CREATORS THEREOF IN THE SPACE. THERE ARE 'FILLER' SIT-THINGS THAT FILL THE NEED FOR ANYONE WHO DOES NOT HAVE A SIT-THING YET.

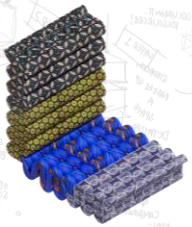


DETAIL 3-1

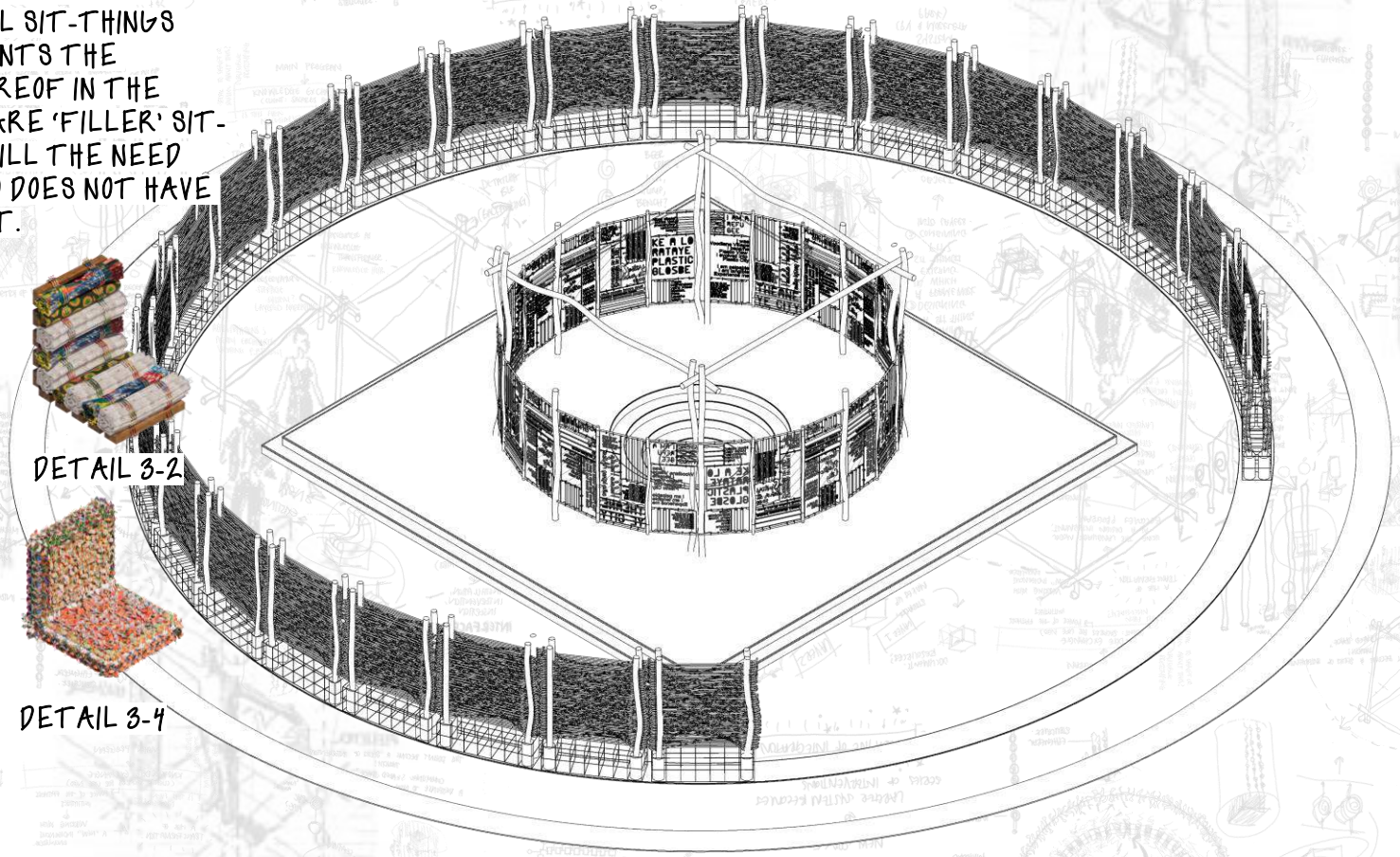
DETAIL 3-2

DETAIL 3-3

DETAIL 3-4



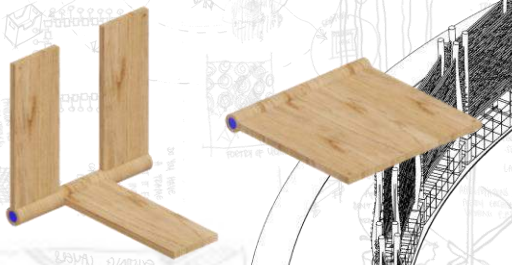
DETAIL 3-5



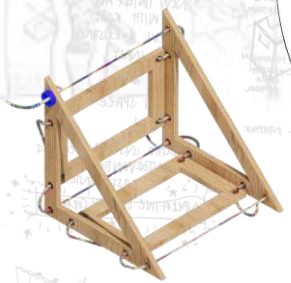
Detail 3a & 3b

DEPLOYABLE SIT-THINGS STRUCTURAL ELEMENTS

THE SIT-THING STRUCTURES ALLOW INTERCHANGEABILITY FOR THE SIT-THINGS AND CAN BE STORED IN THE SEATING STORAGE INTERFACE.

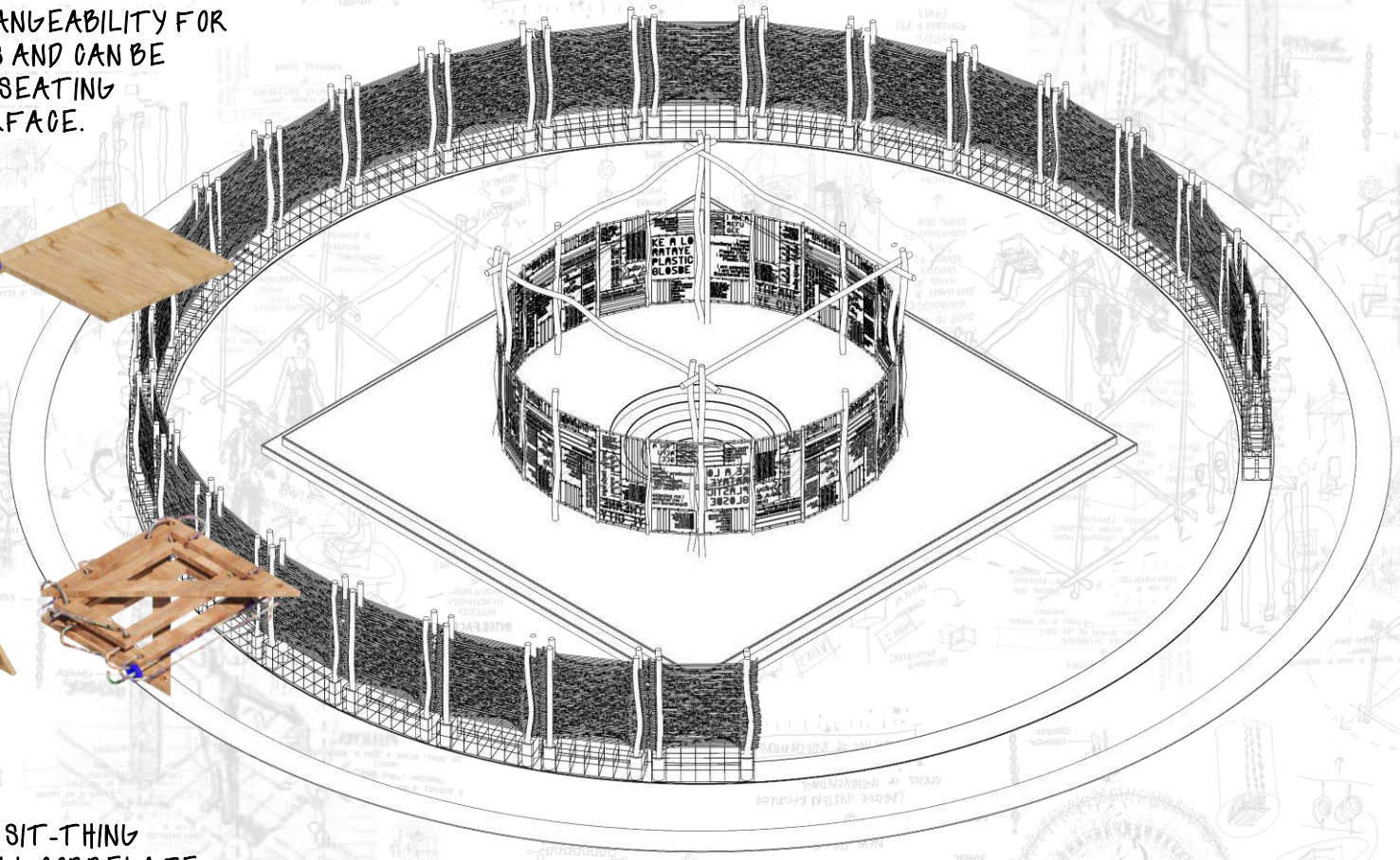


DETAIL 3a



DETAIL 3b

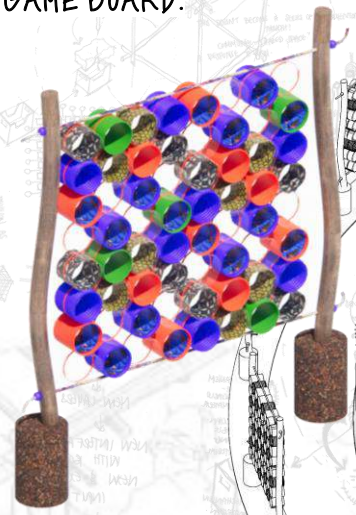
THE AMOUNT OF SIT-THING STRUCTURES WILL CORRELATE WITH THE AMOUNT OF SIT-THINGS THAT EACH SIT-THING HAS A STRUCTURE IF NEEDED.

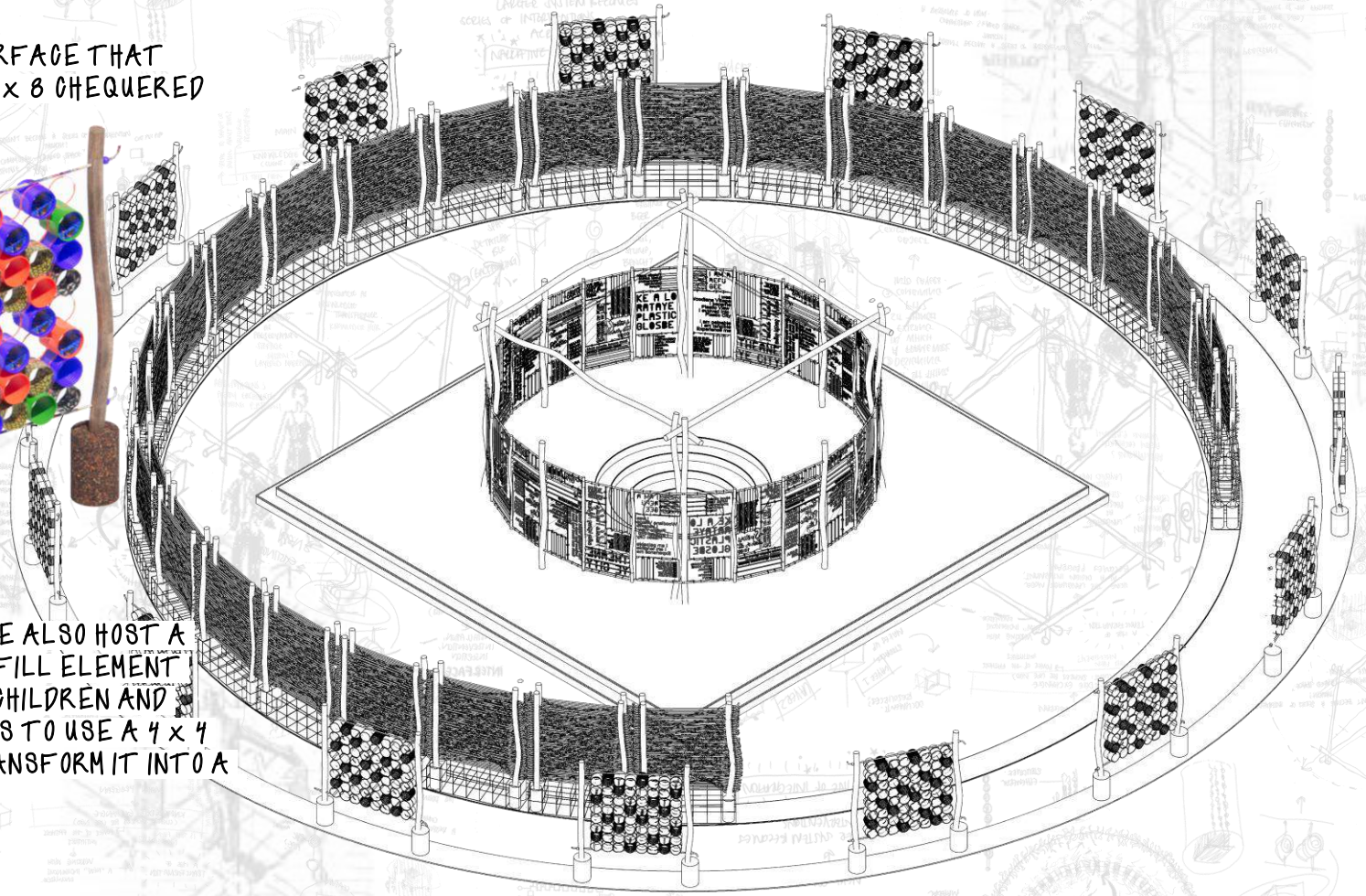


Detail 4

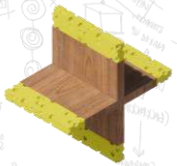
GAMING INTERFACE

A GAMING INTERFACE THAT REFLECTS A 8 x 8 CHEQUERED GAME BOARD.





THE INTERFACE ALSO HOST A DEPLOYABLE INFILL ELEMENT THAT ALLOWS CHILDREN AND SHORTER USERS TO USE A 4 x 4 BOARD AND TRANSFORM IT INTO A 8 x 8 BOARD.

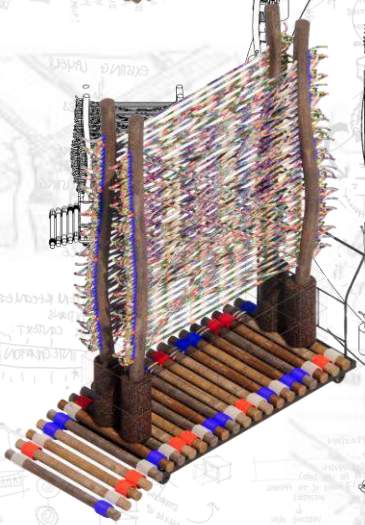


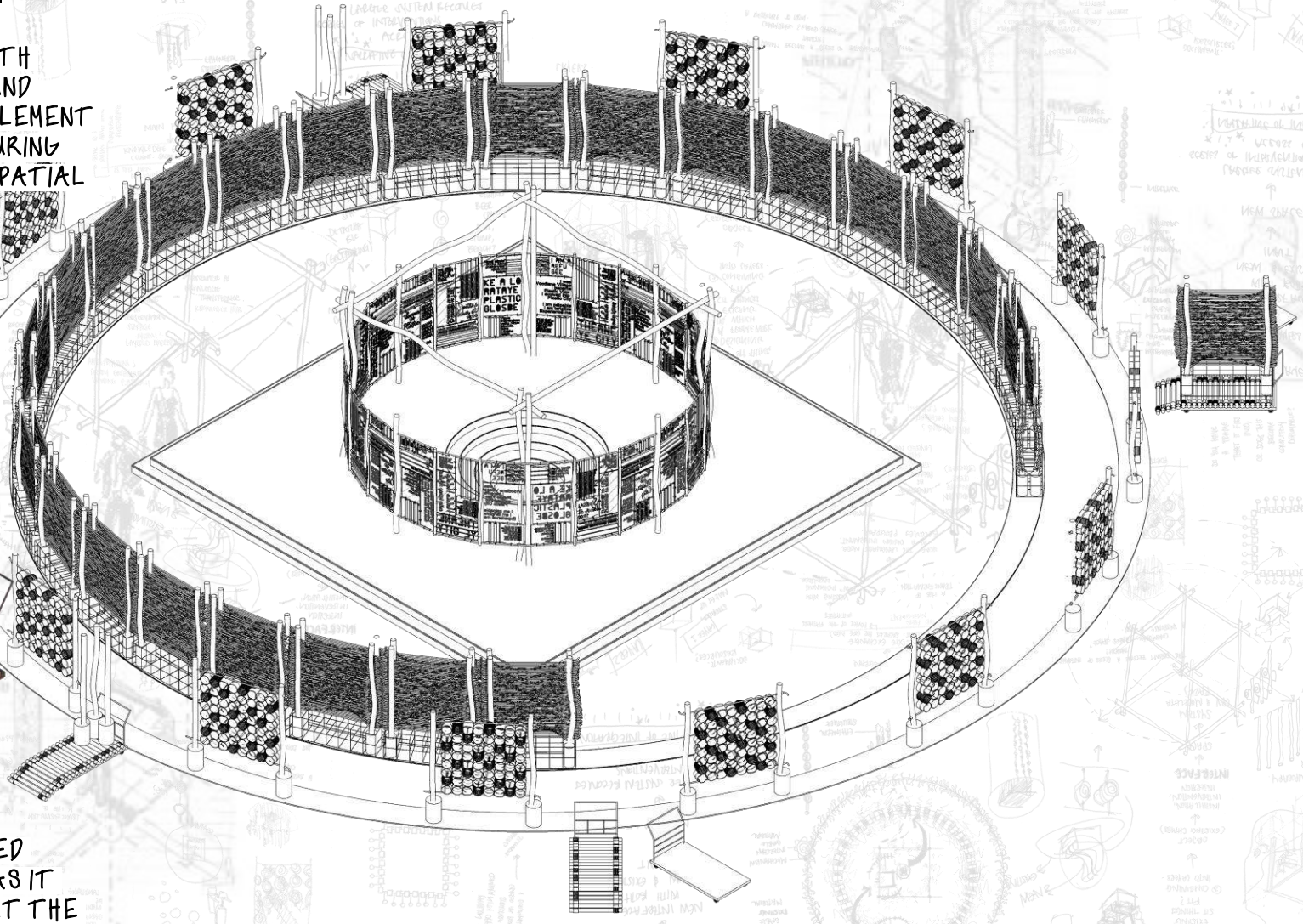
INFILL DETAIL

Detail 5

A MOVEMENT MECHANISM

THIS MECHANISM LINKS WITH EXISTING TROLLEYS FOUND THROUGHOUT THE SETTLEMENT TO AID IN THE RECONFIGURING AND ADAPTING OF THE SPATIAL COMPOSITION.





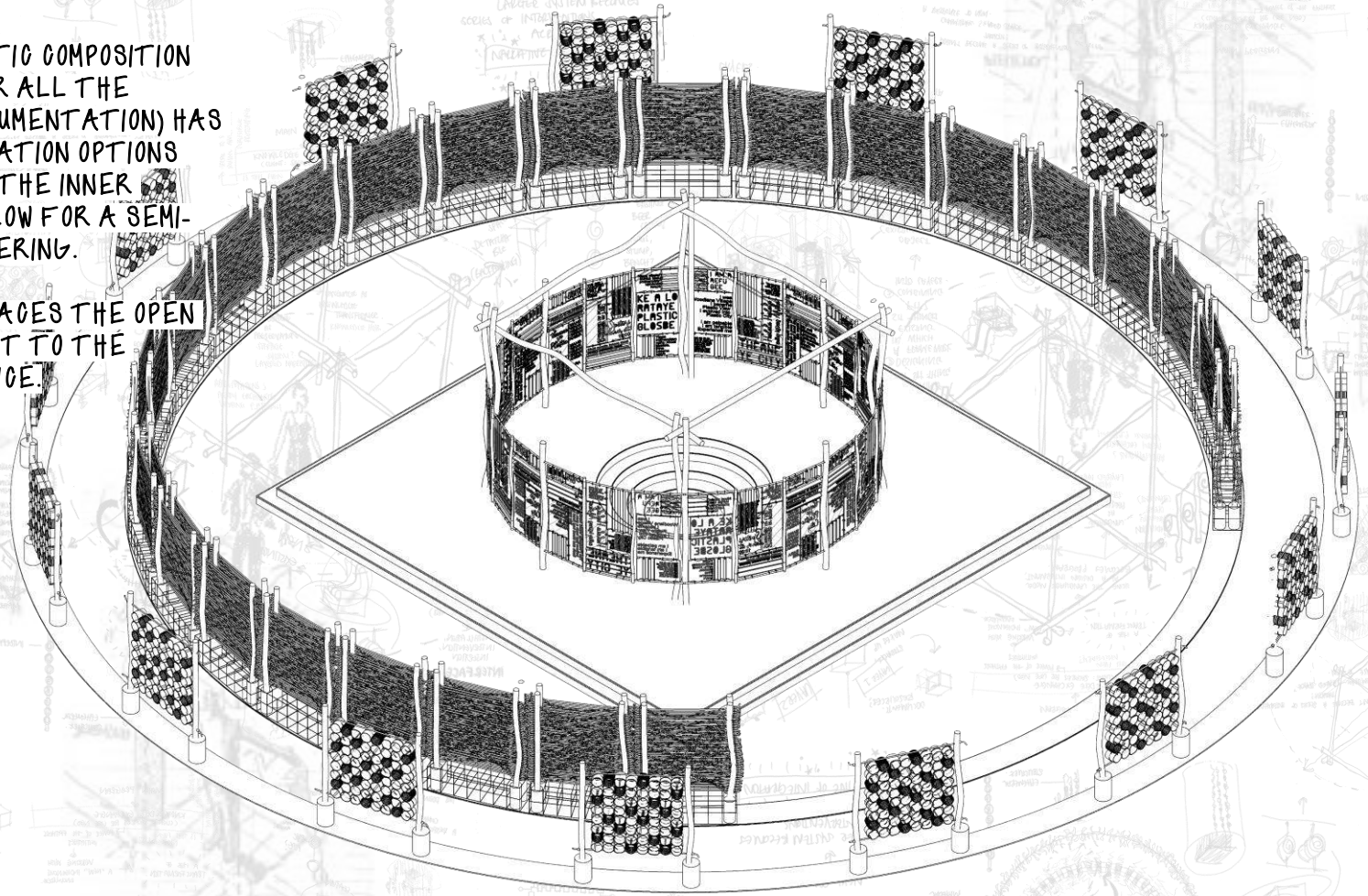
THERE IS NOT A SPECIFIED AMOUNT OF MECHANISMS AS IT CAN BE USED THROUGHOUT THE ENTIRE SETTLEMENT.

Scenarios of Appropriation

ACHIEVING SPATIAL AGENCY THROUGH ADAPTABILITY

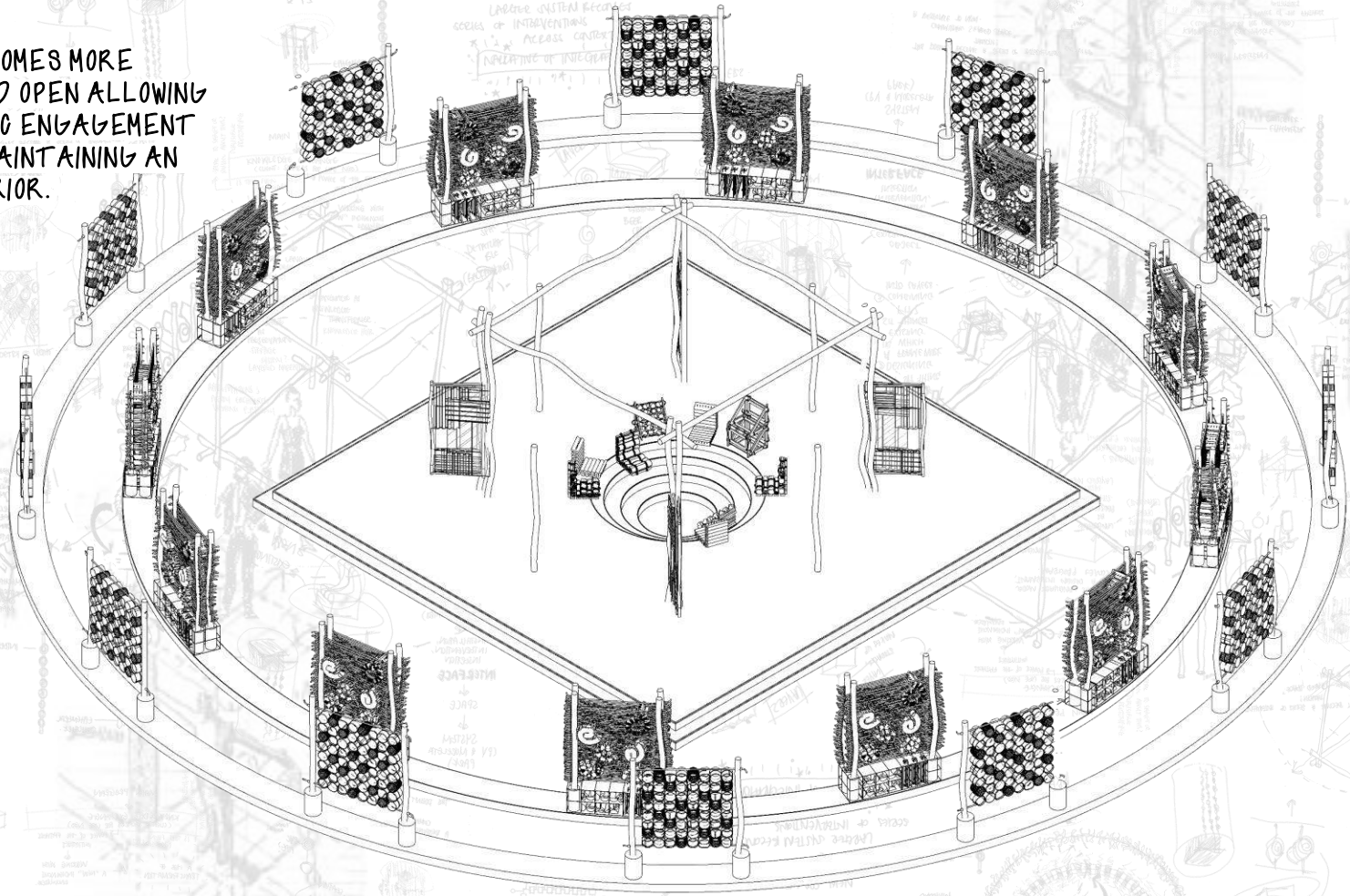
PROPOSED STATIC COMPOSITION (ALSO USED FOR ALL THE TECHNICAL DOCUMENTATION) HAS LIMITED CIRCULATION OPTIONS AND ENCLOSES THE INNER SLEEVE TO ALLOW FOR A SEMI-PRIVATE GATHERING.

THE OPENING FACES THE OPEN FIELD ADJACENT TO THE COMMUNITY OFFICE.



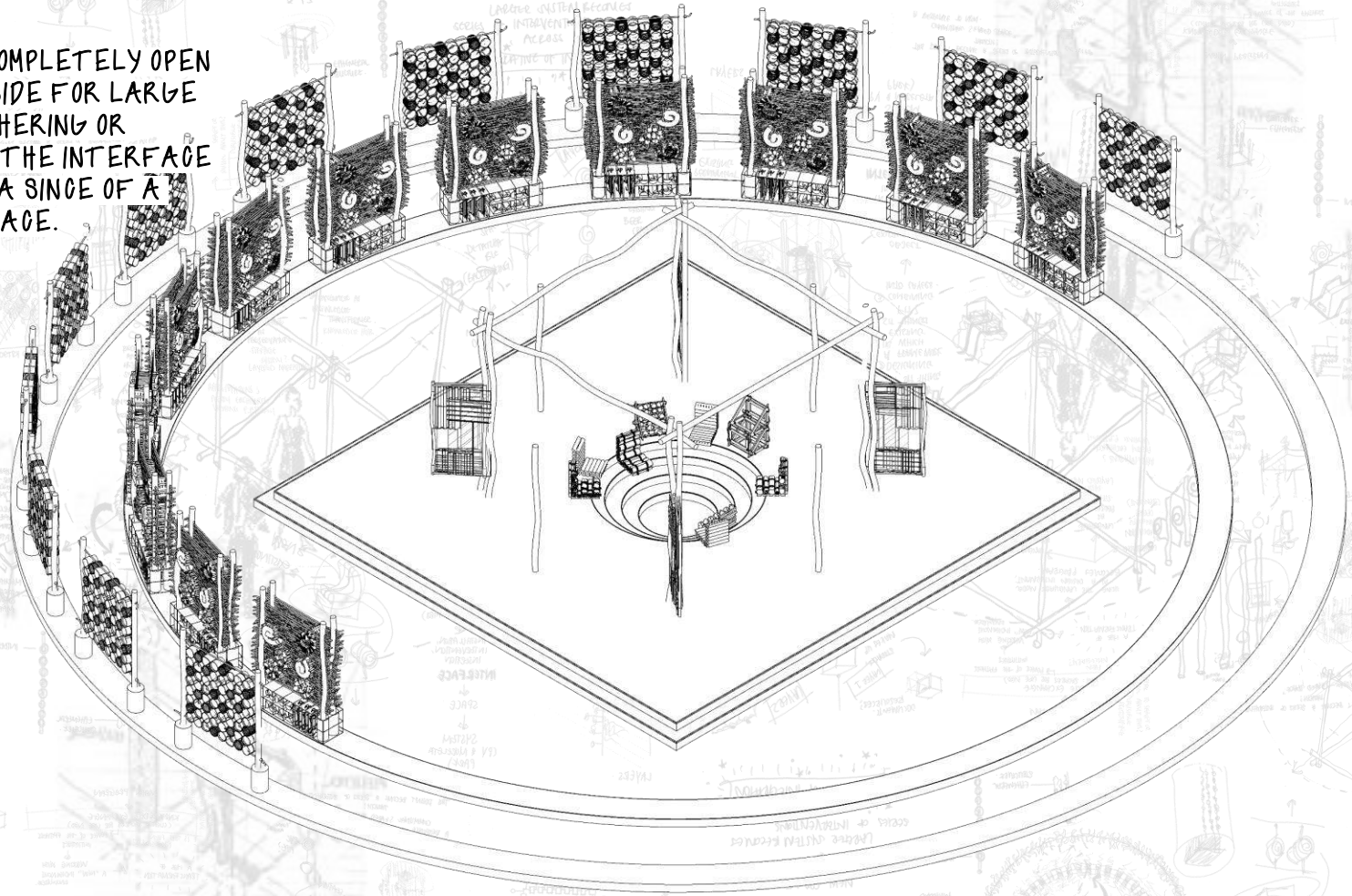
SCENARIO 2

THE SPACE BECOMES MORE ACCESSIBLE AND OPEN ALLOWING FOR MORE PUBLIC ENGAGEMENT WHILST STILL MAINTAINING AN INTIMATE INTERIOR.



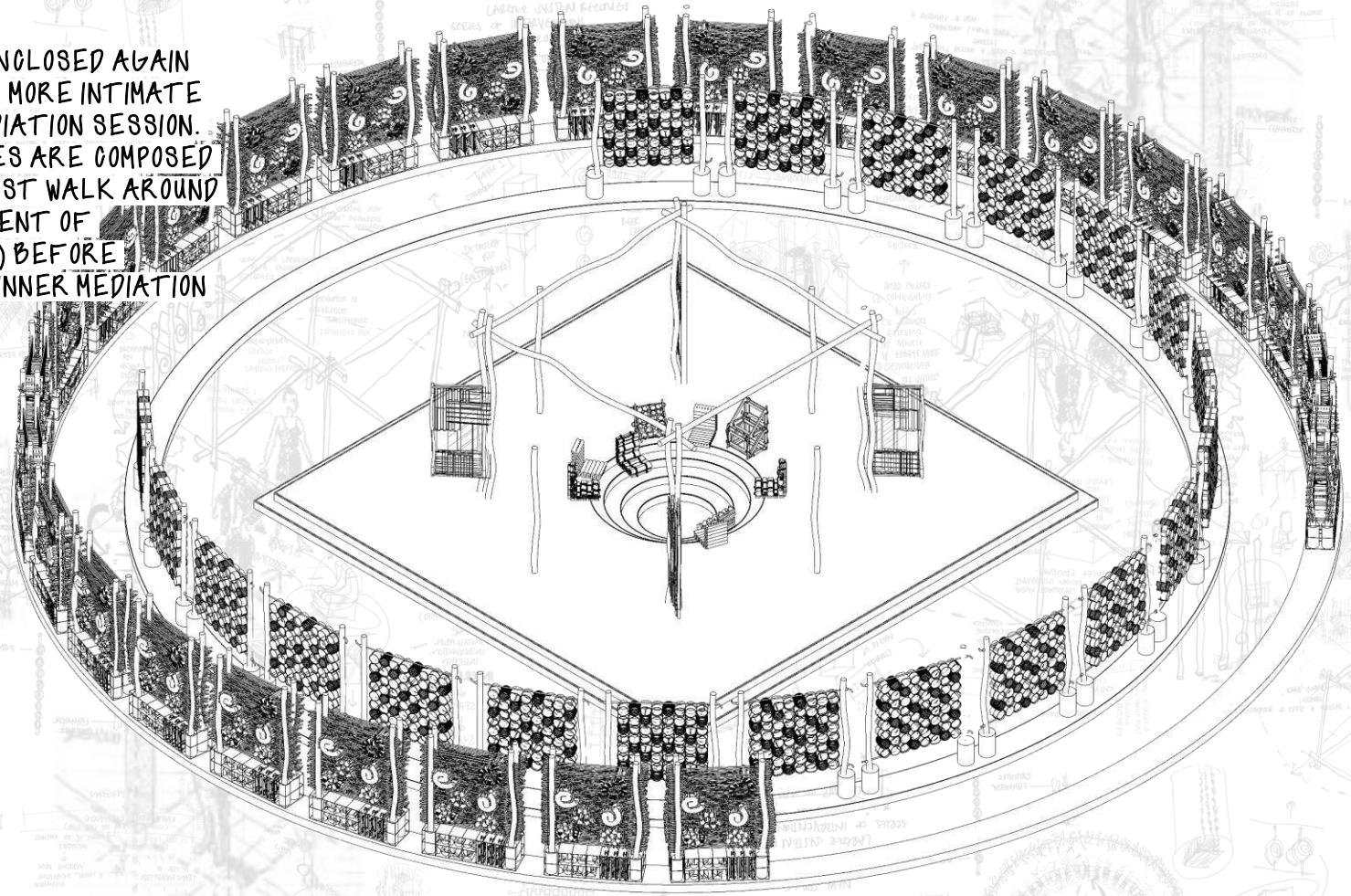
SCENARIO 3

THE SPACE IS COMPLETELY OPEN TO THE FIELD SIDE FOR LARGE COMMUNITY GATHERING OR DISTRIBUTIONS. THE INTERFACE STILL CREATE A SINCE OF A DESIGNATED SPACE.



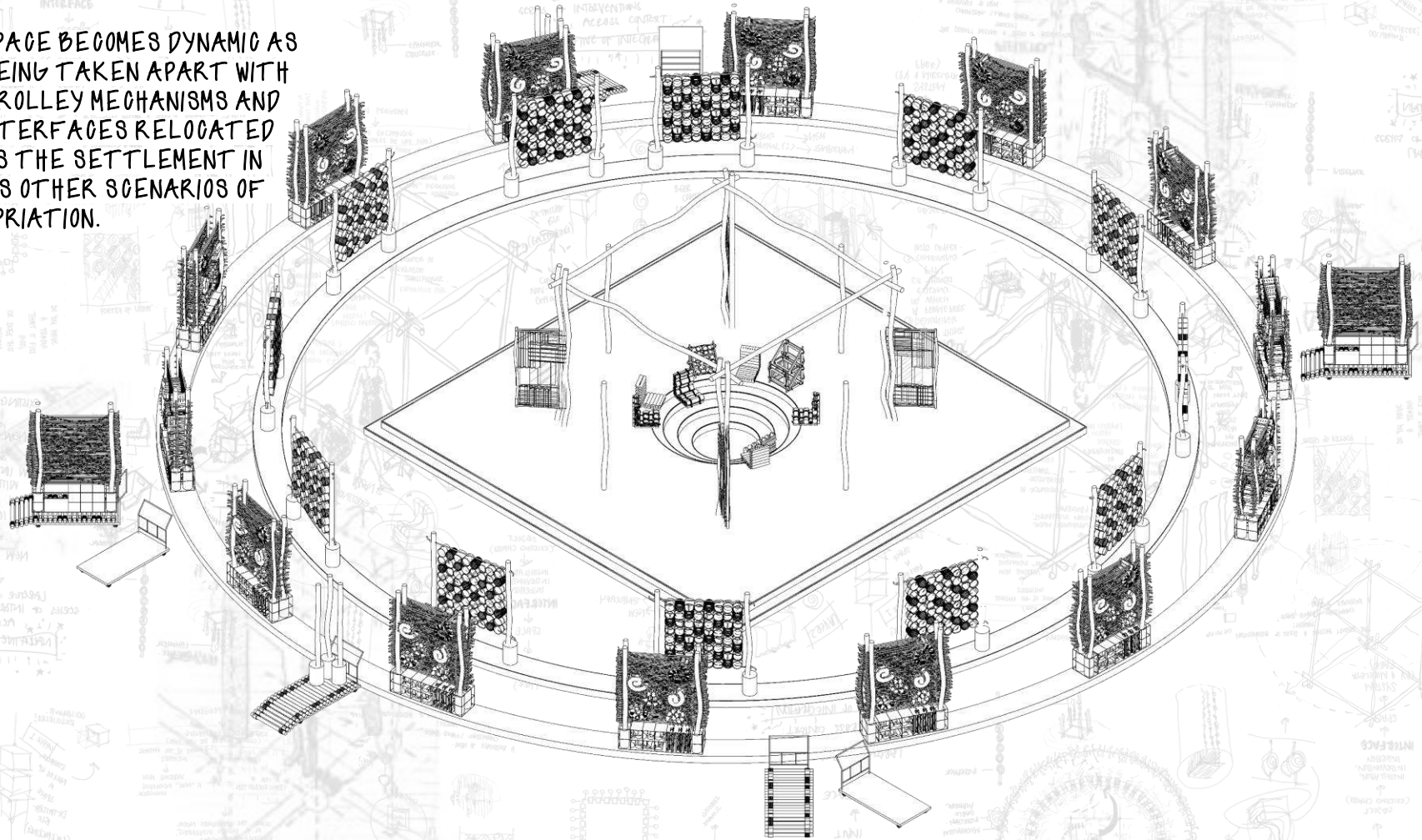
SCENARIO 4

THE SPACE IS ENCLOSED AGAIN TO ALLOW FOR A MORE INTIMATE MEETING OR MEDIATION SESSION. THE INTERFACES ARE COMPOSED SO THAT ONE MUST WALK AROUND (PERHAPS A MOMENT OF CONTEMPLATION) BEFORE ENTERING THE INNER MEDIATION SPACE.



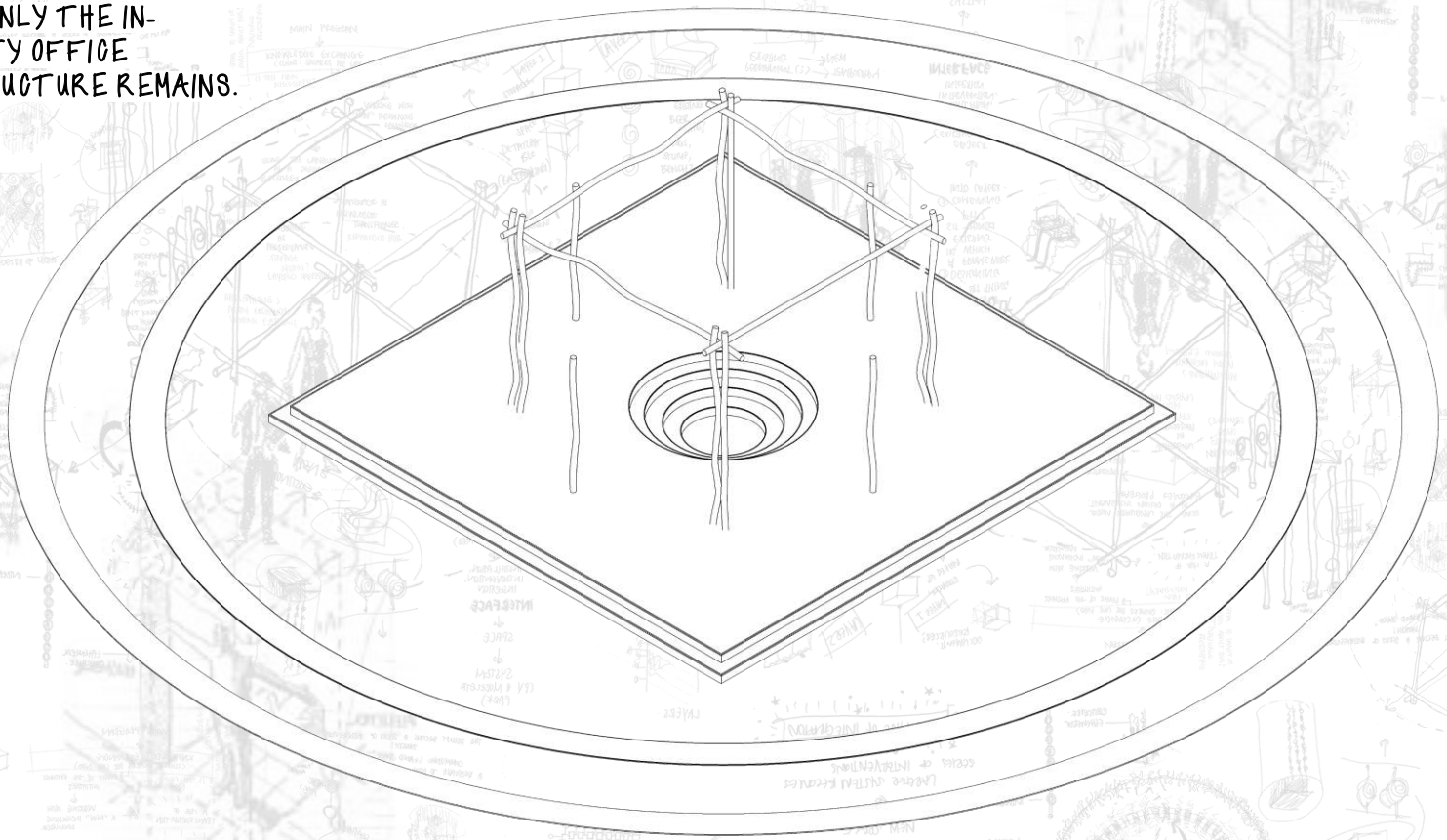
SCENARIO 5

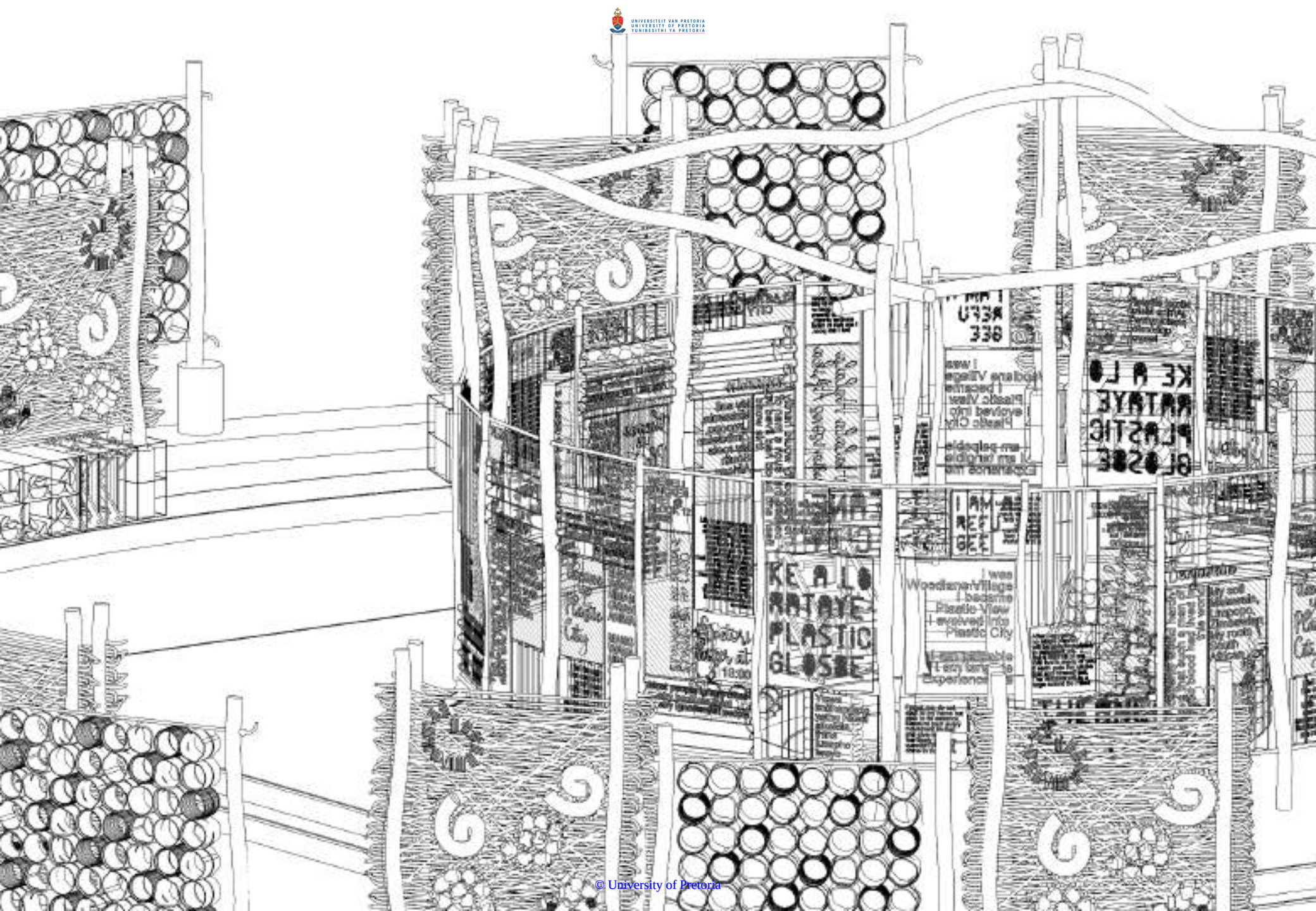
THE SPACE BECOMES DYNAMIC AS IT IS BEING TAKEN APART WITH THE TROLLEY MECHANISMS AND THE INTERFACES RELOCATED ACROSS THE SETTLEMENT IN VARIOUS OTHER SCENARIOS OF APPROPRIATION.



SCENARIO 6

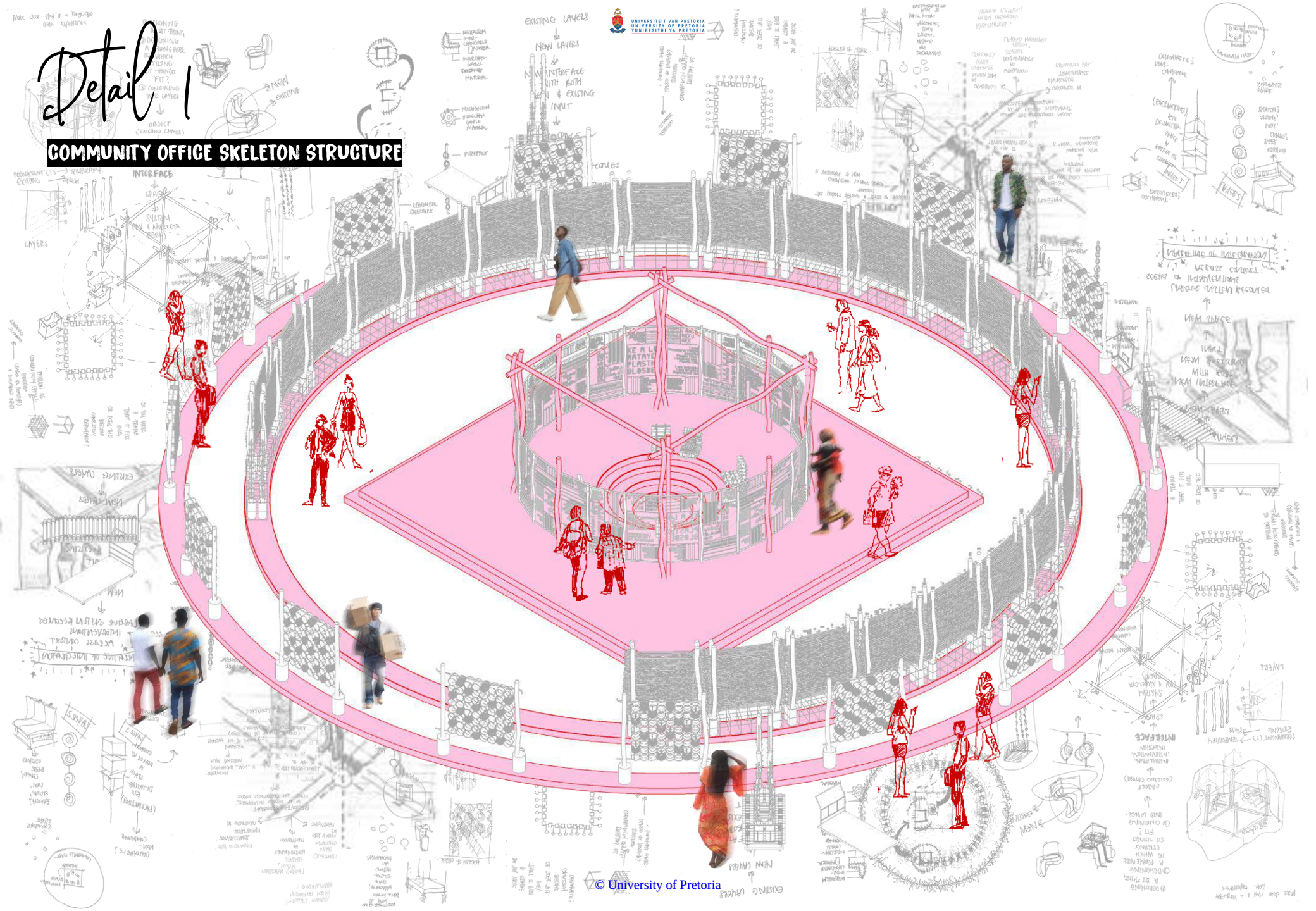
ALL THE MOVABLE INTERFACES AND DEPLOYABLE OBJECTS ARE REMOVED AND ONLY THE IN-PLACE COMMUNITY OFFICE SKELETON STRUCTURE REMAINS.

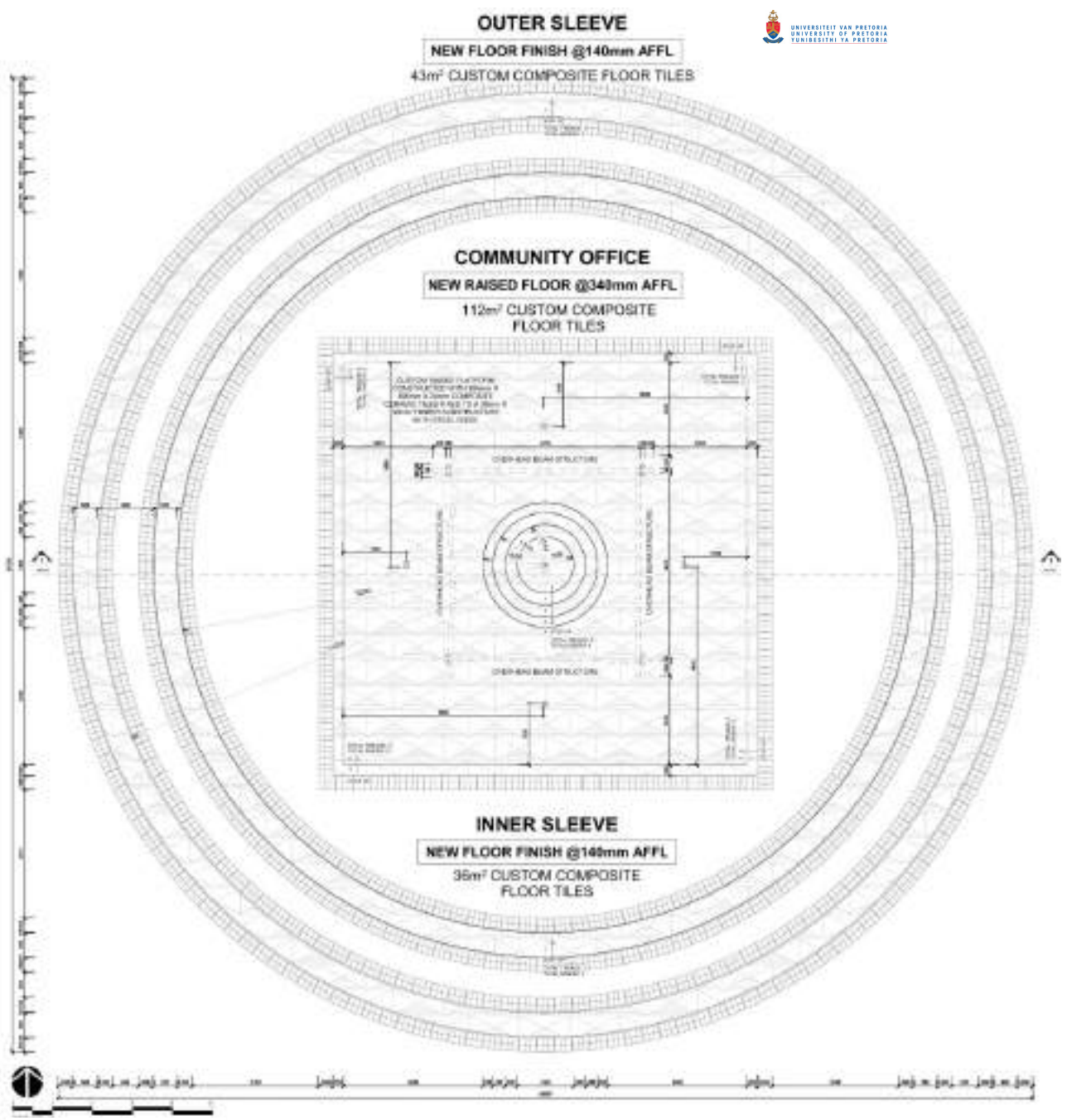




Detail 1

COMMUNITY OFFICE SKELETON STRUCTURE





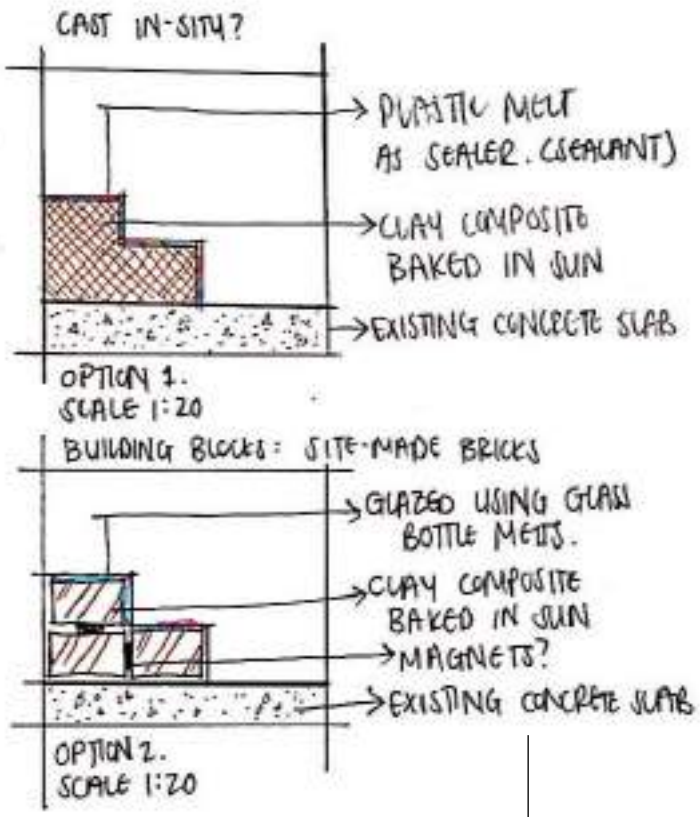
DETAIL 1 PLAN

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS

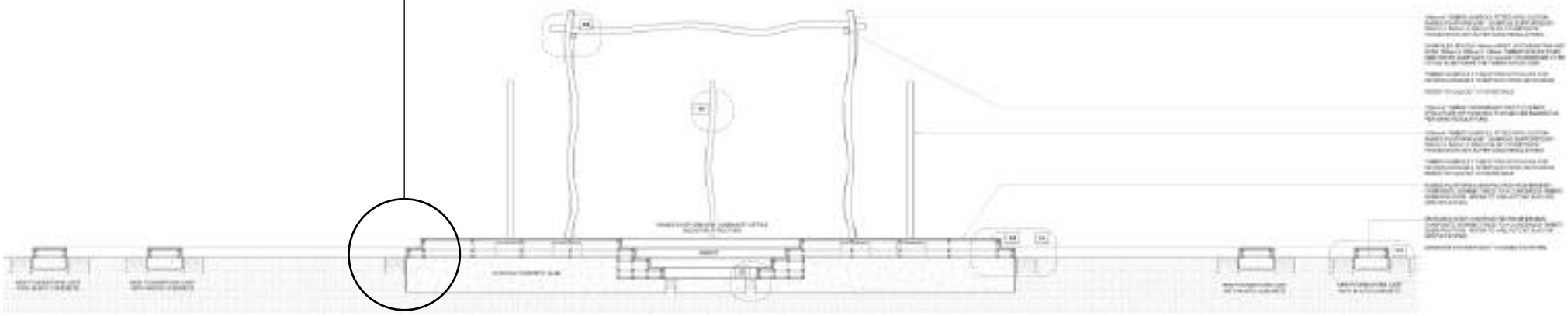
Detail 1 represents a skeleton-figure of the old Community Office to continue the narrative of the meaning of the space.

A prototype built by the Moreleta Park Integration Project to develop a method of constructing with uneven elements (MPIP, 2021).

Testing the ease of disassembly to comply with legislation for structures on site (MPIP, 2021).

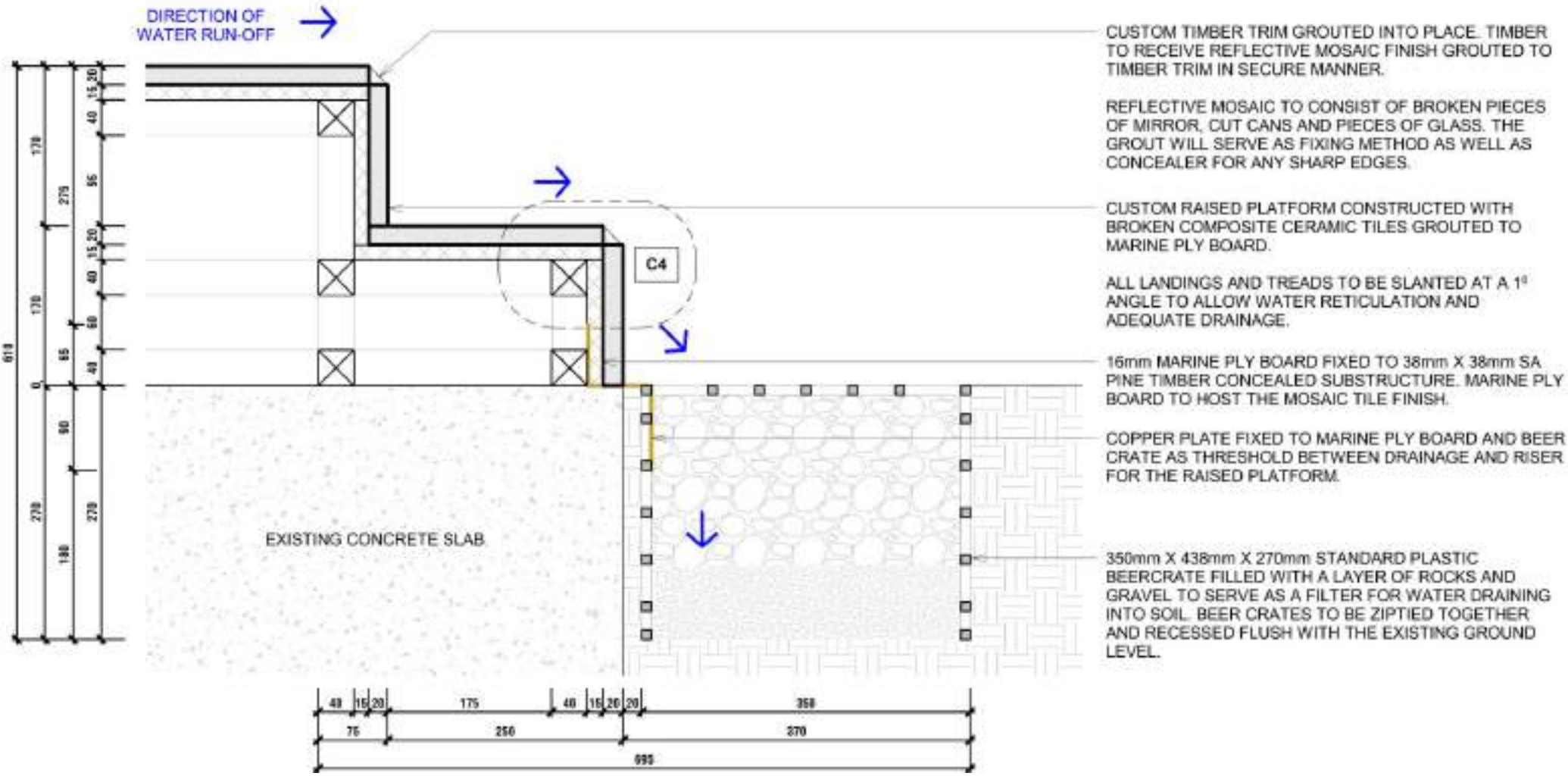


OTHER OPTIONS EXPLORED



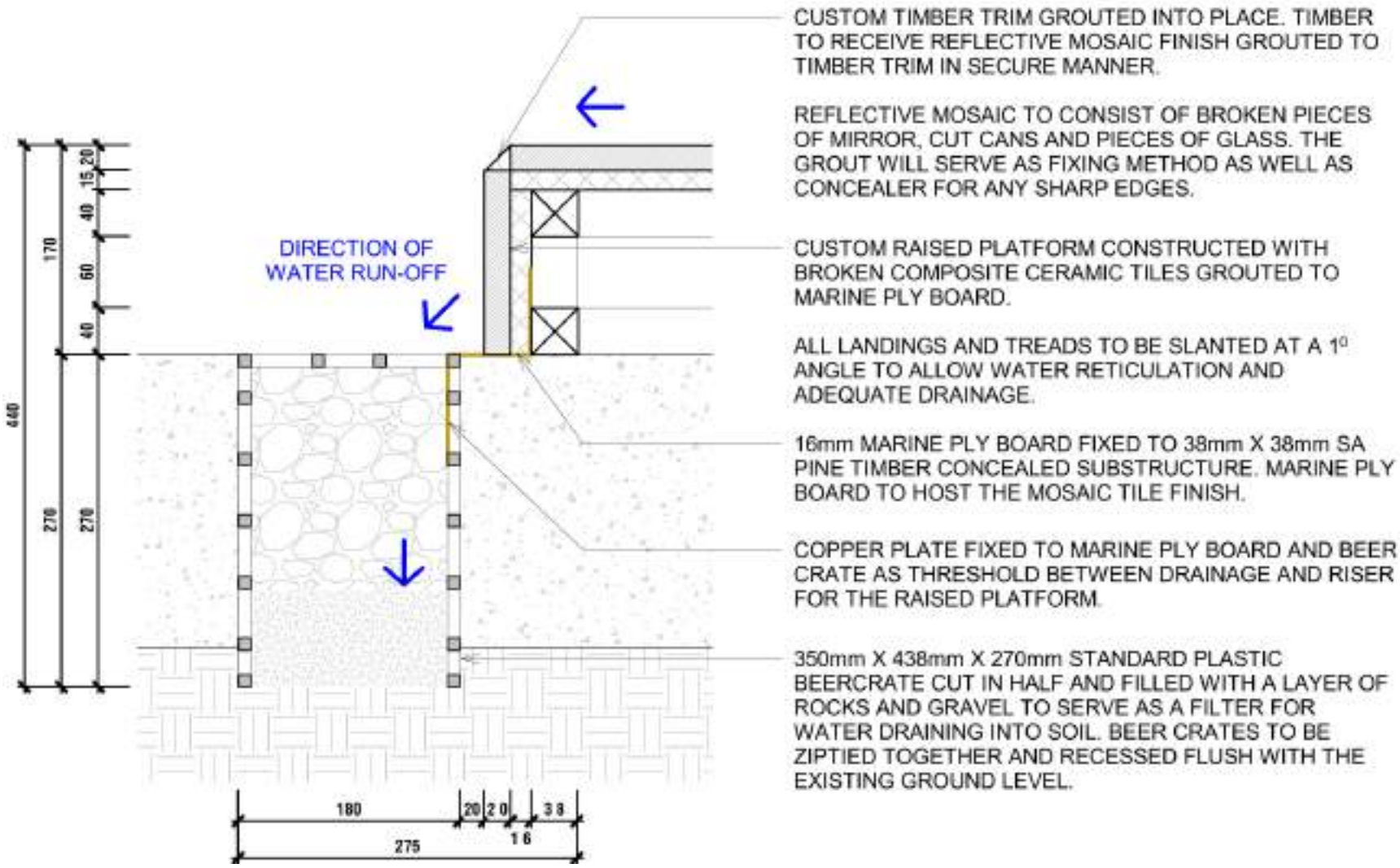
DETAIL 1 SECTION 1

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS



DETAIL 1 CALLOUT 1

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS



CUSTOM TIMBER TRIM GROUTED INTO PLACE. TIMBER TO RECEIVE REFLECTIVE MOSAIC FINISH GROUTED TO TIMBER TRIM IN SECURE MANNER.

REFLECTIVE MOSAIC TO CONSIST OF BROKEN PIECES OF MIRROR, CUT CANS AND PIECES OF GLASS. THE GROUT WILL SERVE AS FIXING METHOD AS WELL AS CONCEALER FOR ANY SHARP EDGES.

CUSTOM RAISED PLATFORM CONSTRUCTED WITH BROKEN COMPOSITE CERAMIC TILES GROUTED TO MARINE PLY BOARD.

ALL LANDINGS AND TREADS TO BE SLANTED AT A 1^{0} ANGLE TO ALLOW WATER RETICULATION AND ADEQUATE DRAINAGE.

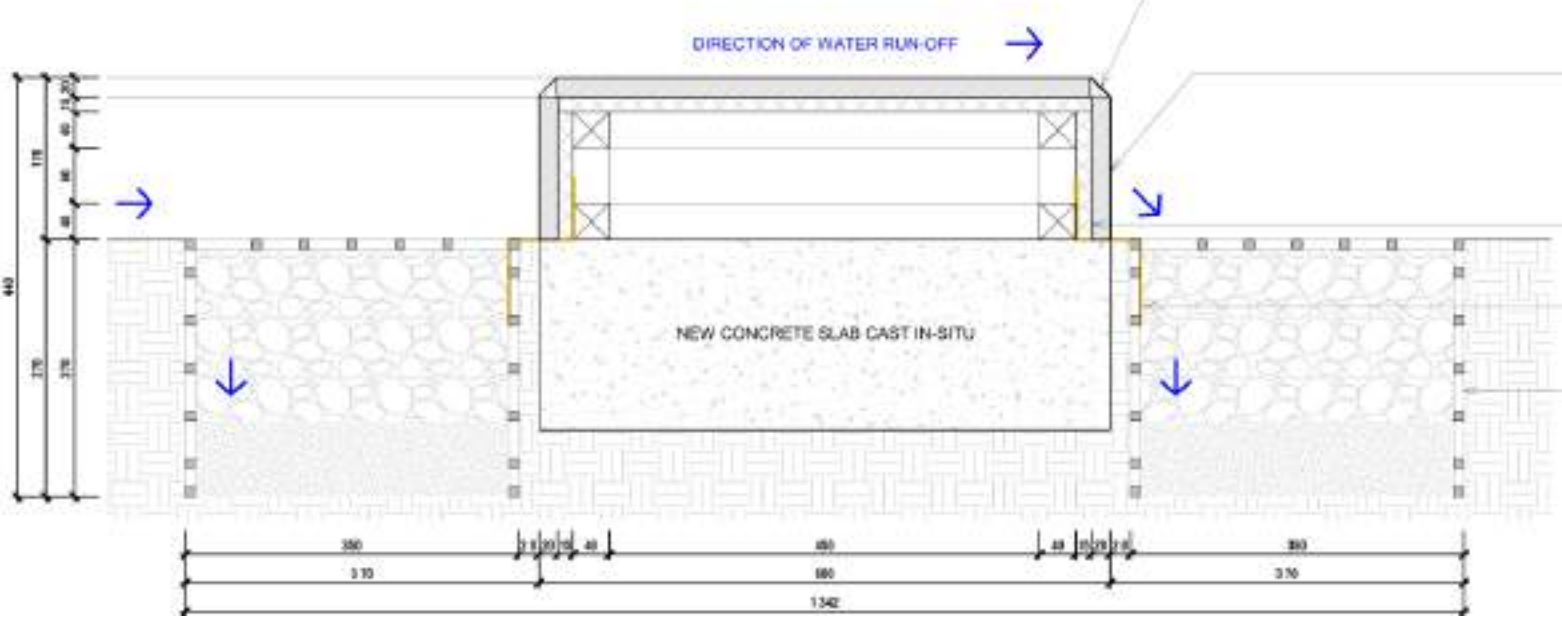
16mm MARINE PLY BOARD FIXED TO 38mm X 38mm SA PINE TIMBER CONCEALED SUBSTRUCTURE. MARINE PLY BOARD TO HOST THE MOSAIC TILE FINISH.

COPPER PLATE FIXED TO MARINE PLY BOARD AND BEER CRATE AS THRESHOLD BETWEEN DRAINAGE AND RISER FOR THE RAISED PLATFORM.

350mm X 438mm X 270mm STANDARD PLASTIC BEERCRATE CUT IN HALF AND FILLED WITH A LAYER OF ROCKS AND GRAVEL TO SERVE AS A FILTER FOR WATER DRAINING INTO SOIL. BEER CRATES TO BE ZIPTIED TOGETHER AND RECESSED FLUSH WITH THE EXISTING GROUND LEVEL.

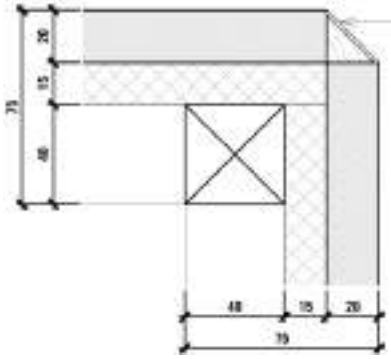
DETAIL 1 CALLOUT 2

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS



DETAIL 1 CALLOUT 3

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS

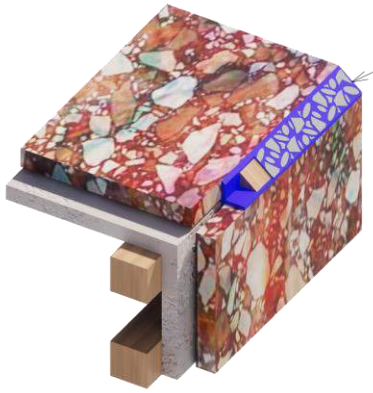


CUSTOM TIMBER TRIM GROUTED INTO PLACE. TIMBER TO RECEIVE REFLECTIVE MOSAIC FINISH GROUTED TO TIMBER TRIM IN SECURE MANNER.

REFLECTIVE MOSAIC TO CONSIST OF BROKEN PIECES OF MIRROR, CUT CANS AND PIECES OF GLASS. THE GROUT WILL SERVE AS FIXING METHOD AS WELL AS CONCEALER FOR ANY SHARP EDGES.

DETAIL 1 CALLOUT 4

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS

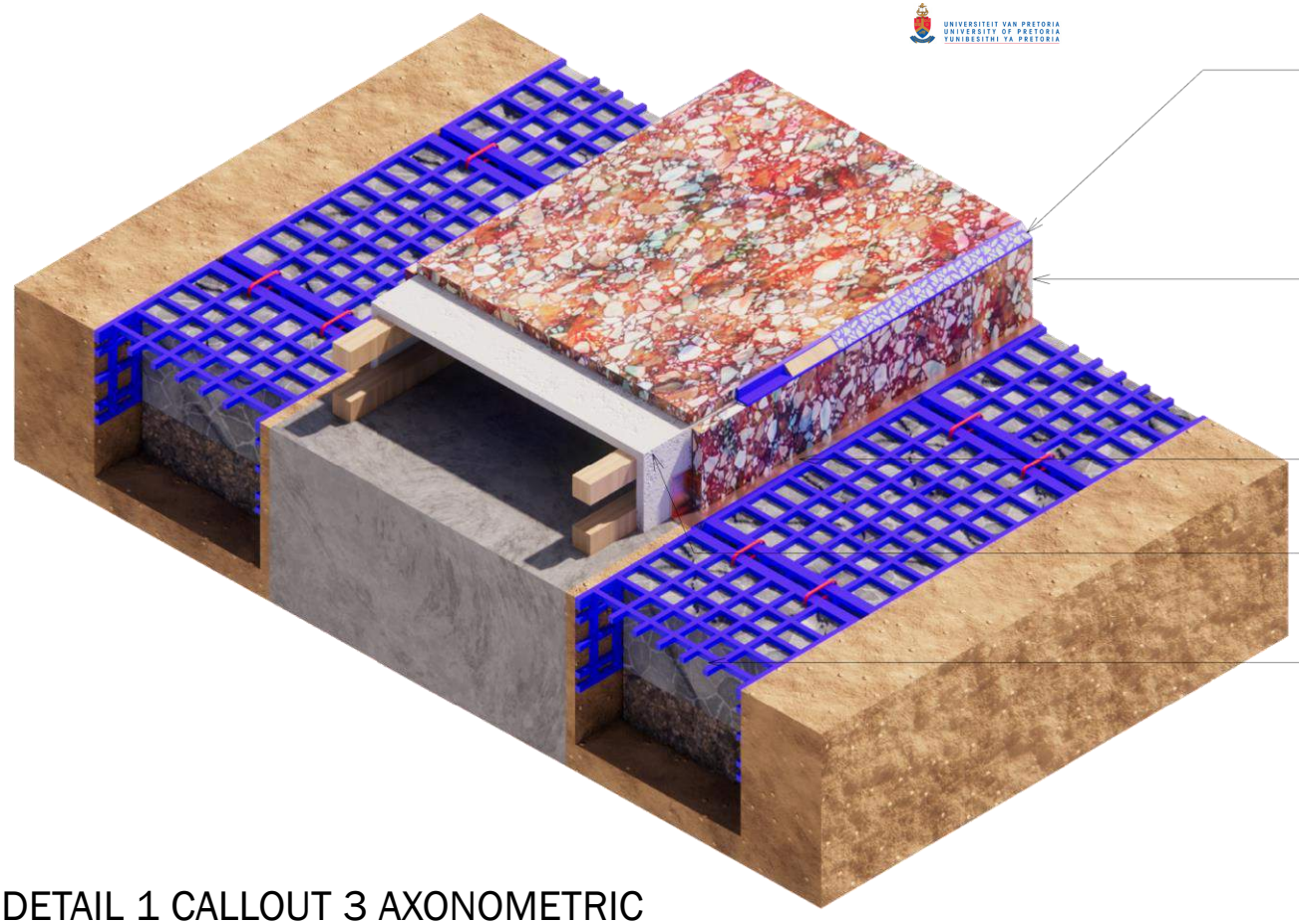


CUSTOM TIMBER TRIM GROUTED INTO PLACE. TIMBER TO RECEIVE REFLECTIVE MOSAIC FINISH GROUTED TO TIMBER TRIM IN SECURE MANNER.

REFLECTIVE MOSAIC TO CONSIST OF BROKEN PIECES OF MIRROR, CUT CANS AND PIECES OF GLASS. THE GROUT WILL SERVE AS FIXING METHOD AS WELL AS CONCEALER FOR ANY SHARP EDGES.

DETAIL 1 CALLOUT 4 AXONOMETRIC

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS



CUSTOM TIMBER TRIM GROUTED INTO PLACE. TIMBER TO RECEIVE REFLECTIVE MOSAIC FINISH GROUTED TO TIMBER TRIM IN SECURE MANNER.

REFLECTIVE MOSAIC TO CONSIST OF BROKEN PIECES OF MIRROR, CUT CANS AND PIECES OF GLASS. THE GROUT WILL SERVE AS FIXING METHOD AS WELL AS CONCEALER FOR ANY SHARP EDGES.

CUSTOM RAISED PLATFORM CONSTRUCTED WITH BROKEN COMPOSITE CERAMIC TILES GROUTED TO MARINE PLY BOARD.

ALL LANDINGS AND TREADS TO BE SLANTED AT A 1^0 ANGLE TO ALLOW WATER RETICULATION AND ADEQUATE DRAINAGE.

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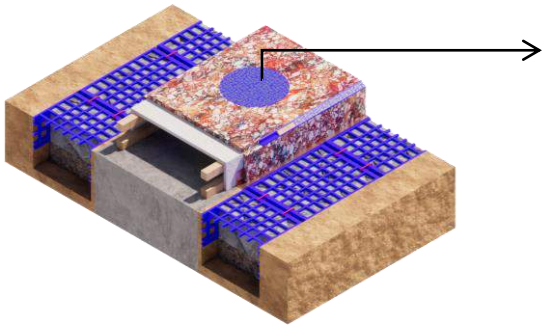
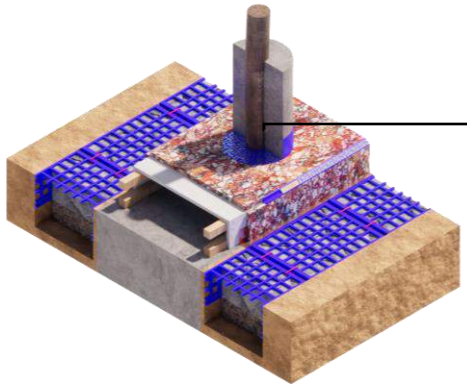
350mm X 438mm X 270mm STANDARD PLASTIC BEERCRATE FILLED WITH A LAYER OF ROCKS AND GRAVEL TO SERVE AS A FILTER FOR WATER DRAINING INTO SOIL. BEER CRATES TO BE ZIPTIED TOGETHER AND RECESSED FLUSH WITH THE EXISTING GROUND LEVEL.

DETAIL 1 CALLOUT 3 AXONOMETRIC

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS



A PREVIOUS ITERATION EXPLORED THE POSSIBILITY OF AN ALTERNATING FLOOR MATERIALS TO SERVE AS INDICATORS FOR THE LOOSE-STANDING INTERCHANGEABLE INTERFACE UNITS.



THIS WAS OVERRULED AS THE SETTLEMENT SHOWCASED SELF-AGENCY AND IT WOULD BE TOO DICTATING. THE FLOOR FINISH WAS LEFT OPEN FOR INTERPRETATION TO ALLOW FOR AGENCY AND AUTONOMY.

OTHER OPTIONS EXPLORED

Potential Scenario of Appropriation

DRAINAGE SYSTEM THROUGHOUT THE SETTLEMENT

There are no municipal services throughout the settlement, including water- and drainage provisions. This leaves all the water and excrement to drain according to natural slopes and mixes with all the waste already on site.

The drainage detail proposed for the community office can serve as a base for possible drainage throughout the site that can be built with on-site materials.

After sufficient iteration (and appropriation) the detail can become part of a larger system throughout the whole settlement that tangibly links the proposed community office to the streets which it aims to serve.

DETAIL 1 CALLOUT 5

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS

100mmØ TIMBER GUMPOLE FITTED INTO CUSTOM RAISED PLATFORM UNIT. GUMPOLE SUPPORTED BY 500mm X 500mm X 200mm IN-SITU COMPOSITE FOUNDATION UNIT AS PER SANS REGULATIONS.

GUMPOLES SPACES 100mm APART IN FOUNDATION UNIT WITH 100mm X 100mm X 100mm TIMBER SPACER FIXED INBETWEEN GUMPOLES TO ALLOW CROSSBEAMS TO BE FITTED IN BETWEEN THE TIMBER STRUCTURE.

TIMBER GUMPOLE TO BE FITTED WITH HOOK FOR INTERCHANGEABLE INTERFACE FIXING MECHANISM.

100mmØ TIMBER CROSSBEAM FIXED TO TIMBER STRUCTURE WITH M20 BOLTS IN SECURE MANNER AS PER SANS REGULATIONS.

(MPIP, 2021).

DETAIL 1 CALLOUT 6

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS

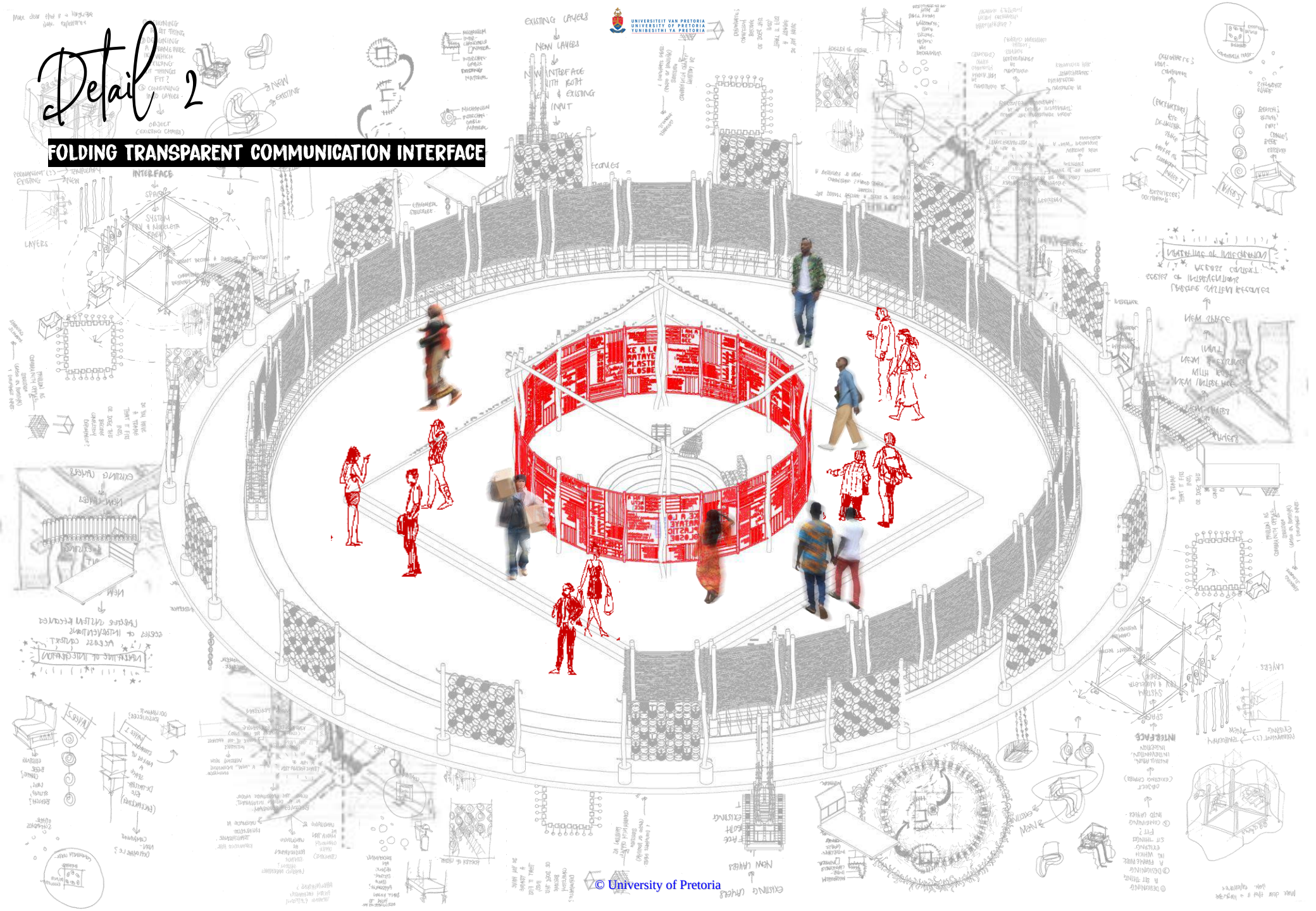
100mm⌀ TIMBER GUMPOLE FITTED INTO CUSTOM RAISED PLATFORM UNIT. GUMPOLE SUPPORTED BY 500mm X 500mm X 200mm IN-SITU COMPOSITE FOUNDATION UNIT AS PER SANS REGULATIONS.

TIMBER TO RECEIVE 25mm DRILL HOLE @2335mm ABOVE FINISHED FLOOR LEVEL TO HOST ROPE MECHANISM.

20mm⌀ SEVEN STRAND WOVEN ROPE MADE FROM RECYLCED PLASTIC BAGS FOUND ON SITE, SECURED TO TIMBER GUMPOLE WITH BOTTLE-CAP DETAIL.

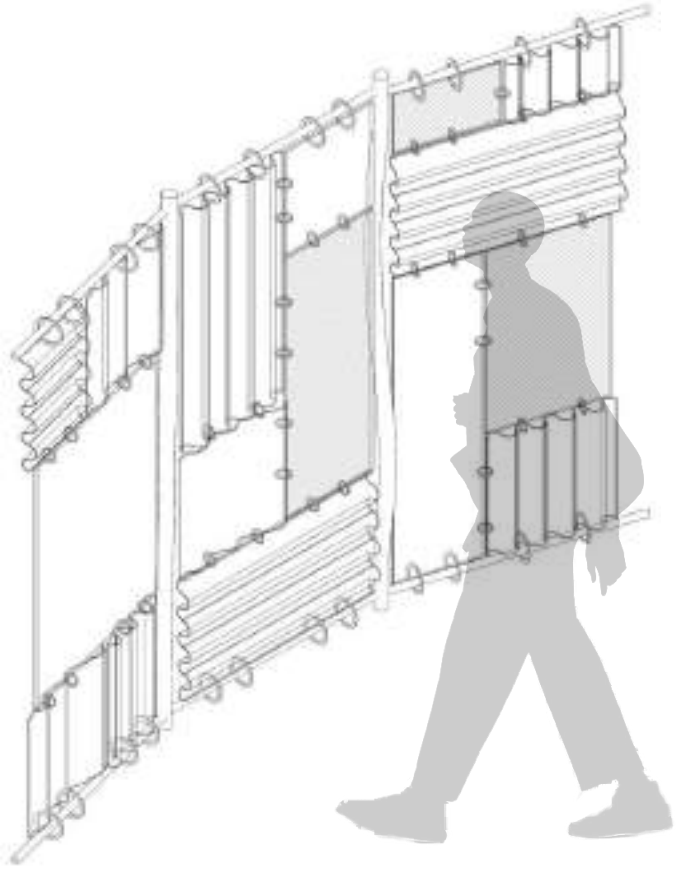
Detail 2

FOLDING TRANSPARENT COMMUNICATION INTERFACE



DETAIL 2 PLAN

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS



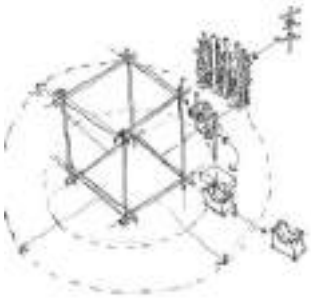
DETAIL 2 AXONOMETRIC

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS

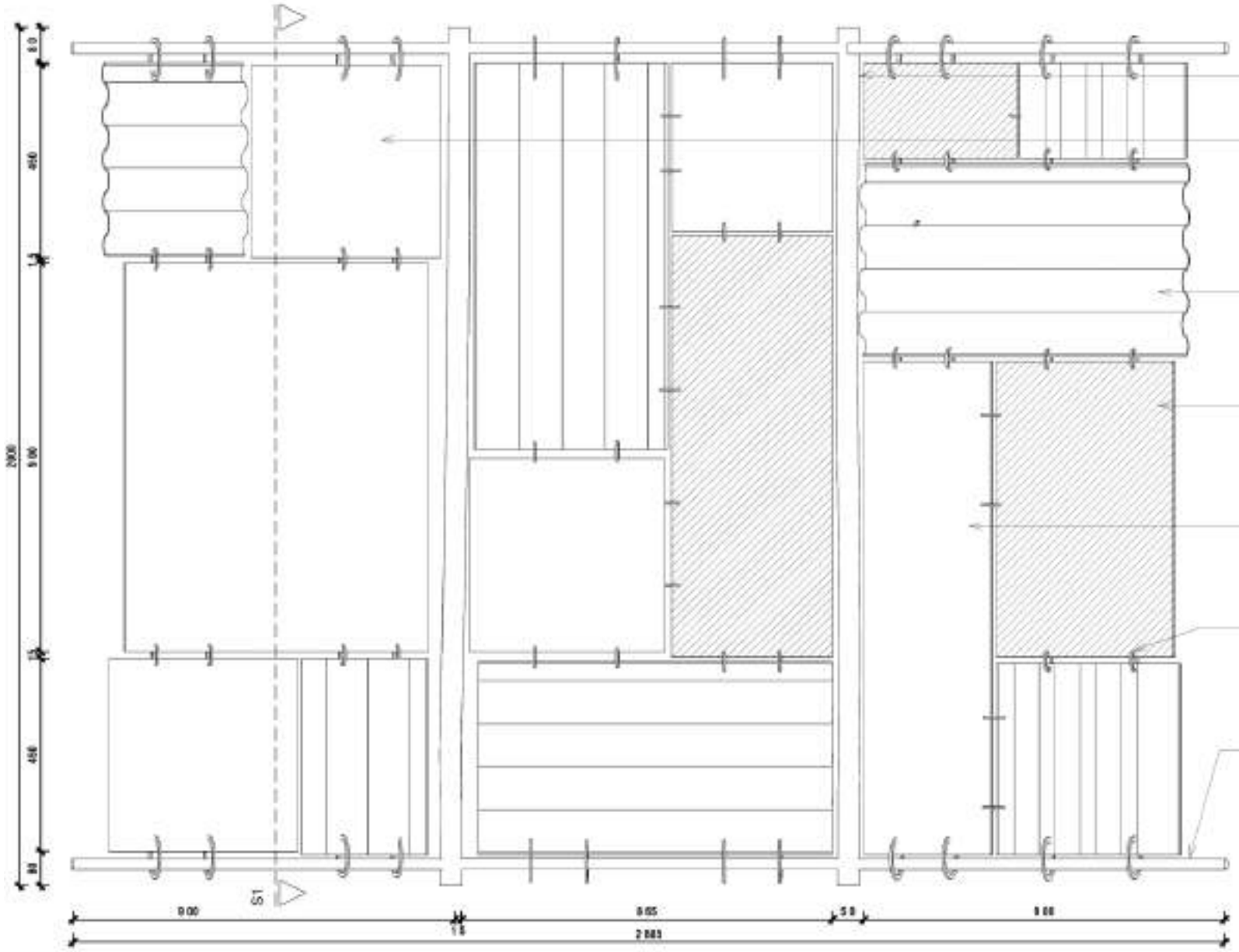
PROTOTYPES

TESTING WRITABILITY AND STRUCTURE OF MATERIALS

INTERFACE IN USE

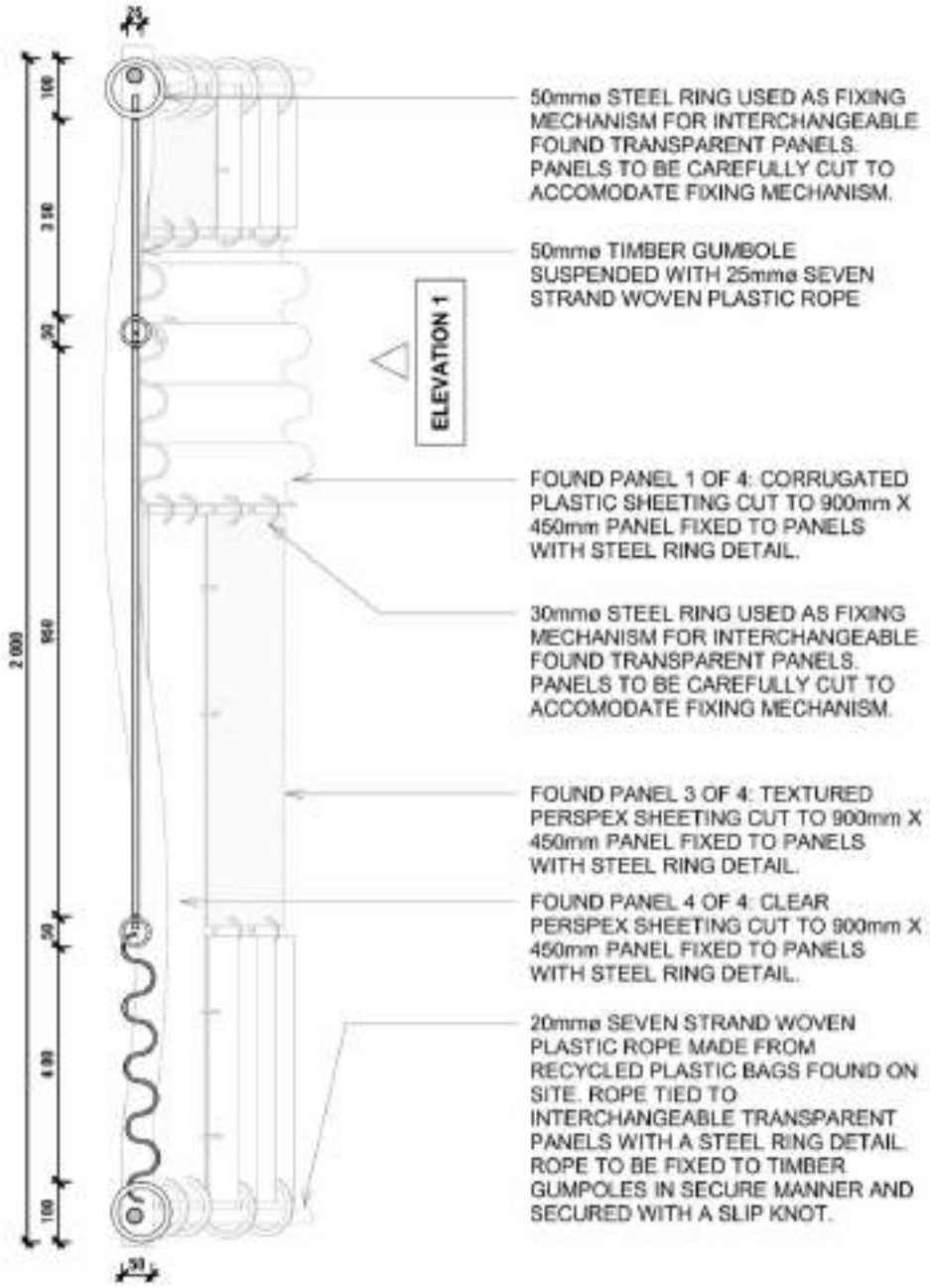


ITERATIONS



DETAIL 2 ELEVATION 1

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS



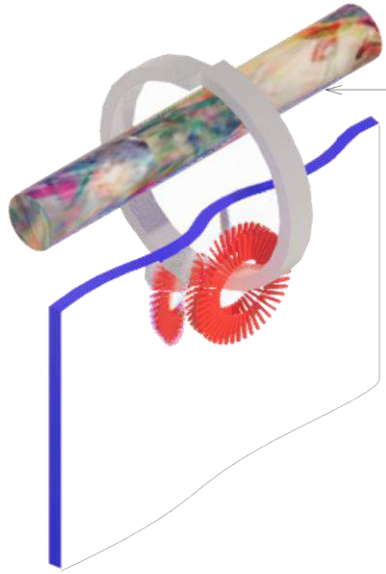
DETAIL 2 SECTION 1

TRANSPARENT COMMUNICATION INTERFACE TO JOIN TO 100mmø TIMBER GUMPOLE AND SECURED WITH BEERCAP DETAIL AND SLIP KNOT WITH 20mmø SEVEN STRAND WOVEN ROPE MADE FROM RECYCLED PLASTIC FOUND ON SITE.

ALL TIMBER GUMPOLES TO RECEIVE FIRE RETARDANT TREATMENT.

REFER TO DETAIL 1 FOR DETAILS.

DETAIL 2 JOINT DETAIL

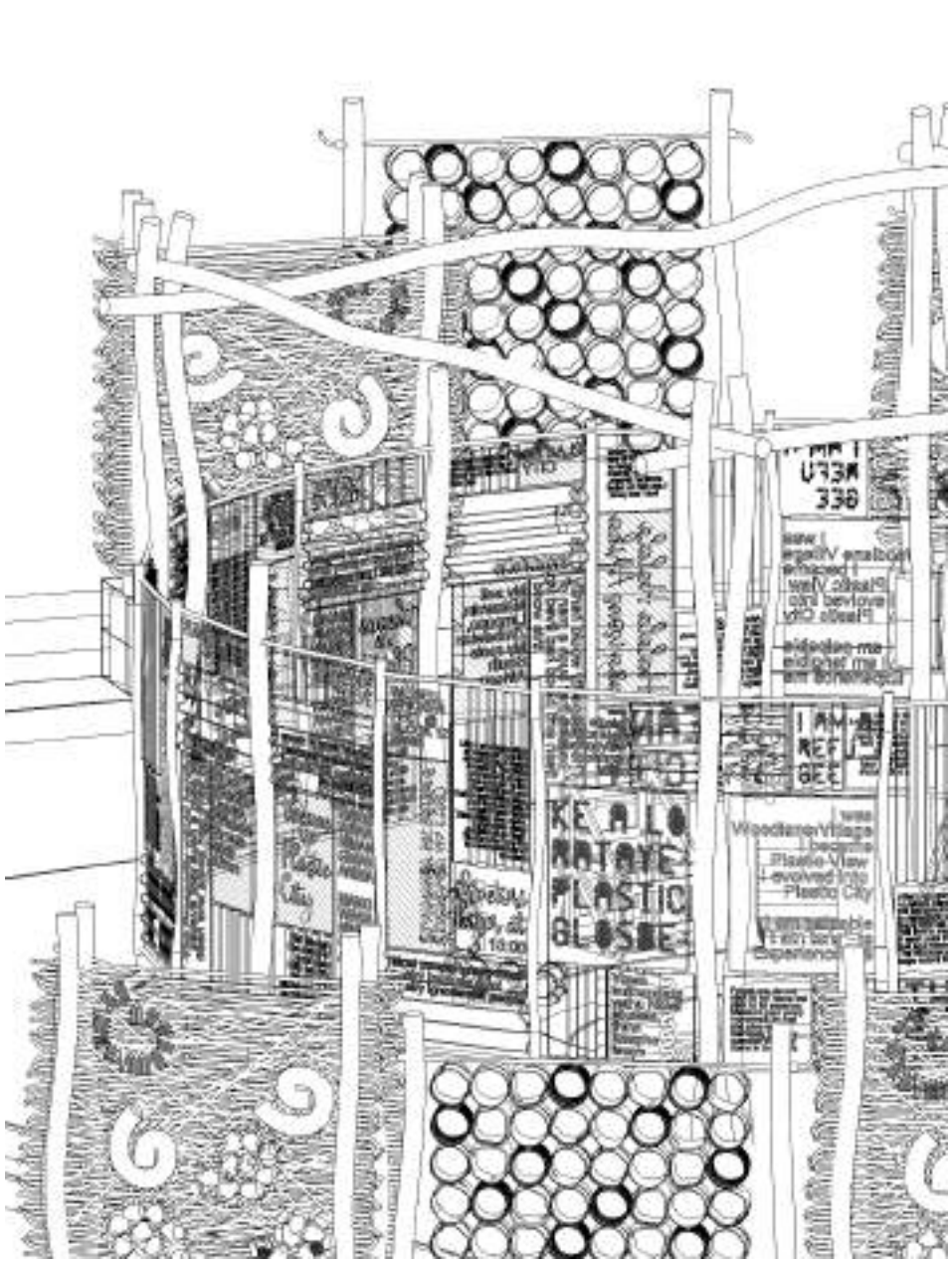


TRANSPARENT COMMUNICATION INTERFACE JOINT TO CONSIST OF FOUND KEYRING FIXED TO SEVEN STRAND WOVEN ROPE. PLASTIC SHEETS TO RECEIVE EMBROIDERY DETAIL TO STRENGTHEN THE SHEET AND PREVENT KEYCHAIN FROM RIPPING THE PLASTIC.

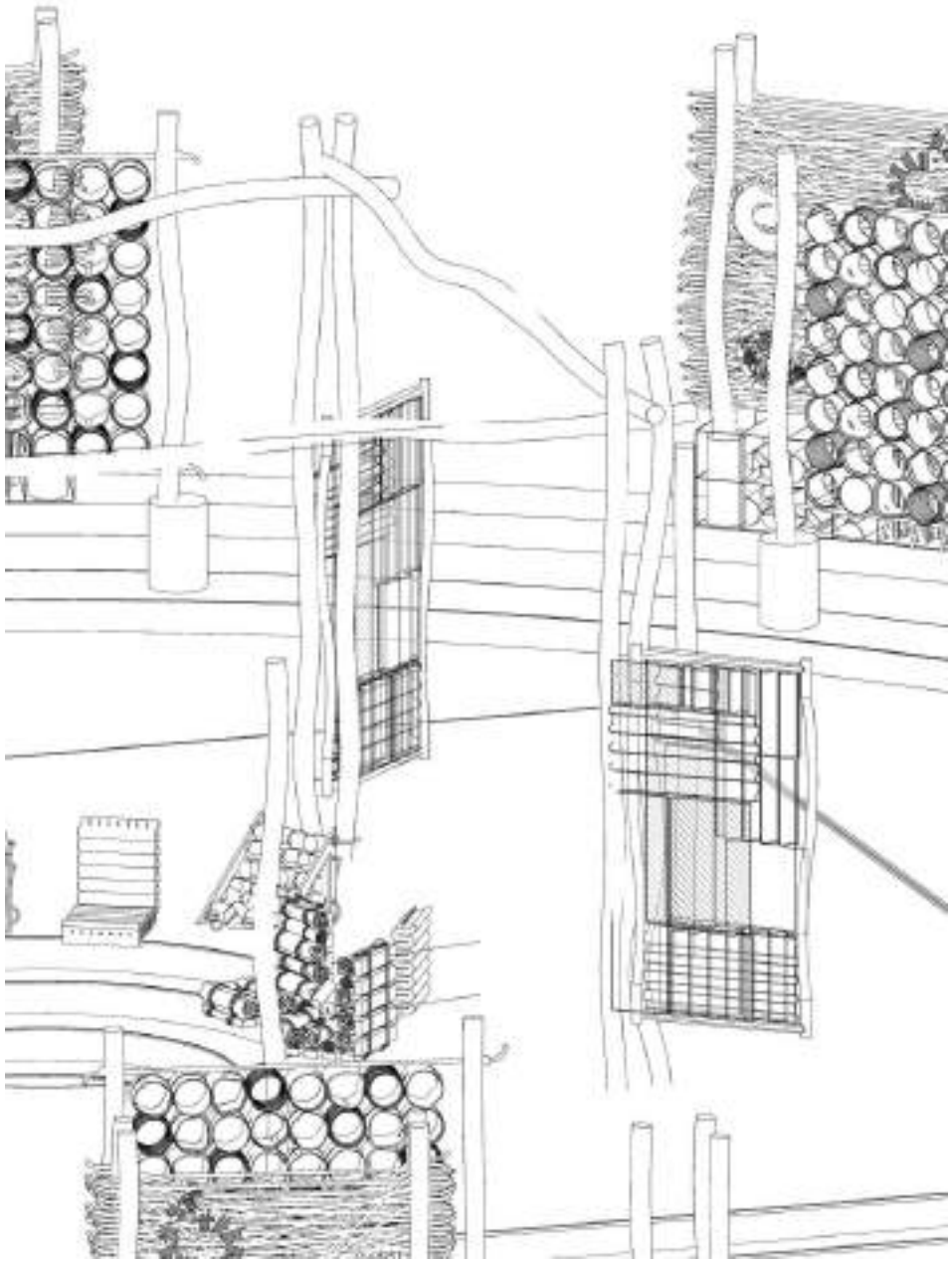
ALL TRANSPARENT PANELS TO RECEIVE BLUE PAINTED EDGES TO AID VISIBILITY.

DETAIL 2 KEY RING JOINT DETAIL

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS



DETAIL 2 IN USE: CLOSED



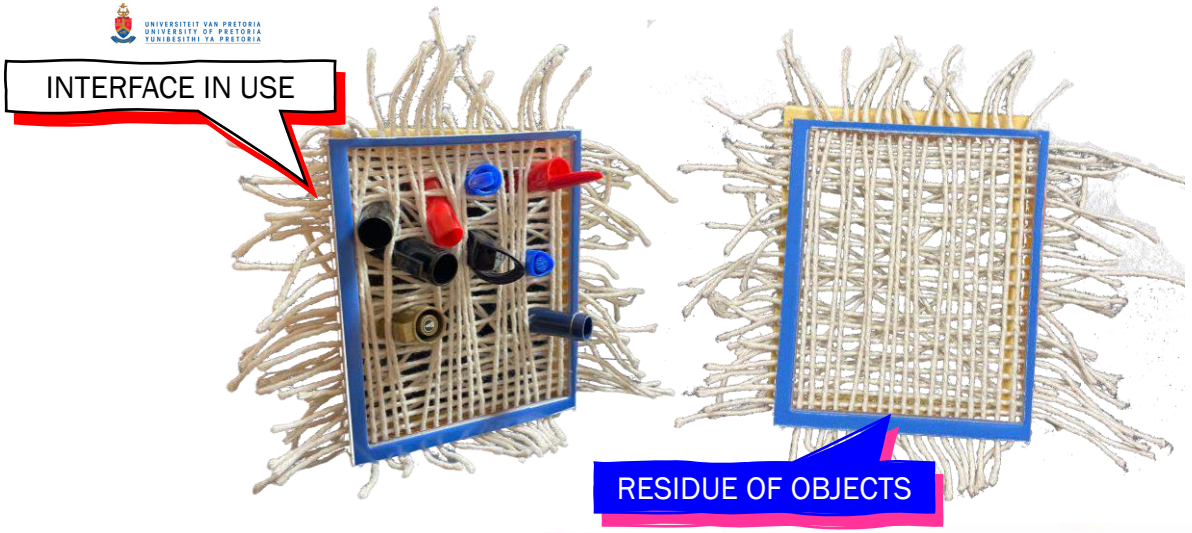
DETAIL 2 IN USE: OPEN

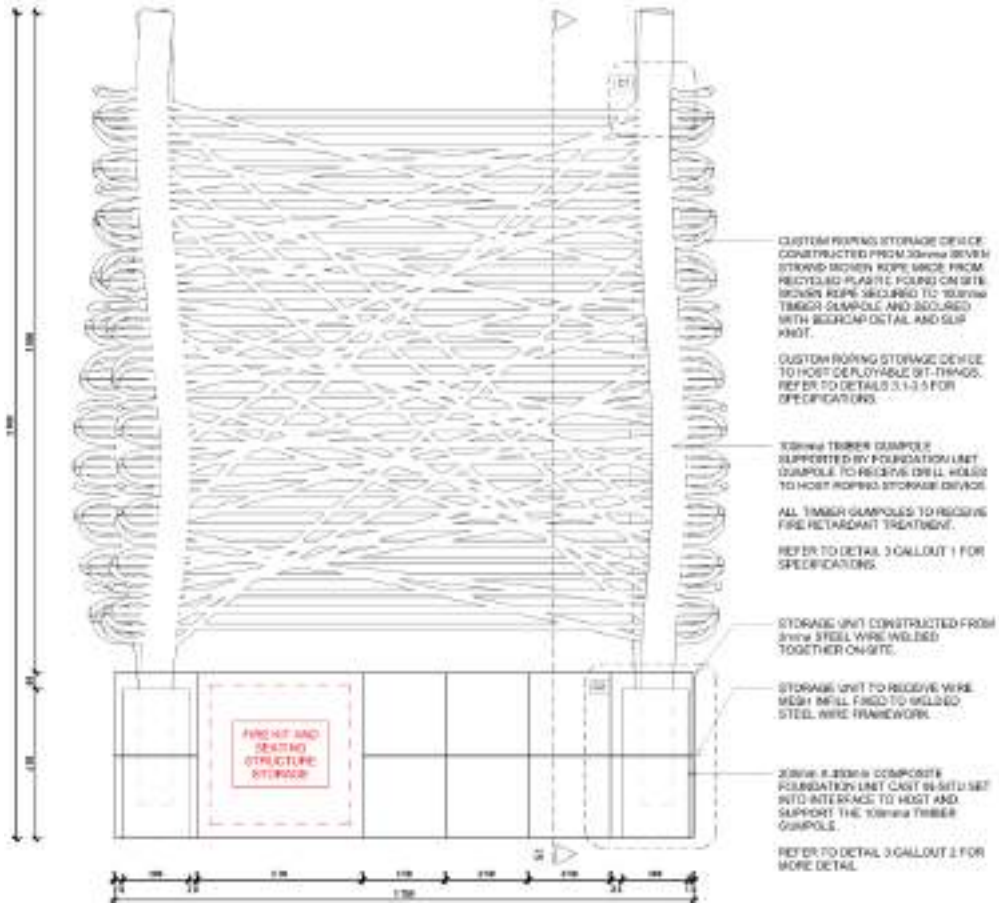
Detail 3

STORAGE INTERFACE WITH DEPLOYABLE SIT-THINGS

DETAIL 3 PLAN

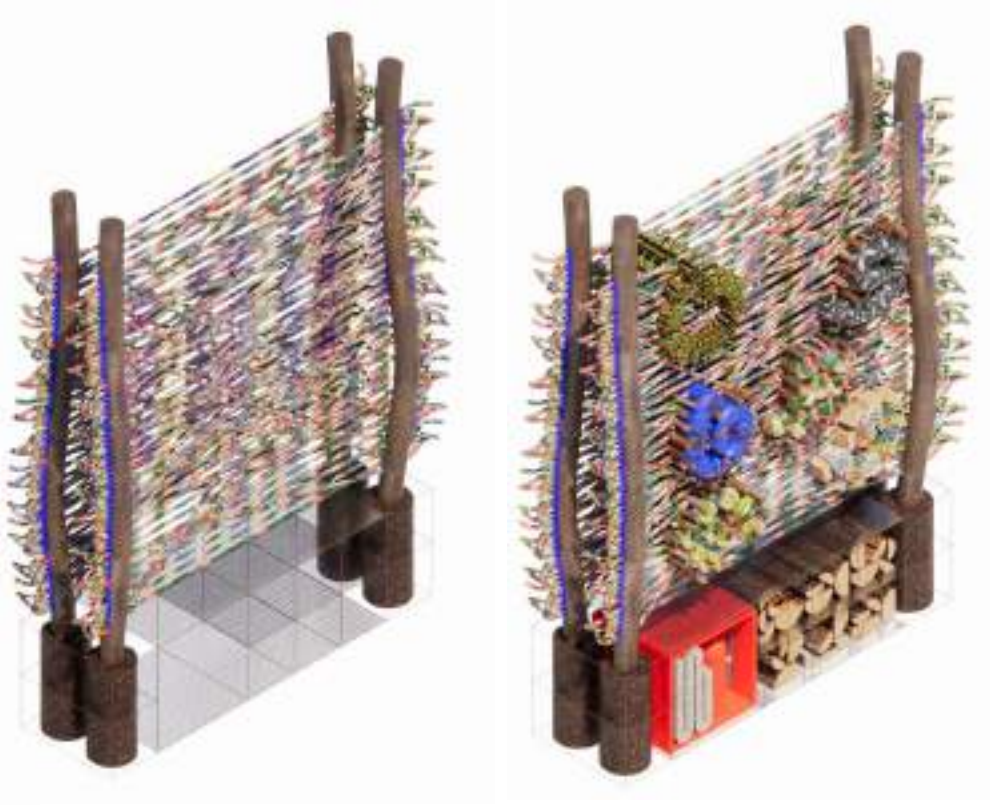
PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS





DETAIL 3 ELEVATION

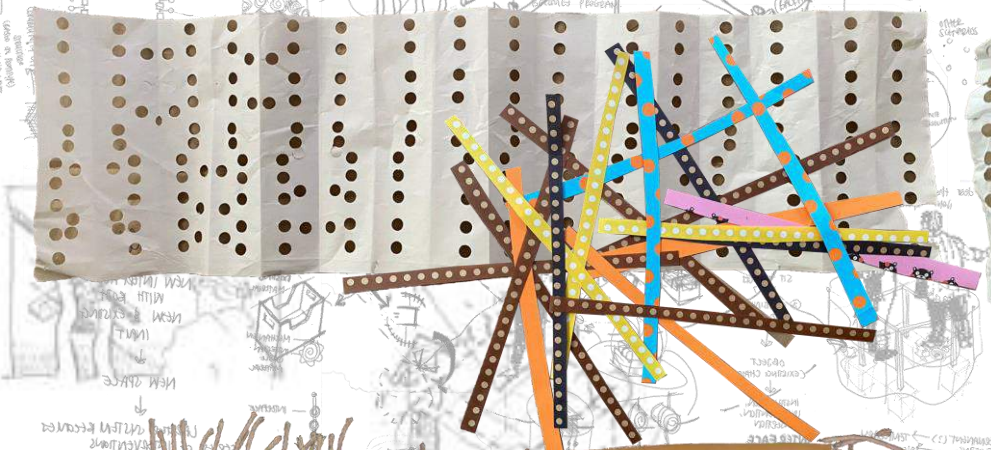
PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS

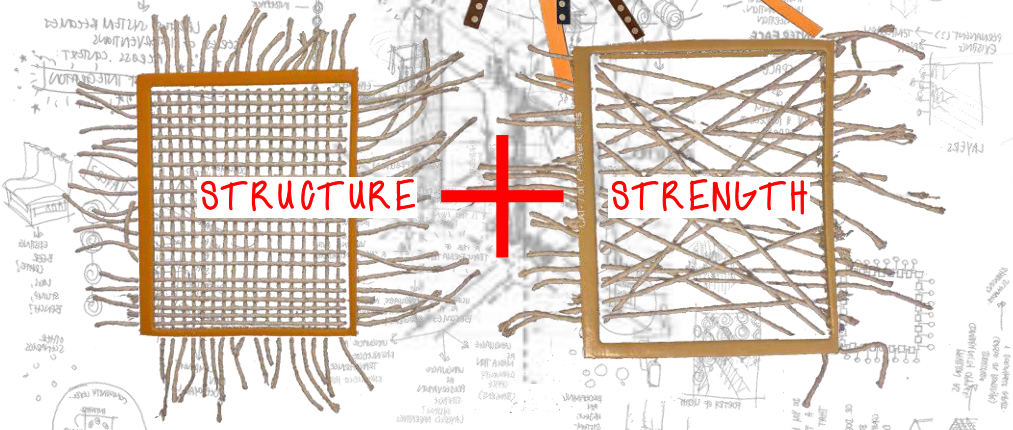


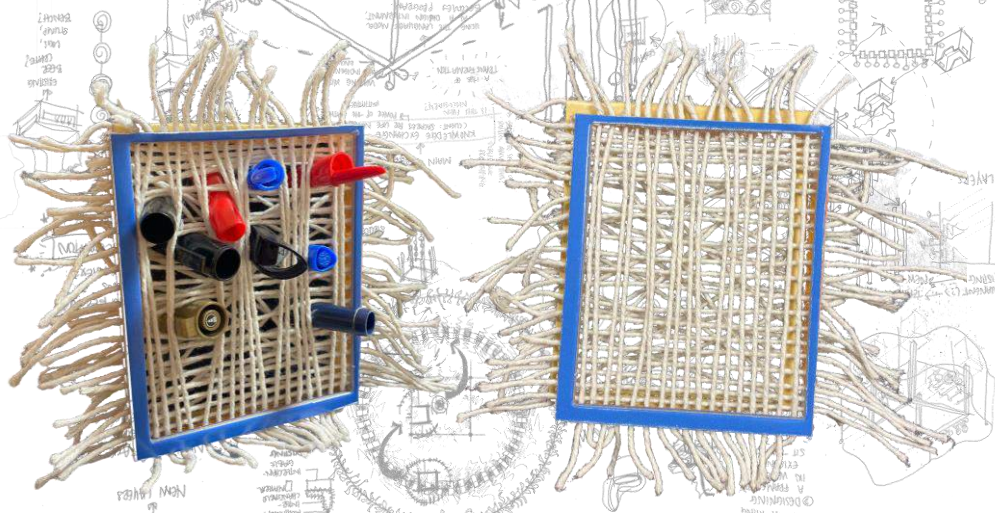
DETAIL 3 AXONOMETRIC STATIC AND IN USE

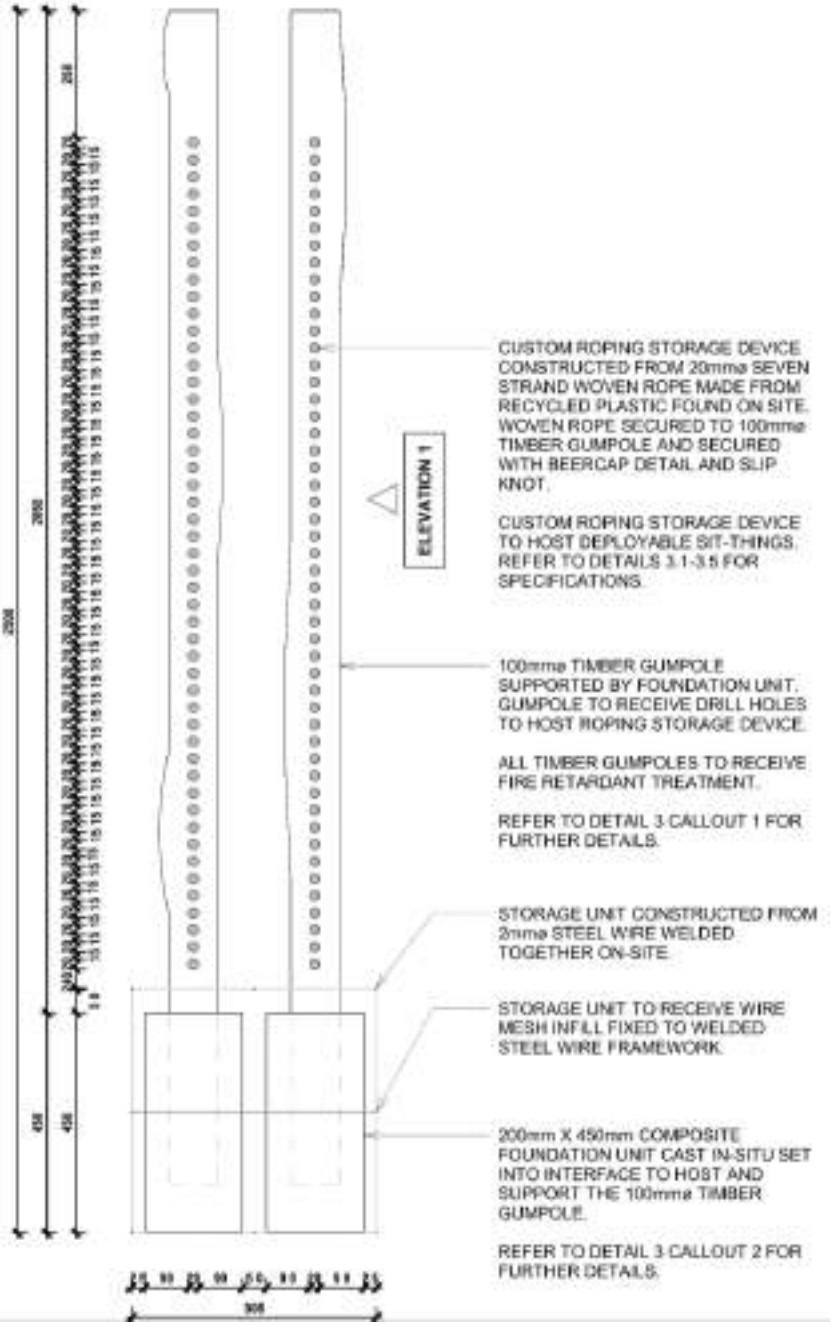
PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS

Iterative Prototyping Process

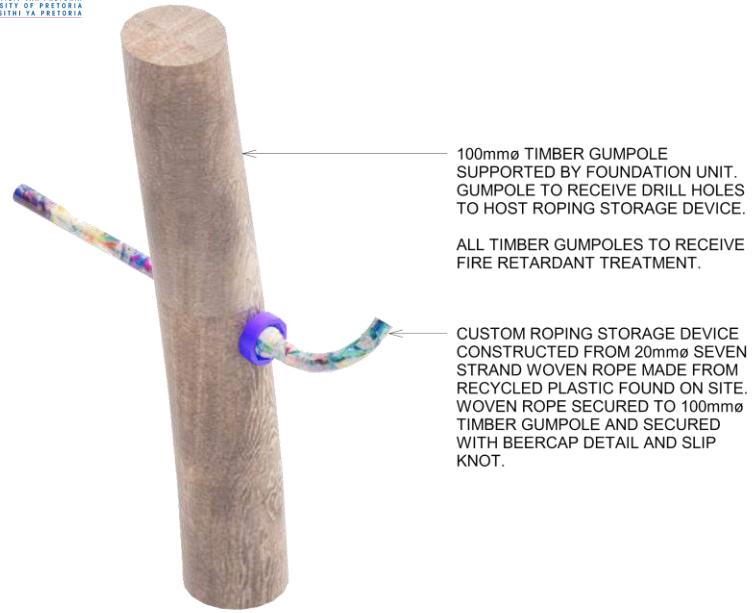




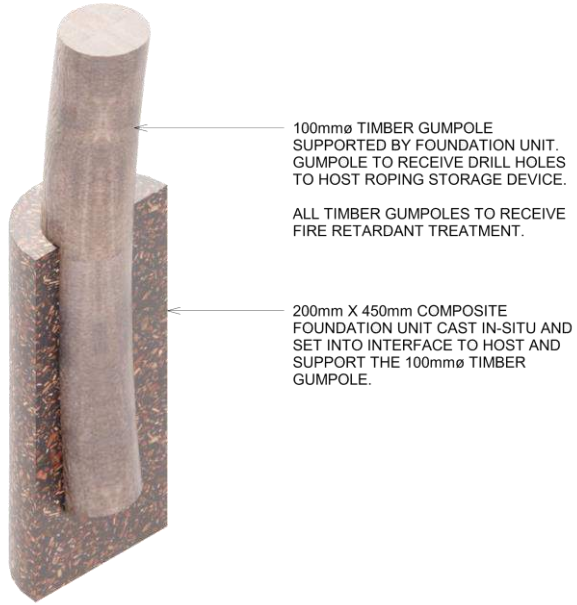




DETAIL 3 SECTION 1



DETAIL 3 CALLOUT 1



DETAIL 3 CALLOUT 2

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS

Collaborative Sit-thing #1

DETAIL 3-1

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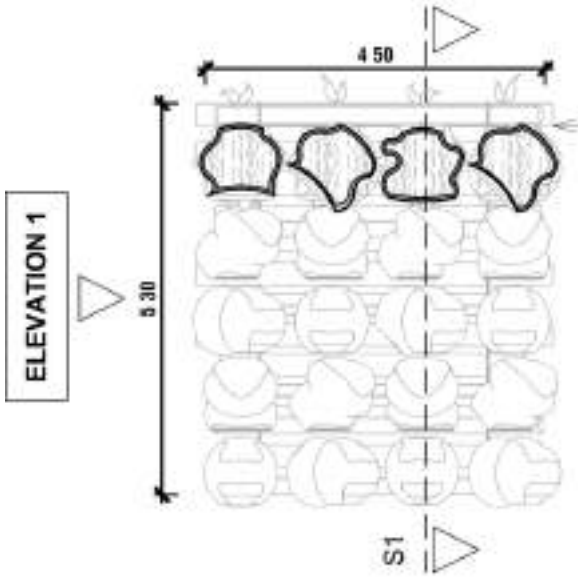
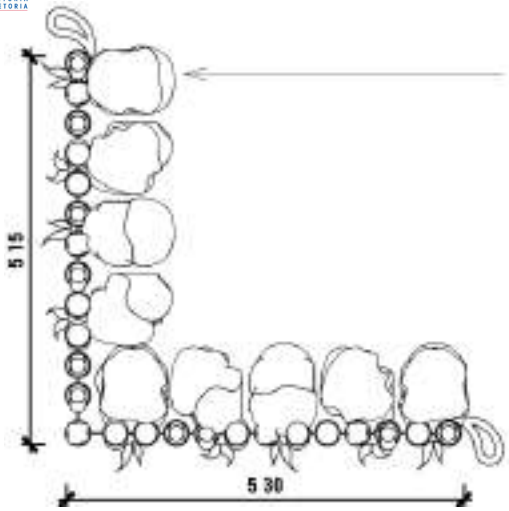


COLLABOATIVE SIT-THING DESIGN 1: CONSTRUCTED FROM FOUND TIMBER STICKS AND TIMBER DOWEL STICKS BASKET WOVEN TOGETHER TO FORM THE BASE STRUCTURE. THE CUSHIONING FILL IS CONSTRUCTED FROM RECYCLED PLASTIC BAGS FILLED WITH FOUND CUSHIONING, GRASS AND PAPER AND TIED TO THE BASE STRUCTURE.

DETAIL 3-1 PLAN

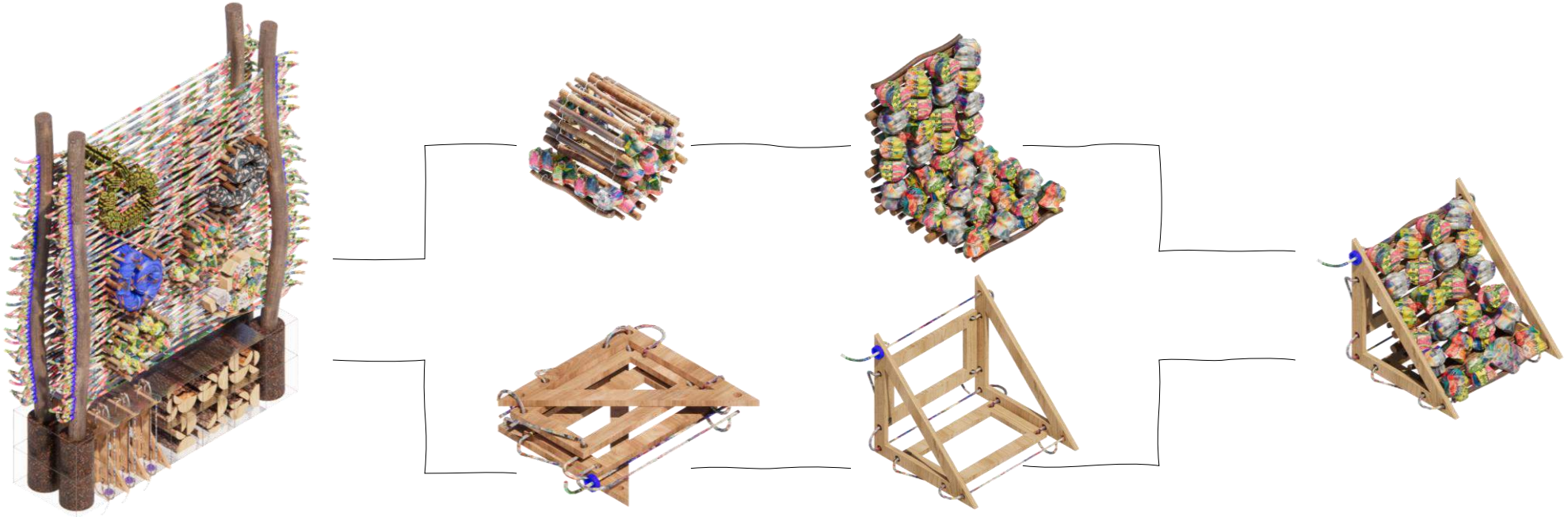
PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS



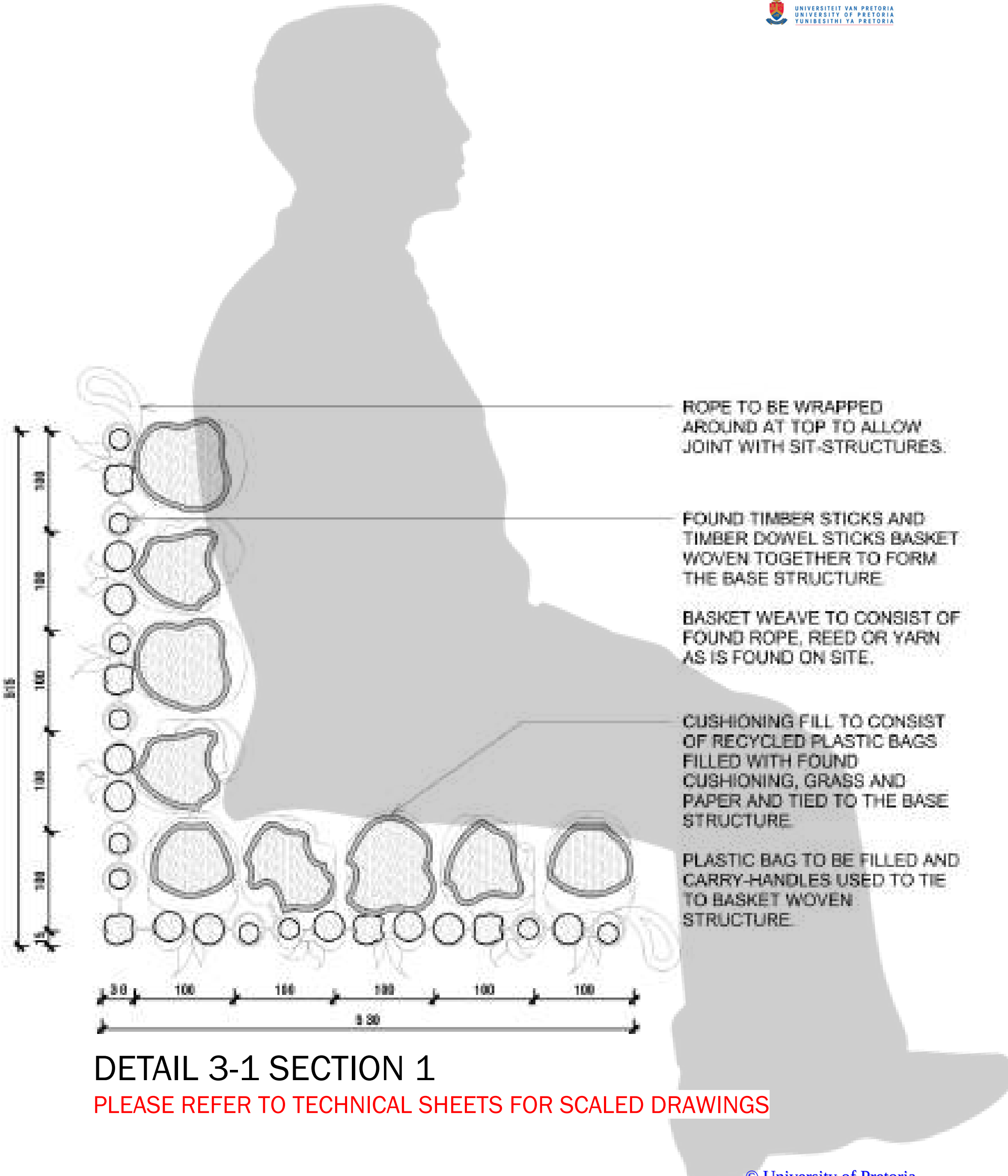
COLLABOATIVE SIT-THING DESIGN 1: CONSTRUCTED FROM FOUND TIMBER STICKS AND TIMBER DOWEL STICKS BASKET WOVEN TOGETHER TO FORM THE BASE STRUCTURE. THE CUSHIONING FILL IS CONSTRUCTED FROM RECYCLED PLASTIC BAGS FILLED WITH FOUND CUSHIONING, GRASS AND PAPER AND TIED TO THE BASE STRUCTURE.

DETAIL 3-1 ELEVATION 1

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS



DETAIL 3-1 PROCESS OF USE

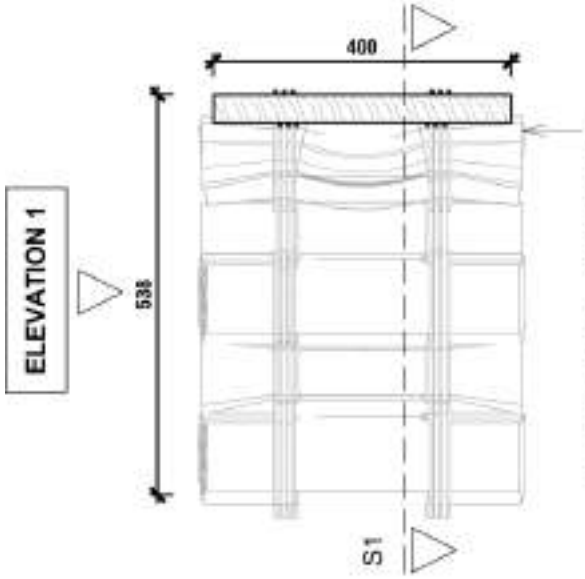


DETAIL 3-1 SECTION 1

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS

Collaborative Sit-thing #2

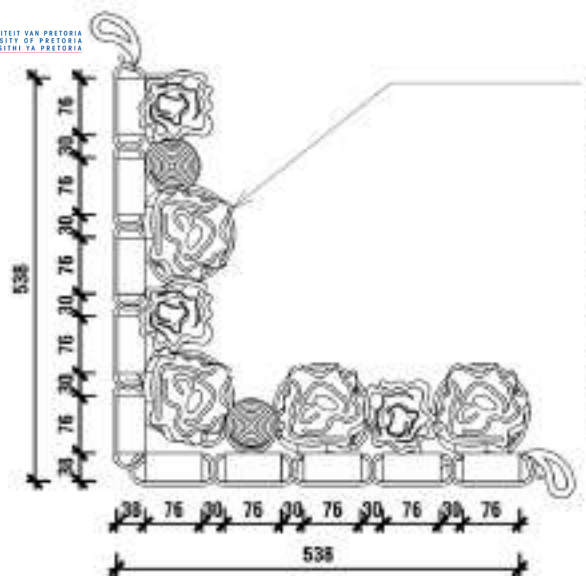
DETAIL 3-2



COLLABOATIVE SIT-THING DESIGN 2: CONSTRUCTED FROM FOUND TIMBER BATTENS BASKET WOVEN TOGETHER TO FORM THE BASE STRUCTURE. THE CUSHIONING FILL IS CONSTRUCTED FROM RECYCLED PLASTIC BAGS FILLED WITH FOUND CUSHIONING, GRASS AND PAPER INCLUDED IN THE BASKET WEAVE TO SECURE TO THE BASE STRUCTURE.

DETAIL 3-2 PLAN

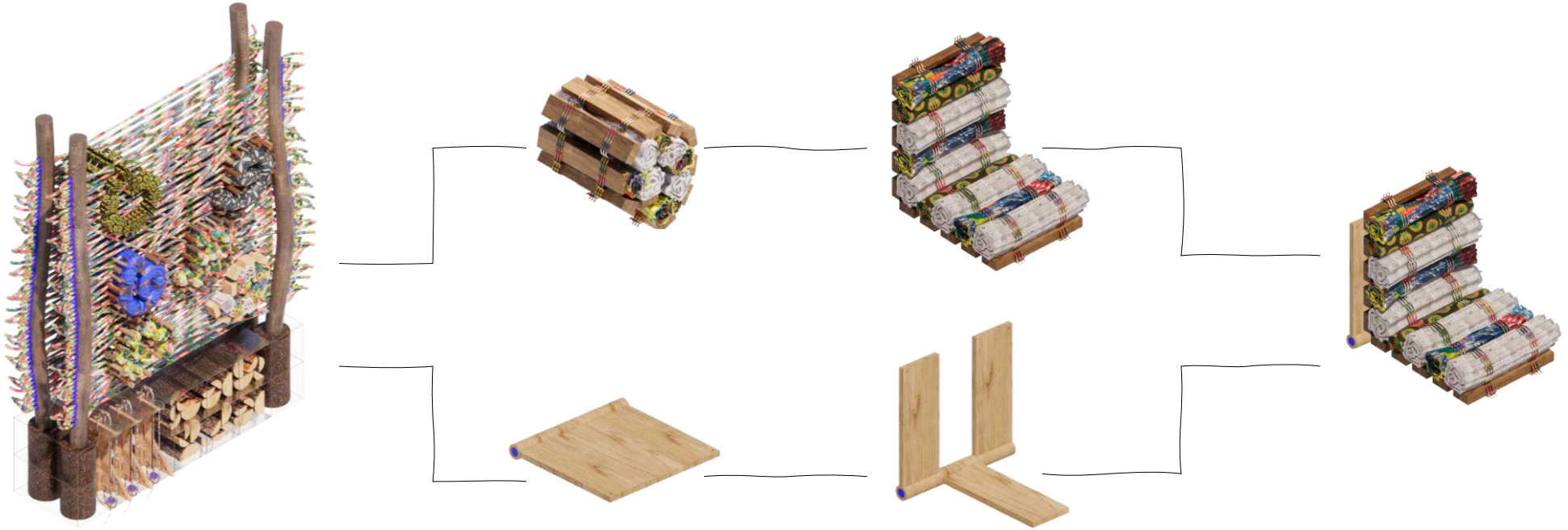
PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS



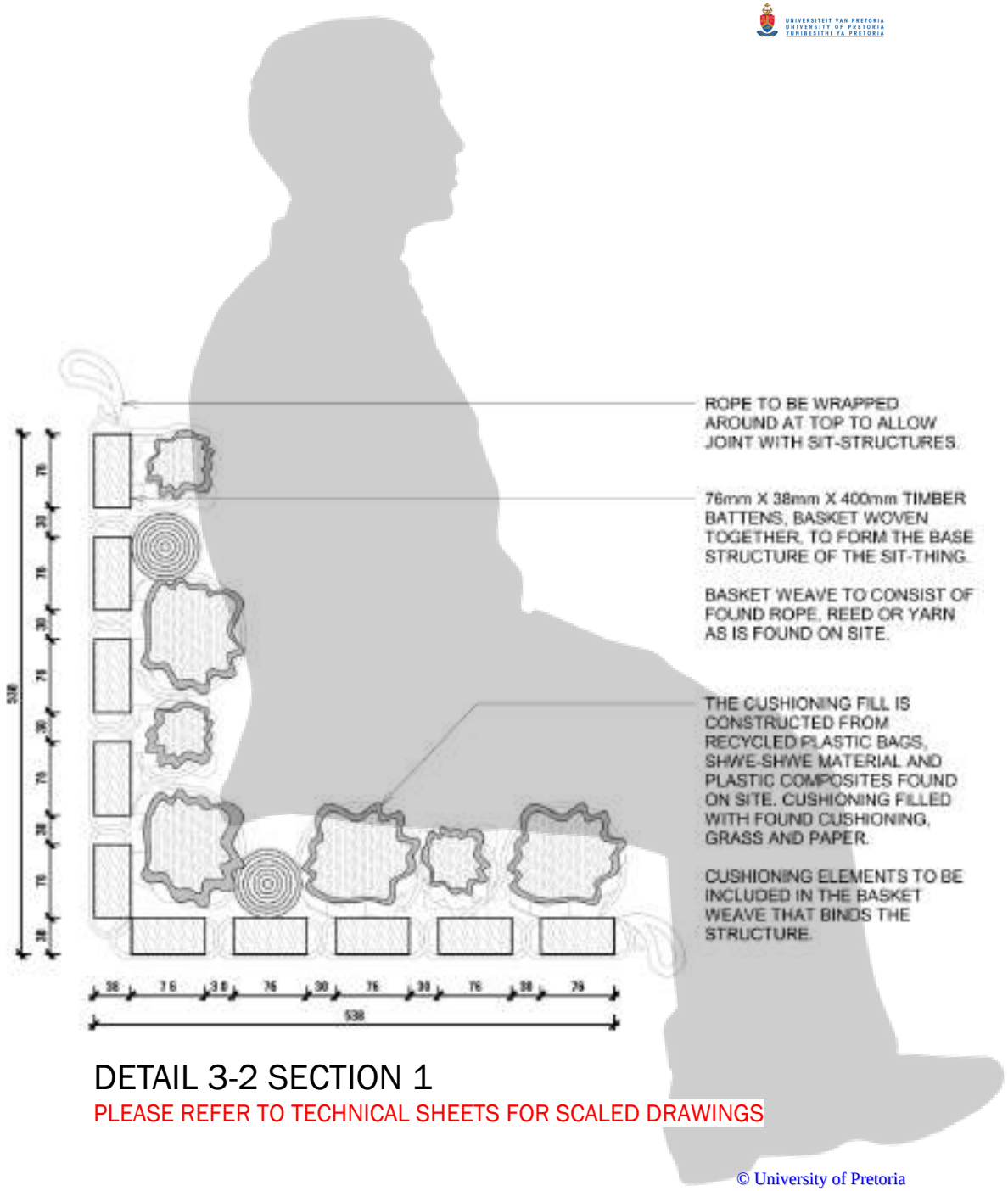
COLLABOATIVE SIT-THING DESIGN 2: CONSTRUCTED FROM FOUND TIMBER BATTENS BASKET WOVEN TOGETHER TO FORM THE BASE STRUCTURE. THE CUSHIONING FILL IS CONSTRUCTED FROM RECYCLED PLASTIC BAGS FILLED WITH FOUND CUSHIONING, GRASS AND PAPER INCLUDED IN THE BASKET WEAVE TO SECURE TO THE BASE STRUCTURE.

DETAIL 3-2 ELEVATION 1

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS



DETAIL 3-2 PROCESS OF USE

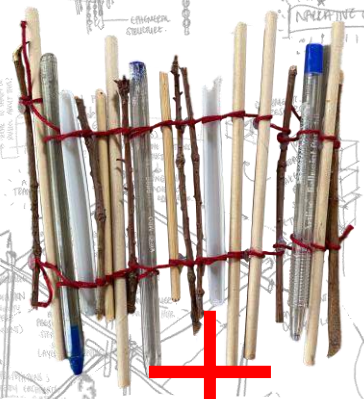


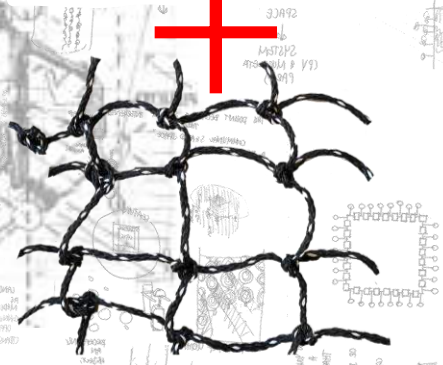
DETAIL 3-2 SECTION 1

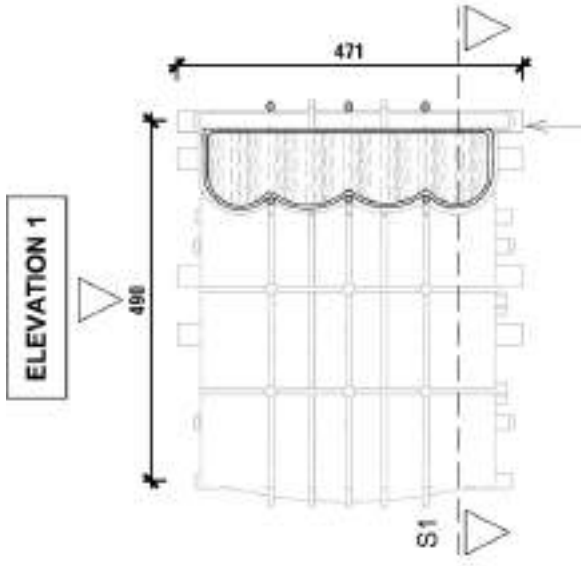
PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS

Collaborative Sit-thing #3

DETAIL 3-3



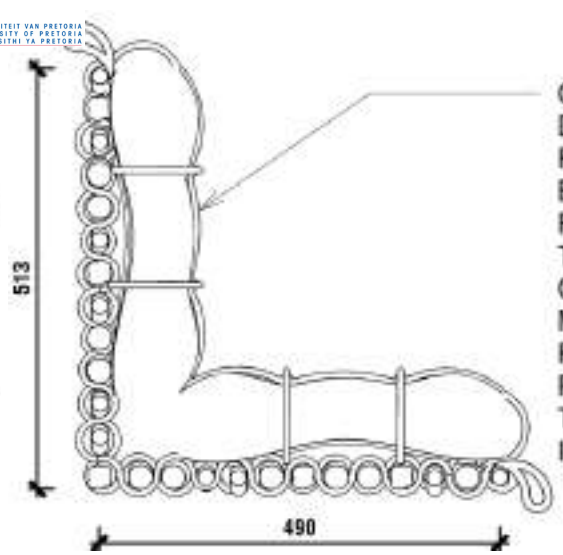




COLLABOATIVE SIT-THING DESIGN 3: CONSTRUCTED FROM FOUND TIMBER STICKS BASKET WOVEN TOGETHER TO FORM THE BASE STRUCTURE. THE CUSHIONING FILL IS CONSTRUCTED A SWESWE MATERIAL COMPOSISTION FIXED TO BASE WITH LOOSE ROPE WEAVE. SWESWE COVER TO RECEIVE FOUND OBJECT INFILL AS CUSHIONING.

DETAIL 3-3 PLAN

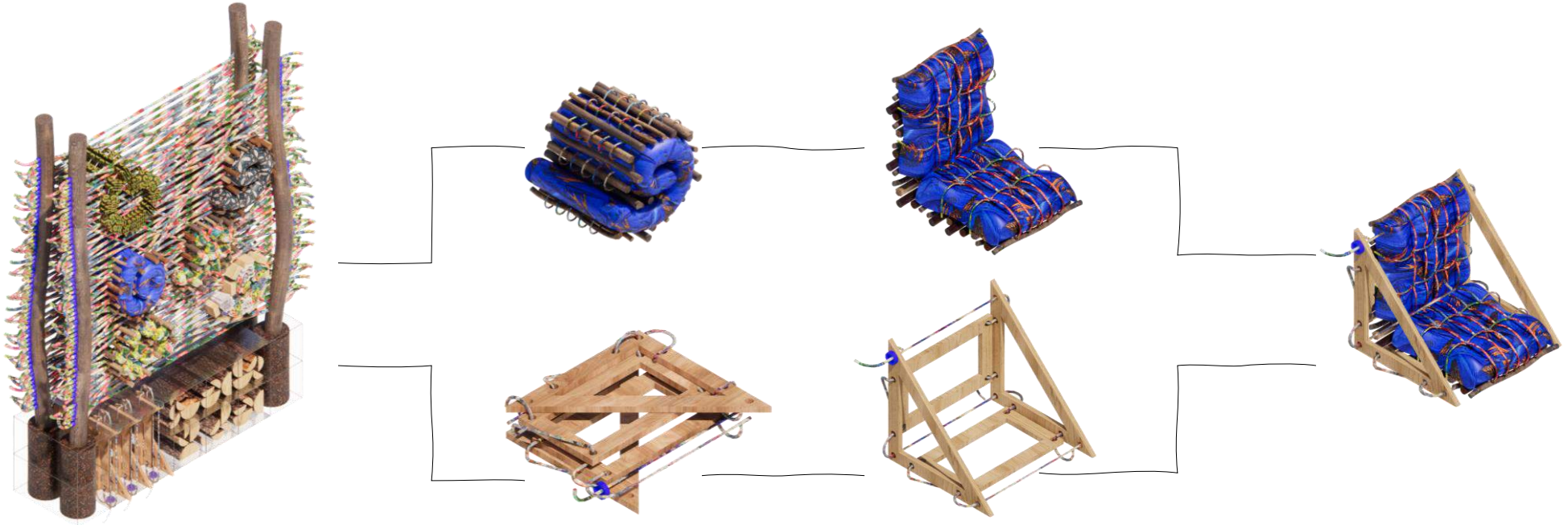
PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS



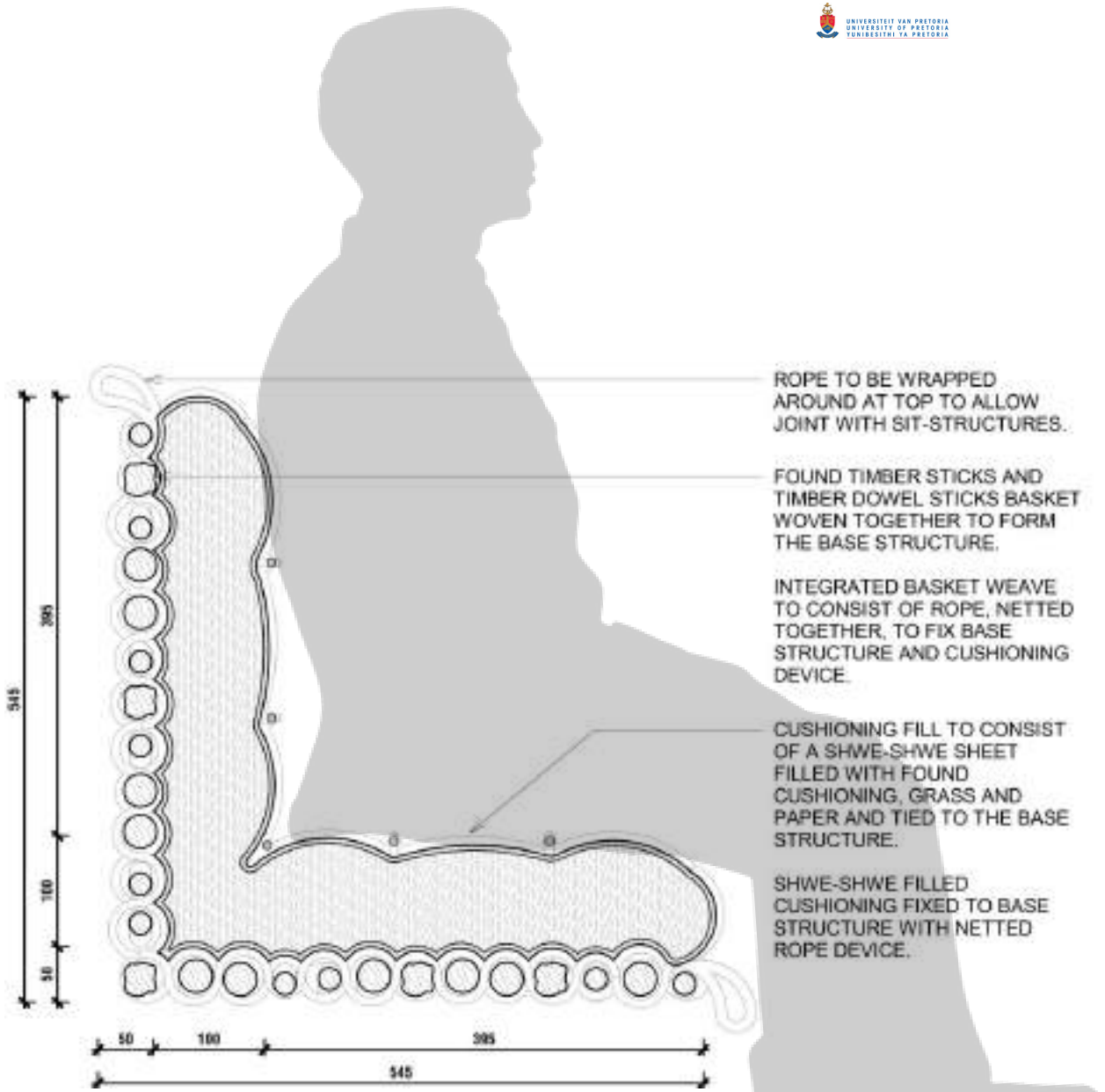
COLLABOATIVE SIT-THING DESIGN 3: CONSTRUCTED FROM FOUND TIMBER STICKS BASKET WOVEN TOGETHER TO FORM THE BASE STRUCTURE. THE CUSHIONING FILL IS CONSTRUCTED A SWESWE MATERIAL COMPOSISTION FIXED TO BASE WITH LOOSE ROPE WEAVE. SWESWE COVER TO RECEIVE FOUND OBJECT INFILL AS CUSHIONING.

DETAIL 3-3 ELEVATION 1

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS



DETAIL 3-3 PROCESS OF USE

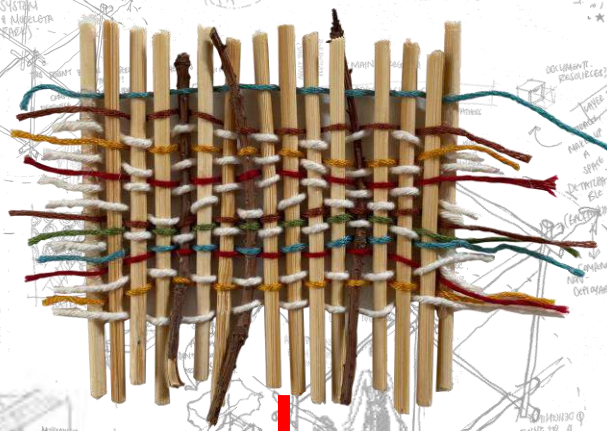


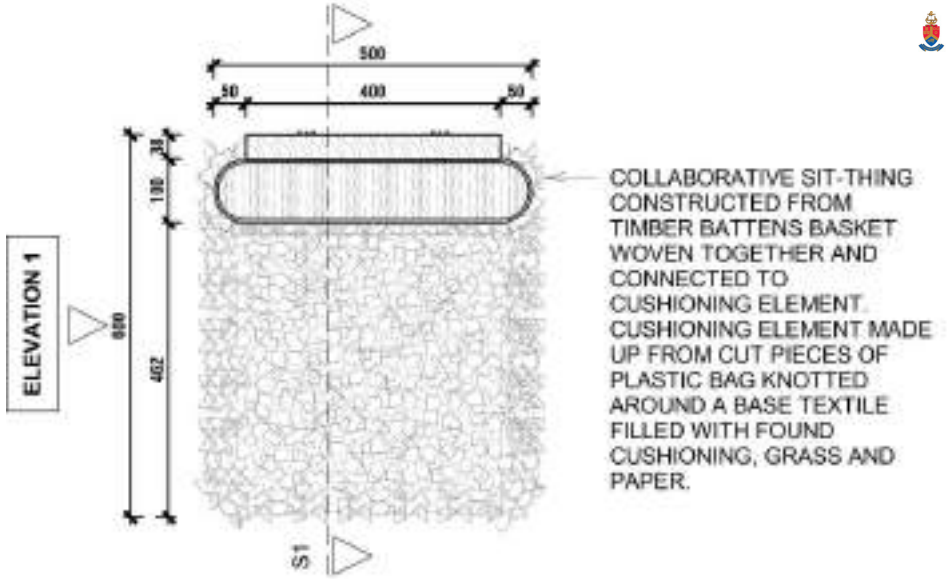
DETAIL 3-3 SECTION 1

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS

Collaborative Sit-thing #4

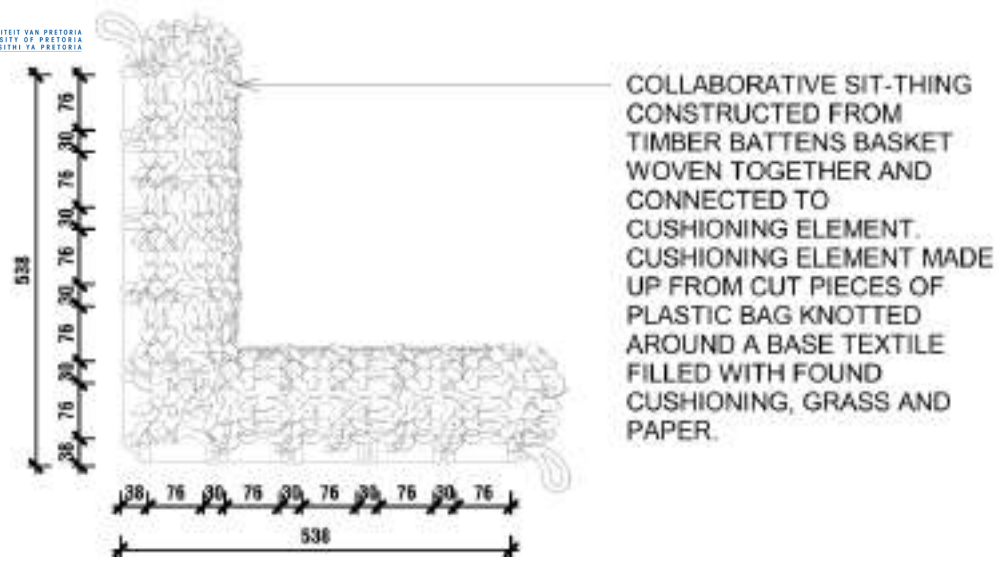
DETAIL 3-4





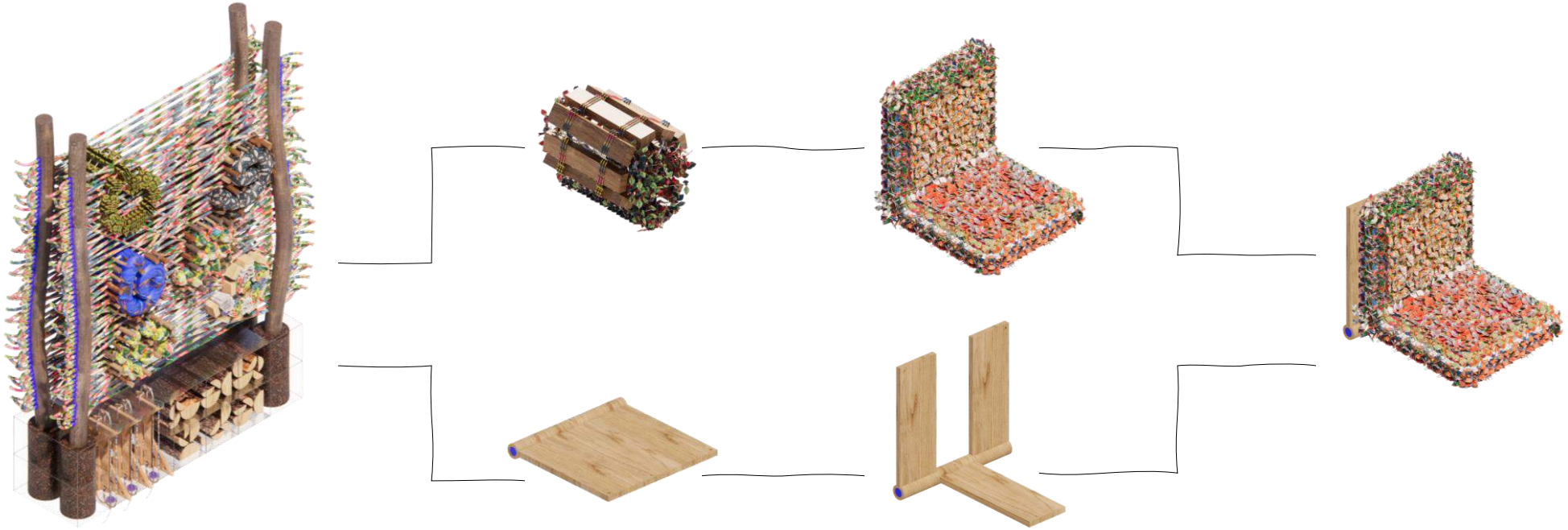
DETAIL 3-4 PLAN

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS

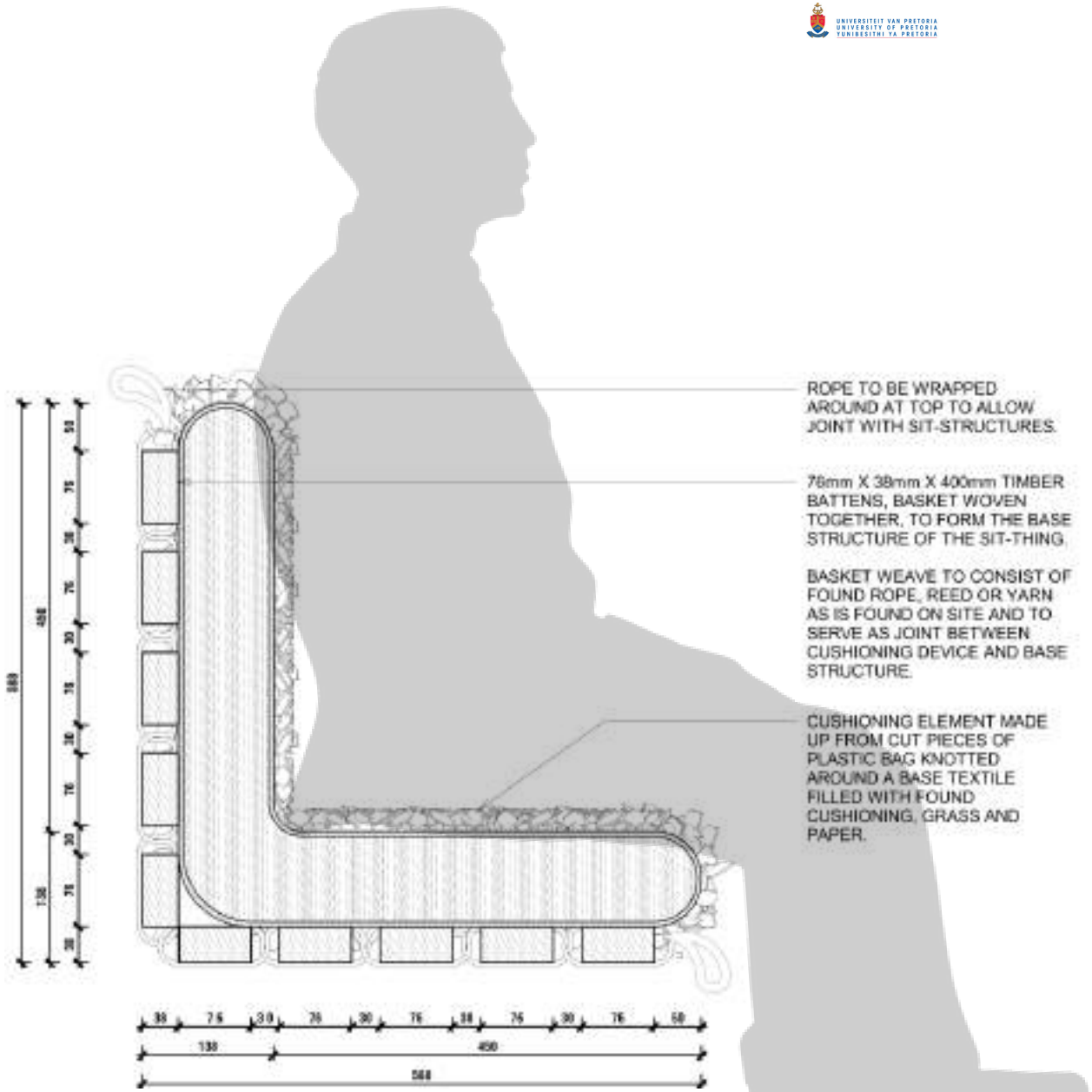


DETAIL 3-4 ELEVATION 1

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS



DETAIL 3-4 PROCESS OF USE



DETAIL 3-4 SECTION 1

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS

Design Sit-thing #1

DETAIL 3-5

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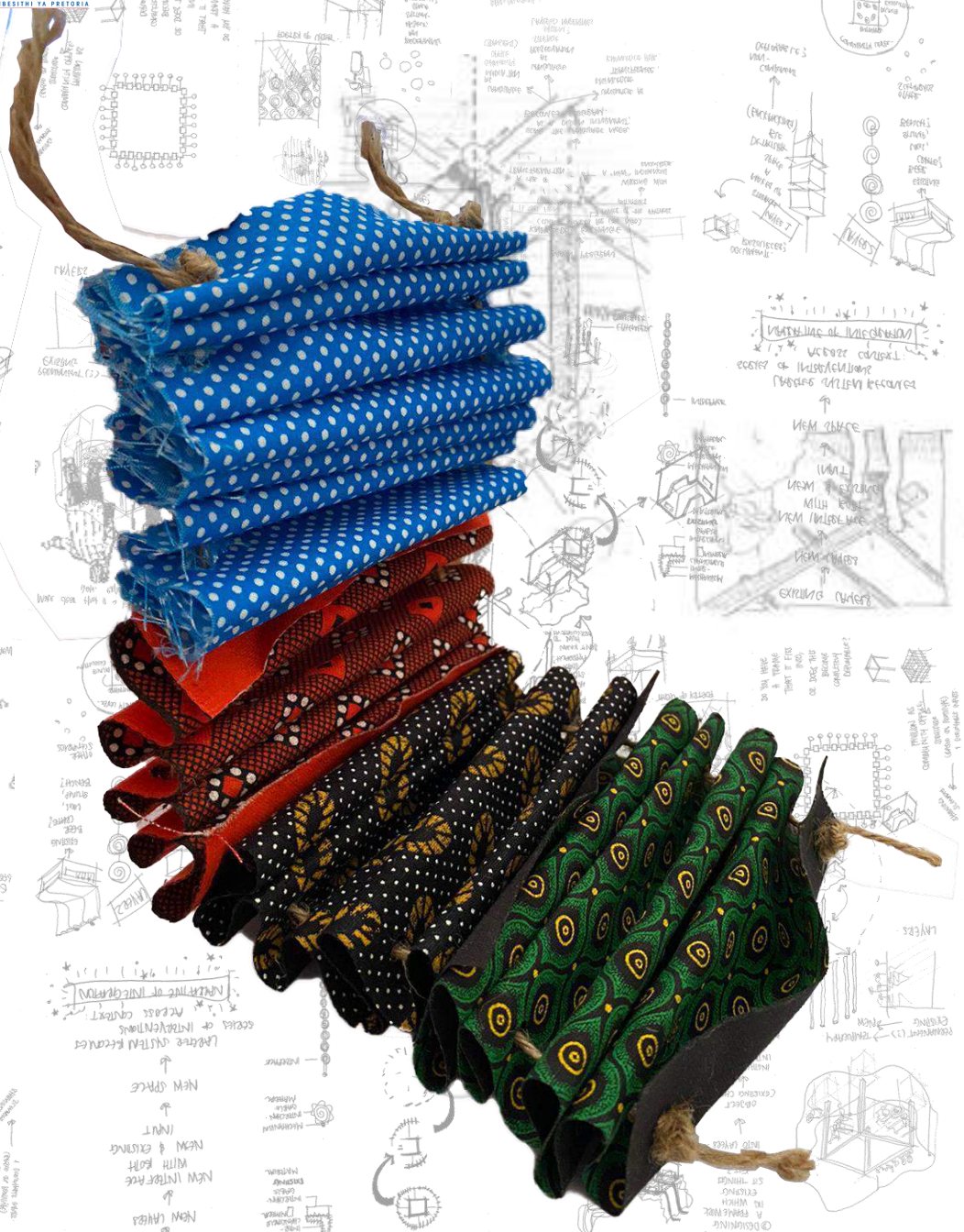
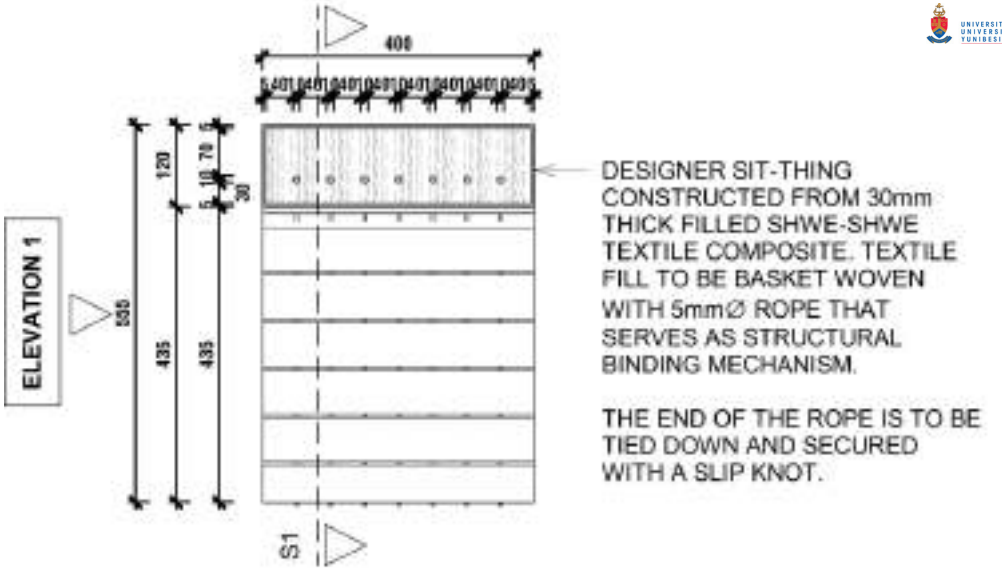
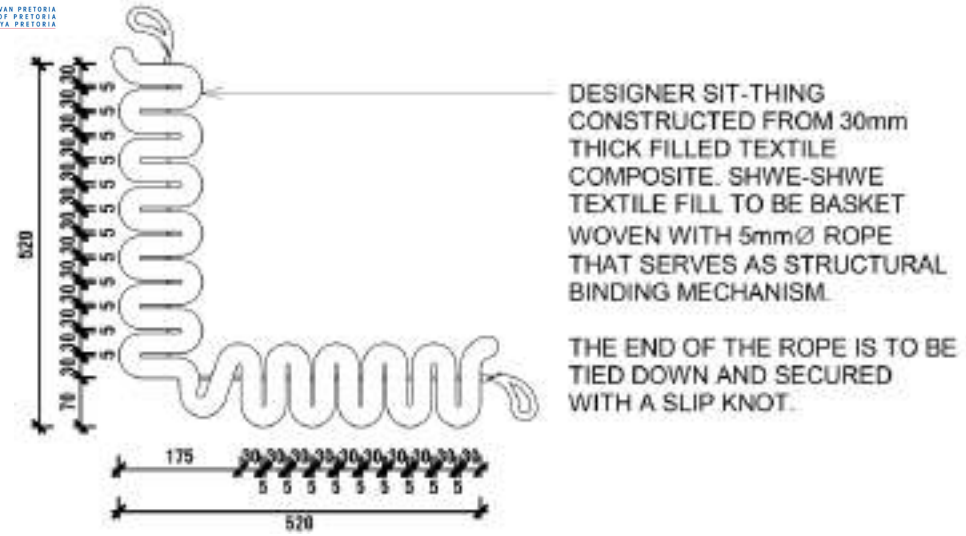




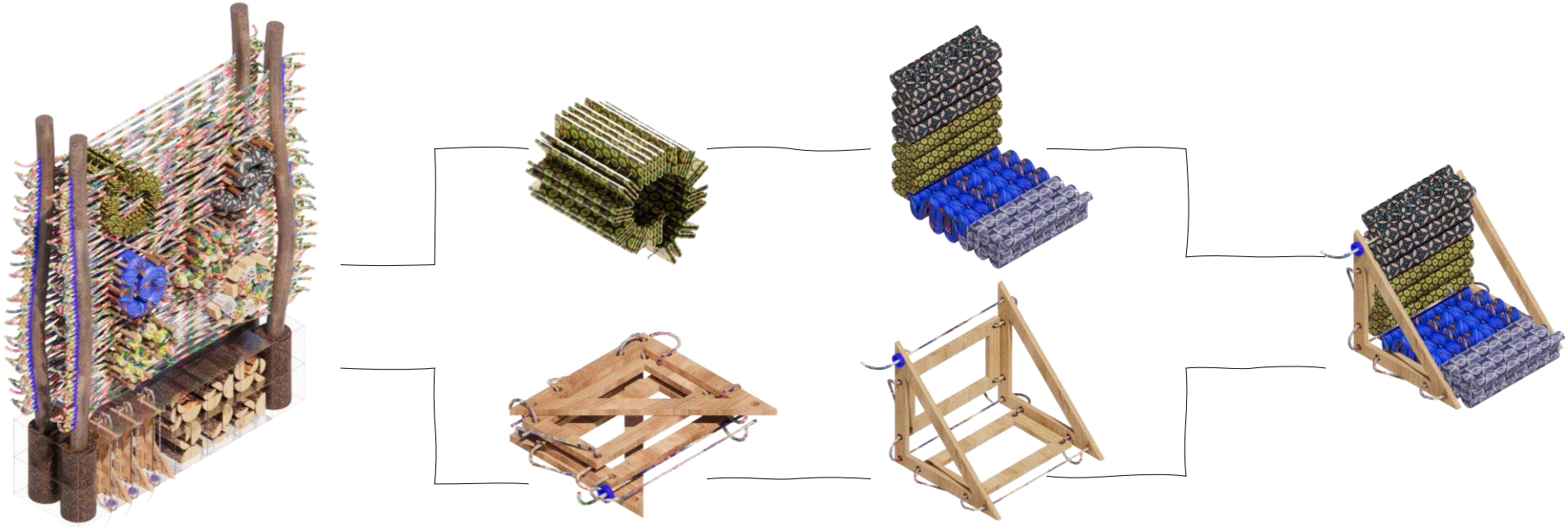
DETAIL 3-5 PLAN

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS

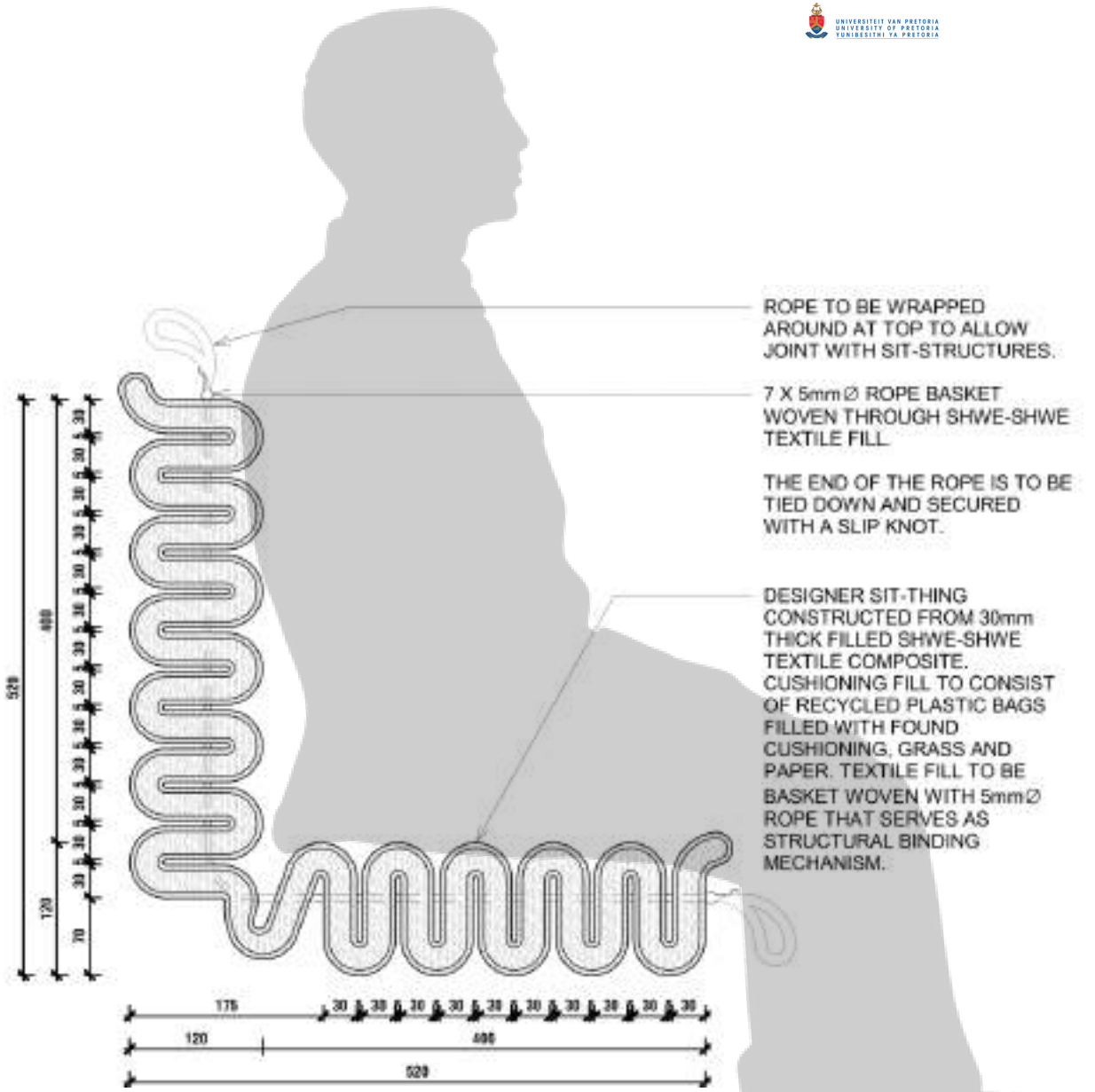


DETAIL 3-5 ELEVATION 1

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS

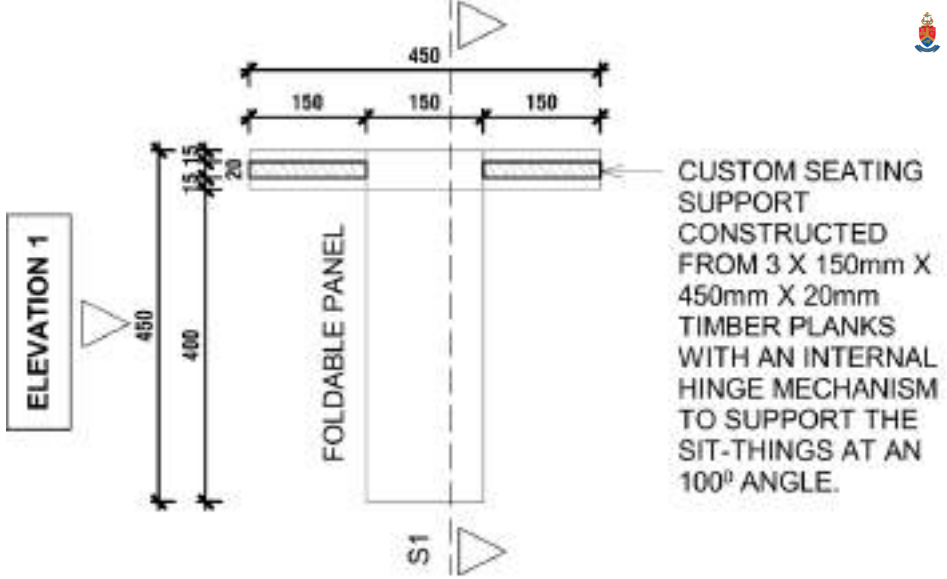


DETAIL 3-5 PROCESS OF USE



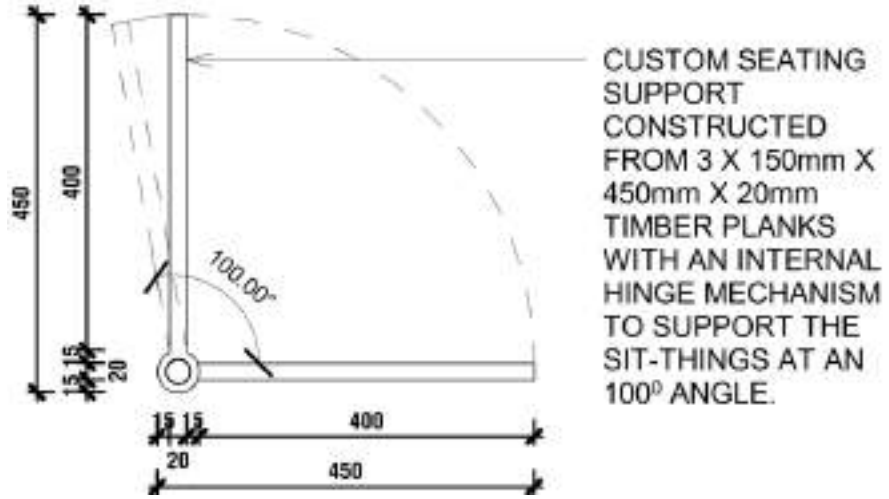
DETAIL 3-5 SECTION 1

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS



DETAIL 3A PLAN

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS



DETAIL 3A ELEVATION 1

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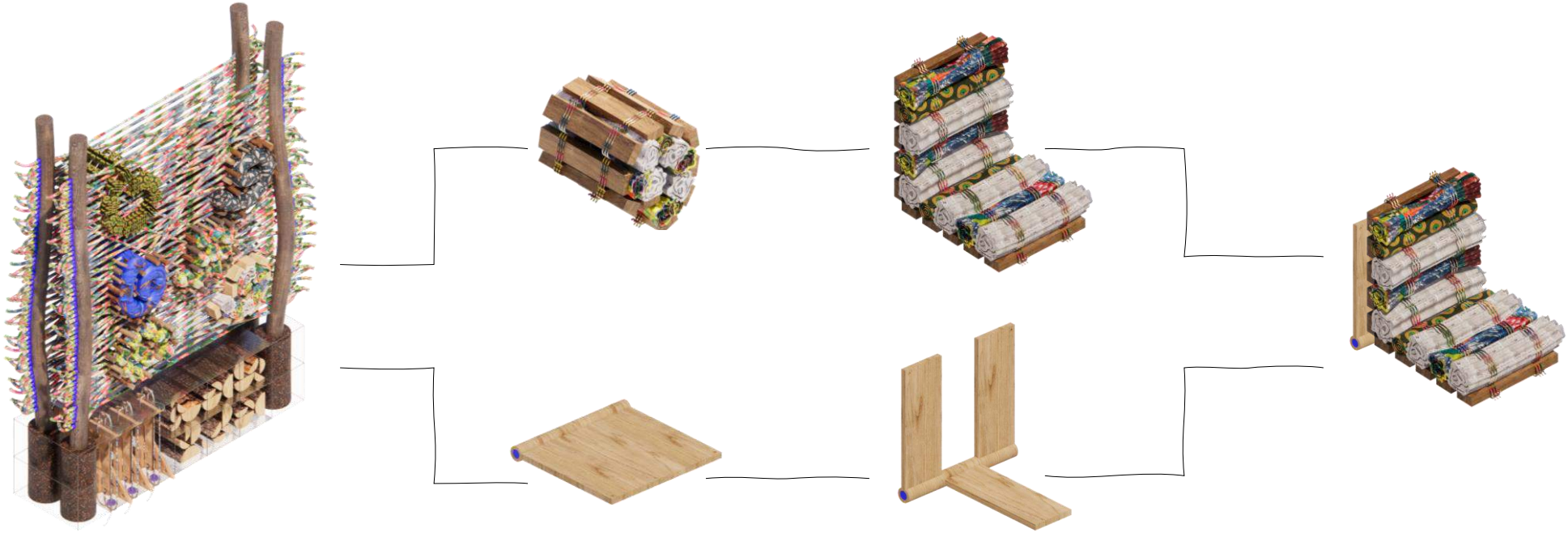
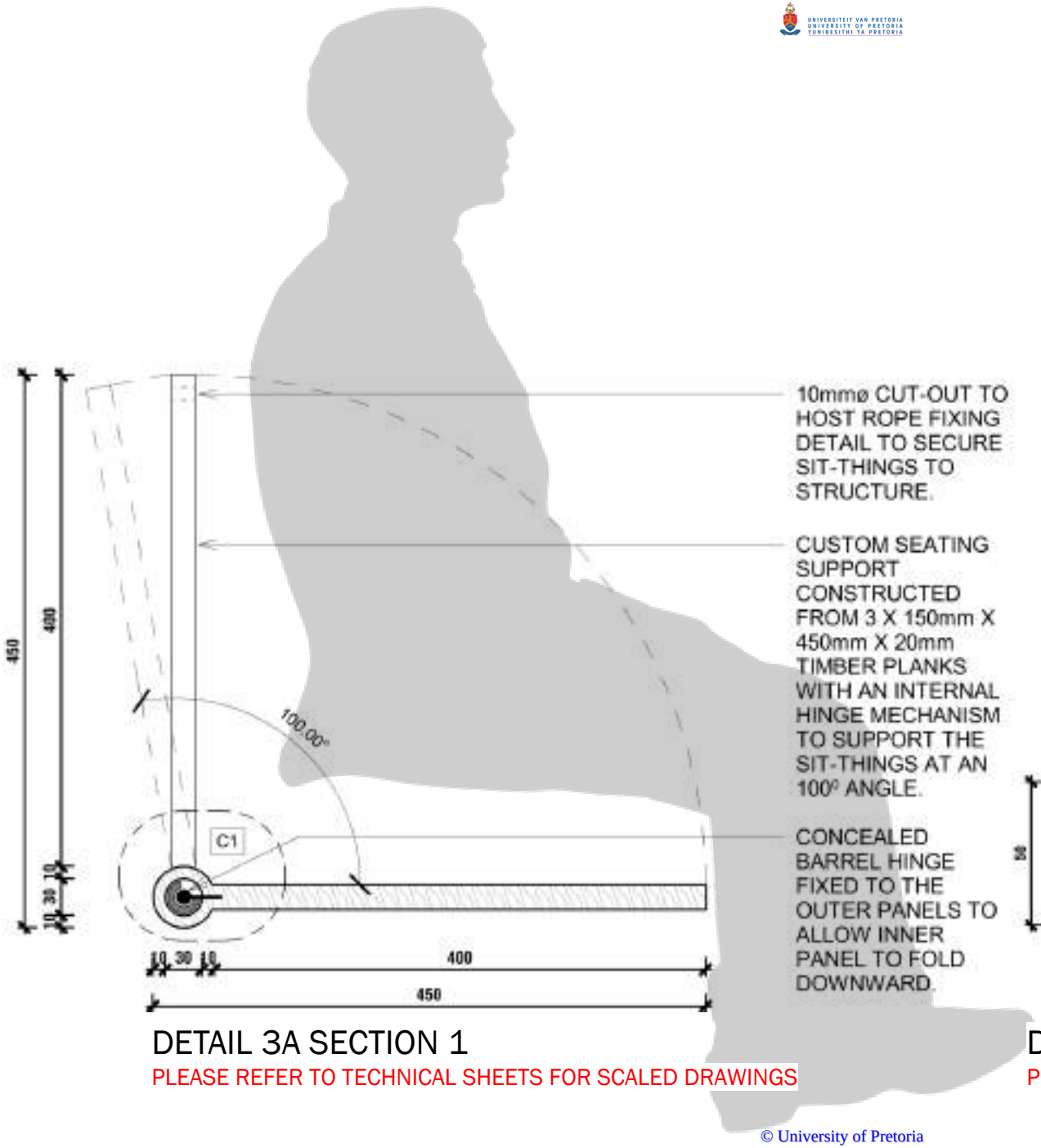
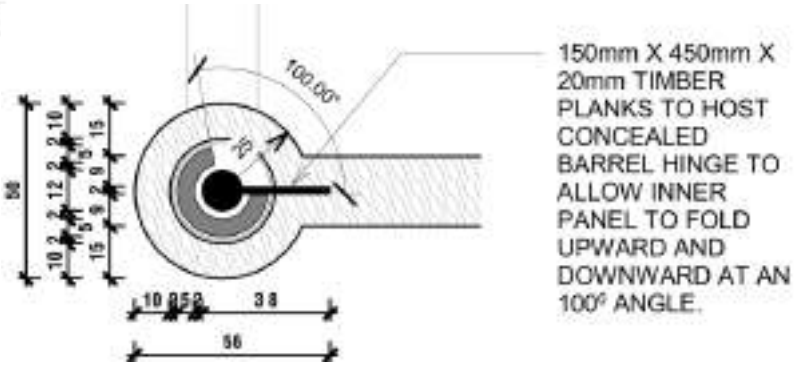


DETAIL 3A PROCESS OF USE



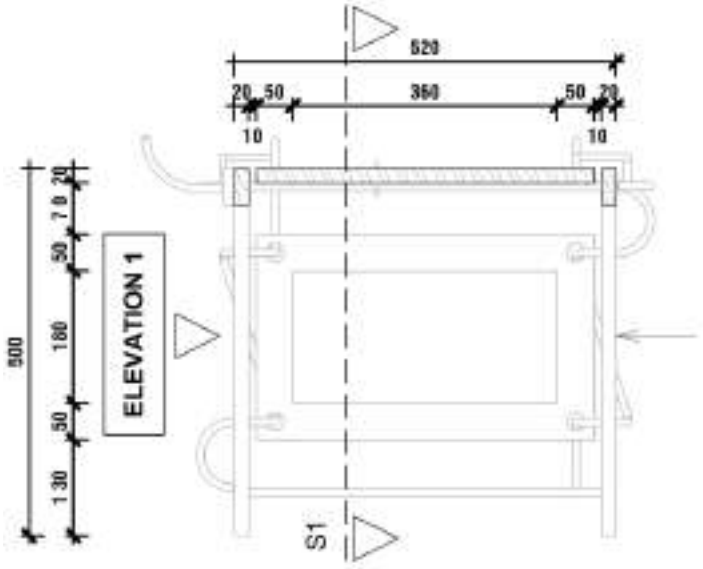
DETAIL 3A SECTION 1

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS



DETAIL 3A CALLOUT 1

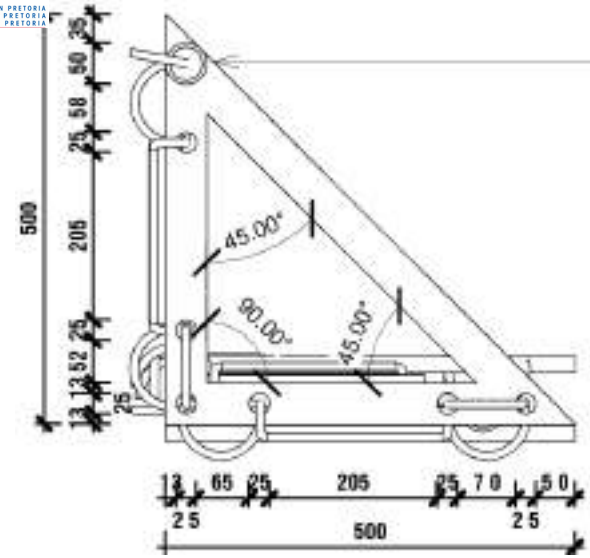
PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS



CUSTOM FOLDABLE SEATING SUPPORT CONSTRUCTED FROM CUT PLYWOOD PANELS, WOVEN TOGETHER WITH 10mmø SEVEN STRAND WOVEN ROPE MADE FROM RECYCLED PLASTIC.

DETAIL 3B PLAN

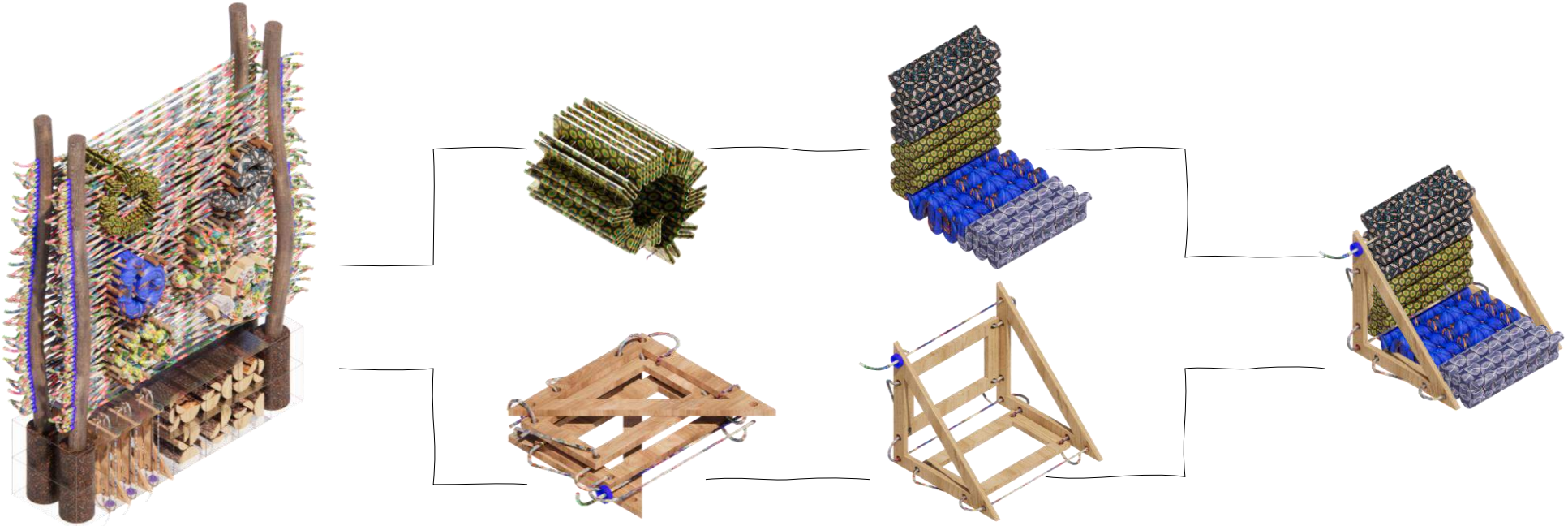
PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS



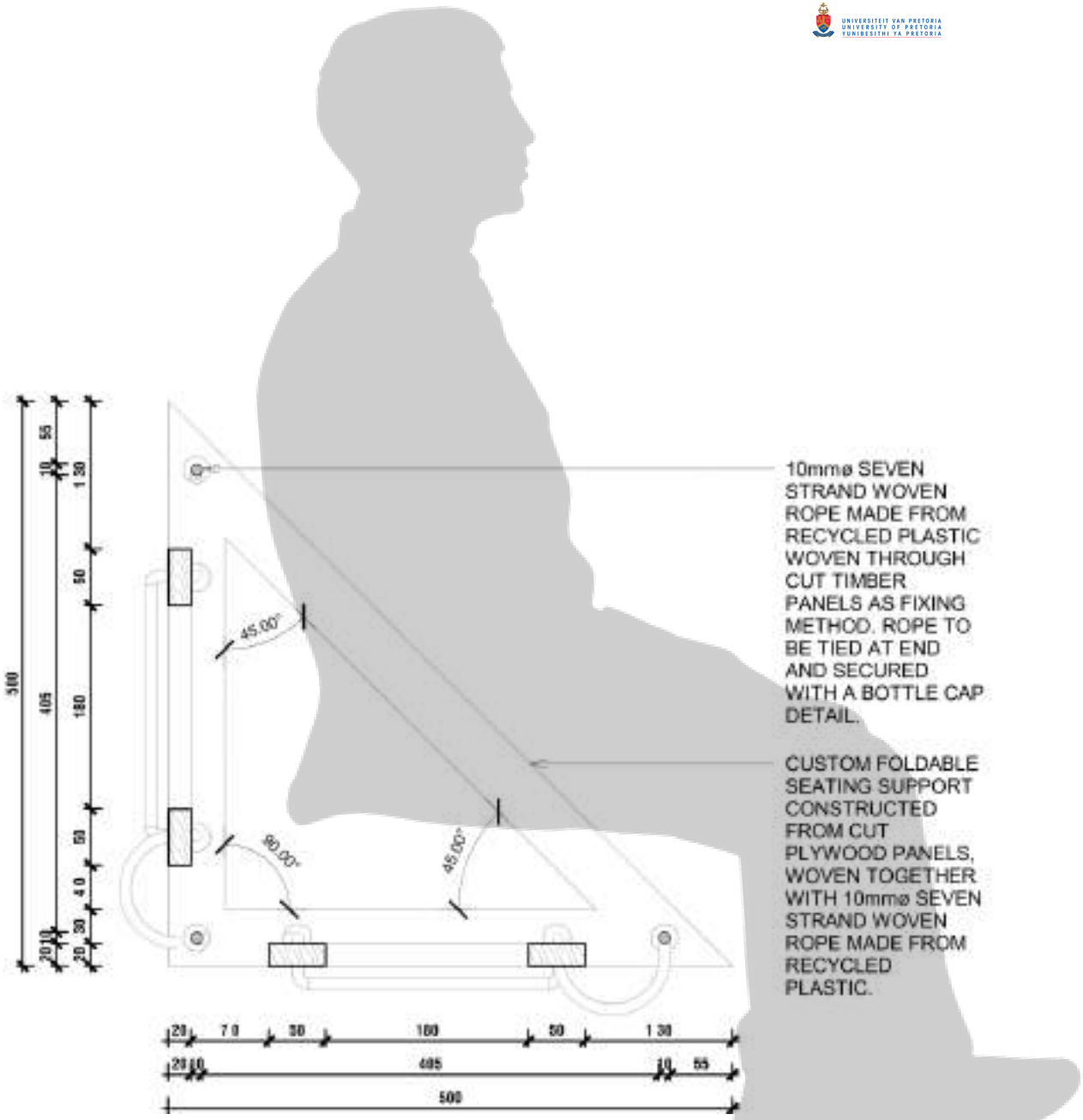
CUSTOM FOLDABLE SEATING SUPPORT CONSTRUCTED FROM CUT PLYWOOD PANELS, WOVEN TOGETHER WITH 10mmø SEVEN STRAND WOVEN ROPE MADE FROM RECYCLED PLASTIC.

DETAIL 3B ELEVATION 1

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS



DETAIL 3B PROCESS OF USE

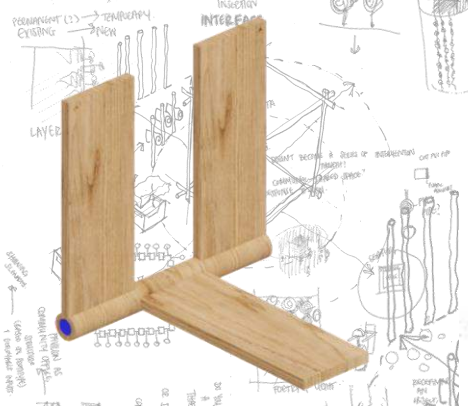


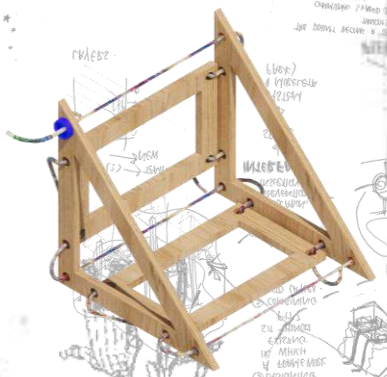
DETAIL 3A SECTION 1

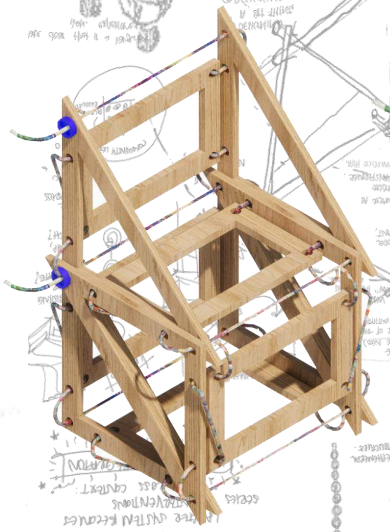
PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS

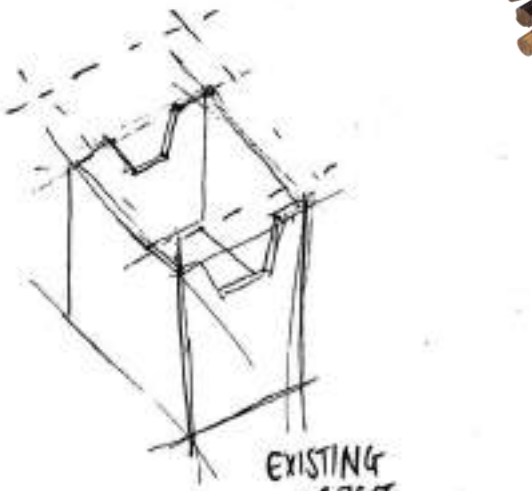
Sit-things & Structure Combinations

VARIOUS SCENARIOS OF SETTING UP THE SIT-THING









A communal structure that responds to the existing language of sitting in the settlement allows for a common denominator whilst still Allowing the individualistic infill that each sit-things contributes to the larger whole. This dialogue between generic and specific is what the project set out to achieve by using the language model as a method of design.

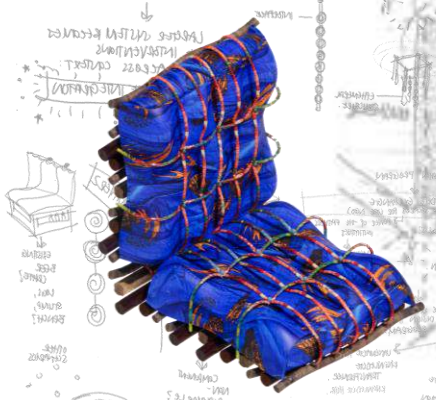
Potential Scenario of Appropriation

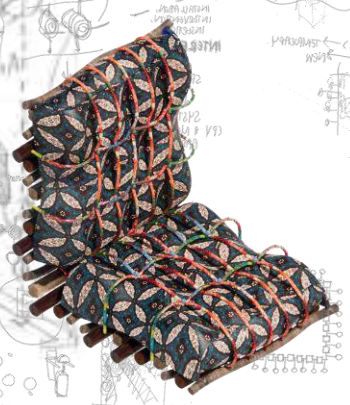
DRAINAGE SYSTEM THROUGHOUT THE SETTLEMENT

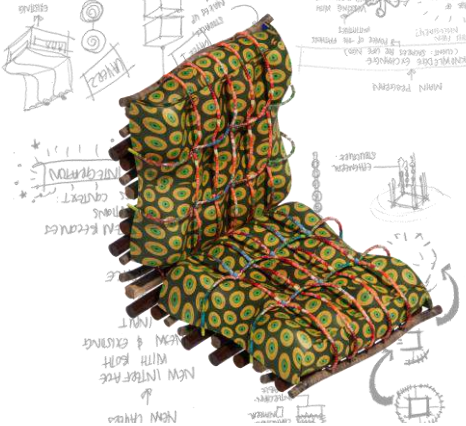
Seating is a common phenomena that enables all the proposed programmes and can be used in many more scenarios across the settlement. To illustrate all the potential scenarios, just one will be discussed.

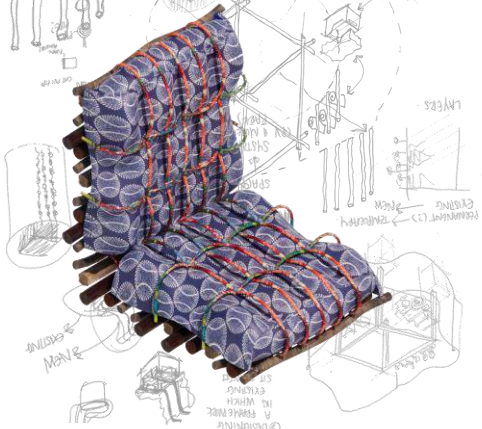
The loose-standing storage interface can be moved across the settlements to bars and shops (like the one illustrated above) to serve as deployable seating and firewood storage.

These allow a larger network of programme enablement and speaks to the nature of Plastic City-ing.





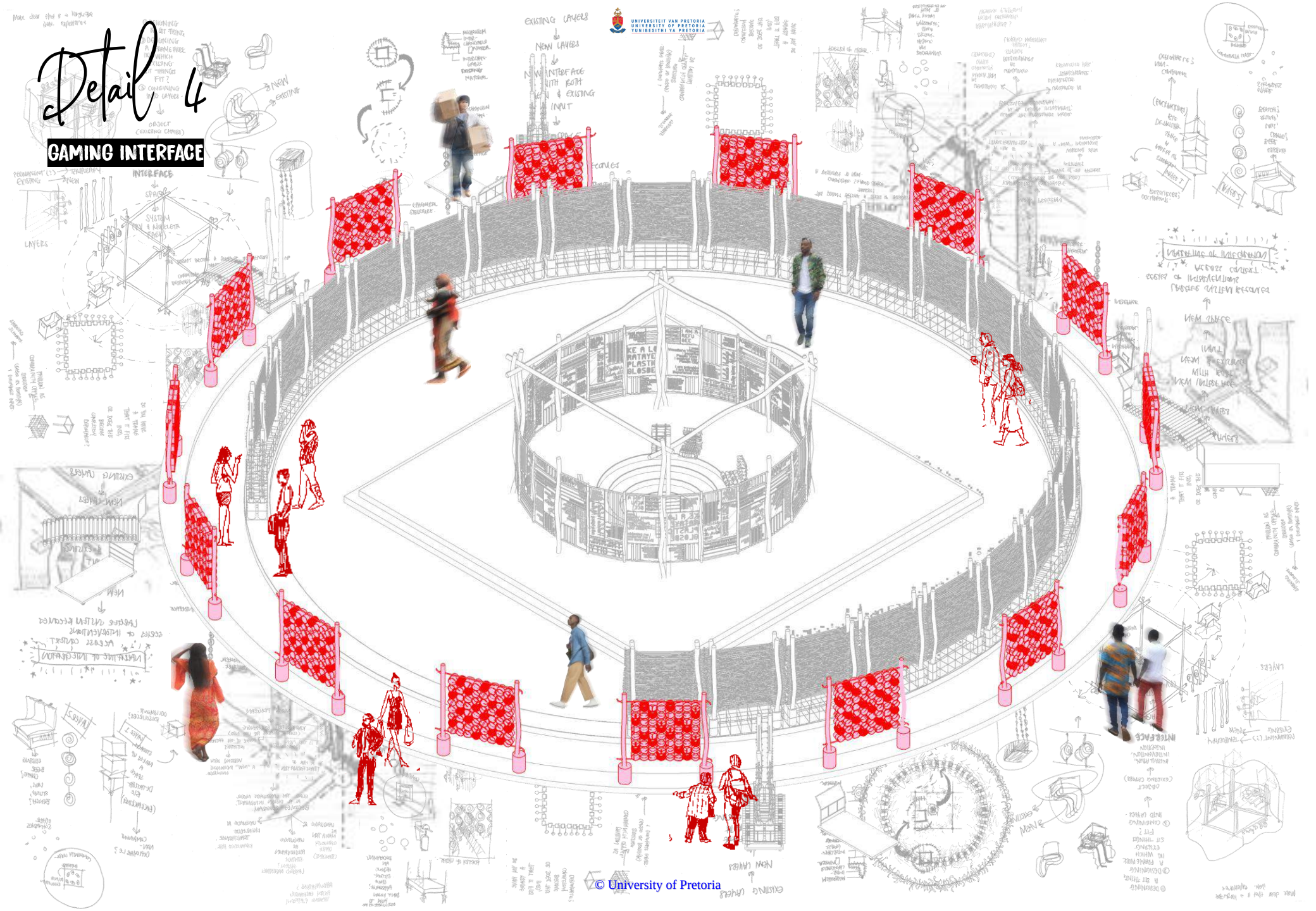


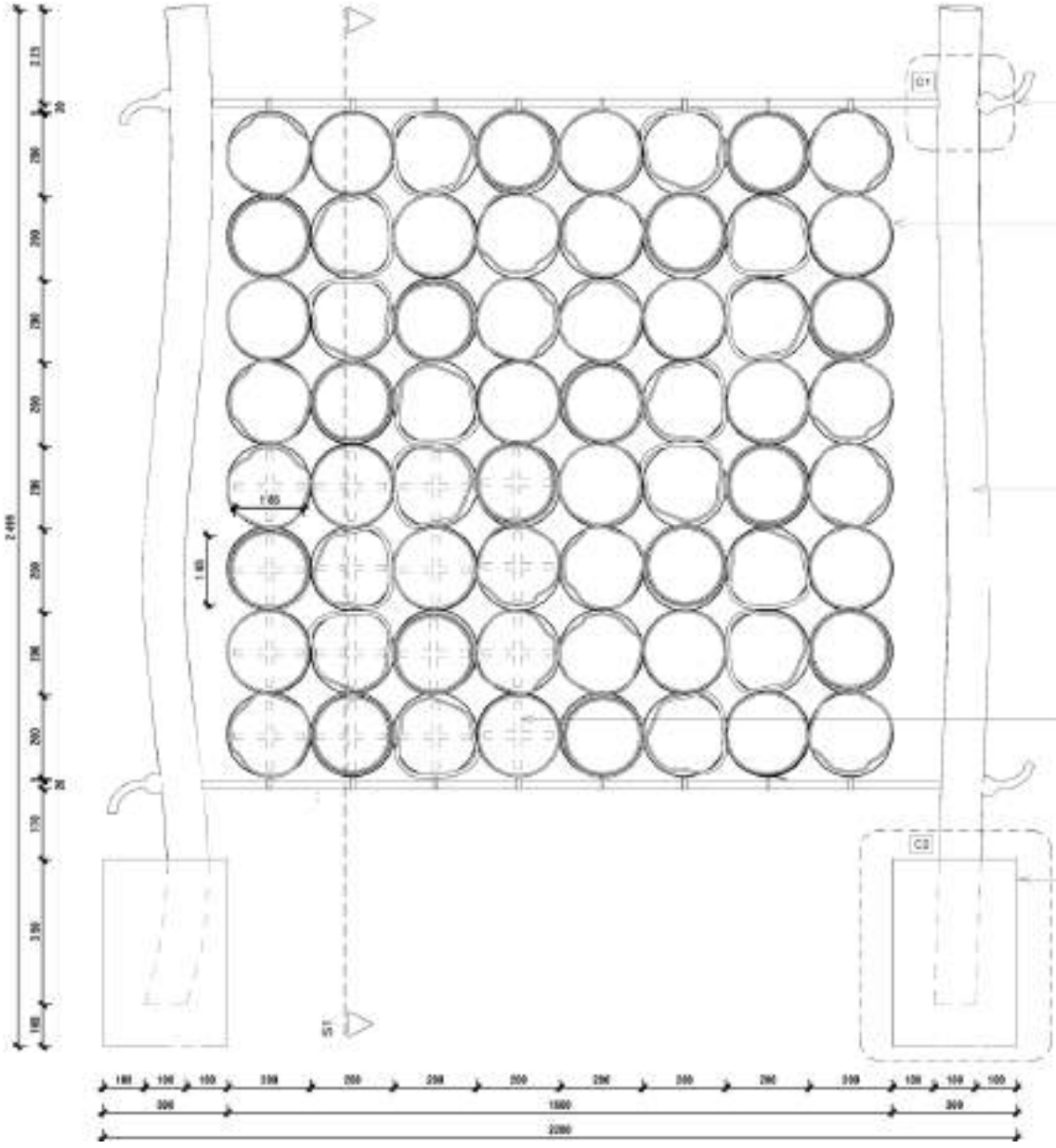


The individual sit-thing designs also becomes a method of expression and appropriation as each individual start to prototype a sit-thing.

Detail 4

GAMING INTERFACE

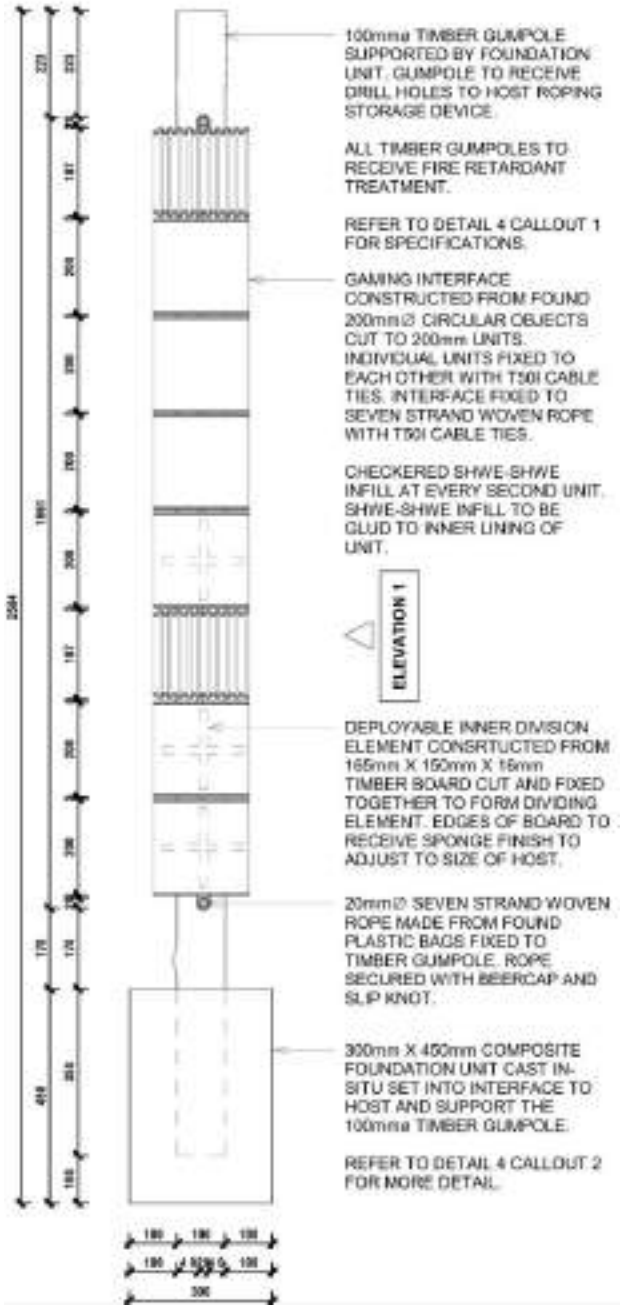




(MPIP, 2021).

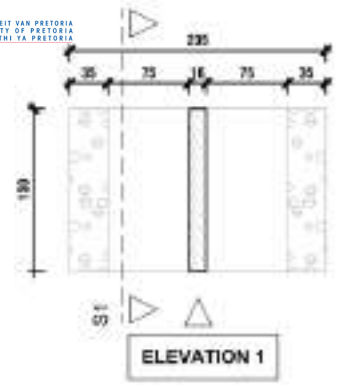
DETAIL 4 ELEVATION

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS



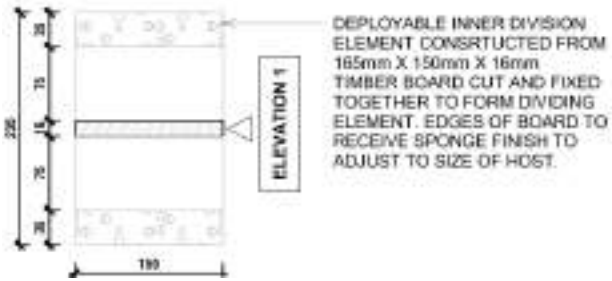
DETAIL 4 SECTION 1

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS



DETAIL 4 INFILL PLAN

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS



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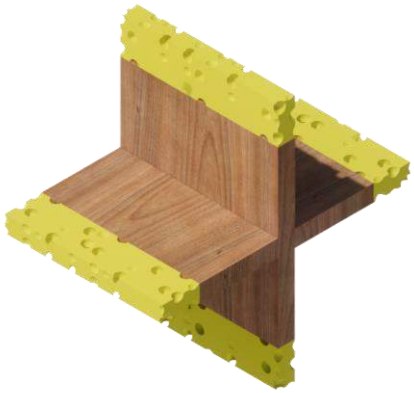
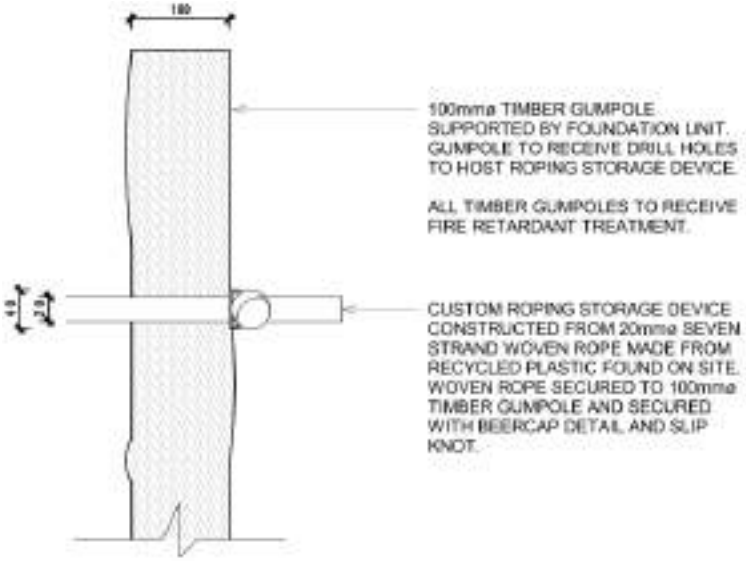


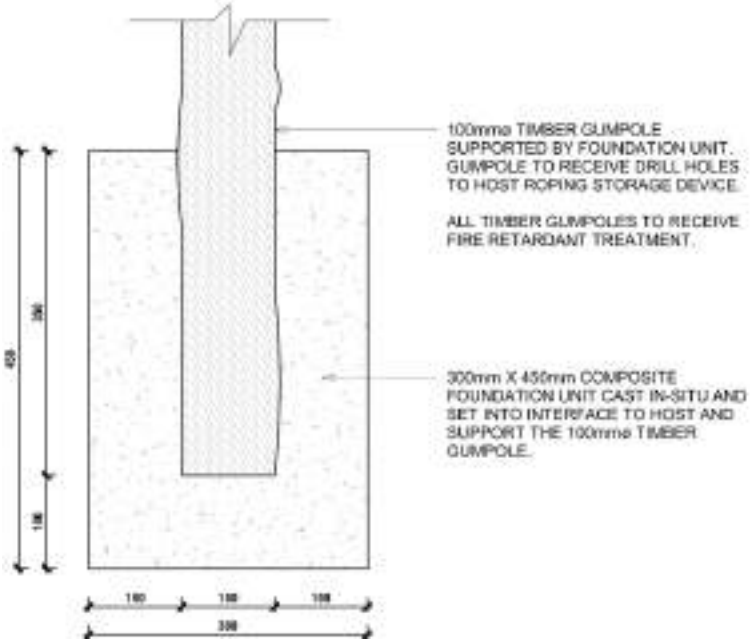
DETAIL 4 INFILL AXONOMETRIC



DETAIL 4 CALLOUT 1

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS

DETAIL 4 CALLOUT 1



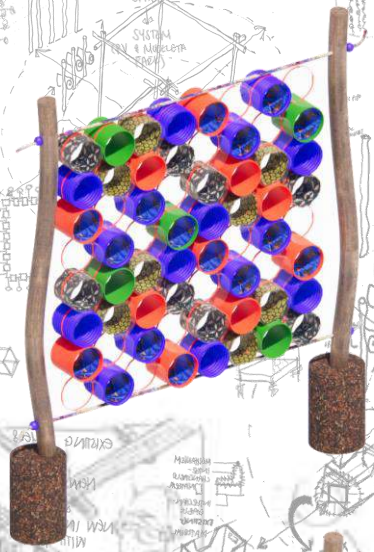
DETAIL 4 CALLOUT 2

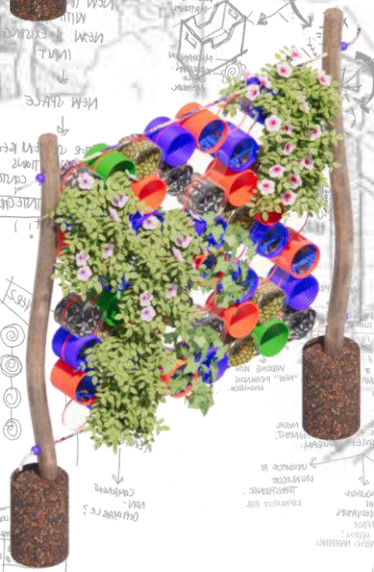
PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS

DETAIL 4 CALLOUT 2

Scenarios of Appropriation

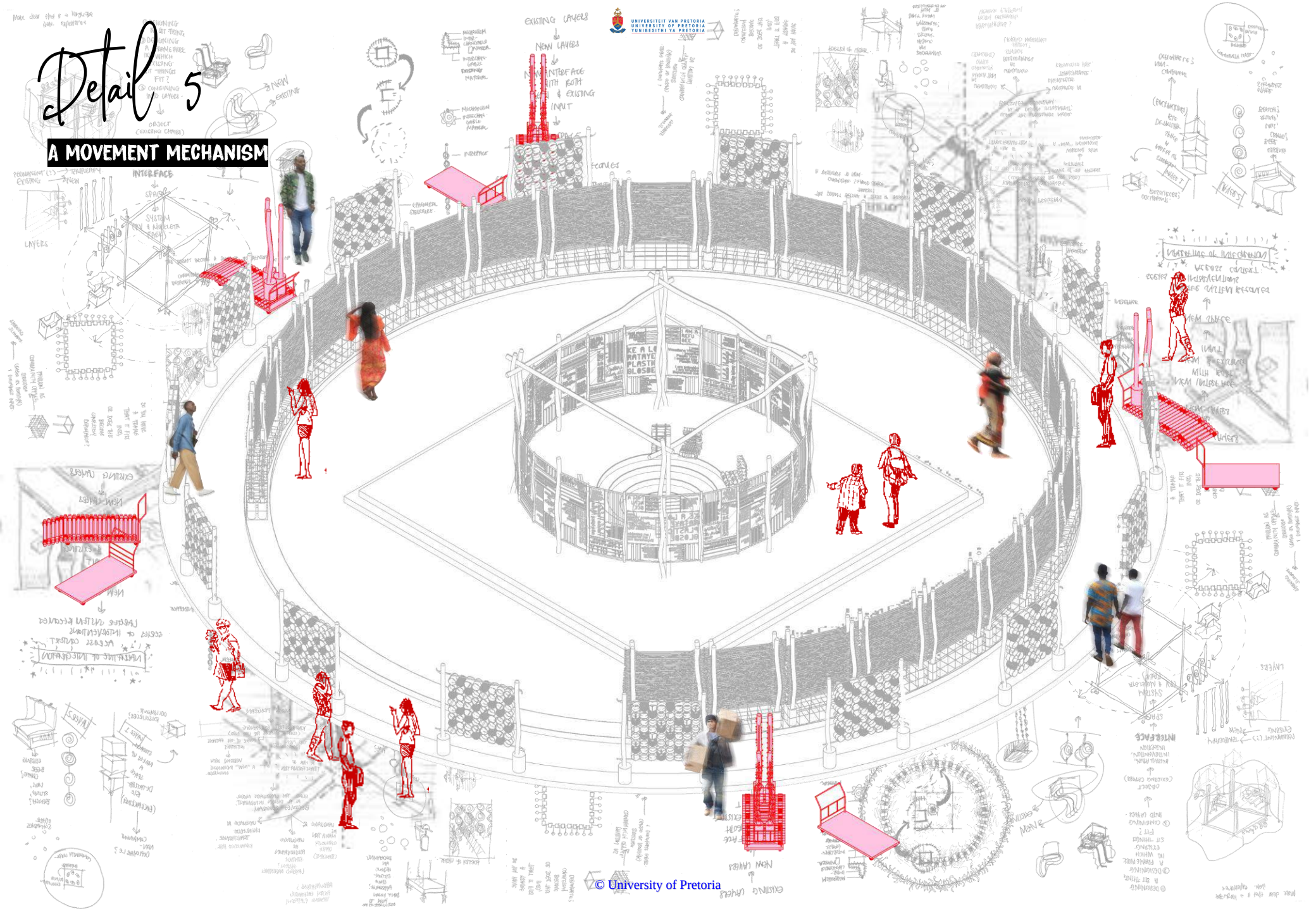
PLANTERS THROUGHOUT THE SETTLEMENT

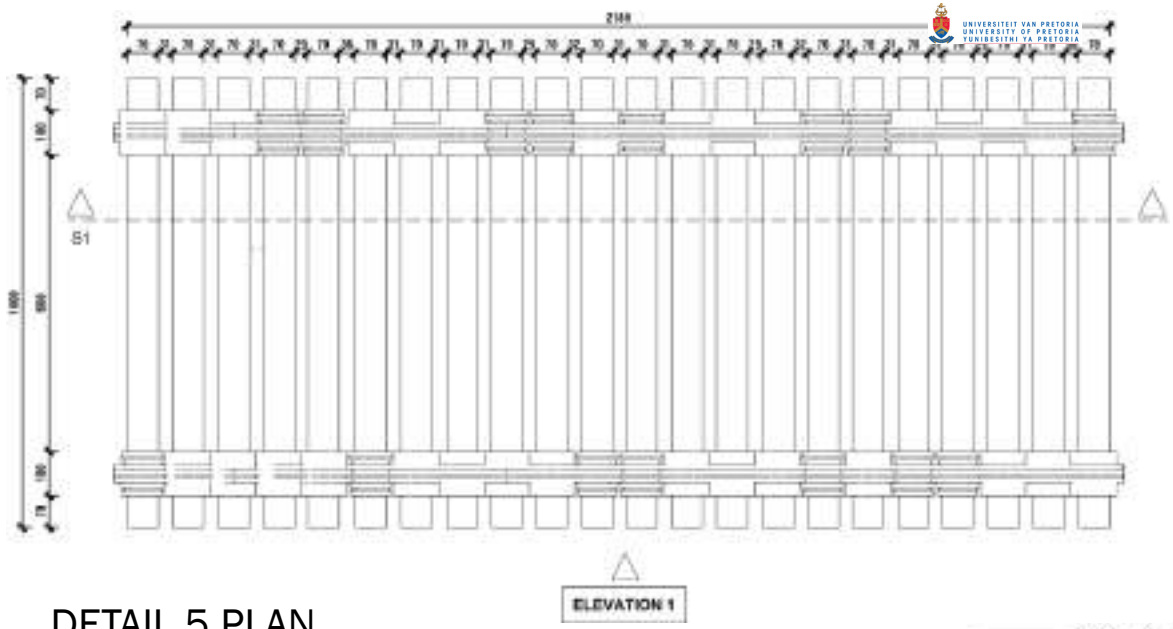




Detail 5

A MOVEMENT MECHANISM





DETAIL 5 PLAN

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS

TROLLEY DEVICE CONSTRUCTED FROM 70mm∅ TIMBER GUMPOLES FITTED INTO FOUND 100mm∅ CIRCULAR OBJECTS CUT TO 200mm UNITS. INDIVIDUAL UNITS BASKET WOVEN TOGETHER WITH ROPE.

20mm ALNICO ALLOY MAGNETS FIXED TO CIRCULAR OBJECTS TO SERVE AS JOINT BETWEEN MECHANISM AND TROLLEY. ALNICO ALLOY MAGNETS WILL FIX TO ANY ALLOW THAT CONTAINS IRON- WHICH ALL STEEL TROLLEYS DO.

DETAIL 5 ELEVATION 1

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS

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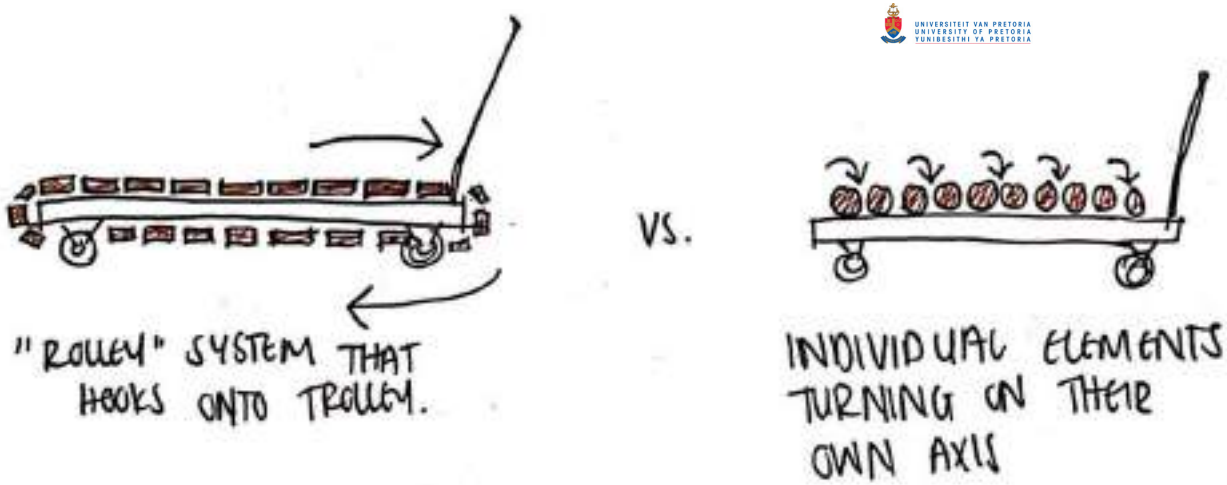
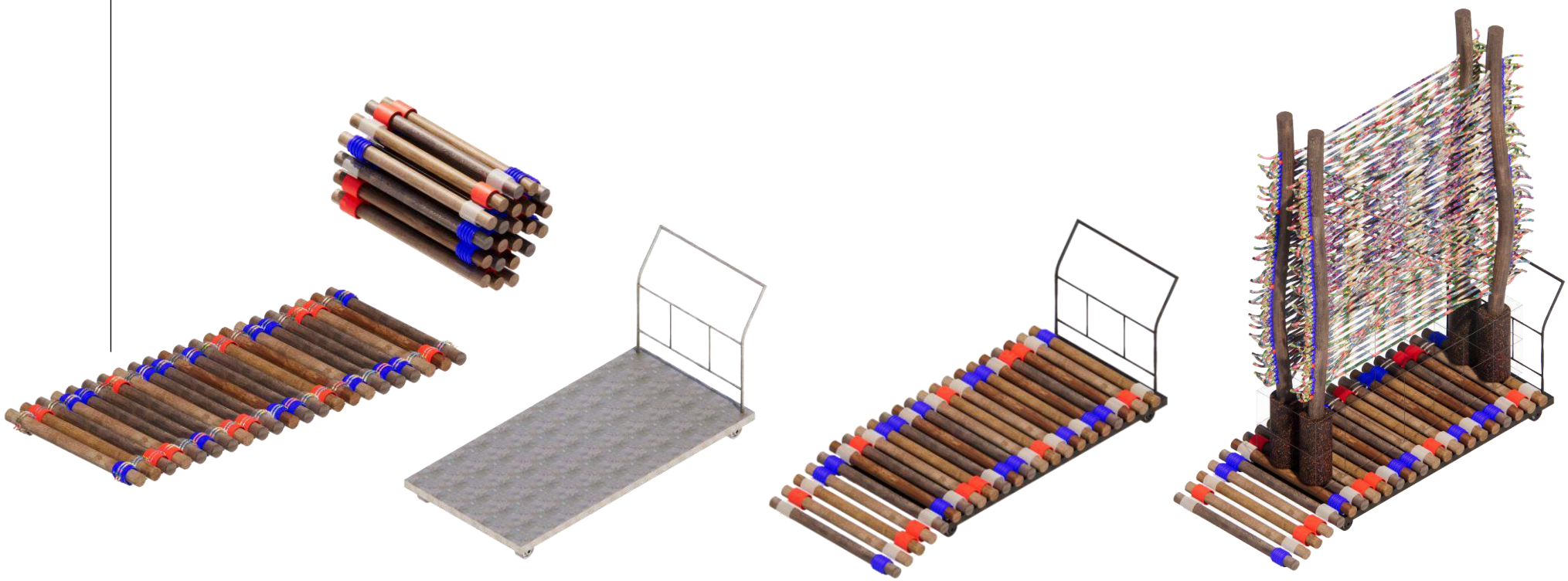
DETAIL 5 SECTION 1

PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS

(MPIP, 2021).

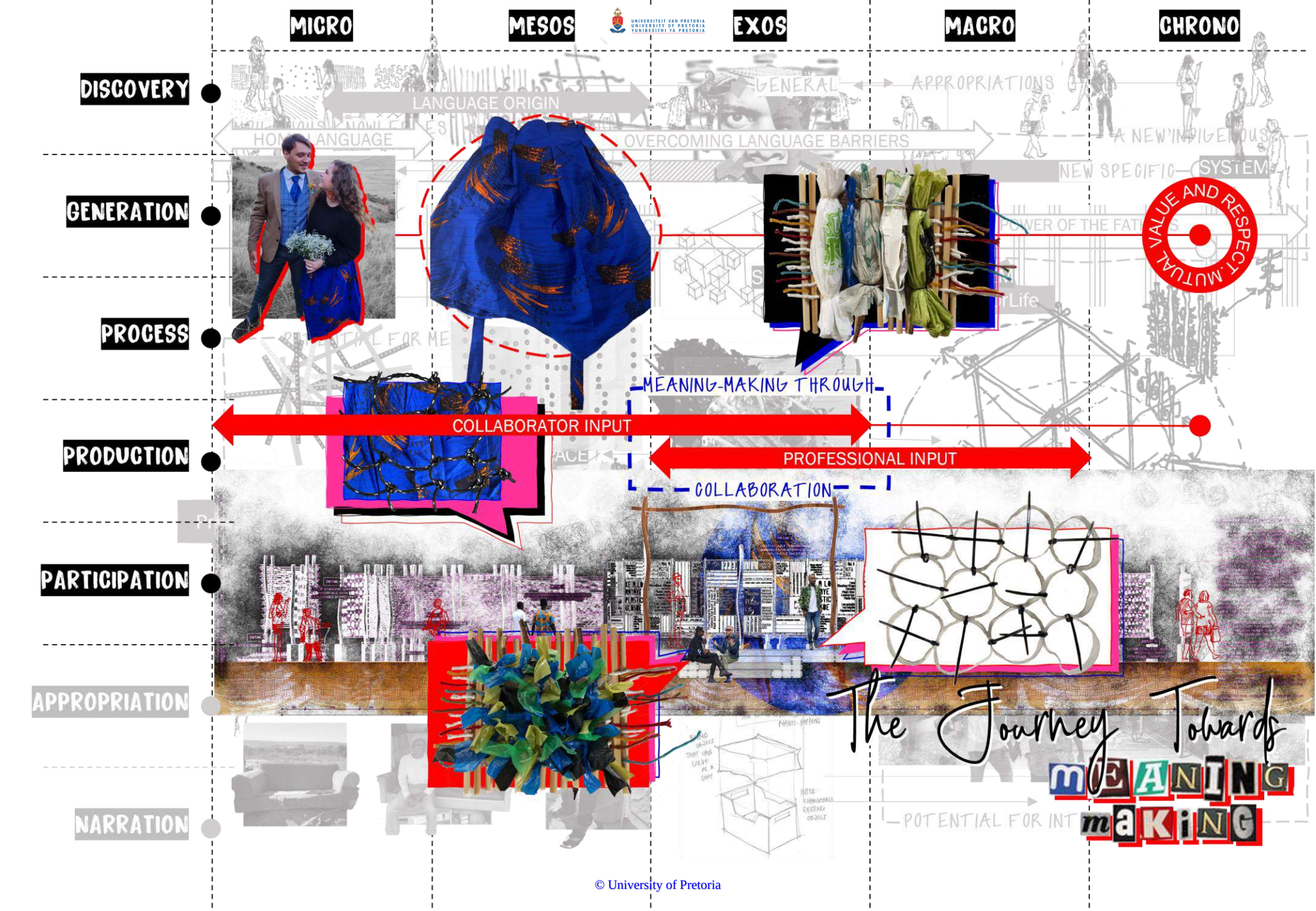


OTHER OPTIONS EXPLORED



DETAIL 5 SEQUENCE OF USE

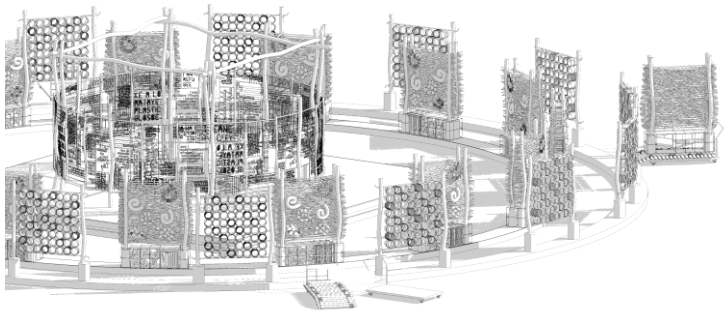
PLEASE REFER TO TECHNICAL SHEETS FOR SCALED DRAWINGS



Results Discussion

The research project set out to define a role for interior architecture as a vessel of cultural production in informal settlements. Due to the various stages of prototyping and collaboration, the analysis of the meaning embedded and interpreted through the design interventions becomes the conclusive discussion for the argument. In this reflective session the design project will be analysed according to the base diagram to evaluate the attempted semiotic approach to meaning-making. The findings will be discussed at the hand of a critical reflection of the project and process as a whole, changes in practice as well as contributions to discourse.

The individual components that make up the design intervention will be mapped across the base diagram as an evaluation of the meaning embedded and interpreted by the designer, collaborators and inhabitants of the space. The diagrammatic representations of these elements will serve as deliberation of the role of interior architecture in informal settlements.



MICRO MESOS EXOS MACRO CHRONO

DESIGN PROPOSAL

Plastic City-ing

TOWARDS A NEW INDIGENOUS IDENTITY

Embedded Meaning

INDIGENOUS CRAFTING METHODS
SPECIFIC CONNOTATION
IDIOSYNCRATIC ASSOCIATION

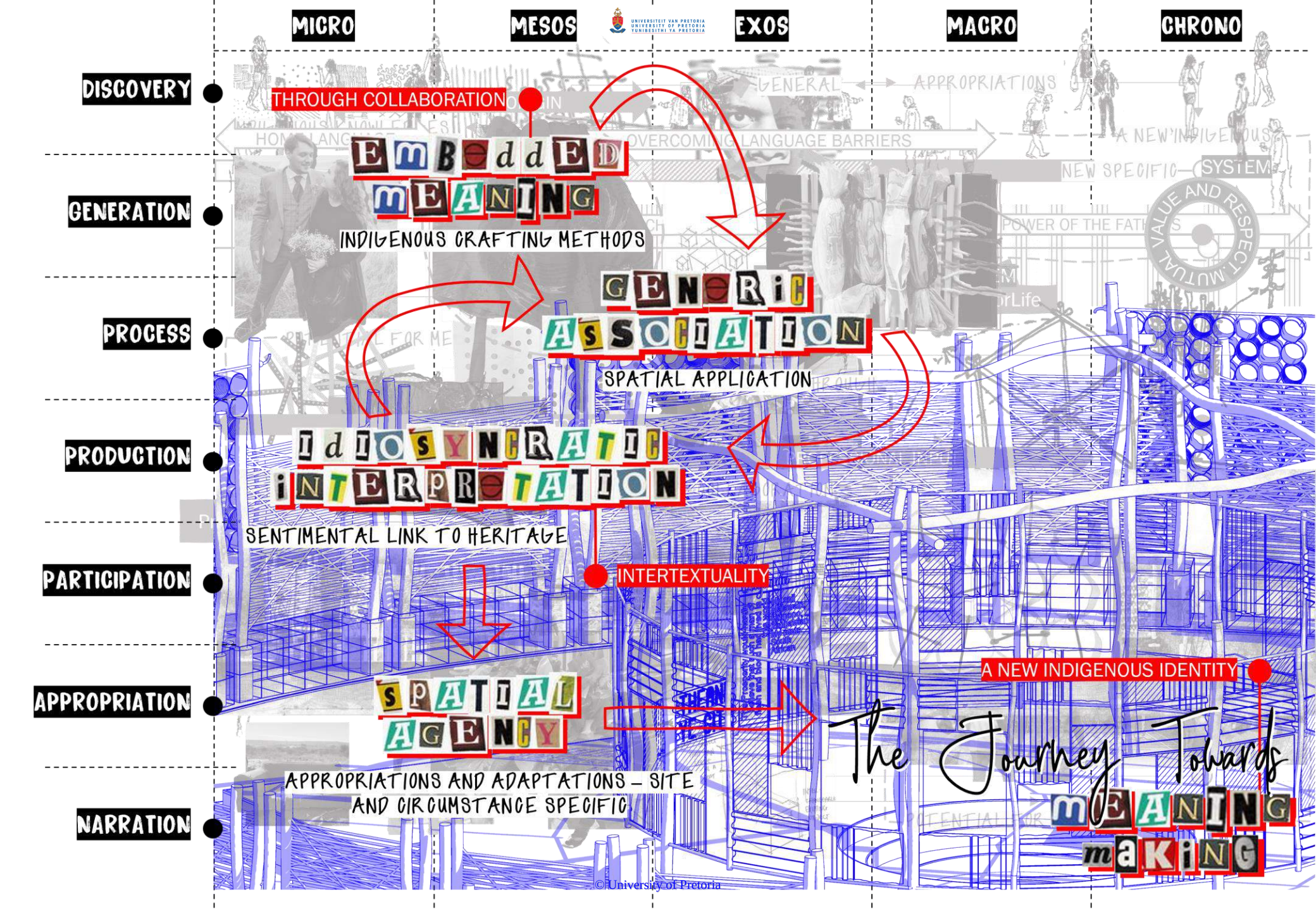
PROTOTYPES
BUILT COLLABORATIVELY AND ITERATED
INTO INDIVIDUAL DESIGN ELEMENTS

SPATIAL AGENCY AND APPROPRIATIONS

COLLABORATOR INPUT

PROFESSIONAL INPUT

DETAIL ELEMENTS
GENERIC TRANSLATION USED BY MEMBERS
OF THE COMMUNITY



Reflection

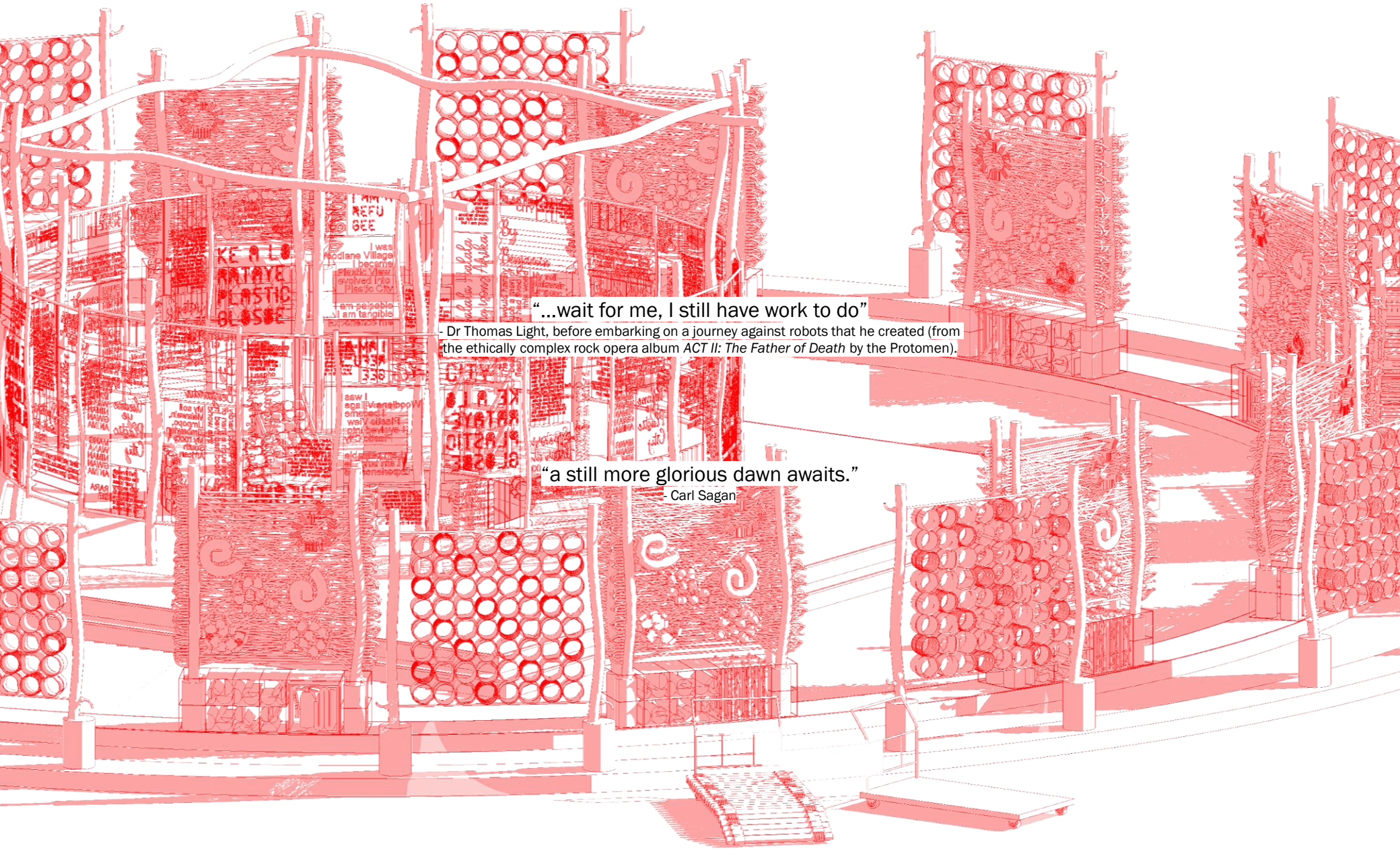
FROM AUTHOR AND COLLABORATORS

The project was challenging at various stages and required constant reiteration and adaptation to not stray from the original intentions. At times the clash between what is required for a professional masters degree and what is required on site became a point of tension and made me question the relevance of a project, such as this, in a setting where more pressing matters reign. I was comforted by the sole fact that at this moment in time, this project, and its outcomes, was all I as an individual could contribute to the circumstances. This did blur the lines between research-and personal involvement but in a project aimed at subjective interpretation a touch of personal involvement goes a long way.

"the process made us visible"

"Ekhet myself leer ken as heldinenas n hond"
-Amanda Strydom & Stef Bos, Die Taal van My Hart

"Throughout the year we have rekindled relationships and I am so happy that we have had the opportunity to do this. We have had weddings, and tea and games and workshops and conversations about difficult things but we talk as humans. Not as researchers and subjects."



“...wait for me, I still have work to do”

- Dr Thomas Light, before embarking on a journey against robots that he created (from the ethically complex rock opera album *ACT II: The Father of Death* by the Protomen).

“a still more glorious dawn awaits.”

- Carl Sagan

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