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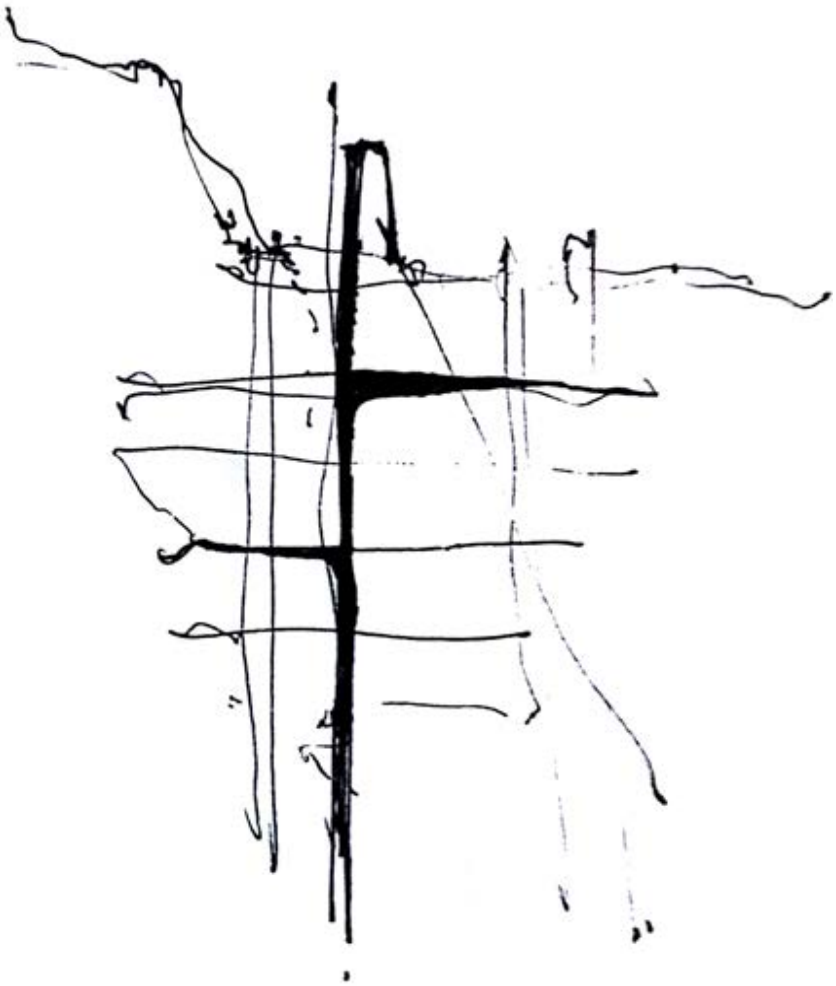

MAVERICK:

An Architecture of Refuge from the margins, in anticipation of a disastrous event in a hostile South African context.

Dalita Rosslee

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The space of our primary perception, the space of our dreams and that of our passions hold within themselves qualities that seem intrinsic: there is a light, ethereal, transparent space, or again a dark, rough, encumbered space, a space from above of summits, or on the contrary a space from below of mud…

Gaston Bachelard (Foucault 1967:2)

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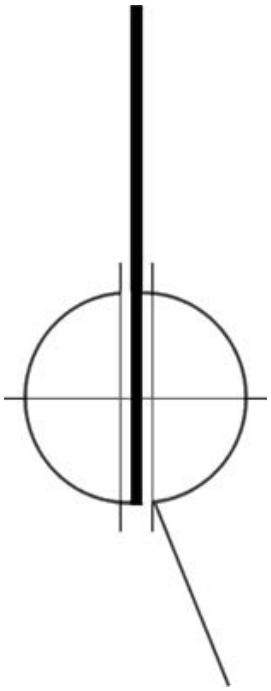

Dalita Rosslee
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PURPOSE:

Submitted in fulfilment as part of the requirements
for the degree of Masters of Architecture (Professional),
March(Prof), in the Faculty of Engineering,
Built Environment and Information Technology.

UNIVERSITY:

Department of Architecture
The University of Pretoria
South Africa
2016

DEGREE:

Master of Architecture (Prof)

COURSE CO-ORDINATOR:

Dr. Arthur Barker

STUDY LEADER:

Johan Swart

RESEARCH FIELD:

Heritage and Cultural Landscapes

KEY WORDS:

Marginalised, Marginal, Refuge, Periphery

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MAVERICK:

An Architecture of Refuge from the margins, in anticipation of a disastrous event in a hostile South African context.

PROGRAM:

Place of refuge and development

SITE LOCATION:

Langeberge Ridge,
Pretoria Townlands 351-JR
Pretoria

COORDINATES:

25°46'14.5"S
28°09'39.1"E

THEORETICAL PREMISE:

From a distinctive normative position, a dominant narrative is formulated in order to regain an identity from the margins.

ARCHITECTURAL APPROACH:

The investigation into traditions of shelter and refuge facilitates the need to be safe. The architectural devices aim at prolonging safety through preservation and development of skills and knowledge.

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PART I

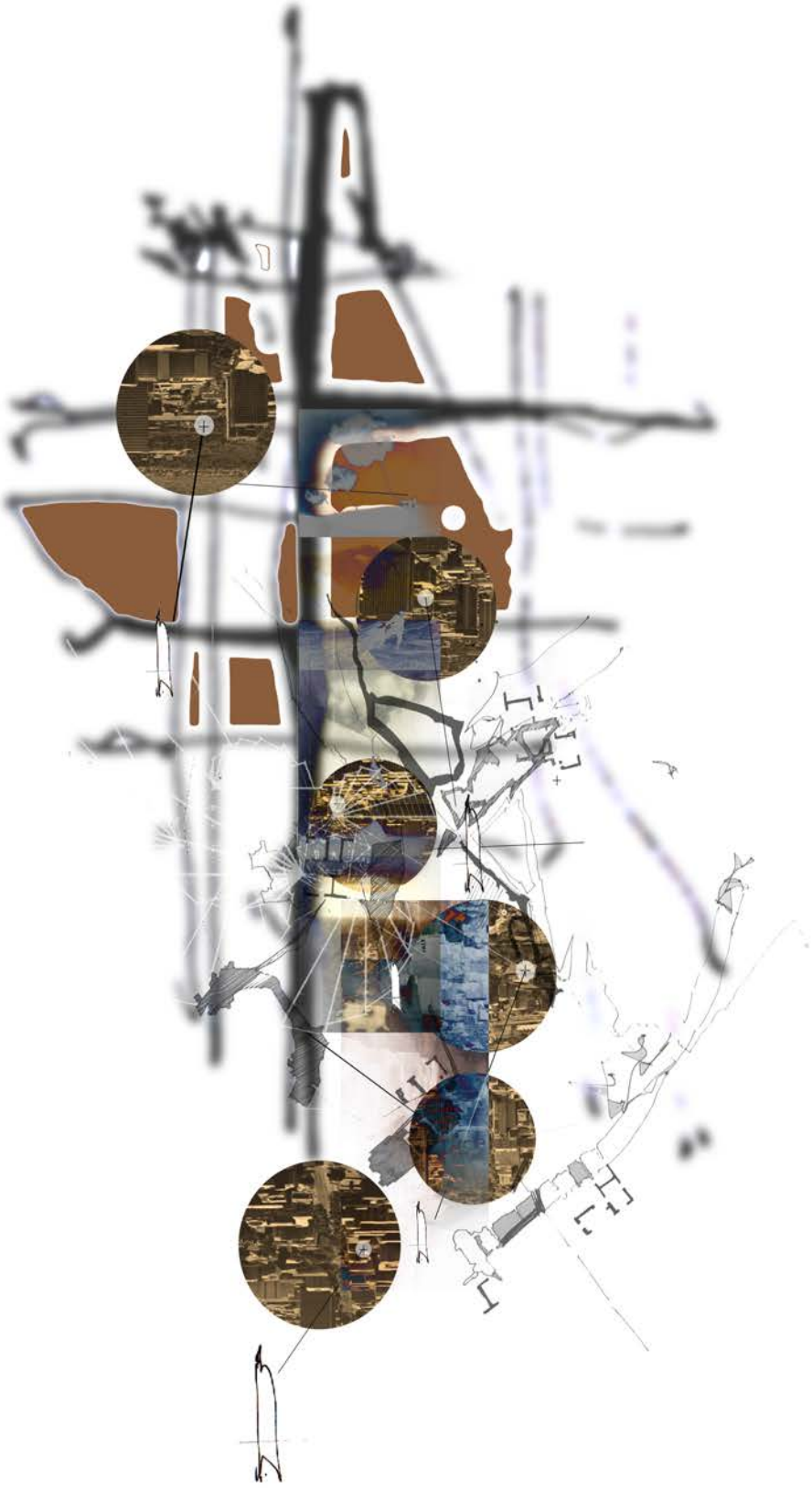

Figure 1: Parti diagram of the layers of the architectural intentions.

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DECLARATION:

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

I further state that no part of my thesis has already, or is currently being submitted for any such degree, diploma or other qualification.

I further declare that the dissertation 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.

Dalita Rosslee

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ACKNOWLEDGEMENTS

This dissertation is dedicated to my brother, Dieter.

My deepest gratitude to everyone who believed in me throughout my studies.

A special thank you:

Johan Swart, for the guidance, wisdom and encouragement throughout the year.

Dr. Arthur Barker, for making me believe (again) that architecture is meaningful and magical. You gave me the confidence I never knew I had.

To the De Reuck family for all your support and providing a home away from home.

Jenna de Reuck thank you for the editing of my book.

Aan my ouers, dankie dat mamma en pappa my altyd onvoorwaardelik ondersteun en liefhet.

Chrisna , Dian en Dieter - dankie vir die hulp met my model.

Dane, your unconditional support, belief, advice and care throughout my studies.

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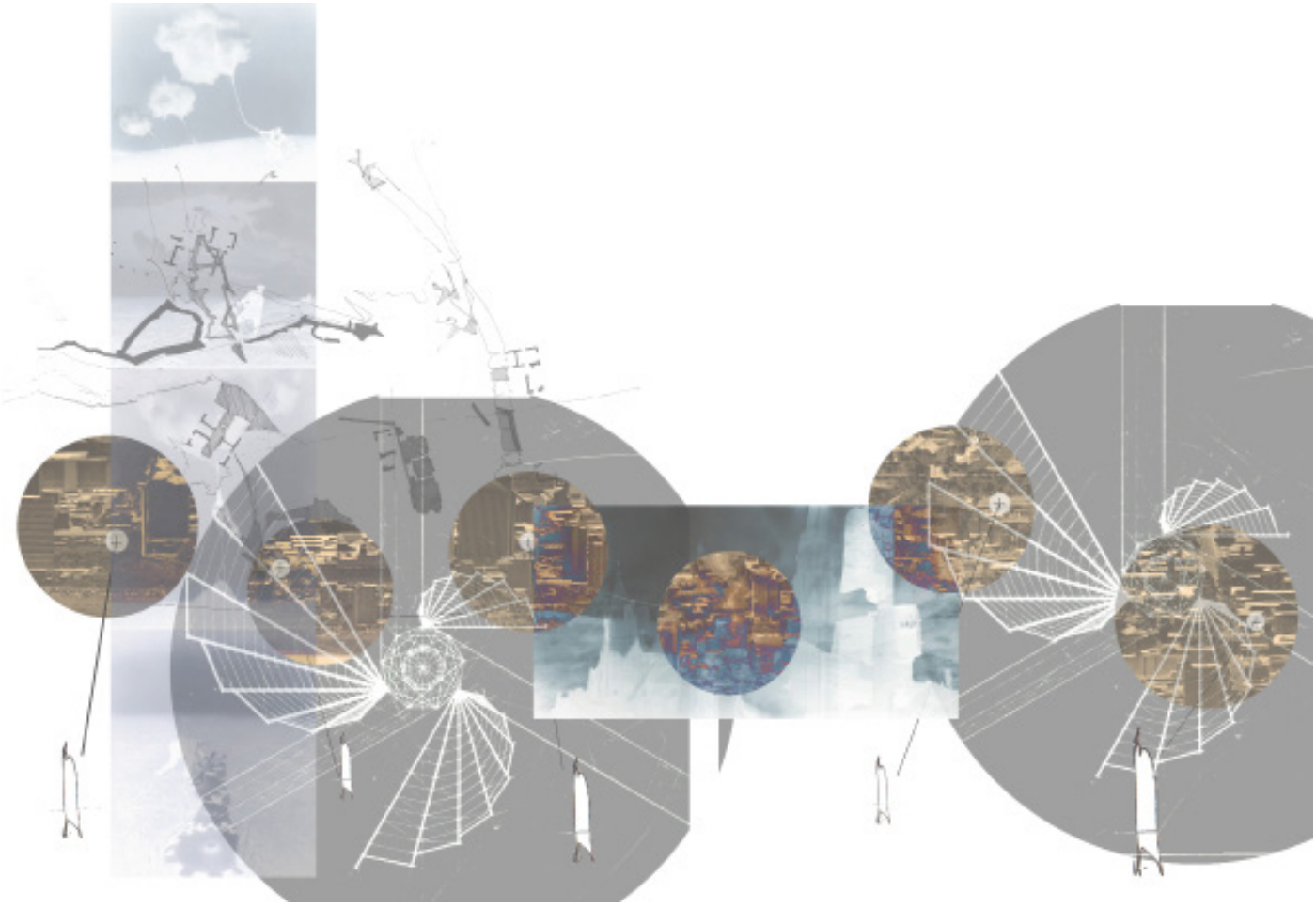
Figure 2: Abstract condition of author's perception of Pretoria. (2016)



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I. PREFACE

PURPOSE OF THE STUDY

The purpose of the investigation is to understand an alternative perception of architecture through various personalities and conditions. Current spatial and societal conditions are dissected to suggest that these conditions could be altered through experience (light-dark, move-stop, see-listen).

The initial premise stems from a deeply personal perspective, growing up with a physically disabled sibling. It is suggested that during the experience of a trauma (experienced specifically by my sibling) an inherent value exists in the need to provide support structures and safe environments. These structures and environments provide the victim of trauma with the ability to express continuous feelings of progress and regress.

In a position of the 'outsider' to this kind of trauma, it remains difficult to comprehend the perception embedded in the struggle of the victim - to regain a stable identity in relation to other people as well as the outside world. Through observation, it has become evident that this identity continually shapes according to conditions and the effects of the spatial and societal conditions on perception.

During the continuous struggle, the identity of the victim defends 'itself' and masks pain in order to regain strength and credibility. The dissertation focuses on struggling identities from the margins of life and attempts to understand how a marginalised position is continually shaped through a 'hostile' society and the conditions embedded in environments created by built form (architecture).

Architecture is deeply rooted in the understanding of conditions in time, thus the study argues for an alternative approach to the present and future narrative of Pretoria. This book illustrates a narrative that exists firstly on a global scale of time and secondly in the context of Pretoria. The narrative relates to a marginal group of people in need of shelter and refuge in anticipation of a disastrous event. Therefore the dissertation is to be viewed and understood in a speculative manner.

The reader is guided through the narrative to understand the group of marginal people in their original mental state, how current societal and political change alters this state and how the intervention can stabilise this state through shelter and refuge.

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The dissertation will consist of three parts:

PART 1
LATENT POTENTIAL:

Marginalised people and marginal space is investigated in relation to society.

PART 2
DISCERNING THE UNSEEN:

Interpretation of physical and social space in the making of architecture.

PART 3
BLURRING THE VISIBLE:

Introducing concepts of space and perception which lead to architectural ideas. The architectural development and and response blurs the norms of society.

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II. ABSTRACT

Survival is bound to conditions of safety (now) and preservation (future). The places that marginal people inhabit are either permanent familiar places, or temporary unfamiliar places. These places however are also bound to time. When circumstances are unpredictable survival instincts are heightened, and when circumstances are predictable survival instincts are at a neutral level (or in in a state of homeostasis). If a place is undergoing change such as societal and political change, the change in mental state of a person occurs as this affects the survival of that person.

The dissertation explores ideas of identity (valued, strong, useful), perception (how other people see the marginal) and marginalisation of specific groups of people. This will be investigated in terms of the preservation of the marginalised people through programmatic devices and activities (what can the marginal offer). The proposed programme (and supporting programmes) allow for the development of marginalised people in a hostile society in which survival and refuge are the first instincts.

The intent of the architecture seeks to explore the relationship between a marginal person and place on a conceptual and physical level. Moreover the architecture seeks to negotiate the margins that society has placed between those who are approved within society (the norm) and those who are different than the norm. A consciousness of this difference or 'margin area' exists throughout the investigation which allows for an alternative approach to create thought-provoking architecture rather than an aesthetically pleasing architecture.

It is the belief of the author that even though something might be 'broken', it remains more useful and is more valuable than something that was perfect in the first place. The project moves beyond monotony and strives for unity in difference (the marginal unite). Difference as a strength creates an opportunity to emphasise those who are different and finds a way to strengthen the alternative identities in a future spatial condition. The proposed programme facilitates the development of these identities to become stronger in time in order to withstand struggle and unpredictability.

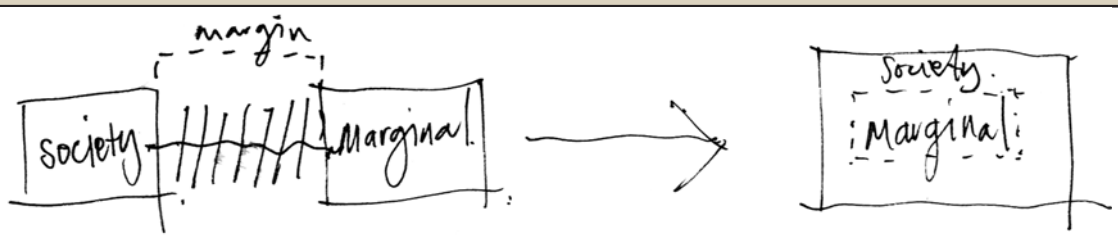

Figure 3: Relationship between marginal and society. (2016)

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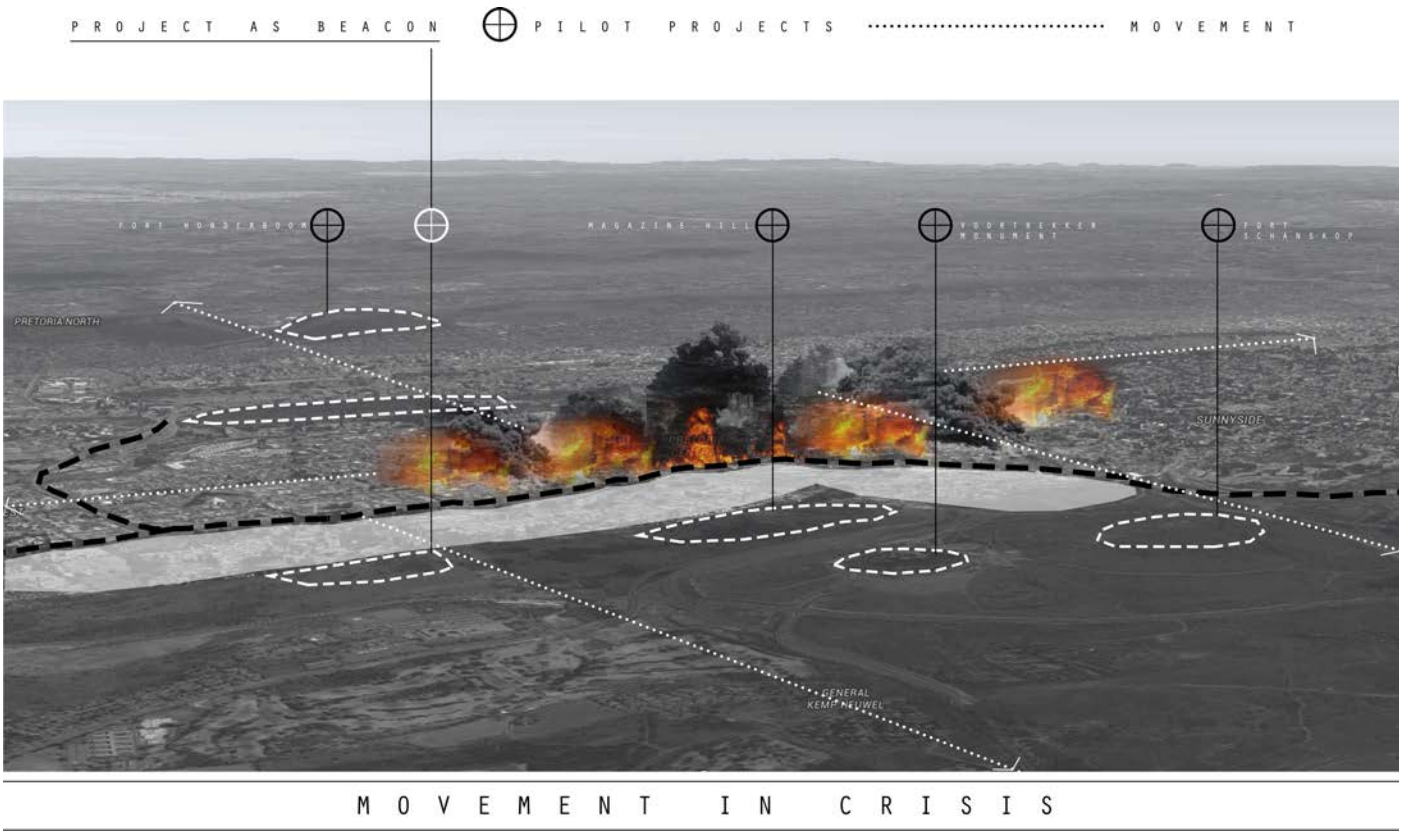

Figure 4: The location of the project in the context of a disaster in the CBD of Pretoria. The possible positions of similar pilot projects are also indicated. (2016)

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III. THE NARRATIVE/PROPOSED CURRENT CONDITION

"STUDENT FEES MUST FALL"
"ZUMA MUST FALL"
"RACISM MUST FALL"
"HOTTEST TEMPERATURES RECORDED TO DATE"
"WATER SCARCITY"
"DROUGHT INCREASES"
"NEAR JUNK STATUS FOR SA"

It was bound to happen. It is the year 2016 and in Tshwane all hell has begun to break loose. Globally there have been similar occurrences of outrage and violence such as ISIS and the havoc the group has created in vulnerable cities. The question asked, as the world begins to stand together sympathetically, sharing in suffering and loss, is, what has the world come to?

As events begin to worsen, the human condition reveals its character and fear begins to envelope peoples' minds and hearts. The realisation of the risk results in citizens gathering contingency plans for a near uncertain future, and with that there are the others that are not considered.

So what about the marginal? How do they survive in this crisis of an uncertain future?

With a theme of flight developing, survival is the first instinct. To each his own is the currency, and with that the struggles spill over to the political, economic and social.

The elderly folk wonder how many days they have left to come by with their limited pension funds. The mentally and physically disabled quiver away as their dependency on assistance increases. The homeless scrounge up the last left-overs and gather their belongings to "trek" to the next safest location. Prisoners manage to deal with their isolation in isolation, as they are acquainted with these themes of crisis and solitude.

As Disaster strikes there are limited safe havens to seek shelter in the increased destruction of the city.

With the condition that is coming into being where do the marginal take Refuge?

A grassroots movement forms and word of mouth rumours that a place exists. There yonder on the periphery, the marginal slowly trek and gather as a collective, gaining a hope as they travel to a sanctuary where all can seek comfort. Although their "homes" are destroyed by the outrage, it is now the survival of their identity that remains. Architecture awaits them.

Their message:
We grow stronger in numbers. Every day new distraught faces join the collective.

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IV. TERMINOLOGY

CONDITION:
(n) the circumstances or factors affecting the way in which people live or work, especially with regard to their well-being.
(v) have a significant influence on or determine (the manner or outcome of something).

CRISIS:
(n) a time of intense difficulty or danger.

DISABILITY:
(n) a physical or mental condition that limits a person's movements, senses, or activities.

EMBRYONIC:
(a) (of a system, idea, or organization) in a rudimentary stage with potential for development.

EMPIRICAL:
(a) based on, concerned with, or verifiable by observation or experience rather than theory or pure logic.

EPISTEMOLOGY:
(n) the theory of knowledge, especially with regard to its methods, validity, and scope, and the distinction between justified belief and opinion.

MARGINAL:
(n) relating to or at the edge or margin.

MARGINALISED:
(v) treat (a person, group, or concept) as insignificant or peripheral.

MARGINALISATION:
(n) the social process of becoming or being made marginal (especially as a group within the larger society); "the marginalization of the underclass".

MAVERICK:
(n) an unorthodox or independent-minded person.

NARRATIVE:
(n) a spoken or written account of connected events; a story.

PHENOMENOLOGY:
(n) an approach that concentrates on the study of consciousness and the objects of direct experience.

SCENARIO:
(n) a postulated sequence or development of events. A setting, in particular for a work of art or literature [or architecture].

SCENARIO ARCHITECTURE:
(n) a unique way of thinking, approaching and creating architecture - free from ideas, styles and preconceptions; it emerges spontaneously through a methodical and analytic design process.

REFUGE:
(n) the state of being safe or sheltered from pursuit, danger, or difficulty. A place or situation providing safety or shelter.

(Oxford English Dictionary)

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DISASTER:

(n) a sudden accident or a natural catastrophe that causes great damage or loss of life.

PRESERVATION:

(n) the action of preserving something for future use.

(Oxford English Dictionary)

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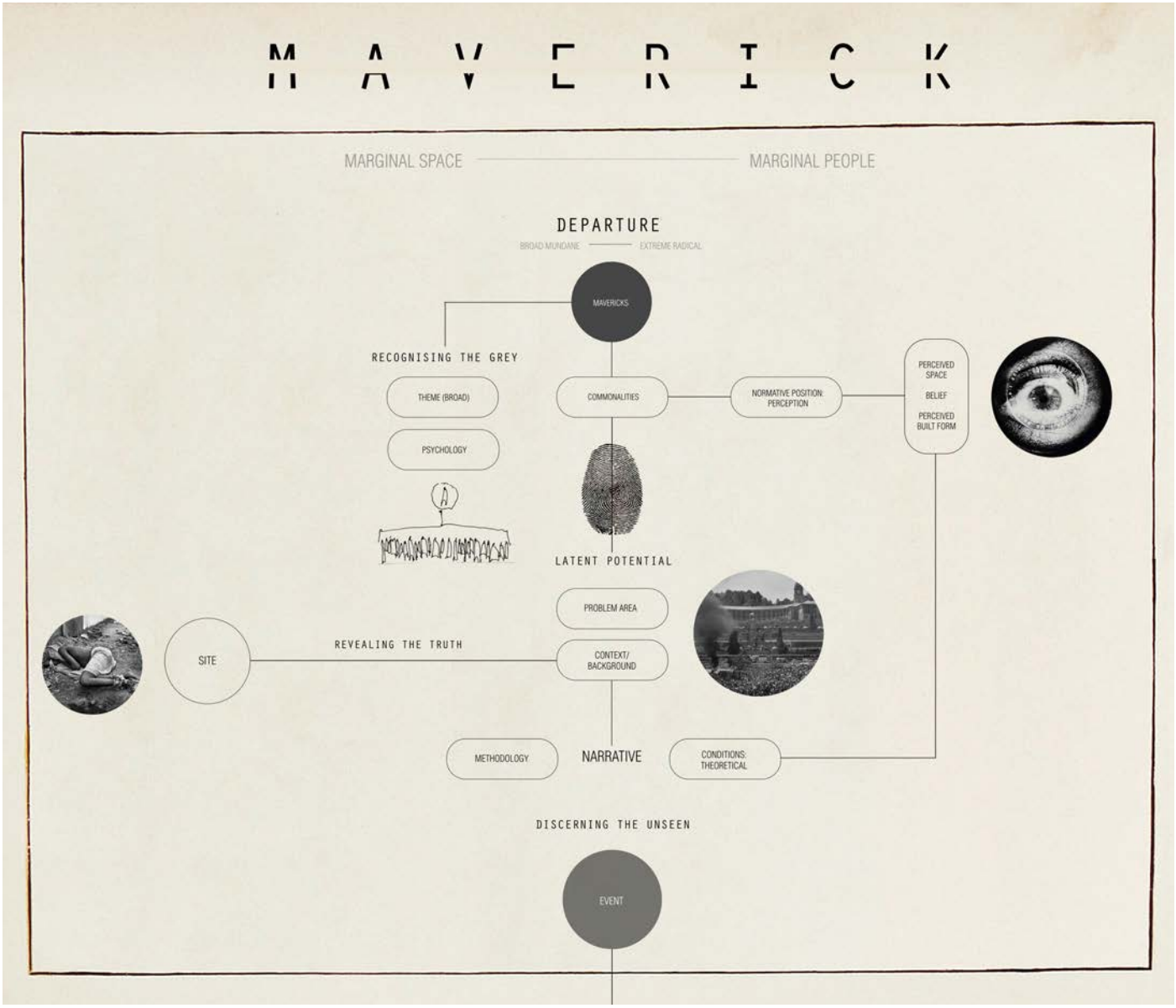

Figure 5: Mindmap of proposal process. (2016)

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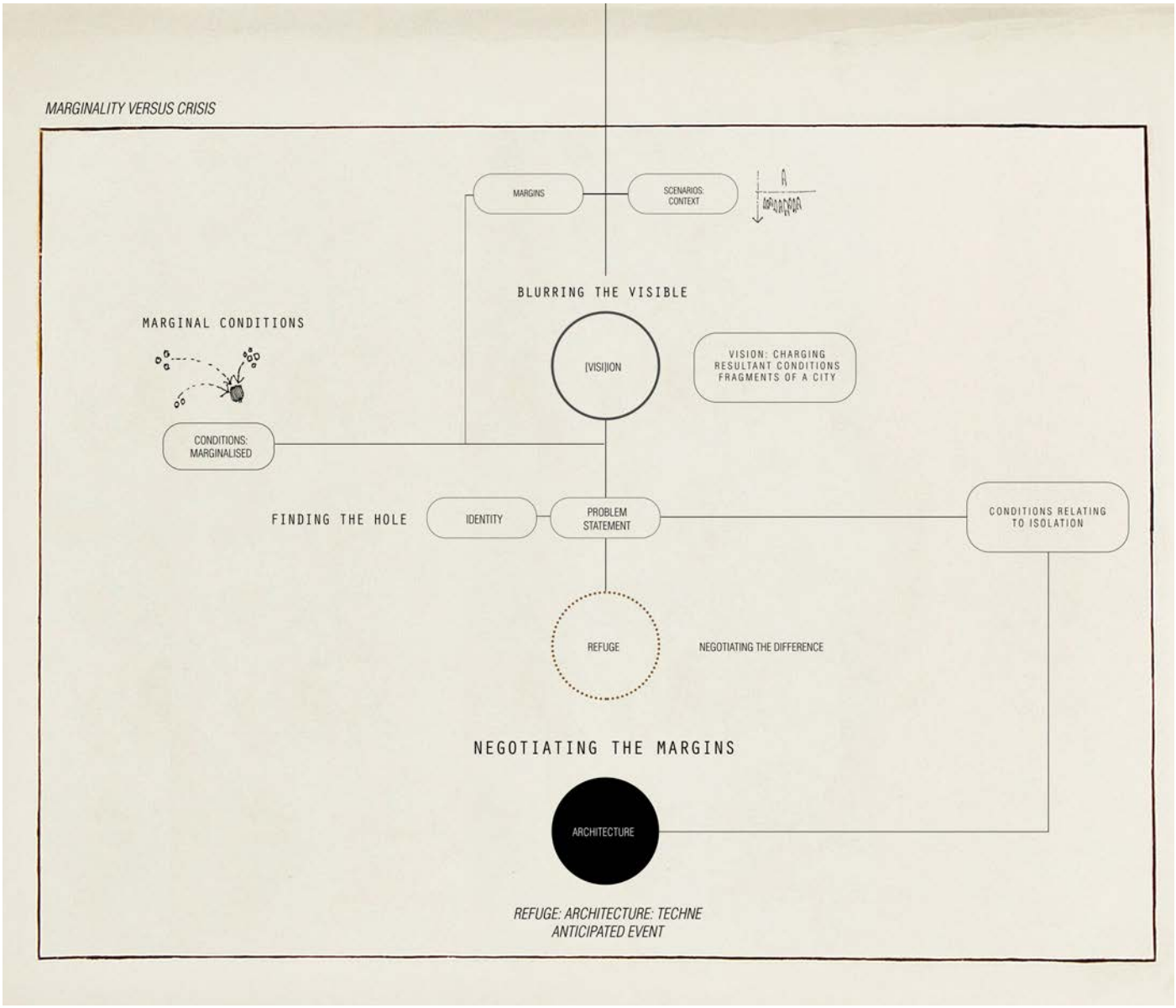

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V. COMPOSITION

[CONTENTS]

I PREFACE
III ABSTRACT
V THE NARRATIVE
VI TERMINOLOGY
X CONTENTS
XIV MARGINAL GROUPS
a. A brief overview
b. Current condition
c. Characters
d. Conclusion

PART ONE [1]

01 *INTRODUCTION* 03

1.1. Normative position 04
1.2. Latent potential 06
1.2.1. The significance of marginal groups 06
1.2.2. Research questions 06
1.3. The broad scheme 07
1.3.1. Contextualising the problem on a global scale 07
1.3.2. South Africa as context - The current state of the problem 08
1.4. Limitations and delimitations 10
1.4.1. Delimitations of the dissertation 10
1.5. Behaviour and the landscape 11
1.5.1. The Experience of Landscape - Jay Appleton 11
1.5.2. Selection of site 12
1.6. Site/sight of refuge 13
1.6.1. Site location 13
1.6.2. Site experience 15
1.7. Problem statement 19
1.7.1. General issue 19
1.7.2. Architectural issue 21
1.7.3. Architectural objectives 22

02 *CHAPTER 2* 23

2.1. The Story 26
2.1.1. Dissecting the process 26
2.2. The research process 29
2.2.1. Merging narrative and process 29
2.2.2. Approach 30
2.2.3. Describing the process 32
2.3. Intentions 34
2.3.1. Architectural intentions 34
2.4. The context 38
2.4.1. Pretoria as context: an overview 41
2.4.2. Space in an African city 42
2.4.3. Conclusion 45
2.4.4. Existing marginal facilities and institutions 50
2.4.5. Interpretation of boundaries, thresholds and margins 51
2.4.6. Postcolonial inquiry 56
2.4.7. Conclusion 57
2.4.8. Synthesis 58
2.5. The instinctive journey: Deliberate subjective exploration 59
2.5.1. Urban narrative 60
2.6. Fragments of a city 61
2.6.1. Analysis of perception in the city 61
2.6.2. Conclusion 62
2.6.3. Perception of space 63
2.6.4. Foundings from perceptual investigation 67
2.6.5. Response 67
2.6.6. Conclusion 67

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PART TWO [2] 70

03 *CHAPTER 3* 71

3.1. The theme 72
3.1.1. The implications of disaster 72
3.1.2. Potential of marginality 74
3.1.3. Crisis 75
3.2. Disaster risk management planning framework for the CoT 77
3.2.1. Conclusion 77
3.3. War and Crisis 79
3.4. Refugee camps: space and resources 81
3.4.1. Spatial formations 82
3.4.2. Spatial principles 84

04 *CHAPTER 4* 85

4.1. The Mavericks 86
4.2. The importance of scenarios as design informant 87
CHARACTER 01 88
CHARACTER 02 92
CHARACTER 03 96
CHARACTER 04 100
CHARACTER 05 104
4.3. Theoretical discourse 107
4.3.1. Space, power and exclusion 107
4.3.2. The concept of speculative space 109
4.3.3. The production of space - Lefebvre 110
4.3.4. Power 112
4.3.5. Conclusion: A phenomenological approach 113

05 *CHAPTER 5* 115

5.1. Identity 117
5.1.1. Programme 118
5.2. Function 1: The workshops 119
5.3. Function 2: The archive 120
5.4. Function 3: The observation deck 121
5.5. Function 4: The laboratory 122
5.6. Function 5: The energy chamber 123
5.7. Conclusion 124

PART THREE [3] 126

06 *CHAPTER 6* 127

6.1. The theory of prospect and refuge 129
6.1.1. Habitat theory 129
6.1.2. Prospect-refuge theory 129
6.2. Case study 1: Coromandel Manor House 131
6.2.1. Formal aspects 132
6.2.2. Environmental aspects 132
6.3. Case study 2: The Onion House: Malcolm Wells 134
6.3.1. An overview 135
6.3.2. Biomorphemic approach to form 135
6.4. Case study 3: Freedom Park 137
6.4.1. An overview 138
6.5. Case study 4: Vernacular architecture 139
6.6. Case study 5: Forts of Pretoria 143
6.6.1. An overview 145
6.6.2. Conclusion 147

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07 *CHAPTER 7* 149

7.1. Key concepts in seeking refuge 150
7.1.1. Contribution 152
7.2. Site: an introduction 153
7.2.1. Interpretation and analysis 154
7.3. Physical context 159
7.3.1. Resources 159
7.3.2. Construction aggregate 161
7.3.3. MVA Bricks 162
7.4. Further interpretation of the site 163
7.4.1. Interpretation of site: activities 165
7.5. Concept development 173
7.5.1. Concept generators in relation to site 174
7.5.2. Design development from conceptual generators 175
7.5.3. Spatial exploration 178
7.6. Negotiating the margins 183
7.6.1. The concept of underground 185
7.6.2. Cappadocia underground settlement 186
7.7. Spacial development 189
7.7.1. Design iteration 1 194
7.7.2. Design iteration 2 195
7.7.2.1. Critical reflection 203
7.8. Final design iteration 205
7.8.1. Conclusion 214

08 *CHAPTER 8* 215

8.1. Conceptual approach 216
8.1.1. Structural concept 217
8.1.2. Structural exploration 219
8.1.3. Detail exploration 220
8.2. Structural precedent: Camden State Park House 223
8.3. Final detail 227
8.4. Environmental considerations 228
8.4.1 Reservoir energy capacity 231
8.4.2. Water usage 231

09 *CHAPTER 9* 233

9.1. Dissertation conclusion 234

BIBLIOGRAPHY 271

LIST OF FIGURES 273

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XIV THE MARGINAL

a. A BRIEF OVERVIEW OF MARGINALITY

The following descriptions of marginality may be used as a starting point to comprehend and examine the concept of marginal space.

Marginality can be defined as the temporary state of having been put aside of living in relative isolation, at the edge of a system (cultural, social, political or economic), … when one excludes certain domains or phenomena from one's thinking because they do not correspond to the mainstream philosophy (International Geographical Union (IGU), 2003:2).

Marginality is generally used to describe and analyse socio-cultural, political and economic spheres, where disadvantaged people struggle to gain access (societal and spatial) to resources, and full participation in social life (Sommers et al., 1999). In other words, marginalised people might be socially, economically, politically and legally ignored, excluded or neglected, and are therefore vulnerable.

Due to the fact that we are dealing with people and resources, there is an immediate spatial implication to the act of marginalisation. Resources are limited based on location therefore a marginal condition exists. This implies lying at the edge of or poorly integrated into system (Sommers et al., 1999). With this concept in mind, it is intended to gain insights into the influence of physical locations and distance on the livelihoods of individuals/ groups and the space itself.

If spatial marginality is based on location, where integration is lacking, we can conclude that the spatial aspect is linked to the person inhabiting that specific place. Thus the argument of relationships is supported and therefore it is relevant to note that societal and spatial marginality go hand-in-hand to understand and interpret marginalisation as a whole.

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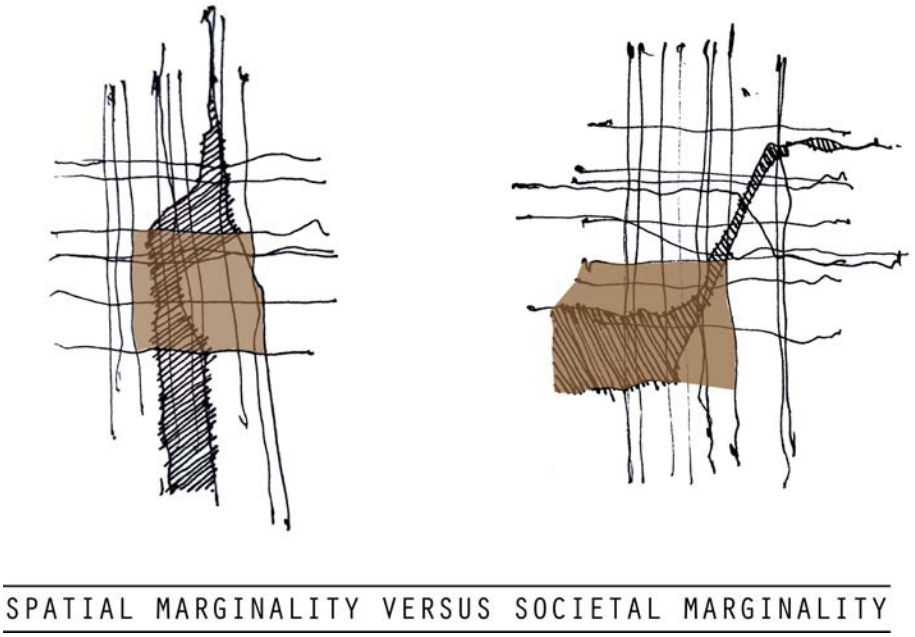

Figure 6: Societal and Spatial marginality form a close relationship in the investigation into marginality in the city. The shaded area in both figures represent the integration of the relationship from all directions of life.

b. CURRENT CONDITION OF MARGINALISATION IN PRETORIA

With the marginalisation of people comes marginalised space. The city is evidently based on a model of marginalisation through political regimes and social constructs. Today marginalised communities are unseen observers of the city due to the lack of credibility given to such people. The problem is embedded in city planning and development which lead to forced removals and displacement of marginal communities in the past.

Purely based on the narrative presented, one could argue that given South Africa's current condition of political chaos and civilian uproar over student fees, racism, inequality and language, the overall condition is problematic.

The prevalence of vulnerability is also observed throughout the city of Pretoria attributed to natural and societal risks experienced on a daily basis - countrywide protests on university grounds are examples of such risks. Future conditions in the same state of decline (political, social, cultural, physical and economic) could potentially cause disastrous events of a massive scale. The problem lies in the current mental state of the marginalised communities who face increased exposure to risks with very little control over their circumstances. Proposing an architectural intervention that ensures safety against such risks increases the marginalised community's coping strategies and improves their resilience against future disaster.

The consequences of leaving current marginalised conditions (on a spatial level) untouched, could lead to the complete destruction of the identity of marginalised communities and their environments. The legacy of these groups of people ultimately shaped by a broken society, will be lost.

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c. CHARACTERS INTRODUCED

To reference the marginal groups, this section will now introduce the characters (the marginal) which form part of the narrative of the dissertation. The characters and what they symbolise will only be stated here in order to understand further reference made to the marginal groups. The marginal groups are called 'The Mavericks'.

One should also note the reasoning for these characters. As part of the argument for a different perception from the margins, different identities exist within the marginal groups. This should be viewed as a strength not a shortcoming. Together the marginal groups form a collective identity of stability and potential for future sustenance.

CHARACTER 1: A CRIMINAL

This character symbolises a person experiencing inner conflict and solitude.

CHARACTER 2: AN ELDERLY PERSON

This character symbolises knowledge and the ability to preserve memories through collection and study.

CHARACTER 3: A MENTALLY DISABLED PERSON

This character symbolises the ability to observe through an imaginative perception.

CHARACTER 4: A PHYSICALLY DISABLED PERSON

This character symbolises the ability to use intellectual knowledge to create things.

CHARACTER 5: A HOMELESS PERSON

This character symbolises the ability to adapt quickly to different environments.

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d. CONCLUSION

The characters introduced, form part of the method of this investigation. As the initial premise states that the different identities within marginal groups are continually shaped according to conditions, it is clear that a past, present and future condition exists for each of the characters.

It is relatively simple to identify past and present conditions, but it is only through the investigation that future conditions can be synthesised through scenarios. The method will help to determine what the psychological effects would be on the characters stated on the previous page.

The outcome of the method should deal with the fact that a condition and the state of perception is significant in the act of place- and space-making.

The choice of characters and what they symbolise will be elaborated on later.

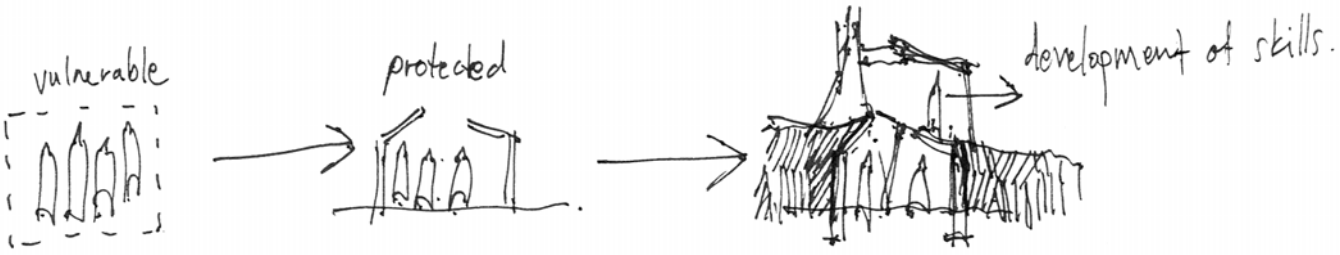

Figure 7: An evolution of the marginal community from left to right. (2016)

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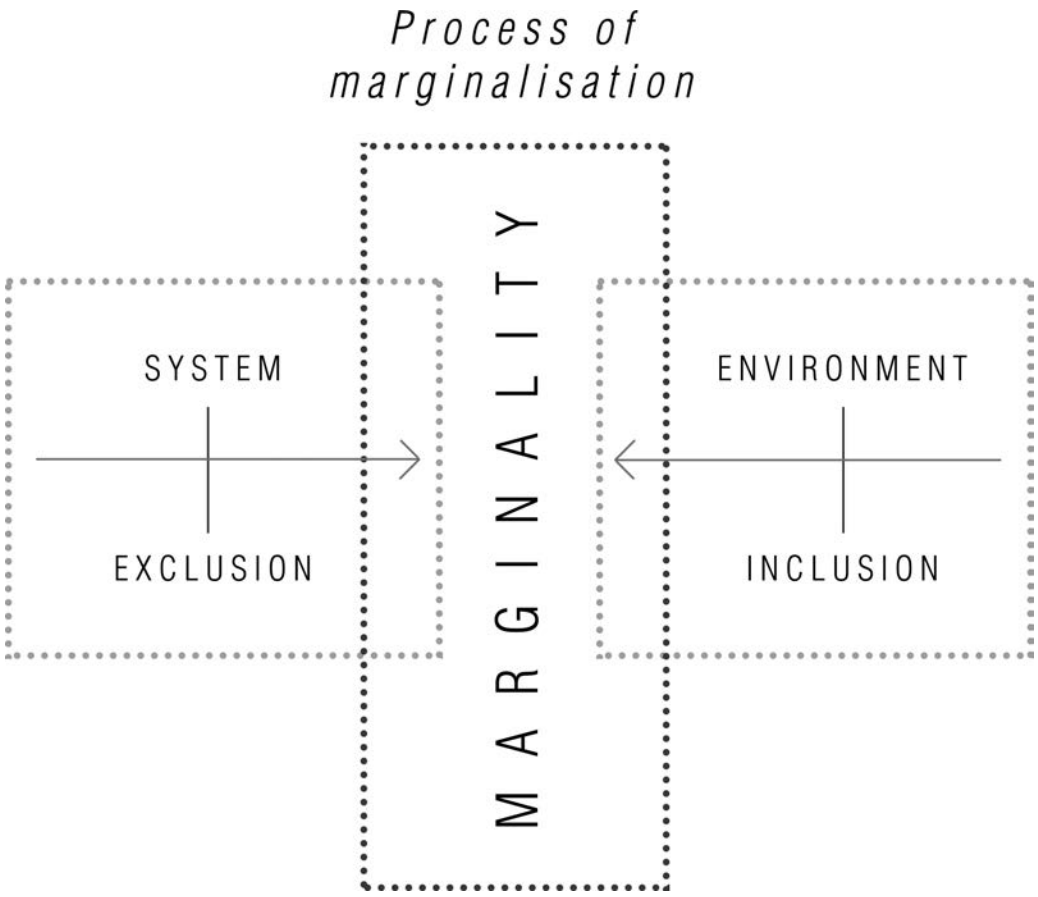

Figure 8: The image aims to illustrate the factors that affect marginality. (2016)

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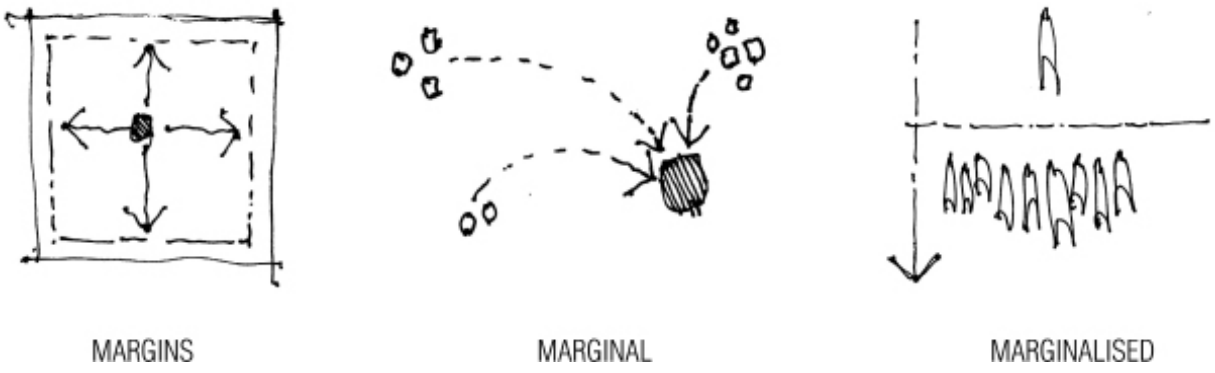

Figure 9: Representations of margins, marginal and marginalised. (2016)

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[PART ONE]

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CHAPTER

01

INTRODUCTION:

This Chapter aims to introduce the scope of the dissertation and the interpretation of relationships which leads up to conceptual and practical issues. The site is briefly introduced in order to contextualise the narrative of the study.

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1.1. NORMATIVE POSITION

"Perception is a central issue in epistemology, the theory of knowledge. At root, all our empirical knowledge is grounded in how we see, hear, touch, smell and taste the world around us" (O'Brien 2003:1).

The sceptical arguments of Descartes suggests certain scenarios that threaten to undermine all of our empirical knowledge of the world (Cottingham et.al. 1983). It could be evident that all human beings are living in a constant dream. It is also a possibility that there may not be an external world at all, and all our perceptual experience and perceptual beliefs may simply be planted in our minds by an external entity.

Given such scenarios, it is not clear how our perceptual beliefs can be justified and thus, how we can have perceptual knowledge. Any reasons for thinking that such beliefs correctly represent the world are undermined by the fact that such beliefs could exist even if the external world did not exist (Cottingham et.al. 1983). Since the seventeenth century, epistemology aimed at searching for a solution to this scepticism. The notion of perception simply assumes that we can have justification for our perceptual beliefs and that perceptual knowledge is possible. Given this assumption, the focus is on how we should conceive of such justification.

It is postulated that the marginal groups in this study have an alternative form of perception. This is based on the premise that current society, not including the margins, is altered through devices of propaganda, social media and the like to a point of no return. Although some form of societal influence occurs within the marginalised community, it is not to the effect that their identities change drastically. Marginal identities are instead largely shaped by the instinct of survival rather than image. The marginal groups are therefore the hope of human civilisation and it is of great importance to shelter and develop the identities of these groups to be sustained in future.

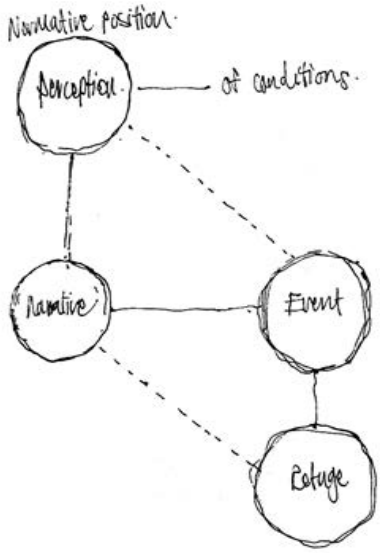

Figure 10: The figure above represents the relationship between the issues of perception and the rest of the structure of the study. (2016)

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"In nature, as an organism evolves it increases in complexity and it also becomes a more compact or miniaturized system. Similarly a city should function as a living system. Arcology, architecture and ecology as one integral process, is capable of demonstrating positive response to the many problems of urban civilization, population, pollution, energy and natural resource depletion, food scarcity and quality of life."

(Paolo Soleri [sa])

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1.2. LATENT POTENTIAL

1.2.1. THE SIGNIFICANCE OF MARGINAL GROUPS

Architecture is a powerful tool used to express various aspects of life, worldview and perception. The act of implementing this tool has to do with the relationships built up between different types of people as well as their environments. Furthermore it is necessary to understand the expression of identity relevant to space.

Identity is interpreted in the comfort of space where freedom of expression exists. Nowadays, and since the technological boom of the 21st century, these identities are altered through various means: internet, fashion, image, branding etc. in current society .

The dissertation deals with marginal people, as it is in the opinion of the author that these communities do not have the same exposure as those who have access to mainstream alterations of self. The capabilities that unaltered identities possess is the unexplored territory (the margins) that could potentially challenge the way we look at the world and ultimately architecture. In this view, when society has to rebuild what once was, the marginal community could offer their ways of learning to survive.

1.2.2. RESEARCH QUESTIONS

As Paolo Soleri mentions in his definition of 'Arcology' - architecture and ecology - (Soleri [sa]), when a natural organism (like a community of people) evolves it becomes a more compact and complex system. In the case of marginalised groups, it is possible that the groups form a collective identity through development. A few questions arise regarding this concept:

a. In an existing marginalised condition, how would the creation of an architecture of refuge support the establishment of a collective identity?

b. How will this have an effect on future development of the broken city? In other words, could the marginalised community transfer newly developed skills to a society post-disaster?

c. Could the investigation lead to a model for marginal communities worldwide (i.e. refugees etc.)?

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1.3. BROAD SCHEME

1.3.1. CONTEXTUALISING THE PROBLEM ON A GLOBAL SCALE

The world has experienced an increasing number of threats against humanity in the recent past. Although many of these threats are location specific, a few stand out that could have an effect on humanity on a global scale. As is quite clear, climate change, due to the alteration of our atmosphere caused by carbon dioxide gases and other pollutants, is one of the biggest threats to our world. If and when policies are ignored that aim to help the reduction of these effects, the problem could continue to exist for centuries to come.

On another level, it is evident to note that humans pose a threat to other humans. In recent global events, militant groups such as ISIS and other politically driven terrorist organisations pose a real threat to civilians all over the world. In these cases, the threat against humanity is larger than what is perceived by the public with little evidence of true intentions by these groups of people. Although it is a generalisation that only threats publicised by the media are a conscious reality, many concealed risks and threats are evident which have an implication on current global conditions. From 2008 the world population has also endured major economic decline causing underlying consequences leading to unpredictable circumstances such as increased inflation, petrol- and food price hikes to name a few.

The relevance of this information lies in the recognition of the act of destruction in many forms - socio-political, economic, natural and man-made.

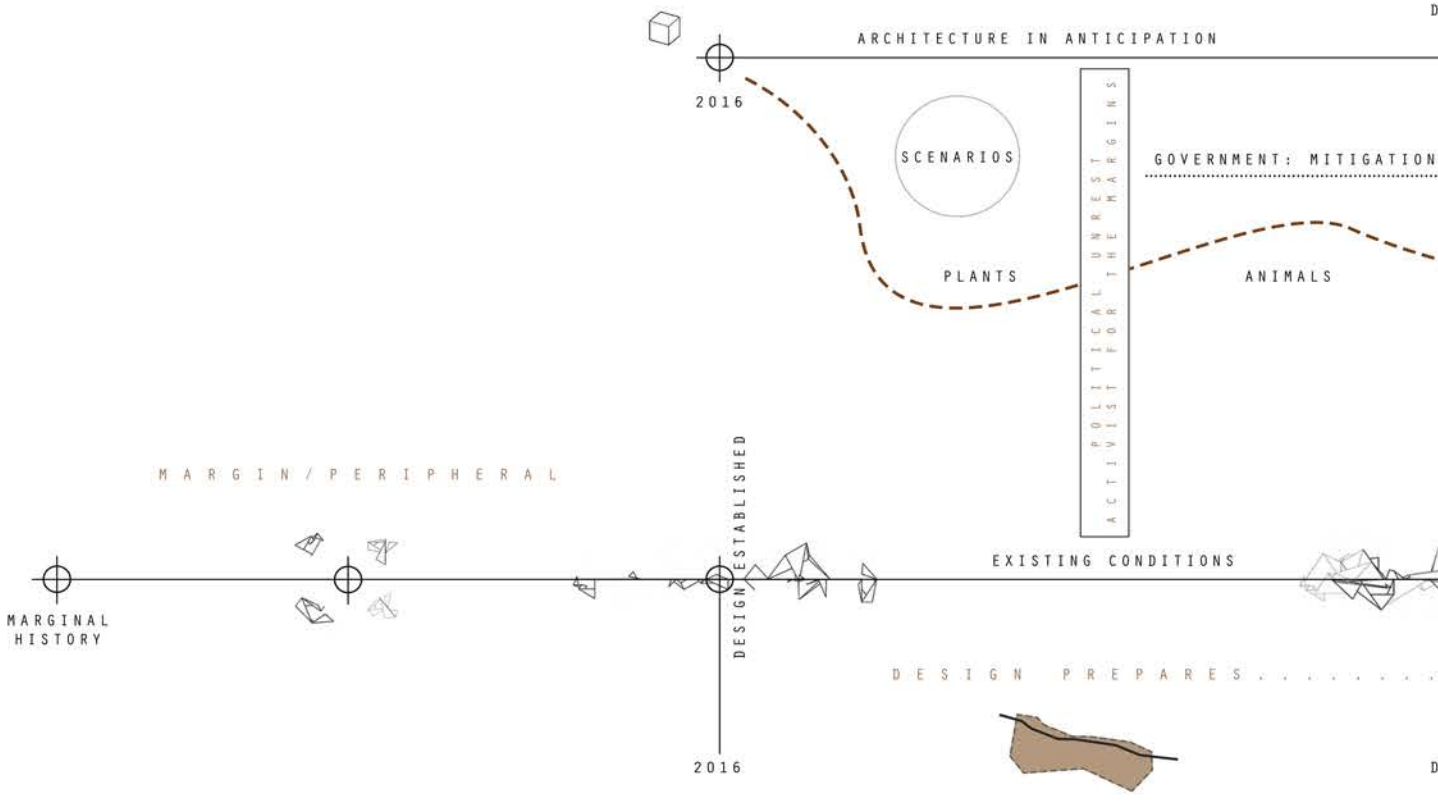

Figure 11: An illustration of the timeline of the project in relation to a broader scheme. (2016)

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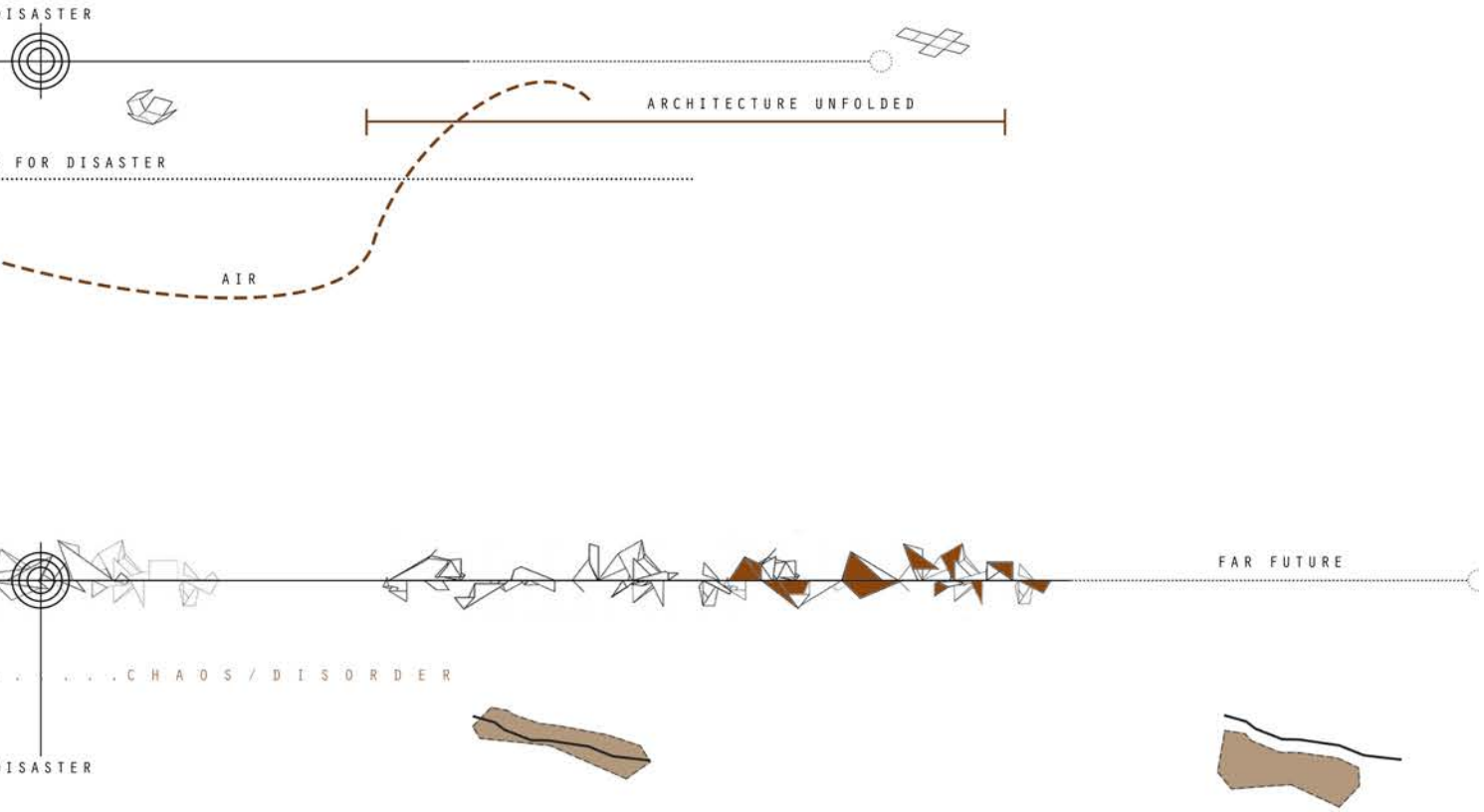
1.3.2. SOUTH AFRICA AS CONTEXT - CURRENT STATE OF THE PROBLEM

To contextualise the dissertation within the global scale (*refer to Figure 7 below*), elements such as water, plants, animals, air, the human condition and disaster mitigation are relevant in the context of South Africa and ultimately Pretoria.

With reference to an article posted on the Sunday Times website (City Press 2016) named 'Impact of water shortage in South Africa'; maize, soya bean and sunflower farmers alone have lost up to R10 billion this year due to the impact of drought. A report released by the UN's food and nutrition working group last month found this drought – the country's worst since 1992 – had caused a decline in maize production that had already led to an increase in food prices of 6.4% (City Press 2016).

Agricultural business chamber Agbiz CEO John Purchase stated that the drought – which had been hitting North West, parts of the Free State and the Northern Cape for the past three years – had already diminished the country's GDP. "Given its severity and prolonged nature, the economic effect will be, and is already, severe. The latest poor and disappointing GDP figures for agriculture are indicative of the drought impact," he said. "Agbiz expects quarters 2 and 3 GDP figures to look even worse, as the full extent of the drought is only then reflected in the GDP figures (City Press 2016)."

There is no doubt that economic, political and social implications impact people's livelihoods directly. Unfortunately these circumstances are unpredictable and people are forced to survive in any way possible. For an average working person the cost of living has increased tremendously while salaries remain the same. The margin that exists between the two conditions does not decrease unless additional financial stability is seeked. If an average individual experiences such pressure to survive, it can only be emphasised that a marginal person endures even greater pressure in an unstable society.



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1.4. DELIMITATIONS

1.4.1. DELIMITATIONS OF THE DISSERTATION

The setting for the investigation is placed on a timeline. The timeline aims to represent a consciousness of past, present and future conditions in order to conduct a thorough study and determine comprehensive responses.

Although it is suggested that a disaster will occur, this investigation does not deal with an apocalyptic future. Instead current socio-political unrest and the rapid depletion of resources sets the scene for anticipation of such an event. The dissertation takes into account the merit of scenarios as a valid design informant.

The argument for the proposed architectural intervention is structured around a response to current conditions in anticipation of future conditions, therefore the proposed building is to be 'built' in 2016/2017. Further alterations of the 'building' or site may occur based on future scenarios: firstly the building becomes a ruin; the site becomes an isolated sustained community; and lastly the intervention is a catalyst for the rebuilding of the city.

Figure 12: An illustration of a marginalised position. [sa]

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1.5. BEHAVIOUR AND THE LANDSCAPE

1.5.1. THE EXPERIENCE OF LANDSCAPE - JAY APPLETON

In his book *The Experience of Landscape* (1993:2) Appleton suggests a rather apt analysis of the link between a landscape (natural or built) and human behaviour. It is in his opinion that landscape forms the backdrop to all human activity and is instrumental to literary history. Appleton explains that there are different ways of viewing a landscape - firstly the interest may lie in the interpretation and explanation of a landscape itself and secondly in the way we look at it. It is then suggested that two types of studies of landscapes exist namely artistic study or scientific study. It may be argued here that architectural investigations lie inbetween these realms of study.

One of the principle reasons for Appleton's enquiry into landscapes is recognising why environments are so significant to human behaviour. In other words, why do certain landscapes feel safer than others?

In the context of this study it can be assumed that a consciousness of the current and possible future environment is appropriate based on the fact that a future condition is suggested. Appleton postulates that during the 20th century, the awareness of the environment was *aroused by the discovery that we (the human race) are polluting it at such a rate that the survival of some species is already in doubt, and that we ourselves could be numbered among such species in the not-so-distant future (Appleton 1993:3).*

The biological behaviour of human beings determine which environments are more appropriate for refuge than others. The basis of this theory relies partly on the selection of site to provide a relevant response to seeking refuge and safety.

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1.5.2. SELECTION OF SITE

To refer to the premise that the 'Mavericks' aim to seek refuge, the process of site selection was based on Jay Appleton's postulated theories of prospect and habitat (Appleton 1993). Criteria for the selection of a site had to adhere to all biological needs of a human being as well as the need to observe without being seen.

The environment should:
- Have a biodiverse landscape.
- Be close to a source of water.
- Be located on the periphery of the city.
- Be at a higher elevation than that of the CBD of Pretoria for surveillance purposes.
- Have views to observe the surrounding context.

The location of site will now be introduced briefly to contextualise the rest of the argument.

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1.6. SITE/SIGHT OF REFUGE

1.6.1. SITE LOCATION

The proposed site is located along the Langeberge Ridge on the periphery of the CBD of Pretoria. The image below aims to illustrate the site in relation to its macro context (Figure 9). Although the physical and historical context will be discussed later in this document, it is noteworthy to mention that the proposed intervention relates to functional and aesthetic aspects of the forts of Pretoria. Therefore the positions of the forts are also allocated below. In reference to the theory of prospect and refuge, the site was initially selected mainly for its latent potential, views and topography. Further discoveries will be discussed at a later stage.

PROPOSED SITE IN RELATION TO MACRO SITE

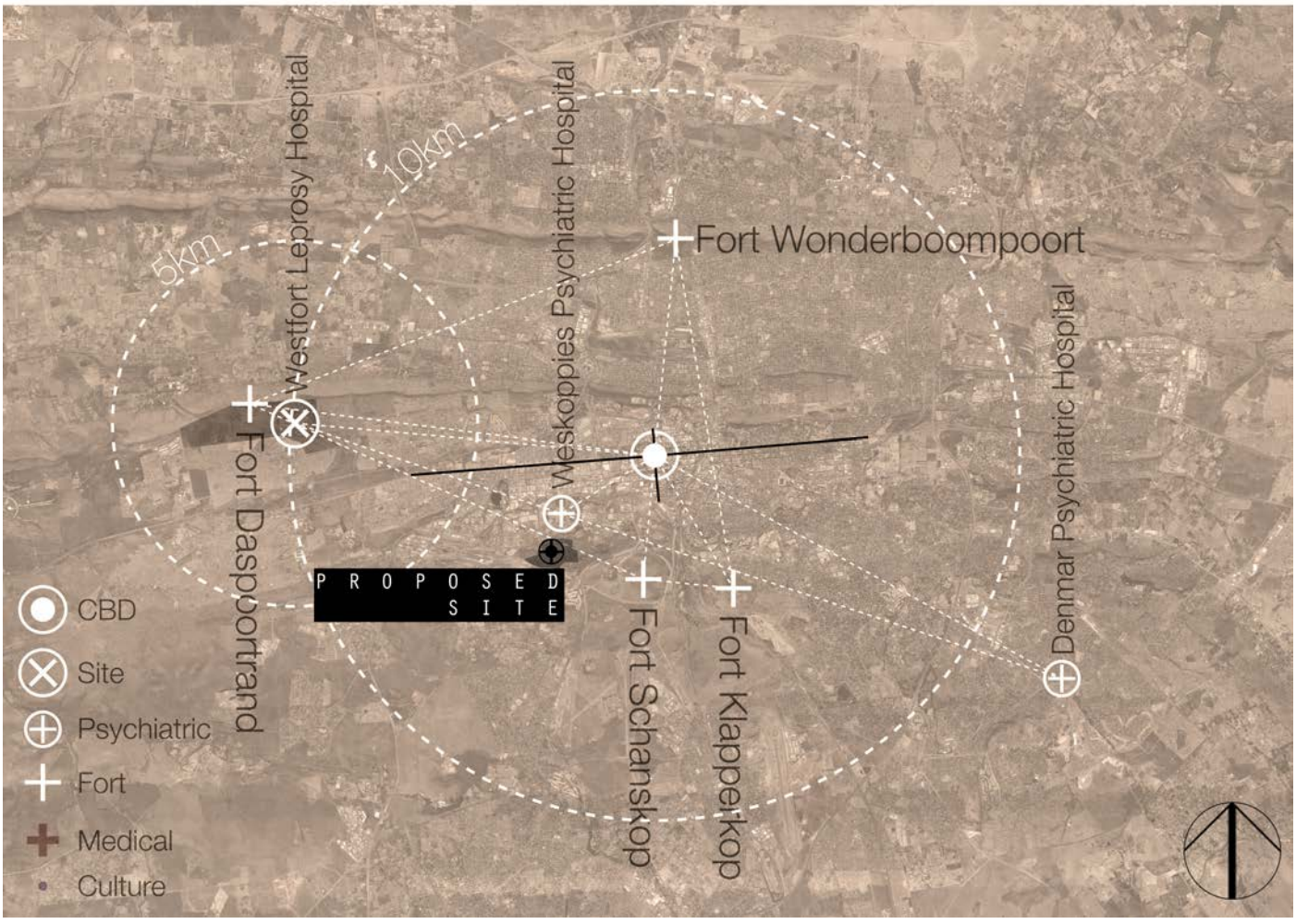

Figure 13: Image of the location of the proposed site in relation to its macro-context. (2016)

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Figure 14: Proposed site in relation to meso site. (2016)

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1.6.2. SITE EXPERIENCE

Figure 15: Photographs taken at different locations on the ridge. (2016)

Based on the initial site selection process, one cannot immediately comprehend the experience brought forth by the act of exploration. It was therefore important to document different site conditions on the ridge as part of a practical analysis study (plants, geology) as well as a theoretical aesthetics study of the environment (views, surveillance, isolation).

With observation or 'sight' as one of the conditions to adhere to regarding refuge, the environment of the ridge also calls attention to other refuge related conditions such as a nearby water source (reservoirs) for future use.

Refer to Figure 10:

1. Panoramic view from the top of the ridge
2. Existing dilapidated pumphouse structure
3. Water reservoir (municipal)
4. Forest-like environment
5. Found objects
6. Plants
7. Existing stream of water possibly from an aquifer.

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Figure 16: Photographs taken at different locations on the ridge. (2016)

2.

3.

4.

5.

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Figure 17&18: Panoramic photographs taken from the top of the ridge. (2016)

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1.7. PROBLEM STATEMENT

In a previously marginalised society, disadvantaged or marginalised people (the 'Mavericks') are situated in conditions with little or no control over their environment. This assumption is made by merely observing general conditions in which the characters find themselves:

1. A prisoner - Prison environment.
2. An elderly person - Old age home or family home.
3. A mentally disabled person - Psychiatric facility.
4. A physically disabled person - Home (with assistance) or rehabilitation facility.
5. A homeless person - Homeless shelter or streets.

The spatial conditions stated above are problematic due to the fact that they only facilitate the provision of certain needs at a specific time. If a disaster were to occur in the city of Pretoria, the current environments that the marginal inhabit would prohibit them from being safe and cared for.

If the assumption is that the existing condition does not improve quality of life (and perception), how can a new architectural typology achieve this and how is the value of the marginal community useful in the greater society?

1.7.1. GENERAL ISSUE

The issue of identity, experienced from the margins, is key in the negotiation of architecture and the human condition. The general context of the study will therefore demonstrate a contested relationship between mind, body and architecture.

According to David Bathory (1993:5), during the early stages of human development, the psychological presentation of the self is a defenceless, passive observer who is unable to take action or alter the trauma experienced during a momentary event. Natural defence mechanisms occur such as regression, denial in fantasy, dissociation and sublimation (Psychoanalytic and Jungian theory in Bathory 1993). A similar position is argued for marginalised people in this dissertation based on the trauma they have to endure on a daily basis. Thus they are passive observer in society - unseen and undervalued.

In addition to an altered physical self, a distortion of space-time manifests, as the self, strives to evaluate the damage and re-establish a physical location of 'its' body in space. Resilience of the marginalised people is necessary as it determines the survival or destruction of the mind-body relationship as well as the position in space and time. The position in space implicates architecture directly as the proposed intervention needs to provide resilience.

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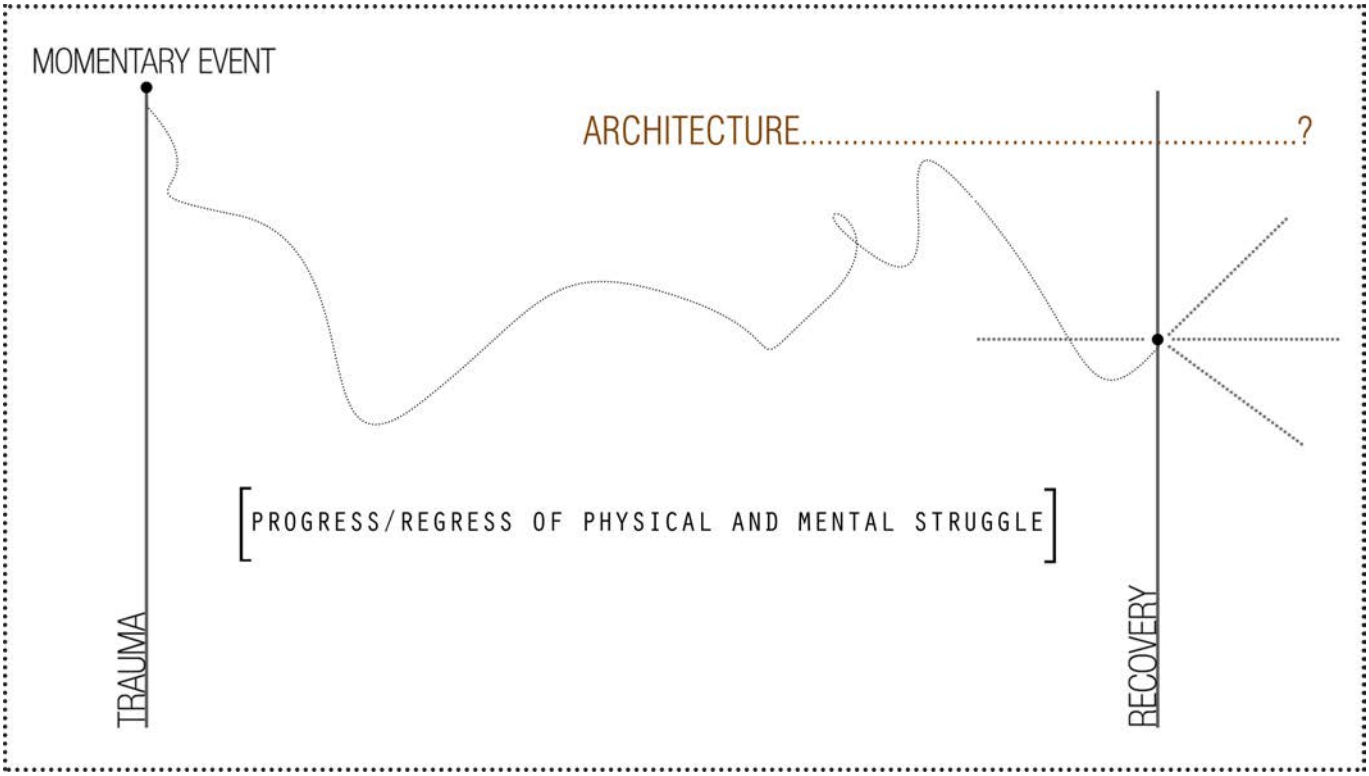

Figure 19: Diagram illustrating the synthesis of the problem statement. (2016)

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1.7.2. ARCHITECTURAL ISSUE

The relationship of mind-body-architecture is a reference to how architecture or built-form is experienced and perceived. In this study it is suggested that a contested relationship exists between psychological and physical aspects of human nature. It is thus not only of importance to recognise what effect architecture has on perception, but to determine how the marginal community can regain their identity through this relationship.

Part of the investigation of identity, will be to recognise that architecture cannot change belief. It can however assist in justifying a position and collective identity of a marginalised population (the 'Mavericks') due to the collective contributions provided by different skillsets of the characters.

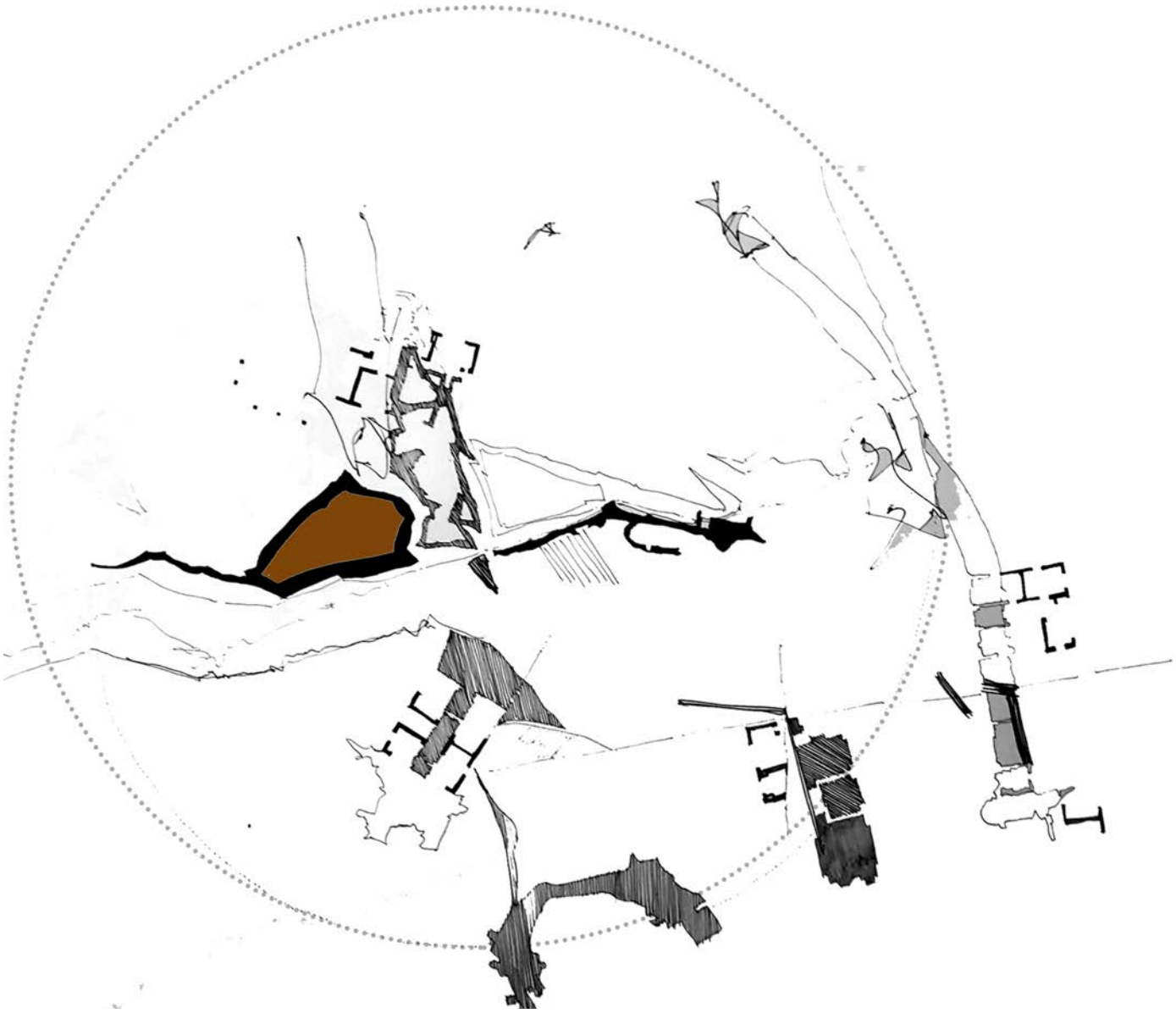

Figure 20: Abstract image of the fragments of the mind and body. (2016)

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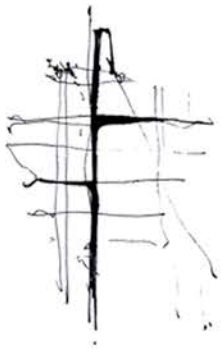
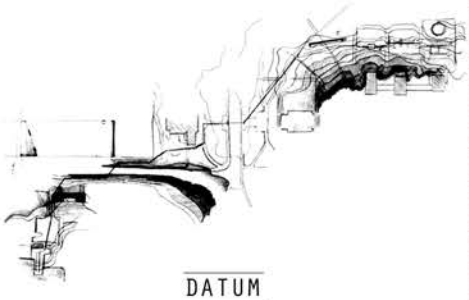
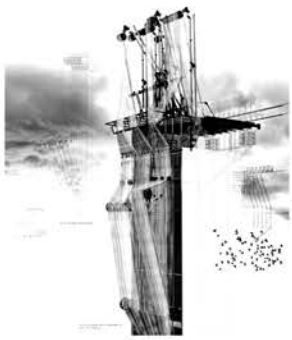


MERGING MARGINS



DATUM

HIDDEN/ISOLATION



RESILIENCE/SUSTAINING

1.7.3. ARCHITECTURAL OBJECTIVES

- To create a new condition that could improve the mental state of marginal people (upliftment).

- Introduce a new typology for the purpose of preservation and refuge; to survive and start a new community that is valued.

- To design a robust structure that could withstand disaster with the possibility of being adapted after disaster.

- To prove the necessity of a structure to enable the marginal people to develop their skills for a better future.

Figure 21: Different ideas are illustrated here that pertain to the architectural devices used during the investigation. (2016)

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