ME[A]TING THE BEEF BAR

A butchery, meat market and informal restaurant as catalyst for socio-economic opportunity and permanence.

The dissertation investigates how architecture can strengthen Marabastad's urban fabric and encourage permanence through the critical observation of the underlying formality within informal networks.

Dominique Peel || Department of Architecture || University of Pretoria

© University of Pretoria

ME[A]TING THE BEEF BAR

A TYPOLOGY FOR INFORMAL SOCIO-ECONOMIC PUBLIC SPACE

Dominique Peel

Year co-ordinator: Dr. Arthur Barker
Study leader: Neels van Rooyen

Submitted in fullfillment of part of the requirements for the degree MArch(Prof)
Department of Architecture
Faculty of Engineering, Built Environment and Information Technology
University of Pretoria

South Africa

Tshwane 2015

© University of Pretoria

FOR MY PARENTS MIKE & CLOTILDE

Thank you for your unwavering faith in me and your endless love

© University of Pretoria

THANKS

To my brother, Nick, for always knowing exactly how to make me laugh

To Dean for being my pillar of strength and my helping hand

To Dressa for being my little miss sunshine

To Rik & Clauds for your friendship & mentorship

To Cath & Toni for the final touches

© University of Pretoria

AKNOWLEDGMENTS

To Neels for your commitment, support & reassurance

To Arthur for showing me what it is to be passionate about architecture

© University of Pretoria

PROJECT SUMMARY

Programme: Beef bar, butchery and meat market

Site description: 11th street, formal shops on the west of 11th street and informal vendors on a fenced off site east of 11th street.

Site location: Marabastad, City of Tshwane

Address: 11th street, south of Belle Ombre Metro Station, west of the sub-station.

GPS co-ordinates:
25°44'20.84'' S
28°10'42.84'' E

Research field: Human settlements & Urbanism

Keywords: Socio-economic activity, Informality, Self-organisation, Resilient & adaptable architecture, Place making, Social cohesion

© University of Pretoria

DECLARATION

In accordance with regulation 4[e] of the General Regulations [G.57] for Dissertations and Theses, I declare that this 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 Dissertation is substantially my own work. Where reference is made to the work of others, the extent to which the work has been used is indicated and fully aknowledged in the text and list of references.

Dominique Peel
2015

© University of Pretoria

TABLE OF CONTENTS

ME[A]TING THE BEEF BAR 2
ABSTRACT 7

1 | INTRODUCTION 9
1.1 | BACKGROUND 11
1.2 | GENERAL ISSUE INTENTION 16
1.3 | URBAN ISSUE & INTENTION 19
1.4 | ARCHITECTURAL ISSUE & INTENTION 23
1.5 | PROBLEM STATEMENT 28
1.6 | SUB-PROBLEMS 28
1.7 | RESEARCH QUESTIONS 28
1.8 | PROJECT INTENTION 28
1.9 | HYPOTHESIS 29
1.10 | RESEARCH METHODOLOGY 29
1.11 | DELIMITATIONS & ASSUMPTIONS 29

2 | CONTEXT 31
2.1 | HISTORY 32
2.2 | RESULTANT MARABASTAD 36
2.3 | MAPPING 38

3 | URBAN VISION & FRAMEWORK 53
3.1 | URBAN VISION 54
3.2 | FRAMEWORK PROPOSAL 56

4 | THEORETICAL DISCOURSE 69
4.1 | URBAN APPROACH 70
4.2 | ARCHITECTURAL APPROACH 72

5 | SITE & PROGRAMME 89
5.1 | SITE 90
5.2 | SITE REQUIREMENTS 90
5.3 | PROPOSED SITE 93
5.4 | SITE ANAYLSIS 98
5.5 | PROGRAMME 104

6 | PRECEDENT STUDIES 113
6.1 | URBAN CASE STUDY 114
6.2 | PROGRAMMATIC PRECEDENT STUDIES . . . 120

7 | DESIGN CONCEPT & INFORMANTS 129
7.1 | CONCEPT: RESPONSE TO THEORY 130
7.2| PROGRAMME INFORMED 134
7.3 | SITE INFORMANTS. 135

8 | DESIGN DEVELOPMENT 139

9 | TECHNICAL RESOLUTION 173
9.1 | URBAN & ARCHITECTURAL CONCEPT 174
9.2 | STRUCTURE 175
9.3 | SUSTAINABILITY & NATURAL SYSTEMS . . . 176
9.4 | MATERIALITY 179
9.6 | CONSTRUCTION. 181
9.7 | TECHNICAL EXPLORATION 182

10 | REFERENCES 201
LIST OF FIGURES 202

© University of Pretoria

ABSTRACT

This dissertation will investigate Marabastad's resilience and how its loose urban fabric and informality has enabled it to survive despite the continuous strain placed on it by physical, social, economic and cultural change. Its autocratic domination by transport and retail networks has resulted in its transitory nature. Marabastad's connection between Tshwane city and its surrounding informal settlements has been the reason for its existence and success as a transport node and retail hub.

The increased growth and establishment of informal settlements has resulted in the development of mini economic, social and cultural nodes on the outskirts of the city and this decrease in economic reliance on Marabastad as a transport node has placed strain on its economic viability.

The dissertation will investigate how architecture can be used as a tool in generating catalysts within Marabastad -reducing its transitory nature and encouraging its permanence. Through the spatial and functional observation and investigation of existing networks and the potential of these, architecture can provide variety and permanence within Marabastad, strengthening its urban fabric and enabling it to sustain itself and be resilient in the future.

Marabastad, rather than being a place of temporality, should be a destination and an anchor point, ensuring its relevance and necessity by identifying and activating new opportunities and in doing so strengthening existing networks. Independent from that of the CBD and the surrounding informal settlements.

© University of Pretoria

1 | INTRODUCTION

© University of Pretoria

Marabastad with its colourful, yet complex history, diverse multi-culture, transitory nature, vibrant and erotic economic opportunity and a future which challenges all of these, has a fragile urban fabric within the City of Tshwane that needs to be preserved. This unique urban fabric which reflects heritage of African, Asian and European influences has been resilient to physical, economic, political and social and cultural change. It has also withstood the juxtapositions of growth and demolition; cultural cohesion and physical segregation; social exclusion and economic inclusion, provisional connectedness and physical isolation; possibility and precariousness.

© University of Pretoria

1.1 | BACKGROUND

1.1.1 BRIEF HISTORY

Marabastad developed North West of Pretoria (now The City of Tshwane) as the first location where Black people looking for work in the city, predominantly as labours, could reside. The area was primarily residential until 1892 when the Asiatic Market was established for Indian people to trade, own buildings & express their culture. In 1892 the "coolie location", South of the Asiatic Bazaar was established for the Coloureds.

The function of Marabastad changed after the first forced removals in 1945 when the Black population was moved to surrounding areas of Attridgeville, Shoshanguve and Mamelodi (Fig. 1.1). The forced removals were to make way for Indian businesses that had been moved out of the city centre by new legislation. Mixed use typology allowed Indians to trade in stores on the street edge and have residential units behind or above their shops. The Indian businesses acted as thresholds between the informal settlements and the city.

In 1957 The Group Areas Act enforced the removal of all residents from Marabastad, including the Indians. This resulted in Marabastad altering its character once more as it became a business district. The New Group Areas Act (1958) proclaimed the outskirts of Pretoria. Indians were relocated to Laudium and Coloureds to Eersterus. Where there was once cultural diversity and unity in Marabastad, the population was now socially segregated and physically dispersed.

In 1975 the Freeway scheme was developed and most of Marabastad was destroyed. The Freeway was never built and Marabastad became isolated and suffocated; cornered off on the North by the Delpoort sewage plant; on the East by the Steenhovenspruit, on the South by vacant land and the cemetery and on the West by Es'kia Mphahlele Drive (former DF Malan) motorway.

In 1981 with the establishment of the Belle Ombre Station (Fig. 1.2), Marabastad became an important transportation hub for Black migrant workers travelling to the city. Taxi ranks claimed previously occupied vacant land and informal traders lined the streets. A huge number of people moved through Marabastad to get to the city each day and retail and transport networks boomed.

Figure 1.1. Forced removals - 1945 & 1957 (Author 2015)

Figure 1.2. Belle Ombre Metro Station (Author 2015)

© University of Pretoria

1.1.2 THE INFORMAL SECTOR

Marabastad comprises of formal and informal transport and retail activity.

The informal network contributes largely to economic prosperity in South Africa. According to the World Bank, the informal sector is driven by its positive side effect of reducing the number of unemployed people and has the potential to not only create jobs but also increase the output of national economy (Meagher 1995). The informal sector constituess between 8 – 10 % of South Africa's economy with street trading being one of the biggest contributors to informal employment (Manning 1993; Rogerson 1996). The majority of informal traders, however, cater for low income groups and therefore have limited market potential. In Marabastad 94 % of hawkers are regarded as survivalist enterprise while only 6% fall into the growth enterprise sector (Brandt 2002).

Unemployment, inequality and environmental degradation remain prevalent problems in Marabastad two decades after Apartheid. The South African government has failed in reducing poverty, providing affordable housing, creating employment and reducing inequalities.

The informal sector is closely linked to the formal sector through production, distribution and service provision. Neither the public (government) sector nor the private sector have been able to provide enough jobs for the increasing population growth and as a result the informal sector is increasingly recognised as the alternative option for the growing unemployment.

South Africa has one of the highest unemployment rates in the world. Since January 2011, however, the informal sector has created 184 098 jobs compared to the loss of 26 098 jobs in the formal sector. The informal sector contributes 5% to South Africa's GDP - an average of R157 billion a year. The informal trade sector is the largest sub-sector with over 1 million people relying on it for employment. (Williams 2014)

The growth of the informal sector in South Africa is influenced by:

- an increase in black urbanization
- slow economic growth
- decrease in formal employment opportunities
- high unemployment
- expensive barriers of entry into the formal economy and
- increased demand for low cost goods and services. (Ndabeni 2013)

The most marginalized and vulnerable groups are driven by necessity rather than opportunity and as a result participate in survivalist enterprises as opposed to growth enterprises.

Informality is often disparaged as a defect in the system which poses a threat to the formal economy and which must therefore be suppressed, if not eradicated. This dissertation argues that the informal economy plays a vital role in the resilience of human settlements, especially in the face of poverty, unemployment and inequitable access to social services. (Ferreira 2013)

There is an urgent need to understand the informal sector within its historical, geographical, political and social context. In developed countries the informal sector is seen as a product of advanced capitalism, whereas, in developing countries the informal sector occurs as a necessity in reducing unemployment and poverty as indicated in Fig. 1.3. (Ndabeni 2013).

Efforts to improve the performance of the informal sector therefore needs to be seen for its potential contribution to South Africa's economy. Policy and infrastructural development can lead to the improved performance of the

© University of Pretoria

informal sector, however, often policy focus is on formalising the informal. This approach is often unsuccessful as it fails to recognise that many survivalist economic activities will not succeed within a formal environment. Informal activities should therefore be aknowledged and facilited for the role they play in increasing employment opportunities and reducing the vulnerability of the poor. (Ndabeni 2013)

The dissertation will explore how architecture can be a tool in creating enabling environments for the development and promotion of the informal sector.

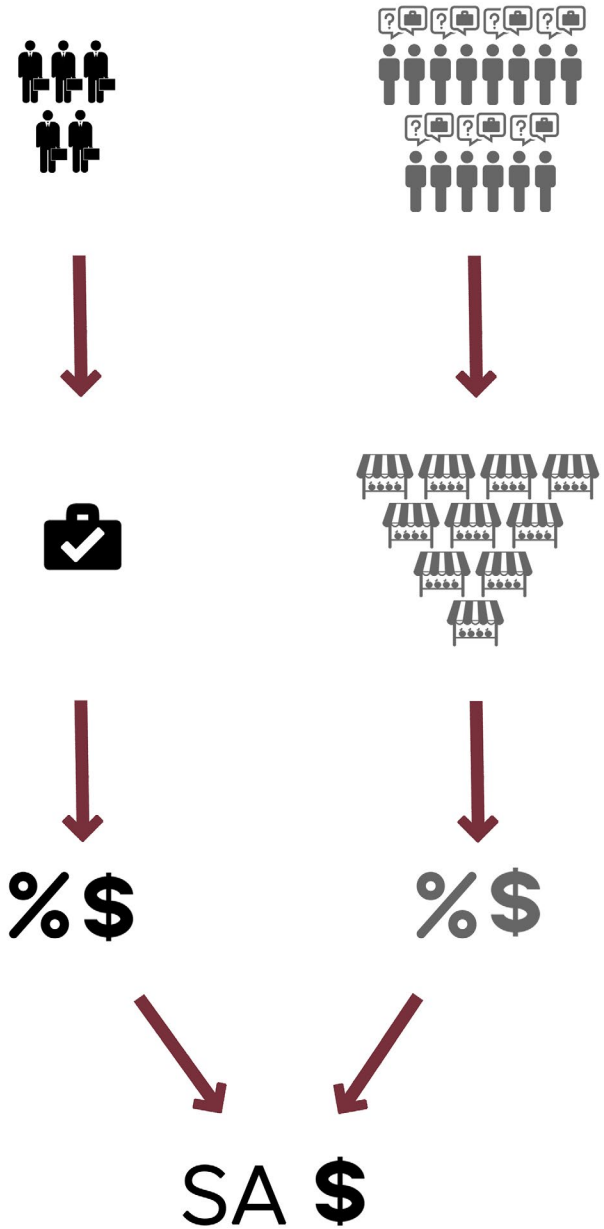

Figure 1.3. Informal sector as viable job creation and economic solution (Author 2015)

© University of Pretoria

1.1.3 THE 'RIGHT' TO THE CITY

The 'right' to the city was established on racial terms that in turn made it clear as to exactly what the city should be and who it should include. Settlement, removal and re-insertion of black people and how they adapted to particular conditions generated an impact on how the city was spatialised (Keith 2005) (Fig. 1.4). Lefebvre indicated that the demographics of settlement patterns, the spatial economies of livelihood and service provision or lack thereof pointed to the methodical construction of segregation as a fundamental urban reality. (Massey & Denton 1993). Colonisation does not refer simply to a specific historical era of territorial expansion but to a process of organising spatial arrangement in terms of core and periphery (Simone 2012:47).

We live in a time of unprecedented change marked by fragments of history and impatient demands to conform to these changes. In post-apartheid, South Africans of all races have been drawn to the city seeking economic opportunity. Exponential population growth is coupled with failure by government to acknowledge the permanence of the Black community in the city by the City Council of Pretoria resulted in the lack of economic opportuniy, maintenance and provision of adequate services within informal settlements and places like Marabastad (Fig. 1.5). Urban areas have not been able to meet their needs of housing and employment within formal infrastructure frameworks (Burdett & Sudjic 2007). This has led to the development and growth of both informal settlements and the informal economic sector (of which the majority of the lower class population rely). Informality, however, is often seen in disparity to formality as it is seen to hinder formal development.
The dissertation will explore how connections can be made between the formal and informal that circumvent the dominant histories, frameworks, and policies that have clearly resulted in Marabastad's haphazard and decaying urban environment as well as its isolation from the city (Simone 2012:47).

A suitable architectural approach can play an important role in the development of such communities which have learnt to survive by being adaptable through an optimistic and opportunistic approach. By identifying opportunities for development informed by the informal, communities can be provided with platforms that enable them to not only survive, but through active participation thrive.

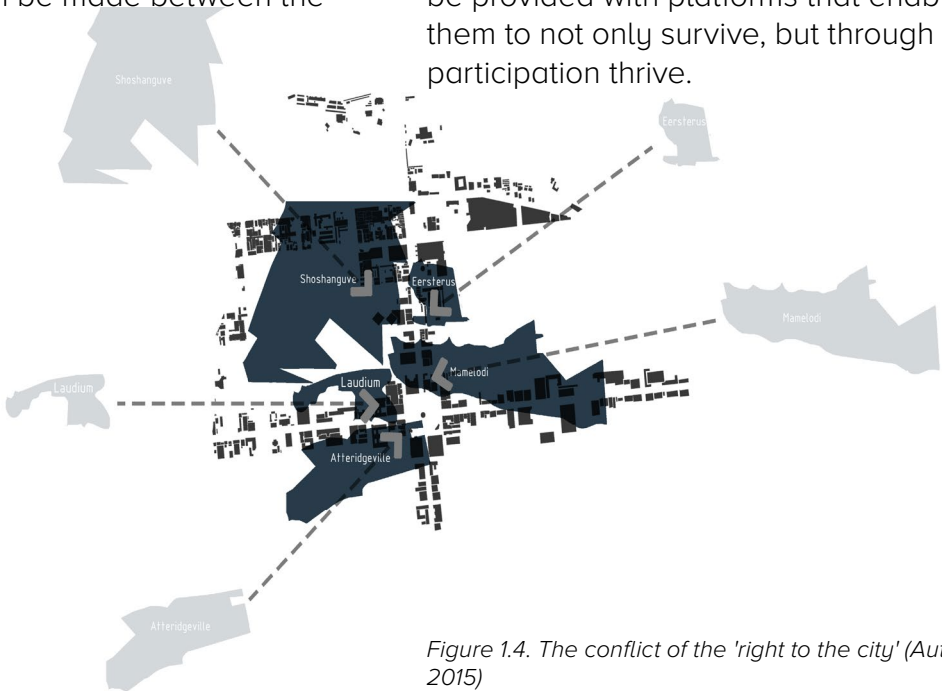

Figure 1.4. The conflict of the 'right to the city' (Author 2015)

© University of Pretoria

Figure 1.5. We won't move (Jurgen Shadeberg)

© University of Pretoria

1.2 | GENERAL ISSUE INTENTION

1.2.1 | GENERAL ISSUE:

Failure to provide opportunity for growth & development of the informal.

Disturbances like informality, environmental degradation and urban poverty impact on all countries to some extent, however Africa is one of the continents most at risk since it is experiencing high rates of urbanisation within the context of pervasive poverty and inequality (Peres & Du Plessis 2013).

Continuous physical, economic, social and political strain on Marabastad has resulted in a resilient community that has survived due to its opportunistic culture and persistent adaptability.

Failure of formal job creation resulted in the determination to make maximum use of the opportunities that were available (Belle Ombre, Fruit & Veg Market to name few). The development of informal trade and transport networks established themselves on the energy of pedestrian movement generated as a result of The Belle Ombre Station in 1981.

Growth and development of the formal sector and its failure to recognize and acknowledge the economic necessity of informality as a survivalist strategy, hindered the opportunities inherent within the informal. Marabastad's urban fabric facilitated by Belle Ombre adapted as best it could to accommodate the temporal and transient nature of the dominating informal trade and transport networks.

The lack of adequate infrastructural support and service provision for existing and potential new informal networks subsequently led to the exploitation of existing conditions. An augmented number of people seeking economic opportunity within Marabastad led to the saturation of informal trade and transport and a consequential decrease in economic opportunity; and the inapt occupation of heritage fabric* and vacant land which has contributed to urban deterioration and decay.

Insufficient economic opportunity in the city and failure to provide affordable housing lead to the rapid growth and development of informal settlements which increased economic independence of informal settlements from the city and consequential decrease in people moving through Marabastad to the city each day. Marabastad's significance as a transitory and temporary place coupled with its haphazard urban condition not only threatens the degradation of its historical urban fabric and natural environment but also the livelihoods of those who rely on Marabastad for social and economic opportunity.

What will Marabastad's role within thid context be when its dominant trade and transport networks (Fig. 1.6) are no longer sufficient to sustain it and its urban condition is unable to facilitate the necessary change?

© University of Pretoria

DOMINATING TRADE & TRANSPORT

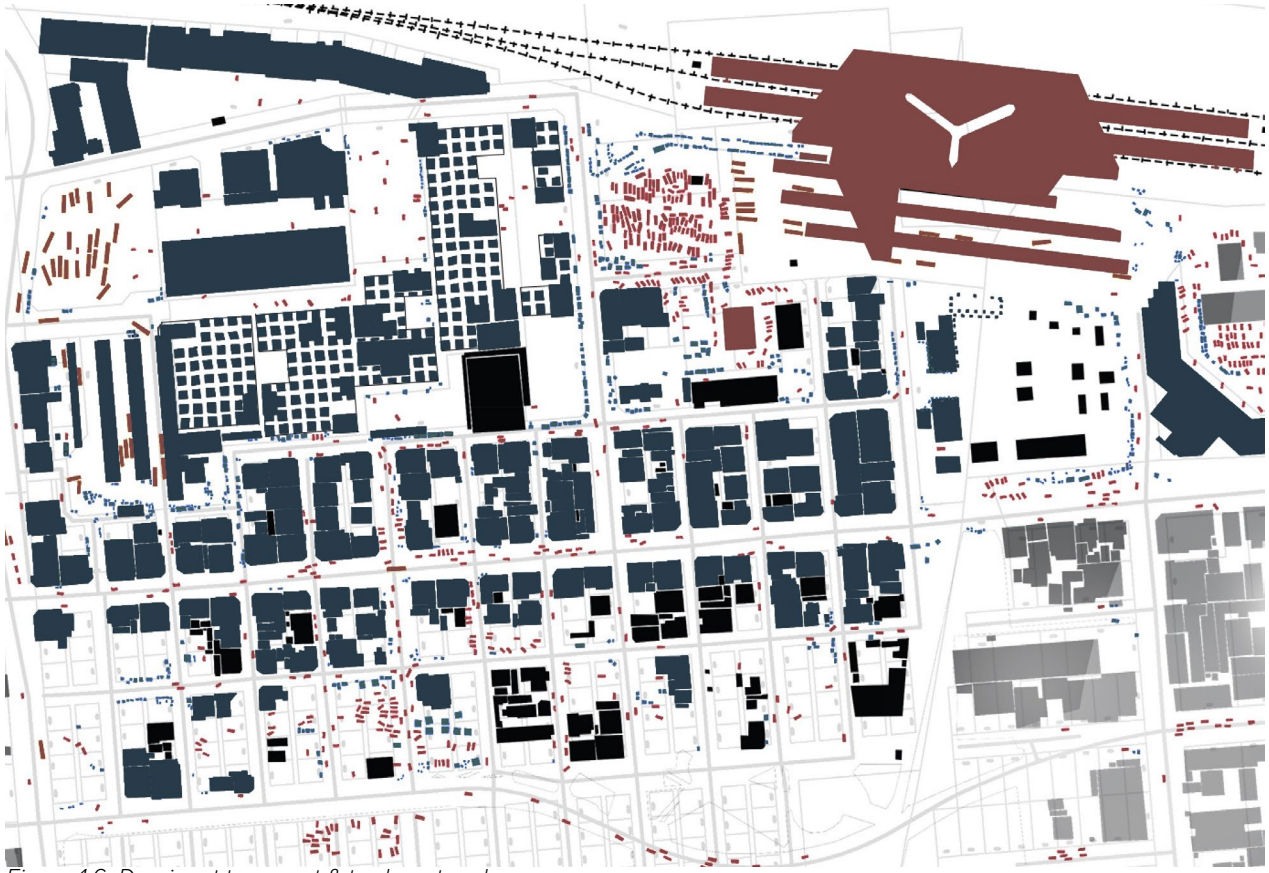

Figure 1.6. Dominant transport & trade networks (Author, Degenaar, Oberholzer 2015)

Figure 1.7. Dominating transport network (Author 2015)

Figure 1.8. Dominating trade network (Author 2015)

Figure 1.9. Urban & environmental decay (Author 2015)

© University of Pretoria

1.2.2 | GENERAL INTENTION

The dissertation will investigate Marabastad's resilience and how its loose urban fabric and informality has enabled it to survive despite the continuous strain placed on it by physical, social, economic and political change.

The intention is to facilitate and encourage the development, growth and prosperity of existing networks (Fig. 1.10) while also encouraging programme diversity by introducing new networks. Promoting diversity will strengthen existing networks and provide a sustainable solution to the lack of 'formal' economic opportunity (Fig. 1.11). Informal networks are opportunistic and adaptable allowing them to remain resilient through their ability to change according to present needs.

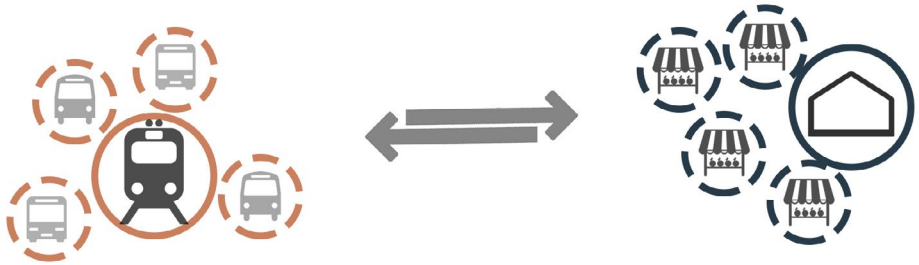

Figure 1.10. Dominant transport and retail networks are vulnerable as they rely on eachother for survival

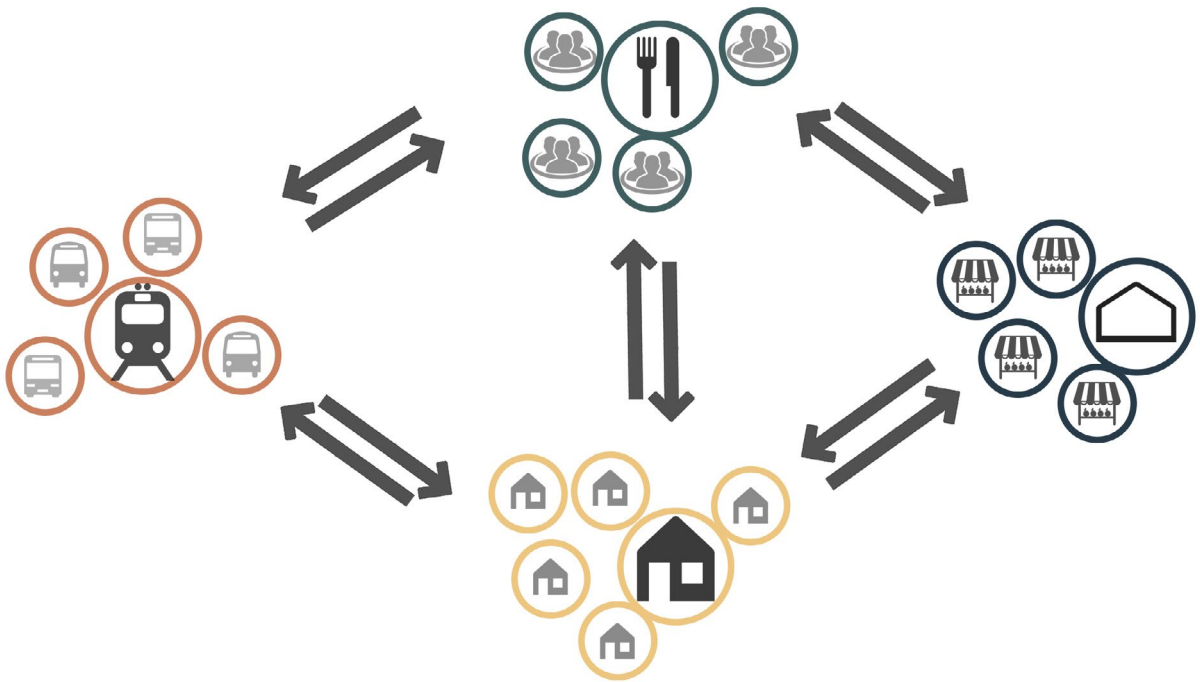

Figure 1.11. Introducing new programmes increases diversity and strengthens existing and new networks (Author 2015)

© University of Pretoria

1.3 | URBAN ISSUE & INTENTION

1.3.1 | URBAN ISSUE

Understanding the dynamics of change and the rate at which change occurs assists to manage or regenerate parts of the urban system within rapidly urbanising South African cities (Peres & du Plessis 2013).

Since the establishment of a democratic South Africa in 1994, the country's major cities have been experiencing an influx of migrants from rural areas and neighbouring African countries, into 'townships' and informal settlements on municipal lands (Soggot & Amupadhi 1997). Within the Apartheid city planning strategy, racial segregation occurred by the deliberate separation of white, coloured and black neighbourhoods usually by geographic features, industrial areas, or large distances (Peres & Du Plessis 2013).

Urban segregation remains a powerful dynamic and there is huge importance in transforming the objectifying and alienating spatial arrangements on the periphery of urban life that racial and cultural encounters produce. To bring black urbanities into the mainstream of normative urban development, however, is to assume that what the city had once excluded could now be easily included.

Situated on the periphery of the urban core and physically isolated from the city by an industrial buffer zone, Marabastad fosters the migratory labour system between informal settlements and the city each day (Davies 1981). Informal settlements and places like Marabastad played a crucial role in the formation of the apartheid city and embodied the complex process characterised as functional inclusion, spatial separation and political exclusion (Chipkin 1998). Marabastad's urban fringe condition has been born from that of simultaneous inclusion and exclusion - where the city refuses physical integration with Marabastad but remains dependent on it as a buffer zone and transport node between informal settlements. A symbiotic relationship* exists between Marabastad and City where Marabastad has become a transitory place for those entering and exiting the city and therefore Marabastad's informal trade and transport networks benefit economically from the huge number of people moving through it each day (Fig. 1.13). Marabastad's development as a transient and temporary place means

Figure 1.12. Urban segretation defined by core & periphery (Author 2015)

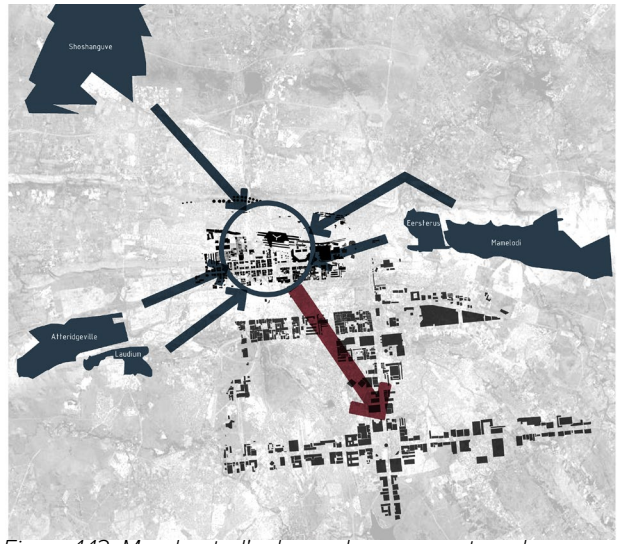

Figure 1.13. Marabastad's dependence on external energies between the city & informal settlements (Author 2015)

© University of Pretoria

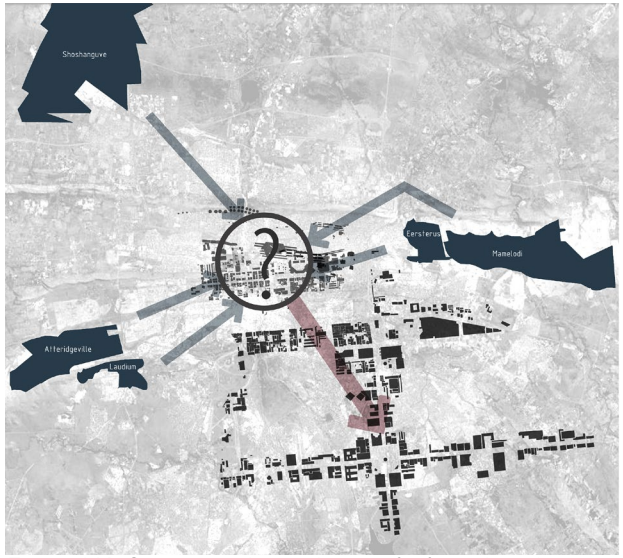

Figure 1.14. Growing independence of informal settlements threatens Marabastad's role within the City (Author 2015)

Figure 1.15. Marabastad as destination within the city (Author, 2015)

that it relies on external energy generated by the relationship of informal settlement to the city for survival. Failure to provide infrastructure has led to stagnant socio-economic opportunity and the decay of Marabastad's urban fabric.

The role of informal settlements has changed hugely in the last decade, however. The growth of the city has not provided affordable housing for the lower income groups and therefore informal settlements have been adopted and accepted as the next housing typology (Rustagi 2014). Where informal settlements used to be mere stepping stones to the opportunities of the city, failure of the formal to provide adequate economic opportunity has resulted in the growth and establishment of the informal sector to provide economic stabiliy. An increase in economic opportunity within communities such as Mamelodi, Attridgeville, Shoshanguve, Laudium and Eersterus has created platforms for socio economic development which resulted in a higher degree of self-sustenance and independence from the city.

The decrease in Marabastad's significance as a transport node and retail hub threatens its dominating networks and exposes Marabastad's dependency, lack of permanence and lack of diverse programme. As the relationship between informal settlements and the city weakens, Marabastad's relevance as a connection is questioned - its role within the city inevitably needing to change (Fig. 1.14).

South Africa is a country which has yet to regenerate its cities into integrated environments. South African cities are characterised by complex and rapidly evolving environments within which the ideological legacy of past Apartheid planning still influences the functioning of the city, and where the new political regime has yet to inclusively repair and integrate the gaps left in the city fabric. (Peres & Du Plessis 2013). In its very physicality the city has been largely disjoined and deprived of an overarching institutional logic able of tying its heterogeneous members together in some conviction of common belonging or reference (Simone 2012:33).

Marabastad's fine urban grain has allowed it to be extremely susceptible to change which has enabled its resilience to physical, economic, social and cultural change in the past, however, unless Marabastad anticipates its future role within its context and accommodates appropriately for this,

© University of Pretoria

the predicted growth and densification of the city will threaten the loss of Marabastad's tangible and intangible memory and history.

Rather than being a place of transition and temporality, Marabastad needs to be a destination and an anchor point within its context. Strengthening the interdependency between Marabastad and informal settlements and the city will ensure its relevance and necessity.

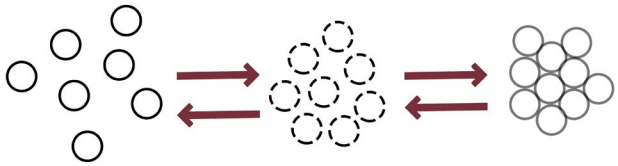

Figure 1.16. Urban issue: Transiency & temporality (Author, 2015)

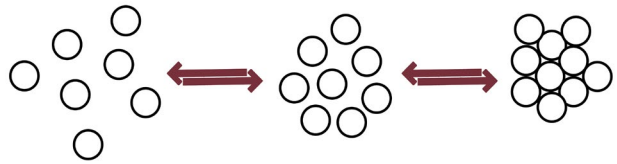

Figure 1.17. Urban intention: Permanence & interdependency (Author, 2015)

SUMMARY OF URBAN ISSUE

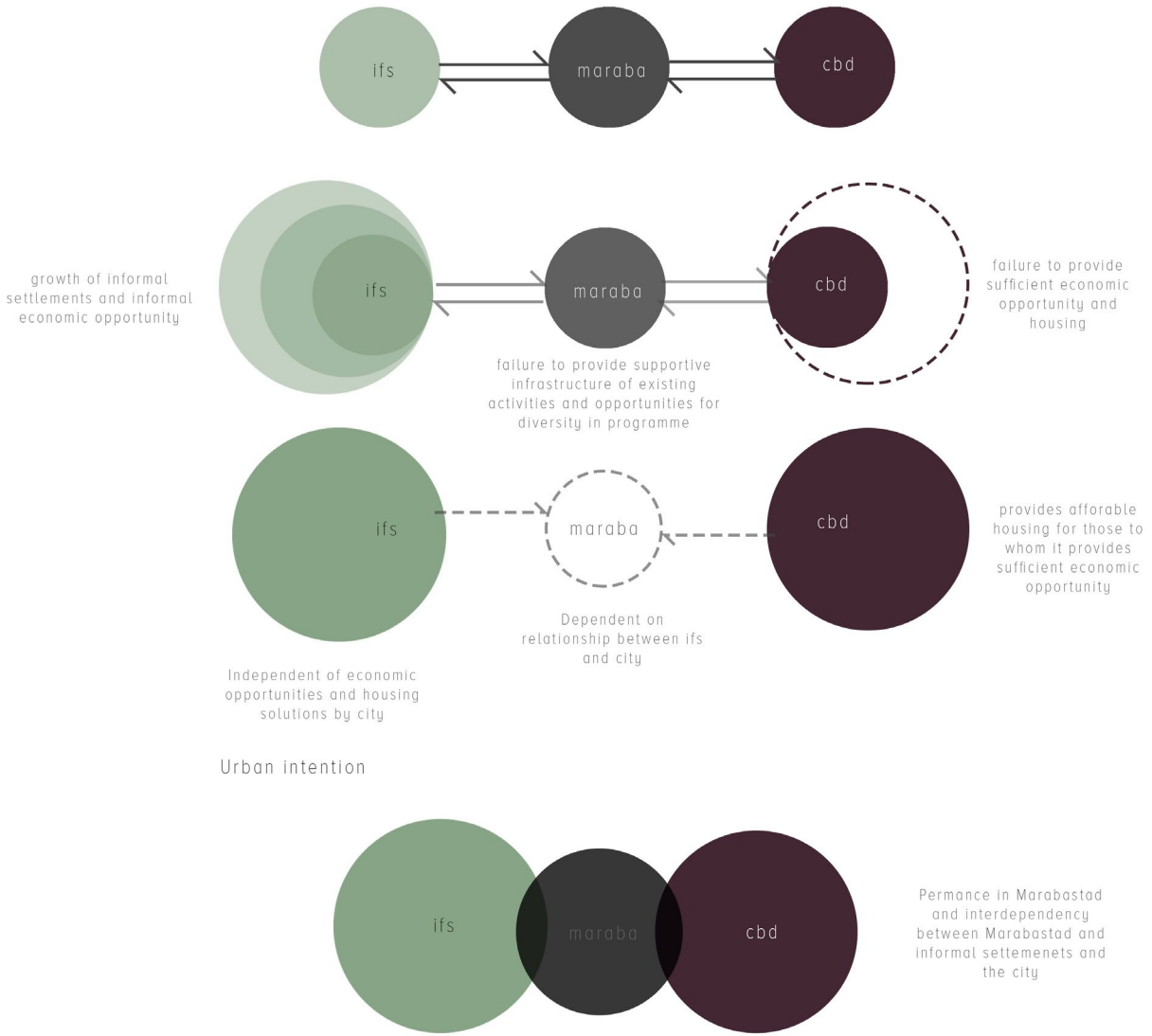

Figure 1.18. Urban issue summary (Author, 2105)

© University of Pretoria

1.3.2 | URBAN INTENTION

The precinct still holds opportunity in its heritage, location and its nature as a trade and transport hub.

The urban intention is to provide the necessary infrastructure that will enable existing informal networks to thrive as well as to create new platforms of engagements that will encourage diversity through the introduction of new programmes. This will promote Marabastad as a destination opposed to a transient place (Fig. 1.15). Strengthening its urban fabric through infrastructural support will uplift the urban condition and create a greater sense of permanence - endorsing Marabastad's contribution to its larger context.

Creating a sense of place within Marabastad will promote expression of identity and culture and expose it as a socio-economic and historically significant destination within the City.

Resolving urban issues of inaccessibility, limited infrastructure and urban decay within Marabastad will aid in creating inclusive environments and reduce the growing inequalities of access to economic and social opportunities.

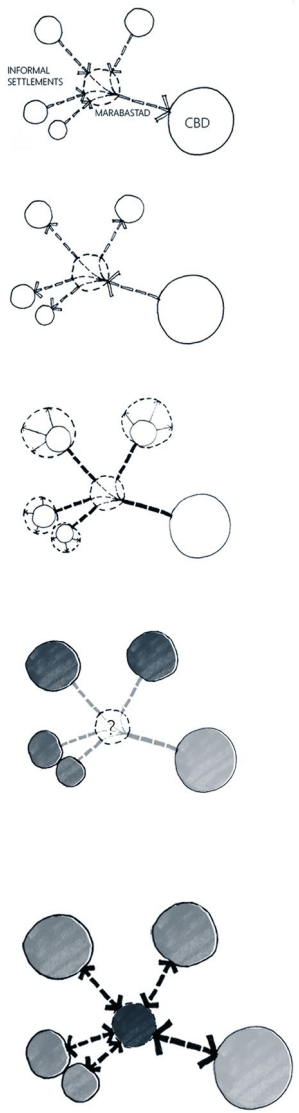

Figure 1.19. Marabastad as destination within the City (Author 2015)

© University of Pretoria

1.4 | ARCHITECTURAL ISSUE & INTENTION

1.4.1 | ARCHITECTURAL ISSUE:

Failure of formal development to acknowledge informality as an important development informant.

There is hostility by the formal towards informal growth and development in developing cities. Formal development often disregards the informal, their needs and the potential for their co-existence by:

1. Competing with the informal on unfair playing grounds [failure to recognise the potential of the informal to grow and establish itself and the possibility for co-existence] (Fig. 1.21).

2. Inhibiting the adaptability and opportunistic approach necessary for the survival of the informal resulting in the abandonment or appropriation of the formal intervention [failure to identify the real need and facilitate it] (Fig. 1.22).

3. Having no regard for the sense of place, eradicates the existing energy, identity and character of a place [failure to respond appropriately to the informal environment].

4. Eliminating the informal completely by replacing it with a new programme [Failure to recognise the importance and necessity of the informal networks within the economy].

As discussed in the introduction the informal sector occurs as a necessity in connecting urban areas to rural areas; increasing employment and improving the livelihoods of the impverished - who rely on it. In the context of urbanisation, poverty and high unemployment, understanding how the informal sector works provides insight into how the city operates and identifies opportunities for development.

The dissertation will address how an architechtural design intervention can be the tool in facilitating the informal -without destroying it (Fig. 1.23). The appropriate choice of site, programme and architectural language will be key in investigating an architectural solution which improves Marabastad socio- economic opportunities by enabling the development and growth of existing and new informal networks; and increasing its dependence through permanence.

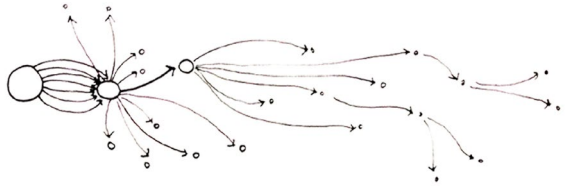

Figure 1.20. Successful informal distribution networks (Author 2015)

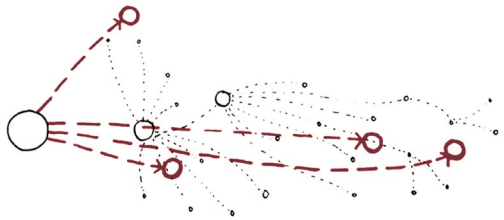

Figure 1.21. Elimination of informal networks by formality (Author 2015)

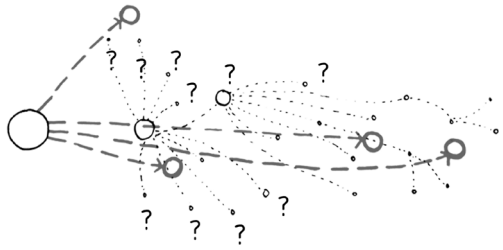

Figure 1.22. Threat to relevance of informal networks (Author, 2015)

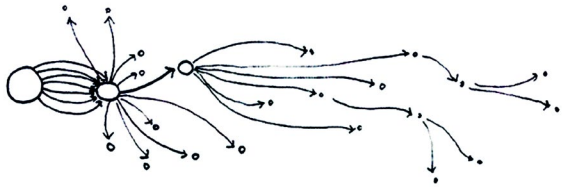

Figure 1.23. Provision of catalytic platforms which strengthen informal networks (Author 2015)

© University of Pretoria

1.4.2 | ARCHITECTURAL INTENTION

The architectural intention is to critically observe informal systems and to provide a design ntervention that enables these environments to remain dynamic, adaptable and maintain a high degree of self-organisation and resilience (Meadows 2008:81)

ADAPTIVE CYCLE

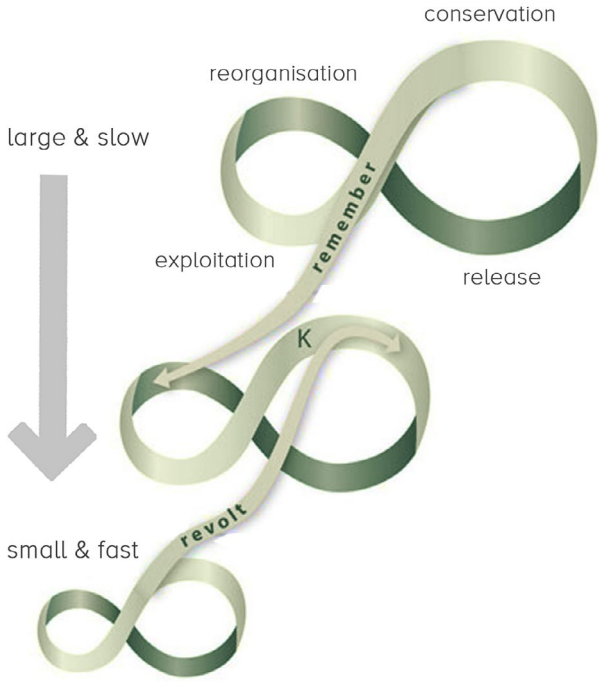

Figure 1.24. Adaptive cycle (Loughborough University)

The architecture will aim to:

1. ENABLE THE CO-EXISTENCE OF THE FORMAL AND INFORMAL

Tension between formal and informal have developed where informal seeks to adapt while formal remains static. The informal should not be romanticised - it remains a necessity and not a choice - however, by discovering patterns in informal activities and understanding what works and why, successful space can be created through architectural intervention that facilitates the informal allowing for establishment and growth. The informal can also demonstrate vibrancy, diversity and creativity to the formal, all of which are characteristic of Marabastad. (Harber 2000: 149). Spire Kostof (1999: 13) stated that "cities, once designed, set about instantly to adapt themselves to the rituals of everyday life". Marabastad functions as a system of many interconnected and delicate formal and informal networks. The intention of the dissertation is to investigate the relationship and potential cohesion between the formal and informal. Defining the scope of architectural intervention where the formal supports the informal rather than impedes or eliminates it, is the biggest architectural challenge. A sensitive architectural approach needs to be taken.

2. THRIVE THROUGH OPPORTUNISTIC ARCHITECTURE

There is a need for an opportunistic approach which adopts indigenous strategies while taking into account existing circumstances (Rustagi 2014). Some of those are as follows:

- Marabastad's urban fabric has adapted to support its temporary and transient trade and transport network, the future relevance of which are both threatened. Observation of existing programmes and the identification of potential new programmes is vital in identifying suitable opportunities for architectural intervention. Infrastructural support as well as diversity of programme will strengthen Marabastad's urban fabric, encouraging a transition from temporality to permanence

.

- The adaptability of informality is what has allowed it to be resilient by allowing it to adopt an opportunistic approach. An architecture which allows for an opportunistic approach enables greater resilience as it constantly emerges, moving from need to need, opportunity to opportunity, in a series of adaptations allowing a place to evolve into what it needs to be and therefore maintaining its relevance and ensuring survival (Mills 2012)

© University of Pretoria

- The architectural intervention needs to allow for adaptability and flexibility of structure, use of space and programme.

3. FACILITATING INTERDEPENDENCY

Architecture can be a catalytic tool in enabling Marabastad's urban regeneration and permanence. Service provision and implementation of infrastructure will facilitate stability of both formal and informal activities, strengthening its urban fabric and encouraging the upgrade of surrounding areas. The introduction of new programmes will provide multi-functionality and diversity assisting in Marabastad's independence from and relevance to the city and informal settlements ensuring an interdependent relationship.

Marabastad requires an appropriate architectural response that suitably mediates between Marabastad's small scale, fine grain heritage fabric and the City's large scale, large grain urban fabric. A unique urban condition will require a new architectural typology/response that will facilitate the successful physical integration when Marabastad's fine urban grain merges with the city's large urban grain.

ARCHITECTURAL INTENTION

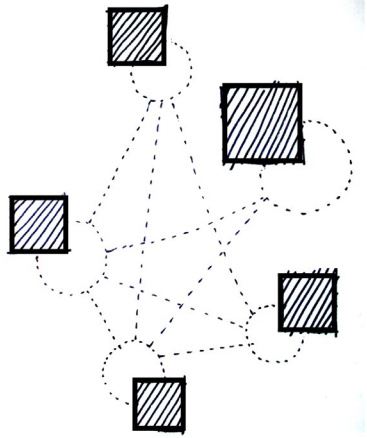

Figure 1.25. Informality attaches to & reappropriates the formal, 'hindering' development (Author, 2015)

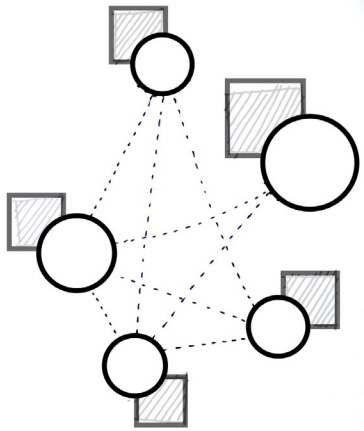

Figure 1.26. Provide platforms that allow the co-existence of formal & informal (Author, 2015)

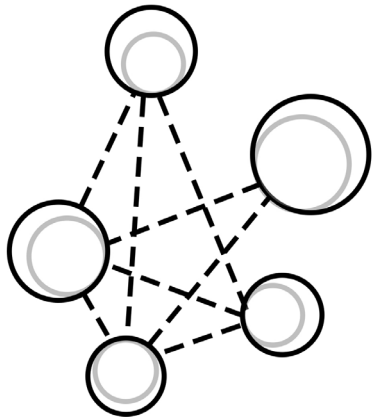

Figure 1.27. Establishment & growth of informal networks (Author, 2015)

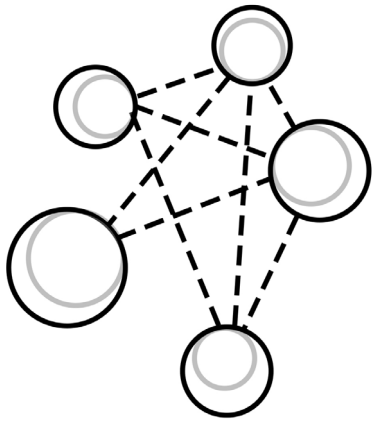

Figure 1.28. Adaptability and self-organisation of informality (Author, 2015)

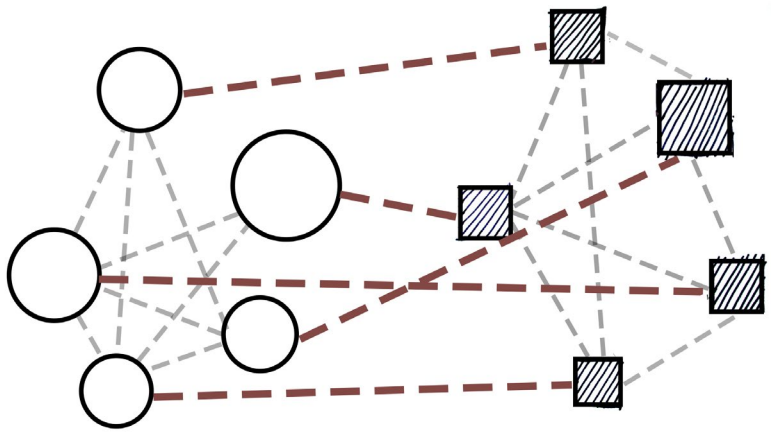

Figure 1.29. Interdependency between formal & informal networks (Author, 2015)

© University of Pretoria

GENERAL, URBAN & ARCHITECTURAL ISSUE

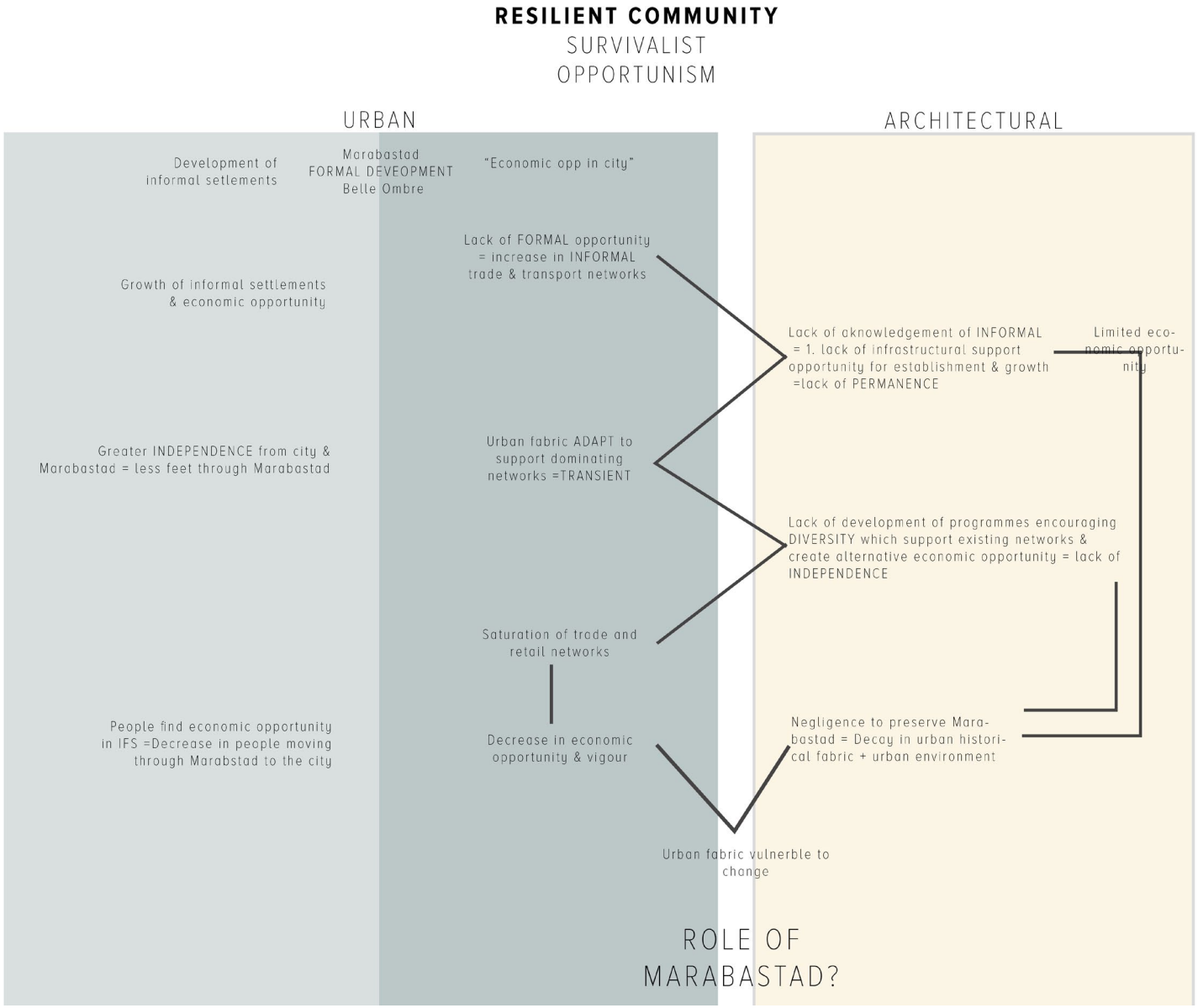

Figure 1.30. General, urban & architectural issue (Author 2015)

© University of Pretoria

CONCLUSION

There is a wide range of discrepant imaginaries about the built environment, how it operates, what it looks like, what it should look like, what takes place within it and what should take place within it. These imaginaries are not coherent, well defined maps that inform how the city is to be navigated and used and this 'illegibility' is what isolates Marabastad. (Simone 2012: 46)

New forms of urbanity, made possible through architectural intervention can be the tool that increasies opportunity, legibility and integration, reducing the growing inequalities of access to economic and social opportunities.

GENERAL, URBAN & ARCHITECTURAL ISSUES & INTENTIONS

	ISSUE	INTENTION
GENERAL	Marabastad's urban fabric has developed to support dominating transport and retail networks. Lack of diversity has hindered opportunity, establishment and growth of existing activities as well as the potential for new activities and networks.	Increase programme diversity by providing platforms of opportunity for both existing and new programmes.
URBAN	Marabastad's dependence on external energy for survival has resulted in its transient and temporal nature. Marabastad's ability to establish itself and create a sense of permanence threatens its urban fabric and the livelihoods of those who rely on it for economic opportunity.	Encourage interdependency between Marabastad, the city and informal settlement by promoting it as a destination within its context. Provide catalytic platforms that facilitate the upgrade of the urban environment, allow for prosperity and growth, increase diversity, promote permanence and encourage expression of identity & culture.
ARCHITECTURAL	Failure of formal development to acknowledge informality as a development informant. Formal development negates and eliminates the adaptability and opportunistic approach necessary for the informal to thrive.	Cohesion of formal and informal networks. Development of the 'formal' which promotes informal networks as a solution to economic deficiency. Facilitate the development, growth and prosperity of informal networks as a solution to the lack of 'formal' economic opportunity.

Figure 1.31. Table of issues & intentions (Author 2015)

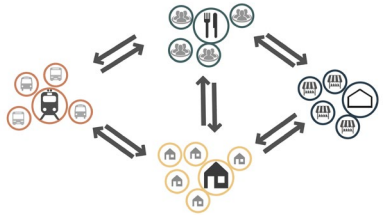

Figure 1.32. General intention

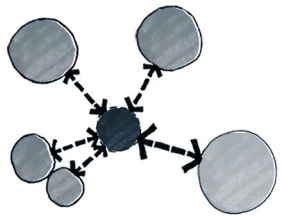

Figure 1.33. Urban intention

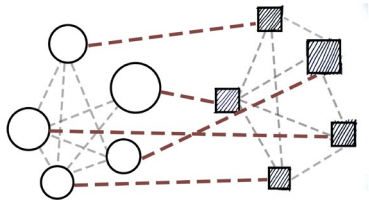

Figure 1.34. Architectural intention

Figure 1.32 - 1.34. (Author, 2015)

© University of Pretoria

1.5 | PROBLEM STATEMENT

Failure by the government to provide infrastructure and services to both the formal and informal activities within Marabastad has hindered positive development and growth resulting in limited economic prosperity and urban decay. The survival of Marabastad as a transitory place is questioned, with its degrading urban condition threatening it further.

1.6 | SUB-PROBLEMS

Architecture can have an impact on the existing environment.

- Architecture as a tool in creating platforms of opportunity, growth and establishment of the informal sector.
- Understanding how existing socio-economic activities and networks functions so that the architectural intervention can enhance these as well as create platforms for new activities and networks.
- Identifying appropriate areas where catalytic architectural interventions can improve the urban fabric.
- Understanding how the Architecture will respond to the tangible and intangible heritage of Marabastad?

1.7 | RESEARCH QUESTIONS

- What will Marabastad's role within the City be when its trade and transport networks are no longer sufficient to sustain it?
- What type of programmes will facilitate permanence by being catalytic to both existing and potential activities?
- How can architecture be a tool in facilitating the resilience of Marabastad's fine urban fabric?
- How can formal architecture assist and create opportunity for the informal without eliminating the informal?

1.8 | PROJECT INTENTION

The dissertation will investigate principles of resilience such as adaptability, diversity and the acceptance of change as an important component for cities (Peres & Du Plessis 2013). It will further address Marabastad's resilience and how its loose urban fabric and informality has enabled it to survive despite the continuous strain placed on it by physical, social and cultural, economic and political change. The general intention is to maintain Marabastad's relevance (beyond its transient nature) by increasing the interdependency between Marabastad, the city and informal settlements. The dissertation aims to identify social and economic opportunities within Marabastad and investigate how these can inform programmes that are catalytic within its environment. The intention is to create greater legibility and permanence within Marabastad by providing infrastructure that facilitates the establishment and growth of both the formal and informal sectors. Increasing the functional diversity is vital so that a system is able to demonstrate a number of different responses to pressure while still maintaining its functionality (Peres & Du Plessis 2013). Providing platforms of opportunity which encourage diversity through multifunctional programmes will also strengthening Marabastad's urban fabric, facilitating its survival in the future.

The architecture aims to emphasise Marabastad as a meaningful place within the City of Tshwane, adding value to the existing context. With the consideration of Marabastad's rich tangible and intangible memory the programme intents to celebrate Marabastad's economic vigour, cultural and social diversity and somewhat chaotic past. Characterising Marabastad as an anchor

© University of Pretoria

point and destination within the city will ensure its relevance in the future.

Design can be used as a tool for proposing and informing new ways of being in architecture to constitute new realities for Marabastad, where a real understanding of socio-economic conditions is evident in the architecture (Harman 2013).

1.9 | HYPOTHESIS

Architecture serves as a mediator between the formal and informal where development through architectural design allows for adaptability and self-organisation of the informal and in doing so enables the positive establishment and growth of informal activities and networks.

1.10 | RESEARCH METHODOLOGY

Types of research strategies applied in the dissertation:

- Historical Research and background to the study area through literature and academic writing a well as through spatial analysis of the development of Marabastad.
- Site visits and observations of the current physical environment and present formal and informal activities were documented through photographs, journal sketches and informal interviews with users of Marabastad. An understanding of the existing spatial qualities of both formal and informal activities was a critical investigation during site visits.
- Theory Exploration: The 'right' to the city, Formality and Informality, Opportunistic architecture, Sense of Place and Public Space in African cities
- Precedent Studies: in terms of Context, Typology/Function, Form, Programme, Materiality and technology:

1.11 | DELIMITATIONS & ASSUMPTIONS

- Site visits, observations and informal conversations were tools in gathering data about the formal and informal activities and networks and their relationship to one another. It is assumed by the author that the assumptions made are accurate.
- The dissertation does not aim to formalise the informal or informalise the formal, instead it aims to understand how the formal can be used as a tool in assisting the growth and development of the informal - using the informal as the primary design development informant. The author cannot guarantee the predicted behavior of the informal, therefore the dissertation does not aim to achieve the perfect solution but rather aims to explore the possibilities that exist between the two urban conditions.
- The purpose of the dissertation is to propose a design solution to the problem identified. It is assumed that the building will be used in the same way that the resources are currently being exploited.

Thorough and critical analysis of the context lead to the synthesis of general, urban and architectural issues from which an appropriate programme was informed. The design solution is not finite and should predict numerous interpretation:

© University of Pretoria