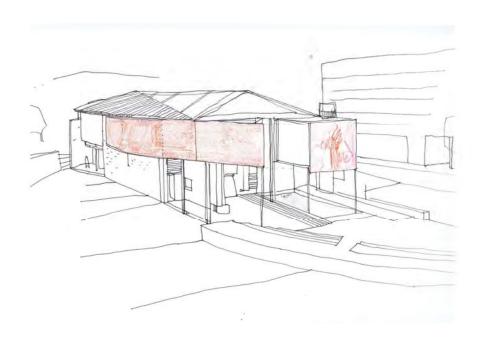






Disclaimer: The content contained within this publication does not necessarily reflect the views and opinions of the University of Pretoria. The content published here is part of ongoing research at the School of Architecture, housed within the greater Department of the Built Environment and the EBIT Faculty. For more information please contact adialidal@gmail.com for more information.

FIGURE 4a: Perspective view of the Eastern edge of the building.



# W A S o P

Plastic Arts Institute and Residency
521 Pretoria Street, Silverton, Pretoria
25°43'59.8"S 28°17'53.1"E
Architecture
The Social Life of Waste
Poesies of Plastic waste in Architecture
Waste, Art, Recycling, Aggregate, Granular, Residency,
Shed, Silverton

A special thank you to my family for continuous support and love and believing in my potential to conquer a small mountain that leads to the best of places - to my friends for their humour and their madness and their dedication to help realise every idea and concept into finality - my study leader for her presence and encouragement - and finally Dr. Arthur Barker for his guidance and persistence to bring about brilliant architecture through dialogue.

----

This disseration served to explore architecture as language of visions - the architectural project is always but a vision which the architect constructs into being through language itself and all its forms.

---

This dissertation sought to explore these languages rather than an architecture - however what has been discovered is that the building is not the terminus of the architectural dialogue instead only one platform for its departure into dialogue.

---

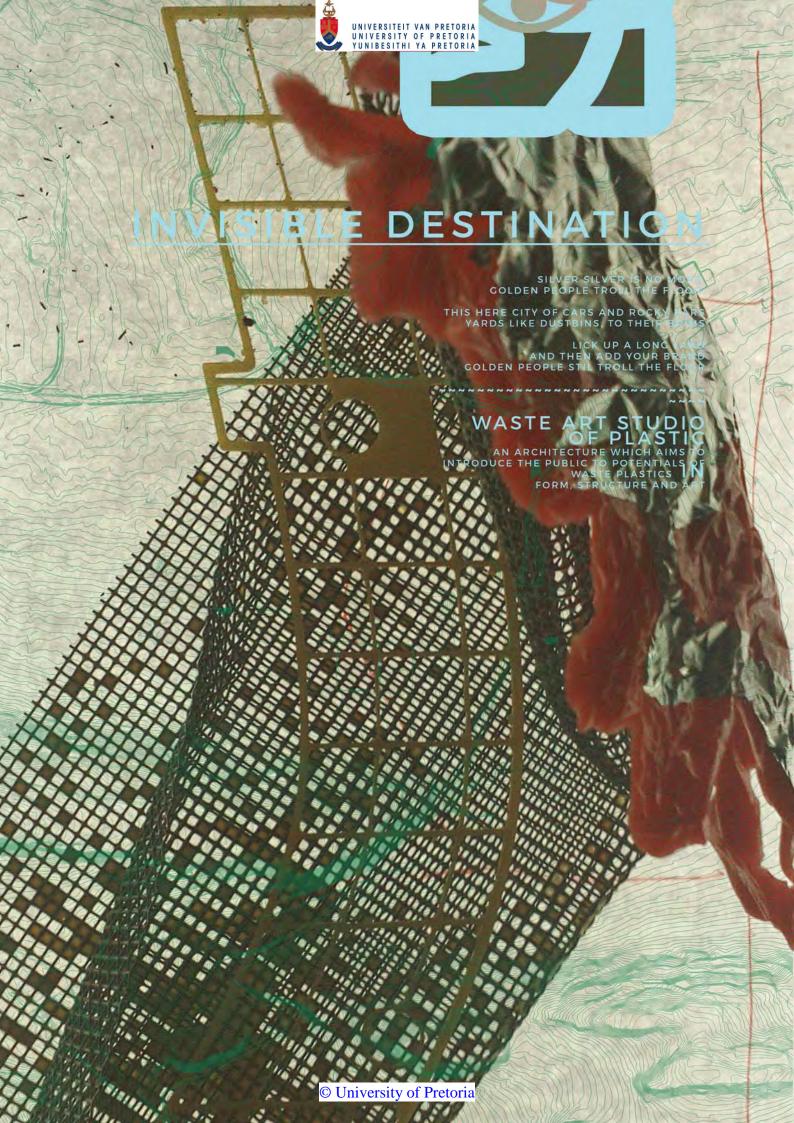
The architectural program of an artist residency in conjuction with a waste information centre culminated into three architectural typologies developed from concepts of perceptions of value relating to waste - which is recognised in this thesis as broader term that defines physical disposed matter - but also served as a description for the social and spatial conditions in terms of waste.

The beacon which is the architectural residency is a typology of attachment, extraction and precise reprentation as a means to express value of accepting waste - and so the architectural language of the beacon becomes that of physical waste matter and seeks to facilitate dialogue through its matter and thus generate social value that might be wasted relating to the object of matter waste.

The role theatre and frequency gallery refer to the planes. They serve as spatial activation and insertions for the reuse of an existing portal frame shed located in Silverton, secretly and invisble to most people. This inudstrial typology which is a ubiqutous and universal spatial reference to production is then used as the container of programs of small architectures of art making.

Although the architecture is small and seeminly formless - the agenda of this dissertation was aimed at confronting architectures luxurious grandeurs and aimed to make serenade an architecture of smallness - but also of a realness and buildability -

FIGURE 6 : Poster by IMW showing the 3d printed frequency gallery floor structure



# NOTES ON THE CODIFICATION OF THIS BOOK / LANGUAGE / ABBREVIATIONS

The research topic of this dissertation is focused on waste art and architecture. Through various investigations, three concepts were developed in relation to attitudes towards waste. These attitudes have been used as a mechanism of structuring this book as a means to emphasize the duality of meanings and the potential of interpretation of conceptual foundations and therefore function as an academic exploration of language and design in architecture.

Therefore, each chapter will begin with its designated number, conceptual marker, but also its explored attitude. These attitudes are clearly defined in the conceptual chapter, but for summary purposes a short and basic definition will be provided here for quick reference.

Accepting; a general attitude of embracing, absorbing, immersion towards the value of waste Rejecting; an attitude of disposal, separation or non-acceptance of the value of waste Reflecting; an attitude of questioning, debate and discussion relating to the value of waste

This book is also a tool for creative expression and serves to stand as final artwork of this dissertation, therefore, the use of poetic language will be utilised in the introduction of some chapters and works of art by the author are included in the visual language.

**SLOW**: the Social life of waste

IMW: Ilze Mari Wessels

PET:

AG : Element of Silver AU : Element of gold

The Green Markers [Figure 6] are inspired by the series of books from OMA called *Elements*. The colour green will be used to mark out importance related to waste and its attitudes of value, as well as other important aspects in text.

Figures are also listed according to their pages

numbers for less time wasting.

The precedents are located throughout the book as each chapter is inspired by an element of either art, architecture or waste.

The cover page image is a set of differently exposed film photographs taken by the author of an existing recycling building in Jet Park, 2015.

 $\Delta$ : beacon

~: frequency

\_|- : role theatre

♦: Invisible destination

✓: accept∞: reflect

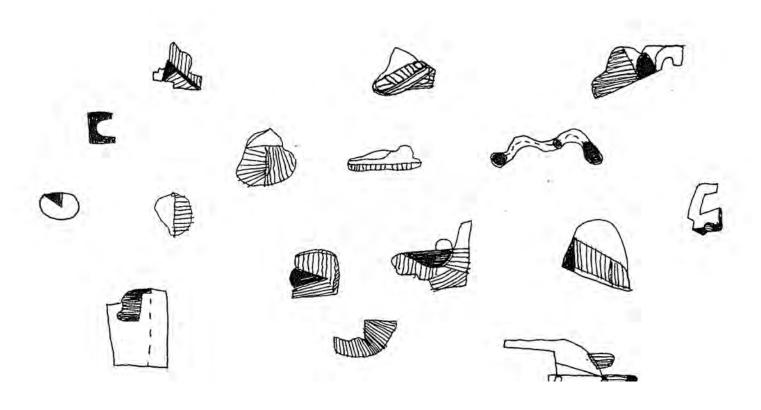
■: reject

Internet references will make use of QR codes instead of typed out web pages for space and time wasting to be avoided.

And for the reference, North is always up.

FIGURE 8: Photocopy of doodles that eventually became translated into symbols for program. IMW, 2016





# CONCEPTUAL MARKERS

Δ	17
_ - of ~	23
_i _i-	31
_ - ~∆~~~	41
_ -	49
~~~~~	61
Δ ~ _ -	83
<b>\rightarrow</b>	99
~ <u>\( \Delta \) \\ \( \Delta \) \\\ \( \Delta \) \\ \( \Delta \) \\ \( \Delta \) \\ \( \Delta \) \\\ \( \Delta \) \\\\ \( \Delta \) \\ \( \Delta \) \\\\ \( \Delta \) \\\\ \( \Delta \) \\\\ \( \Delta</u>	139
Δ_ -       ~	151 156
_ - ~	~~~~~ ~ ~~~~ ~~~~~~~~~~~~~~~~~~~~~~~~~~
~~~~~	156
Δ	156
Δ	156
~~~	156
Δ	156
~~~	156
_ -	156
Δ	156
Δ	157
$\Delta$	157 157
_ -	157
_  _ -	157
_ - _ -	157
~~~~~	157
Δ	158
Δ	158
~	~~~~~ ~ ~~~~ ~ ~
~~~~~	158
$\Delta$ $\Delta$	158
$\Delta$	158 158
_ -	158
_l ~~~	158
~	~~~~~ ~ ~~~~ ~~ ~~
~~~~~	160
Δ	160
$\Delta$ $\Delta$	160
Δ	160
Δ	160
 Δ	160
<u>Δ</u>	160 160
_ - 	161
$\Delta\Delta$	161
Δ	161

UNIVERSITEIT VAN PRETORIA UNIVERSITY OF PRETORIA	
YUNIBESITHI YA PRETORIA	
~~~	161
$\Delta$	163
Δ_ -~	167
_ -	169
~	171
_ -	172
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~
~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	172
$\Delta$ $\Delta$	172
_ -	172
_ -	173



# **CONTENTS**

<u>00. Into</u>	21
01. Wastescapes	27
02. Theory	35
<u>03. slow[a]</u>	45
<u>04. ag   au   ◊</u>	53
05. conditioning	65
06. concepts	89
07. reveal	107
08. plasticity	147
09. SYLLOGISM	165
10: reflection	221
11. references	233



# LIST OF FIGURES

FIGURE 4a: Perspective view of the Eastern edge of the building.
FIGURE 6: Poster by IMW showing the 3d printed frequency gallery floor structure
FIGURE 8: Photocopy of doodles that eventually became translated into symbols for program IMW, 2016
FIGURE 12a; 'The angry drawing' by IMW 2016
FIGURE 14A: Photograph by Pierre Reyneke of the artwork of Goncalo Mabundo, Mozam bique, 2016.
FIGURE 24: Image of Archigrams 'Walking City' scan the QR CODE on the right to visit Archigraphy, the source of the image.
FIGURE 26a: Photograph of leftovers by IMW 20b: QR code to a gif of a visiting to soshonguvon youuth day [June 16] 20c; view of abandoned building in Pretoria, IMW 2015.
FIGURE 28: Diagrams drawn based on the writings of Pfiefer, IMW 2016.
FIGURE 30: Collage of photographs of scrap yards in Silverton, IMW 2016.
FIGURE 33 : Early sketch of the branching logic which is contained within the map of Silverton IMW 2016.
FIGURE 34a: L Urban Vision diagrammatic conceptual sketches, Fig 28b: Vectorised and 3-diagram, IMW 2016.
FIGURE 36: Poster made to communicate the vast landscape of theory relating to context issues and methodology to produce a codification. approach.
FIGURE 38: Collection of scans of drawing from a pre-thesis exercise by the author, IMV 2016.
FIGURE 40: Drawings from the pre-thesis exercise for the Master class 2016, coordinated b Johan Prinsloo and Arthur Barker.
FIGURE 42: Diagram collage of an illustration of Bergson's theory of time and experience and of how the spectrum of experience alter through the section of the building.
FIGURE 44a: Screenshot from google of the definition of Precariat. Fig 36b: Film photograph by IMW of 'Matter out of context' of plastic and wire waste located in the wilderness of Dull stroom in 2015.
FIGURE 47: Photograph of the artist from Maputo making screens with reused plastic bottle caps, IMW 2016 and QR code to https://www.youtube.com/watch?v=IQbIqNd5D90.
FIGURE 48: Scan from journal demostrating the translation of transactions and spatial requirements for artist residency into diagram.
FIGURE 50: Photograph by author of the Waste Art Fair event organised by SLOW as part of JHB Art Week, the skate event.

FIGURE 52a: Sketch by IMW (2016) of the Pioneer Museum House in Silverton. 32b: edited



photograph by IMW of the interior of the community centre of the site block.	52
FIGURE 54: Timemap of Silverton by IMW, 2016.	54
FIGURE 50 : Sketches of rock collections IMW 2016, titled: Plastic rocks and the Monolith an intuitive exploration of the beautiy of rocks as objects.	n as 56
FIGURE 58: Site clippings screenshots of existing waste yards in and around Silverton. Goo Maps Online with QR code to Silverton map link.	gle 58
FIGURE 60: Folded GIS map of Silverton to the centre of the chosen site.	60
FIGURE 62: GIS Maps of the site block showing the existing shed and surrounding area at the site block. The site of the exisitng shed is in the bold pink block.	and 62
FIGURE 64a: Condition of the invisible desitination located on the suburban block 58b. Way of energy that architecture attaches to as representative of architectures' nature and the pose of exploitation of this mapping exercise.	
FIGURE 66: Layers of site unpacking, from bottom to top. 1. Experience of private and pulsand the spectrums, PINK as public and Blue as private. 2. Overlayed vision of block devopment, strenghtening of edges and insertion of new energy and reartrangement of pulsapace to fit into the activation of programme. 3. Connections between sites on b66ock. First proposed site of the park space. 5. Possible interventions in red. 6. Natural element defining space on the block.	vel- blic . 4.
FIGURE 68: Section diagrams by IMW (2016) of the existing typology and programmes space in Silverton and proposed vision of adjustments.	of 68
FIGURE 71: Example of the designed condition card for communicating the experienced spatial conditions and propose spatial srategies for urban vision. proposal. IMW 2016	ра- <b>7</b> 1
FIGURE 74 Site visions of how the shed exists within the block. 68b. 3d and sections of sit and their typolgies and the vision of mising typolgies into a state of opennes.	ites 74
FIGURE 76: Extracts from the urban vision explaining how the conditional mapping then became a tool for shaping energies along an artisnal corridor . 66b. Showing how the visit developed from contextual situations that were visited and informed the conditions mapped and translated.	ion
FIGURE 78: Historical archival map of Silverton with overlaid site location and concept sketches communicating the extent of sptaial conncetion towards the Souther Science et es FIGURE 72b Collection of photographs of approach to site.	
Telkom LTE tower across thestreet from Residential	79
block.	79
Residential stariwat of block to the north of	79
selected shedsite. Behind the man is the envisioned public entry way - existing as car dr through.	rive 79
Shell garage on	79



Fakkel Street	79
across from	79
Police Station.	79
Silverton police	79
station	79

FIGURE 80: Process work of applying mapped conditions then categorised into transaction types. The following images are photocopied maps that have been cut, recopied, drawing on to devlove the greater urban vision onto the site itself. This excercise became complicated but served as warmup for the understanding of where the architecture was to start occuring.

80

FIGURE 82: Conceptual Map of Site overlayed onto contours and vision surfaces. 82

FIGURE 84 Devolution of vision symbol onto the site block as a freestanding image of codification.

FIGURE 86: Site block with pink block outline demarcating the site extents that see the building open up onot the western park,.

FIGURE 88: Sketches of theory continued into conceptual development, branching and compartmentalization through resource commodification as base for developing the attitudes to waste that then resulted in the conceptual strategies for these attitudes. IMW 2016.

FIGURE 90: Diagram of symbols relating to programmatic requirements for the artist residency, including water, wifi, eating space, access to materials and experience of scale, IMW 2016.

FIGURE 92: Poster communicating how existing programmes on site, in conjunction with mapped conditions and proposed vision, result in directions for a conceptual translation. 92

FIGURE 94: Diagram of the spatial and social inhabitation of the concepts, IMW 2016.

FIGURE 96: Drawings of spatial experiences based on the values of waste of rejecting, accepting and reflecting.

FIGURE 98a: Conceptual directions illustrated as different types of lights, flames and sources of energy and their translation into spatial models for block visions.

98

FIGURE 100: Final concept poster unpacking spatially and conceptually the potential of concepts of beacon [then pin], role theatre and finally frequency, IMW 2016.

FIGURE 102: Diagram of the concepts overlayed onto the face of time clock to communicate the use of space over time. 92b: Diagram of sketch of branch logic being applied to the struc-



ture of the dissertation book serves to remind the reader of this moment in the book where the syllogism begins.

FIGURE 104 Sectional detail drawings of how conceptual value of waste become translated into the walls that divide the spaces and also support the gallery as it pierces through the structure exisitng,

104

FIGURE 106Sketch of the spheres of waste and its potential distillation, using colour and line to express a transformation from waste to nature. Figure 96b. An imagined door handle design

FIGURE 108 A later note from a journal describing the place of the beacon - with diagrams of how the beacon and the role theatre and frequency meet and are arranged, IMW 2016 108

FIGURE 109 A sketch of a column detail - exploring structure, an infill waste wall surrounding a column, ie: meeting with additive materials or constructions, IMW 2016 109

FIGURE 111: An overlay of digital and hand drawings to demonstrate the similarities and differences and also communicate the method of 'Reveal' and 'growth' in design and also is an image that can be used to show beacon, role, platform and frequency early representations, enclosures are the two role theatres of dialogue space and making space, the diagonal lines are earl indicators of stairs which is an extension of the role theatres spaces - relating to frequency Beacon can only be expressed in the vertical elements as an expression of emergence - the beacon enclose had not yet manifested at this time. IMW 2016 Figure 101B: Screenshot of notes on spatial experience of waste exhibitions.

FIGURE 112: Early plan of proposed building, the grey alludung to the existing shed footprint and the pink rectangle to the new building space.

FIGURE 114: Residency space and form explorations in section sketchs. Figure 104B: "The Artists Pool' a sketch of the artists creation space, IMW 2016 114

FIGURE 116: Models of artist residency explorations and sketch of the plans of small residential spaces for artists.

FIGURE 117: Model used to communicate the linear extension of waste into the existing shed building.

FIGURE 118: Precedent, program and writing about the space of the residency - relating to the dustbin of society and references to the Tea house and Nirox artist residency projects.

118

FIGURE 120: Sketches of different spatial requirements and sections for the spaces related to making and talking.

FIGURE 122: July model show dialogue space in relation to the above gallery and circulation. Figure 112b: May model of maker space as the open air workspace similair to industrial sapces

FIGURE 124Precedent and spatial concept and requirements poster for talking space, IMW 2016

FIGURE 126 Precedent and spatial concept and requirements poster for maker space, IMW



2016 126

FIGURE 128 Ground floor sketch plan overlayed onto a CAD drawing of the building gallery curve overhead. 128

FIGURE 130a: Development of branch logic into plan. 114b: Gallery final floor plan sketch, IMW 2016.

FIGURE 132 : Sections of the now removed warehouse of recycling distillation 132

FIGURE 134: 'On Space Time Foam' by Tomas Sareceno is an installation at Hangar Bicocca in Milan (2012-13) which illustrates the dreamy spatial potentials that can be explored with a material such as plastic .The QR code can be scanned to access the image at the following http://tomassaraceno.com/projects/on-space-time-foam/

FIGURE 136: Plans in progress, from sketch to print to sketch plans and paint plans reinforcing the branch logic into space. 136

FIGURE 138: Conceptual elevations for the building north and south. Gold represented plastic construction, blue is that of aperture or transparency, red is brickwork and black concrete.

FIGURE 140: Explosion of a cad modelled toilet and explosion of the program of the building. 140

FIGURE 142: Final sketch plan of the building - after removing the additional portal frame.

142

FIGURE 143: Final partii diagram. sentence of symbols in relation plan spaces. 143

FIGURE 144: #d cad model view of planes of the role theatre in relation to the gallery and the beacon structure in the foregound.

FIGURE 146a: Artwork by Troy Makaza made of Silicon Syringe extrusions, featured at the FNBArt Fair 2016, photo by IMW, 2016. Artwork by Pedro Pires 'The Inhabitant' made from plastic diesel containers.

FIGURE 148: Shua Architects and their ice cream tub elevated library in Indonesia with Qr code. To the right, Ubuntu Blocks and Rural Studio projects.

FIGURE 150: Sound and Silence Plan, IMW 2016.

FIGURE 152: Image of Precious Plastics machines from the website of Precious plastics (Precious Plastics, 2016). Figure 143: is of the molecular structure of plastic. http://www.extremetech.com/wp-content/up-loads/2013/08/nchem.1720-f1.jpg 152

FIGURE 154: Section in progress of the shed with gallery insertion and the imagined recycled plastic column of wavy form 154

FIGURE 156: SBAT diagram of the current project [Materials not yet concluded] 156

and on the right is an early Sefaira Model data output of the project. 156

FIGURE 158 Photograph of final detail model suring contruction demostrating here the piercing of the plastic columns 158

FIGURE 160 Diagram details and detail modelled component of the plastic column which has developed from the sectional waving form into a functional space of waste dialogue relating to water waste literally.

160

FIGURE 162 Editted perspective drawing of the POO STOEP space where the building quietly opens to the south for events and again make a beautiful exhibition of the toilet.

144



FIGURE 164a: explode axo diagram of the building from gallery at the top to the role theatre surface and the bottom and the wall beacons between. 136a: Synthesis diagram of materials from existing typologies and material characteristic in Silverton.

FIGURE 166 Tectonic explosion of building as part of construction strategy 166

FIGURE 167 The culmination of waste value through 3d axo detailing the moment of waste transformation ie. the beacon insertion and also the piercing of the gallery through the shed.

FIGURE 169 Diagramatic unpacking of theory, concepts and value onto the space. 169

Beacon accepting waste on the eastern edges and through the gallery of frequency reflection of waste value then spatially concludes in the role theatre which rejects value stigmas through dialogue and open s to the west as a allusion to this excretion of waste concepts.

FIGURE 170a: Photograph of red shredded plastic. 138b: Sketches of potential lattice structures to exploit the movement potentials of aggregate, IMW 2016.

FIGURE 172: Details in progress by IMW 2016. Selection based on the intersection with old and new, giving spatial waste injections of energy.

172

FIGURE 174: Plan with overlay of conceptual symbol language applied to spaces. Legend on following page. 174

FIGURE 176: legend for conceptaul symbols and their intersections and collaborations that unpack how concepts will function architecturally.

FIGURE 177: Layers of plan parts- Beacon: Roof structure lattice--- Role Theatre surface floor of public to waste intersection and finally the building that resonates all frequncies.

FIGURE 178: Second floor plan of spaces in relation to conceptual symbol language, IMW 2016.

FIGURE 180 Roof plan 180

FIGURE 182 Ground floor plan 182

FIGURE 184 Artist residency and mezanine floor plan 184

FIGURE 186 Gallery floor plan 186

FIGURE 188: Atelier van Lieshout, Clip-On, 1997. Bottom, Jean-Louis Chanéac, Parasite Bedrooms, link to image: https://s-media-cache-ak0.pinimg.com/564x/ab/d1/85/ab-d1859e4f1ef4ede1e87cf274238836.jpg ab-d1859e4f1ef4ede1e87cf274238836.jpg

188

FIGURE 190: Detail modelling of structural elements of steel work for the beacon. 190

FIGURE 191: Detail section drawing of the piercing toilet structure into gallery floor, as a technical exploration of waste services as structure

191

FIGURE 192 Perspective of the southern facade where the gallery piercies through the face of the existing portal frame and also allows for a social spatial development relating specifically to waste. Opposite pages are steel details [incorrect not updated] and steel modelling of gallery floor and roof components with steel rectangular channels, where circle cut throughs are the srevice columns.

192

FIGURE 194 Perspective view into the maker space, connection onto elevation with the outdoor role theatre space. 168B Image of Ubuntu blocks as reference to plastic potential as flooring enclosing material.

FIGURE 195 Progress detail of elevation forms and structure that accepts, rejects and reflects on energy and waste and a 3d exploded perspective of how work spaces and their surfaces plug into the structure again as part

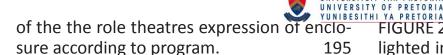


FIGURE 196 Perspective of the eastern entrance for waste delivery. Images making reference to the suburban garage door, to the right a plan displaying movement of waste from waste entry and finally a precedent of movement with the SpielbudenPlatz project by NL Architects/

http://www.gkdmetalfabrics. com/files/news/big/da7ab74cb3a1a7163fd98d2f9223b228.gif 196

FIGURE 198: 3d perimeter section of the building with its legends and connected sketch of a 3d perspective of the role theatre on the right bottom.

198

FIGURE 200 Plans of site and plans of the top floor of hte building, in progress. 200

FIGURE 202: Section through the gallery and the role theatre space with tire wall construction and spolia brick. 202

FIGURE 204: Section through maker space and gallery with the beacon in the distance. and 3d printer on maker space floor. 204

FIGURE 206 Section B with role theatre space cut through and toilet /plastic column 206

FIGURE 208 Section C of maker space with residency in the background 208

FIGURE 210 Eastern elevation 210

FIGURE 212 Northern elevation 212

FIGURE 214 Southern Elevation 214

FIGURE 216 Western Elevation 216

FIGURE 218 Section A 218

FIGURE 222 Final model with roof removed showing the role theatre at the top, the gallery in yellow 3d printed plastic and the waste spaces and residency at the bottom.

222

FIGURE 224 The Beacon at scale 1: 100 and to the left at 1:200 showing the steel structure that connects materials, motion and people.

FIGURE 226 Detail model photographs - highlighted in green is the gallery, top left - over the maker space - top right and bottom - rejection of existing waste. 226

FIGURE 228 Table of models - from left to right: Technical concept model [blue and red and yellow], beacon model, detail model, site model with conceptual pink foam form making experiments and below that 1: 100 site model withiin urban framework, first model of the year in brown card - from masters class exercises.

FIGURE 230: A set of naratives created by the author to allude to the mystery and beauty of industrial spaces which here serves as a happy ending.

230

FIGURE 234: 'Sad man in the gold town' an illustration by IMW 2016, 234

FIGURE 236: 'The Arcadian' , section of a pianting by IMW, 2016 236





FIGURE 12a; 'The angry drawing' by IMW 2016



# OO. INTO ISSUE



So let us get into a little bit of something that is this, a little bit of nothing and a little bit of something.

Into this mess that is but mass, transfigured into a smell I cannot yet, but could and might stand for, a taste I never and sight I shall. This is the dustbin – have you met her?

Now climb inside.

### THE SEARCH FOR AN ISSUE

Issues are not hard to come by. Generally speaking, the world is full of issues, those we read about in the newspapers, those we encounter and experience firsthand;,ranging from economic to the environmental crisis, such as the current student protests at all South Africa institutions of higher learning.

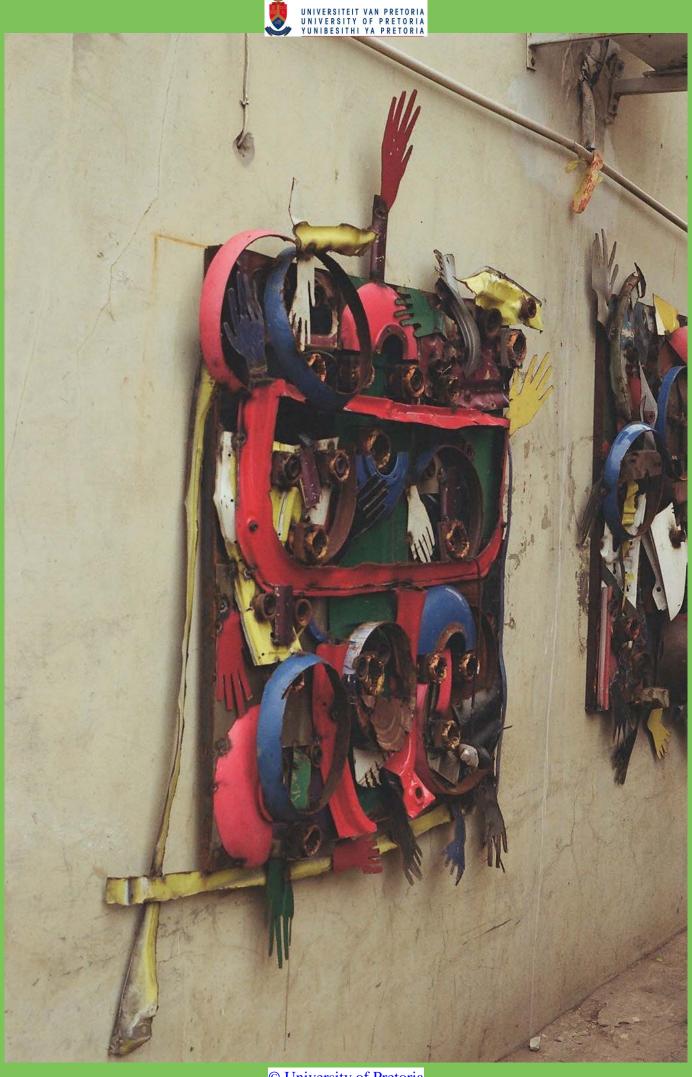
Issues are defined as aspects of important topics for debate or in another dictionary based sense of the world it literally means to distribute and in a sense that is what issues in architecture deal with, not topics of relevance but also topics in need of distribution. This dissertation does not seek to delve into the psychological meaning of this relation to the author of a dissertation and the issues which are selected - rather recognise how design and the designer are intrinsically related and that even through the process of abstraction, interpretation, and critique, a designer is always interpreting through the lenses of the self. For this reason, the author would like to surmise how the selection of the issues relating to waste have been selected, because of associations with organisations and people that have inspired her to explore these associations in the premise of architecture through the medium of the arts. The image on the right is of an G. Mabundos artwork made from scrap steel taken by Pierre Reyneke on a visit to Maputo as part of the SLOW workshop in 2016.

The general issue is that of waste. The issue of waste can be vaguely interpreted through readings of definitions from the Internet to be that which has yet to be cultivated or that which has been disposed of or that which has been failed to make good use of. The dissertation tries to unpack waste along these definitions but also realises that the notion of waste is so current in current societies thinking, that perhaps it will one day no longer even exist.

Jeremy Till [2009:45] refers to a presentation by Peter Guthrie in his book Architecture Depends and quotes him on saying that 'architecture is waste in transit'. His statement encompasses the challenge that faces the built environment as a whole and to a great extent also confronts architecture in its actual matter to be held accountable for its enormous carbon footprint [Van Wyk 2006:15] and contributions to harming the resources of the planet which are clearly more vulnerable than ever before [Frampton 2009:56]. Currently, the position which architecture has taken in response to situations related to climate and resource concern has been to become more conscious of the building, its materials and construction methods, thereby actively conserving resources, but also considering how the building functions as an entity during its post-construction phase. It has however been debated that the energy outputs generated in order to conserve energy do in fact use more energy in its totality, much like the Cobra Effect, where a solution to a problem results in an amplitude of the problem.

This dissertation accepts this approach towards a conservation of resources, however, would like to explore the means in which architecture can extend beyond its physical parameters of being a responsible entity and explore strategies and methods of making a didactic architecture that communicates and extends the conservation ethic, through to its immediate context.

FIGURE 14A: Photograph by Pierre Reyneke of the artwork of Goncalo Mabundo, Mozambique, 2016.



© University of Pretoria



This dissertation <u>rejects</u> the current waste/green aesthetic but seeks to <u>reflect</u> on the architectures that can become realised on a one to one scale for the effect of immediate change, architecture as an artwork, a sculpture, an object in space that is to be considered, witnessed and critiqued by its viewers and users. This desire for immediacy exists because of the state of planetary affairs and a hope that even on a theoretical level this architecture can become realised consciously for any reader.

## METHOD OF DEALING

The author utilises the method of drawing, symbolic language and digital imagery to create her architecture. Architecture is to the author an art of language that can make use of almost any medium to communicate spatial potential on every scale possible as well as every social context. It is this language which the author seeks to explore in this dissertation through production, but also through the eventual refinement, because despite abundance of imagery there is a vocabulary that needs to be layered onto the abstract and conceptual character of drawings and visuals for the fluency in language to exist and it is essentially this practice which the author sought to explore throughout this dissertation and finally concludes that architecture is a process of revealing that which already exists within the mind of each architect through the process of language both visual, virtual and verbal.

# MEASUREMENT OF PROGRESS

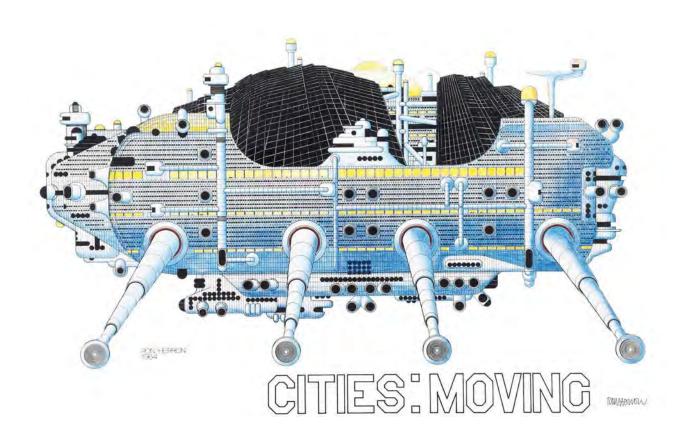
Codification has been utilised to a great extent to justify thinking in relation to place, see the conditioning chapter of the urban vision and mapping process. However, coding place and waste attitudes and eventually concepts lead to a level of complexity which resembled a mathematical formula that the author feels she may not be able to fully unpack in a single year of work, however, it has been an exploration of how rigour of method can be applied to an intuitive way of creating architecture. Codification also allows for process to become more accessible and therefore further researched and tested as a methodology for making architecture. Coding has also been a way to layer language into the visual aspect of architecture in an attempt to become better equipped in a vocabulary of describing design thinking and process to others.

### VISION OF ARCHITECTURE

What this dissertation hopes to state through the topic of waste is that as of late, current society still functions along a flawed and flustering value system, especially in the context of South Africa which is not only dealing with its apartheid legacies, but is also in the process of defining its identity, but also in the global context of a world of capitalism and therefore it is the hope of the author that the dreamlike science fiction architectural nature, like the work of Archigram, can become imagined here in response to the desire to want to change the way in which architecture is made. An architecture of smallness and an architecture that recognises its temporality and finally an architecture that recognises its potential as art.

FIGURE 24: Image of Archigrams 'Walking City' scan the QR CODE on the right to visit Arch Daily, the source of the image.









# [ accepting waste ]





FIGURE 26a: Photograph of leftovers by IMW 20b: QR code to a gif of a visiting to soshonguve on youuth day [June 16] 20c; view of abandoned building in Pretoria, IMW 2015.



# 01. WASTESCAPES

TYPOLOGIES OF WASTE





# **WASTES**

<u>Pollution is a necessary result of the inability of</u> <u>man to reform and transform waste.</u>

The transformation of waste

The transformation of waste

The transformation of waste

The transformation of waste is perhaps the oldest preoccupation of man. Man being the chosen alloy,

He must be reconnected via shit, at all cost.

PATTI SMITH,
[lyrics from 25th floor.]

## WASTESCAPES

Residential buildings, a recent Birkhauser publication [2015], introduces the book by defining the current global issues defining architectural challenges Pfeiffer [2015:10-25] goes on to write about the current architectural context and the five main challenges facing architecture today, which will be elaborated on and responded to below and correspond to the images on the right.

- 1. The new social and demographic context that relates to the elderly bubble and the migration conflicts experienced as part of the thirsty planet syndrome.
- 2..Another seemingly unending condition that is sprawl and the unsustainable land consumption rates creating strange and non-resilient pockets of sealed off the land, somewhat like suburbs, that see islands of function irrespective of the global context.

- 3. The continuing complexity of legislation with its rapid rate of accepting new laws, but because of a bureaucratic tendency not being able to apply them fast enough.
- 4. The well-publicized climate context and finally the newly popularized LCA analysis of materials, an awareness of the embodied aspects of material use.

## WASTE EXPRESSIONS

That waste is the expression of mankind's inability to transform in the words of Patti Smith song 'The 25th floor' might be assumed true if one has to reflect on the existing social conditions proliferating globally through environmental toxification, social uprisings and protest, violence and political corruption without consequence of what comes after- i.e.: what can be learnt when the libraries are burnt to the ground? In such a context it may be difficult to grasp or relate to any future and architecture is about imagining a place for futures.

It is through a hyper-poeticisation of waste that there exists the potential to create a realism of the irrelevance of death and rather communicate the value of life and its continued and intertwined cycles. In other words, waste could exist as a narrative by which secularity can extend itself or perhaps even find itself cultivated into a [video] [Zizek 2006] religious outlook that might relate to reincarnation.

However, this dissertation investigates how waste transmits beyond matter moving along the branches [see chapter theory] of disposal and discarding, but also exists as matter of a more conceptual nature, be it consciousness in the form of stagnation or of an abandoned building that cannot be used for its purpose like Figure 20c.

FIGURE 28: Diagrams drawn based on the writings of Pfiefer, IMW 2016.

1.

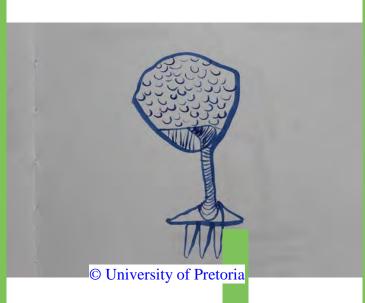
UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI VA PRETORIA

2.

3.



4.





Waste, besides being the disposed matter, exists as the uncultivated space and mind, which is also what this dissertation seeks to engage with.

As stated in the introductory chapter it is clear that humanity is in full confrontation with its finite environment, coming to terms with both the eventual and inevitable collapse [Frampton 2007: 344]. Frampton writes conclusively about the complex territory of the capitalist surface, that it exists within a network of abstracted boundaries or fiscal fences that separate individuals from communicating because of access to the environments in which we interact. The ordering structures of capitalism do not reject its responsibility to both the environment and the planet, however, extends itself in directions hard to understand, therefore the dissertation seeks to explore how architecture can serve as this medium of message about the relation between environmental capitalism. Introducing the economics of waste and the precariat social class [ see chapter SLOW] that still function within

the classic principles of supply and demand, yet generate an economic gravity that disregards the

considered worthless.

consumptive attitudes of capitalism, rather operate with a system of reassigning value to that which was

Architecture is not the combatant/enemy to 'the system' that is capitalism, which Frampton associates to the issues at hand of resource depletion, rather the author would suggest that architecture should exist as the tool by which introductions to 'otherness' can begin to be carried over as a liberal social consciousness that is relatable and navigable to any individual.

How can architecture simply communicate to an individual a hope for a future, thereby reaching a conscious state of empowerment in light of our overwhelming world of crisis? The following chapters will unpack waste in its social and spatial capacities and define the idea of waste beyond the landfills, as well as the matter accumulating in our bins. It begins with the unpacking of waste expressions and their meaning to the author,

based on readings and accepted ideas, but also the rejection of certain attitudes.

#### WASTE OF PEOPLE:

FOR PEOPLE TO BE WASTED DOES NOT ONLY REFER TO GETTING EXTREMELY DRUNK BUT SPECIFICALLY THE WASTE OF SOCIAL POTENTIAL [IN THE FORM OF TRANSACTIONS] THROUGH SOCIAL ISSUES SUCH A POVERTY, HOMELESSNESS AND DISEASE. [CH SLOW]

#### WASTE OF TIME:

Not making the most of time.

## **WASTE OF SPACE:**

Empty/ unoccupied /unaccessible space or a person who is regarded as unnecessary.

### WASTE OF WASTE:

Letting waste be.

### WASTE NOT WANT NOT:

Name of the last exhibition hosted by SLOW at the drill hall in JHB.

### WASTE OF WATER:

THIS IS THE GREATEST CRISIS OF SOCIAL ISSUE YET. LACK OF ACCESS TO CLEAN DRINKING WATER CAUSES DEATH WHICH A LIFE WASTED BY THE DISREGARD OF THE WELL BEING OF ANOTHER.

This is the conclusive part of this chapter because waste can be unpacked in so many ways and this year itself could go to waste if there is no definitive stand taken by the author of this dissertation about waste.

FIGURE 30: Collage of photographs of scrap yards in Silverton, IMW 2016.





The greatest resource at risk of waste is water and this is something directly related to the built environment and the way in which we can deal with this is by using fewer resources, recycled and reclaim spaces and materials and also activate places where people can access information about technologies and the future awaiting.

To conclude the author would like to state that she believes,

THERE IS NO SUCH THING AS A WASTE: ALL THINGS EVEN THOSE DESIGNATED AS WASTE HAVE VALUE WHETHER PHYSICAL OR JUST CONSCIOUS FOR CONSIDERATION. TRUE WASTE - SOMETHING OF TRUE NON-POTENTIAL CAN ONLY COME ABOUT WHEN WE DISREGARD VALUE OF LIFE IN ALL ITS FORMS, THEREBY ACCEPTING WASTE AS AN ENTITY FOR REJECTION RATHER THAN REFLECTION.

FINALLY, WASTE IS A

NECCESITY FOR CREATING

- IE. ONE CANNOT CREATE

WITHOUT WASTING - WE

CAN MERELY GO ABOUT BEING

CONTINOUSLY AWARE OF OUR ROLE IN

RELATION TO WASTE- ARCHITECTURE

CAN FACILITATE THIS AWARENESS

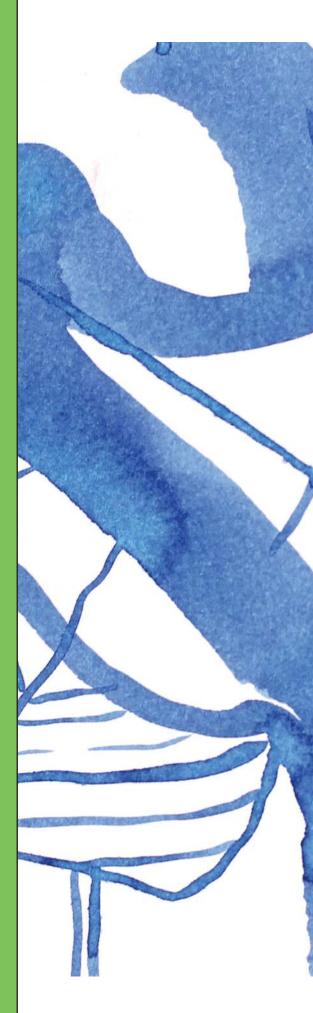




FIGURE 33: Early sketch of the branching logic which is contained within the map of Silverton, IMW 2016.





# [rejecting the accepted theories]

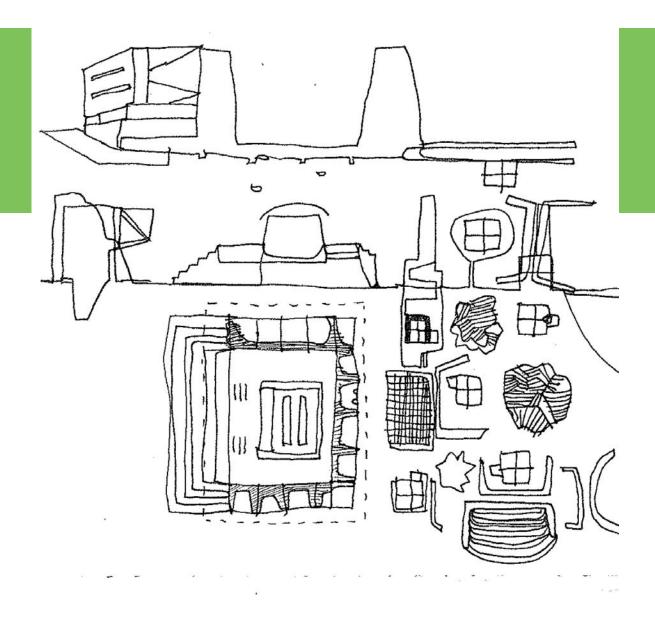


FIGURE 34a: L Urban Vision diagrammatic conceptual sketches, Fig 28b: Vectorised and 3-dimensionalised branch concept diagram, IMW 2016.