

https://dspace.org/

Re-Modelling of Living Spaces in La Rochelle - Designing for Adaptable Living Spaces in Johannesburg South

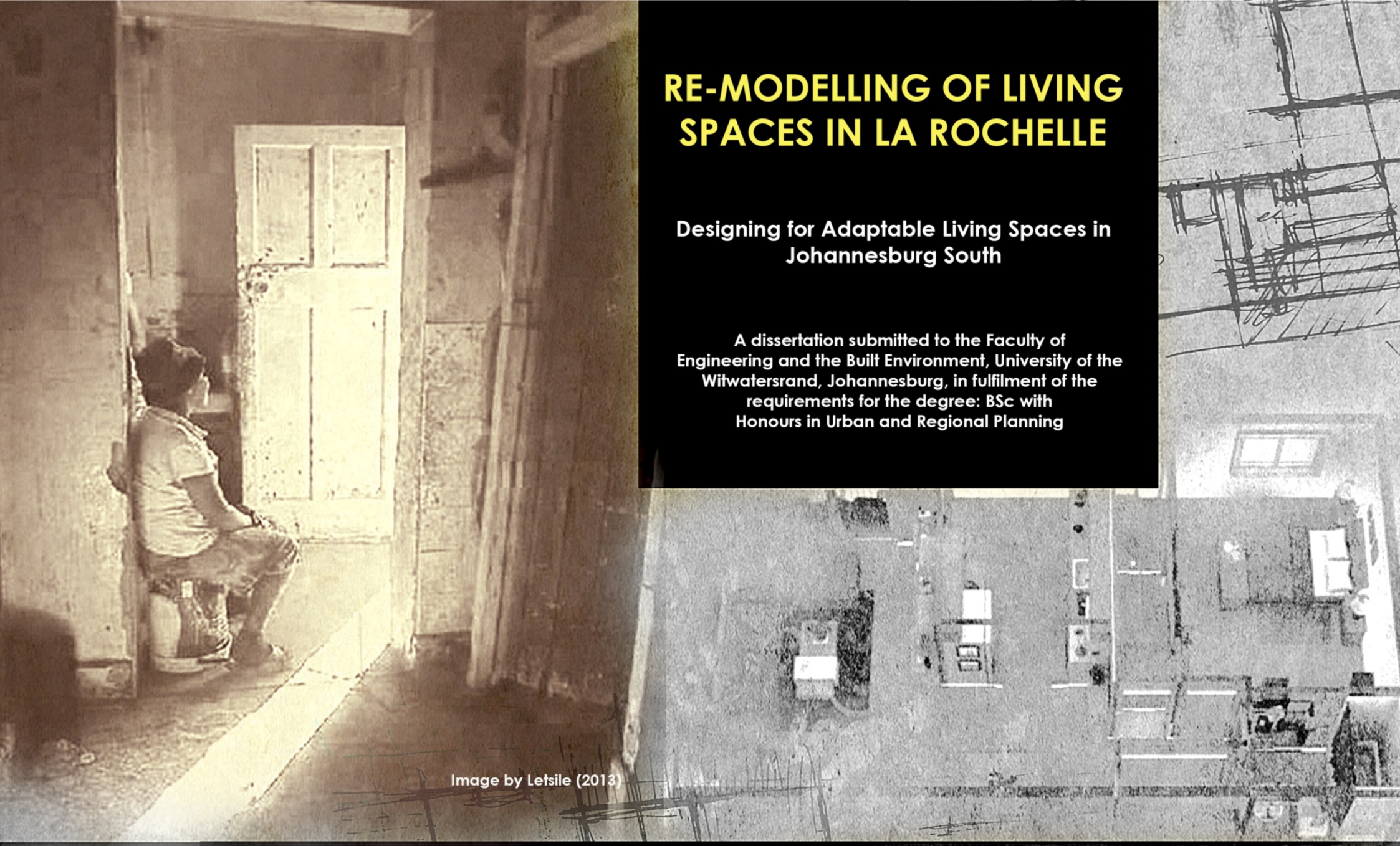
Mavuso, Nkosilenhle; Mavuso, Nkosilenhle

2014

http://hdl.handle.net/10539/20464

Mavuso, N (2014). Re-Modelling of Living Spaces in La Rochelle - Designing for Adaptable Living Spaces in Johannesburg South, University of the Witwatersrand, Johannesburg

Downloaded from a DSpace repository. https://dspace.org/



RE-MODELLING OF LIVING SPACES IN LA ROCHELLE

Designing for Adaptable Living Spaces in Johannesburg South

A dissertation submitted to the Faculty of Engineering and the Built Environment, University of the Witwatersrand, Johannesburg, in fulfilment of the requirements for the degree: BSc with Honours in Urban and Regional Planning

Image by Letsile (2013)

Author: Nkosilenhle Mavuso (572396)

Supervised by: Dylan Weakley

November 2014

Declaration

I declare that this dissertation is my own unaided work. It is being submitted for the BSc Honours degree in Urban and Regional Planning to the Faculty of Engineering and the Built Environment at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination to any other University.

Nkosilenhle Mavuso

_____2014

Abstract

Sub-Saharan Africa is currently faced with the situation of rapid urbanisation where large populations are migrating into cities from rural areas within their countries as well as across international borders (Jenkins, 2012). This 'demographic bulge', which is occurring in what, is "arguably a uniquely weak political and economic context" (Jenkins, 2012, 5). Coupled with largely low–income economic statuses and mobile populations (large portions of the residential occupants seek temporal living spaces), these residential typologies are developing to allow for flexibility, affordability, increased access to the benefits of the city, and to generate income through renting and/or subletting. The City of Johannesburg (CoJ)is developing this form of urban and morphological growth within some of its former 'white' (in terms of apartheid planning) inner-city and peri-inner city suburban areas, that now contain elements of both conventional and non-conventional (so called informal) dwelling types.

After the official fall of the apartheid system in 1994, the city of Johannesburg has experienced rapid urban change, both demographically and physically (Crankshaw, 2008). Many of the white minority that occupied the inner-city and its immediate surrounds during apartheid, 'fled' to peripheral suburbs and gated communities to the north after the regime was abolished, leaving the inner city open to habitation of all kinds of people (Simone, 2004). What became unique about this urban change was the physical transformation of settlement patterns and living spaces of the city's old suburbs located on the periphery of the inner-city. In what Simone (2004) calls a case of the South African townships moving in, formation of make-shift 'informal' type living spaces began to creep into former white 'formal' suburban neighbourhoods, with migrants from within South Africa and other parts of Africa seeking residential spaces to rent.

Areas such as Yeoville, Rosettenville and La Rochelle were amongst those where this living trend developed to greater magnitudes, with abandoned houses being occupied informally as well as small rooms being built in the backyards of single dwelling houses for rent. These emerging types of living space design largely happened outside the recognition of the state, in this case being the CoJ government. What seems prevalent in the formation of these informal forms of living within formal residential areas is the need for affordable living spaces in close proximity to economic opportunities found in the nearby city centre of Johannesburg. However, the low density single dwelling type design of these areas meant that there would be limited space to accommodate the increasing demand for residence in the areas. It is in this that the trend of informal living space sharing in the area emerged and has sparked my interest in investigating how these spaces are physically structured and administrated.

The aim of this research report therefore is to investigate how La Rochelle's residents and property owners have self-designed and self-administered their living spaces through remodelling their main houses and providing backroom dwellings to accommodate more occupants. The study, in a broader sense, investigates the organic growth of human settlements in Johannesburg, using the case study of La Rochelle, and try to determine the sustainability of the current housing remodelling and backroom development trend that is bringing in occupant numbers that are higher than formally allowed within single dwelling vicinities in an a settlement that was initially designed for low densities. Its main focus is on the idea of shared living spaces as an important aspect to how migrant communities live in the area and how they design their living spaces to allow for it. It looks into housing densities and how housing spaces are remodelled or reconfigured to allow for these densities and investigates whether there are suitable infrastructure facilities available in the area to sustain these densities. It further assesses the area's adaptability and/or resilience to the changes (socially and physically) that were brought about by this growing housing provision trend, with the ever increasing cross-border and domestic migration that is said to be occurring in the City of Johannesburg.

The research also looks into the proposed housing densification plan that the City of Johannesburg (CoJ) has for La Rochelle, as outlined in the Turffontein Strategic Area Framework, under the auspice of the Corridors of Freedom project, and assesses it with the current housing and living conditions of the area. In doing this, it provides bases for a critique of the plans that the CoJ government has for the redevelopment of the area, particularly with regards housing provision and densification strategies and draws conclusions on the possible impacts the new housing may have on the current residents of La Rochelle and based on my findings come up with recommendations on how the housing plans can be better conceptualised to suit the needs of the current occupants of and landowners in the area.

Acknowledgements

To my Lord and saviour Christ Jesus, the author and finisher of my life; I give all the glory and honour to you for giving me the ability and the strength to do this project. To my family; my parents, Norman and Phindile Mavuso, and my beloved sister Minilenhle, I thank you for supporting me throughout this journey *boNcele lekhohlwa*. Your prayers and constant encouragement has kept me going through all the hard times and I dedicate this work to you. Also, to the rest of my extended family who I know have been praying for me in the various, I thank you for all your support as well.

I would like to thank my supervisor Dylan Weakley. You have been a guiding light throughout the course of my research and are the reason why my work has turned to be the quality that it is. I thank you for always being patient with me and showing faith in my ability to do well. I would also like to mention specific lecturers in the School of Architecture and Planning who have not only been my teachers, but who I have seen as mentors throughout my 4 years in the school. To Solam Mkhabela, Nqobile Malaza, Garth Klein, Prof. Aly Karam, Prof. Fana Sihlongonyane and Amanda Williamson, I thank you all for everything you have taught me, but more than anything for supporting me through all my personal and financial challenges.

Special mention goes to Solam Mkhabela for being an inspiration to me in my growth as an aspiring professional and for taking a father figure role in guiding me through my studies. To Nqobile Malaza, Prof. Aly Karam and Prof. Fana Sihlongonyane, I give utmost thanks for helping me secure funding to do my postgraduate studies and for always making time to see and assist me in my times of need. I pray that the good Lord blesses you all for everything you have done for me. I also thank Prof. Claire Benit-Gbaffou, Dr Chloe Buire, Dr. Sarah Charlton and Dr. Neil Klug for all they have taught me particularly in my undergraduate degree, as well as Jennifer van den Bussche, Simon Mayson and Alison Todes for all the advice and information you gave me its help in my research.

To my classmates and colleagues, with special reference to Thato Nkoane my field work research partner, Kwanda Lande, Natasha de sa Santos, Ntokozo Khanyile, Pitsi Manthatha and Thabi Mndawe, thanks for your friendship and support through all the long days and late sleepless nights we spent working together. It has proven worth it at the end. I would also like to thank two special people in my life, Aviwe Mandyanda and Bavukile Dlamini, for never leaving my side in good and bad times. You have been supportive, patient and loving to me and are the reason I am who I am today. Lastly, I thank the people of Rosettenville and La Rochelle for agreeing to take part in my study and allowing me into their homes. Without them my study would have not been a success.

CONTENTS

ABSTRACT ..... **II**

ACKNOWLEDGEMENTS ..... **IV**

CONTENTS ..... **V**

LIST OF ACRONYMS ..... **X**

1. INTRODUCTION AND BACKGROUND **1**

1.1 Introduction 1

1.2 Research Background and Material Context 2

1.3 Overall Argument 4

1.4 Problem Statement 4

1.5 Research Objective 5

1.6 Research Question 7

1.7 Research Sub-Questions 7

2. BUILDING THE THEORETICAL FRAMEWORK: EXPLORING THE LINKAGE BETWEEN URBAN RESILIENCE, INFORMALITY AND ORGANIC CITY GROWTH **8**

2.1 Introduction 8

2.2 Urbanization of African Cities and the Lack of Affordable Housing 9

2.3 Urban Resilience through Adaptability in the Face of Change 12

2.4 Urban Informality: Evolution of Space 14

2.5 Organic City Growth within the "Planned" City 18

2.6 Government Intervention: The Sustainable Human Settlements Urbanisation Plan (SHSUP) 22

2.7 Development of the Conceptual Framework 23

2.6.1 Urban Resilience and Urban Informality 24

2.7.2 Urban Informality & Organic City Growth 25

2.6.3 Urban Resilience and Organic City Growth 27

3. RESEARCH METHODS **28**

3.1 Introduction 28

3.1.1 Personal interest in study 29

3.2 Methods Used and Rationale for Research Approach in Current Study 30

3.2.1 Quantitative methods 31

3.2.1.1 Desktop data collection *31*

3.2.2 Qualitative Methods Used 32

3.2.2.1 Ethnographic and Social Profile Analysis: Participant Observation, Interviews and Additional Research *32*

3.2.2.2 Assessment of physical conditions and available infrastructure *33*

3.2.2.3 Assessment of proposed housing development plans for La Rochelle (Policy Analysis) *33*

3.3 Approaching the community and the interview process *34*

3.4 Ethical Considerations & Challenges Faced In Study 34

Documentation of Findings *35*

4. LA ROCHELLE – A MIGRANT DESTINATION & CULTURAL MELTING POT 35

4.1 INTRODUCTION 35

4.2 INTRODUCING LA ROCHELLE: PLACE & ITS LOCATION 36

4.3 HISTORY OF LA ROCHELLE & ITS EARLY DEVELOPMENTS 38

4.4 The Post 1994 migrant influx into La Rochelle 40

4.5 THE CURRENT SITUATION IN LA ROCHELLE: AN AMBIGUOUS & HOSTILE ENVIRONMENT 41

4.5.1 Demographic composition and community relations 41

4.5.2 LIVELIHOODS 43

4.5.3 HOME OWNERSHIP AND RENTAL ACCOMMODATION 44

4.6 GOVERNMENT PLANS & RESPONSES TO LACK OF AFFORDABLE HOUSING ... 45

4.6.1 The Formal Housing Backlog Challenge & Need for Rental Accommodation 46

4.6.2 The City of Johannesburg's Housing Development Policy Plans for Affordable Rental Housing 48

4.6.3 THE CORRIDORS OF FREEDOM PROJECT: EVALUATING THE TURFFONTEIN STRATEGIC AREA FRAMEWORK (SAF) 50

4.6.3.1 SAF Plans for Residential Development in La Rochelle & Surrounds 51

Density 52

Design 53

Diversity 54

WEAKNESSES OF TURFFONTEIN SAF DOCUMENT 54

4.6.4 Policy alternatives: Informal Rental Enablement Programme (IREP) 55

5. CASE STUDY FINDINGS: THE ADAPTIVE LIVING SPACE REMODELLING PRACTICES OF LA ROCHELLE RESIDENTS 57

5.1. INTRODUCTION 57

5.2. FIELD WORK FINDINGS 58

5.2.1 THE 'SHARED HOUSING'/'ROOMS' & 'SPACES' TYPOLOGY IN LA ROCHELLE 59

5.2.2 DEFINING 'SHARED HOUSING'/'ROOMS' AND 'SPACES' 60

5.2.3 Documenting the 'Rooms' & 'Spaces' 61

HOUSE 1 63

LANDLORD & TENANT PROFILE 65

PHYSICAL ATTRIBUTES OF HOUSE 65

Quality of physical conditions 65

Available infrastructure and amenities 65

Sharing of space and services 66

Social Attributes of house 66

Household management arrangements 66

Safety and security 66

Demographic relations (Nationality, age, gender) 66

HOUSE 2 67

LANDLORD & TENANT PROFILE 67

PHYSICAL ATTRIBUTES OF HOUSE 69
Quality of physical conditions *69*
Available infrastructure and amenities *69*
Sharing of space and services *70*
Household management arrangements *70*
Mobility of residents (duration of stay) *70*
Reasons for renting rooms and sharing spaces *71*
Demographic/social relations *71*
HOUSE 3 72
LANDLORD & TENANT PROFILE 72
PHYSICAL ATTRIBUTES OF HOUSE 74
Available infrastructure and amenities *75*
SOCIAL ATTRIBUTES 75
Reasons for renting rooms and sharing spaces *75*
Household management arrangements *76*
Demographic/social relations *77*
Sharing of space and services *77*
HOUSE 4 78
LANDLORD & TENANT PROFILE 78
PHYSICAL ATTRIBUTES OF HOUSE 80
Flexibility and Adaptability (physical changes of house over time) *80*
SOCIAL ATTRIBUTES 82
Reasons for renting rooms *82*
Household management arrangements *82*
Demographic/social relations *82*
HOUSE 5 83
LANDLORD & TENANT PROFILE 83
PHYSICAL ATTRIBUTES OF HOUSE 83
Flexibility and Adaptability (physical changes of house over time) *83*
Sharing of space and services *83*
SOCIAL ATTRIBUTES 85
Demographic/social relations *85*
Household management arrangements *85*
Socio-economic status of tenants *85*
LANDLORD & TENANT PROFILE 87
PHYSICAL ATTRIBUTES OF HOUSE 87
Flexibility and Adaptability (physical changes of house over time) *87*
Quality of physical conditions *87*
SOCIAL ATTRIBUTES 88
Demographic/social relations *88*
Sharing of space and services *88*
Tenure security *88*
Socio-economic status of occupants *88*
Mobility of residents (duration of stay) *89*

5.3.1 The 'Rooms' and 'Spaces' of La Rochelle: A Product of Necessity or Preference? 89
5.4 Conclusion: Is There A Need For Intervention In La Rochelle? 90

6. FINAL CONCLUSIONS & RECOMMENDATIONS 92

6.1 Introduction 92
6.2 Recommendations: Planning for a 'Conventional' and 'Non-Conventional' City 94
6.3 Legitimising the Development of Self-Help housing through Regulation & Innovative Design 97
6.3.1 An Incremental Typology: Working with what's there 97
6.3.2 New Residential Developments – Inclusivity through design 100
6.3.2.1 Designing for choice: Rental beds and shared facilities 100

REFERENCES 104

Figure 1 : Is building up the best way to densify low income, low-rise settlements experiencing a growing population & housing demand? (Mavuso, 2014) 7
Figure 2: Conceptual Framework diagram – Linking Urban Resilience, Urban Informality & Organic growth (Mavuso, 2014) 24
Figure 3: Location of La Rochelle within the Johannesburg Metropolitan Region 37
Figure 4 : Thato (Research Partner) standing in front of one of the backrooms and the shared washing area, as Mrs Kamnqa explains the physical structure of the household to us. 63
Figure 5: Thato and Mrs Kamnqa standing in the courtyard space of the main house and backrooms, discussing the state of affairs in the household 65
Figure 6: Thato interviewing Elizabeth (standing) and her friend who had come to visit her for the day, inside Boland Park. 67
Figure 7: Freelance workers sitting at Hunt Square waiting for day jobs from willing employers. The open space is also used as a play area for children and as a mini football field during the evening. 72
Figure 8: Image on the left illustrating the narrow and dark passage that tenants walk in the house to access their rooms. This lack of light and air circulation is, according to Ms Ndimande (in image on the right), causing the slow degradation of the internal walls and ceiling (illustrated in image on the right) 75
Figure 9: Informal shack located in the backyard of House 3. The shack was converted from being a tool shed and is rented out as a room by a diminutive single male, who is able to fir in it due to his short statue 77
Figure 10: A 2007 aerial image of House 4 which reveals a large amount of vacant space around the main house which seems smaller than its current size. 80

FIGURE 11: AN AERIAL IMAGE OF HOUSE 4 IN 2014 ILLUSTRATES AN EXTENSION OF THE MAIN HOUSE AND CONSTRUCTION OF ADDITIONAL UNITS IN THE BACK YARD ALONG WITH A POOL AREA (GOOGLE MAPS, 2014) 81
FIGURE 12: ZANDILE STANDING IN FRONT OF ONE THE ROOMS IN THE BACKYARD OF HOUSE 4. BEHIND HER IS A SWIMMING POOL AREA THAT IS UNDER CONSTRUCTION BY THE HOME OWNER 81
FIGURE 13: CLEANING ROSTER PASTED ON THE KITCHEN WALL ALLOCATING CHORES TO DIFFERENT FAMILIES 85
FIGURE 14: TO THE LEFT; AN IMAGE OF MAPASEKA SITTING AT THE FRONT DOOR OF THE HOUSE AND ON THE RIGHT AN IMAGE OF THE INSIDE OF ONE OF THE ROOMS IN THE HOUSE. 88
FIGURE 15: TURRFONTEIN SAF PLAN ILLUSTRATING IDENTIFIED AREAS WHERE DENSIFICATION AND INTENSIFICATION OF EXISTING AREAS IS PROPOSED, TO BE LOCATED ALONG PROPOSED TRANSPORT SPINES AND OPEN SPACES. IMAGE ADOPTED FROM TURFFONTEIN STRATEGIC AREA FRAMEWORK (2014). 95
FIGURE 16: TURRFONTEIN SAF PLAN ILLUSTRATING IDENTIFIED AREAS WHERE DENSIFICATION AND INTENSIFICATION OF EXISTING AREAS IS PROPOSED, TO BE LOCATED ALONG PROPOSED TRANSPORT SPINES AND OPEN SPACES. IMAGE ADOPTED FROM TURFFONTEIN STRATEGIC AREA FRAMEWORK (2014). 95
FIGURE 17: ILLUSTRATIONS OF SINGLE RENTAL BEDS THAT CAN BE RENTED OUT BY SINGLE OCCUPANTS FOR A LOW RENTAL COST (MAVUSO, 2014) 101
FIGURE 18: ILLUSTRATION OF RENTAL BEDS WITH LOCKABLE STORAGE DESIGNED TO ACCOMMODATE UP TO 4 OCCUPANTS IN ONE ROOM. (MAVUSO, 2014)... 101

List of Acronyms

ARPL - Architecture and Planning

BRT - Bus Rapid Transit

BNG - Breaking New Ground

CBD - Central Business District

CoJ - City of Johannesburg

GDS - Growth and Development Strategy

GMS - Growth Management Strategy

IREP - Informal Rental Enablement Programme

JDA - Johannesburg Development Agency

KZN - KwaZulu-Natal

JOSHCO - Johannesburg Social Housing Company

NBR - National Board of Revenue

NDP - National Development Plan

NSDP - National Spatial Development Perspective

RDP - Reconstruction and Development Programme

RSDF - Spatial Development Framework

SA - South Africa

SADC - South African Development Community

SAF - Strategic Area Framework

SANS - South African National Standard

SDF - Spatial Development Framework

SERI - Socio-Economic Rights Institute of South Africa

SHS - Sustainable Human Settlements

SHSUP - Sustainable Human Settlements Urbanisation Plan

SSA - Sub-Saharan Africa

TOD - Transit Orientated Development

UDF - Urban Design Framework

1. Introduction and Background

1.1 Introduction

Within the context of an urbanising world, with growing African and South African cities having to adapt to accommodate population growth through physical/spatial change, this research report presents findings on one neighbourhood where such adaption is taking place. Specifically, the work focuses on re-modelled living spaces in the area of La Rochelle, Johannesburg. The work outlines the current situation of rapid urbanisation taking place in Johannesburg and how it is leading to the need for affordable housing in close proximity to employment opportunities in the city centre. It shows how this need is resulting in the formation of 'informal' type living spaces within settlements initially designed as formal. It investigates how home owners and residents in La Rochelle have designed and provided affordable living spaces within their single dwelling housing units and backyards, by re-modelling or reconfiguring these spaces. My study interrogates these living spaces and attempts to understand the reasons behind their formation and the means in which they are physically designed and administrated.

In order to theoretically frame the work, it discusses literature that has been written on the concepts of urban resilience, urban informality and organic city growth. This is the basis for the theoretical framework used. It then analyses the impacts that the creation of additional living spaces is having on the La Rochelle community as a whole with particular focus being on the social aspect of 'shared spaces' and the physical conditions of the spaces in which this sharing is taking place. The work argues that the manner in which home owners and residents of La Rochelle are remodelling their living spaces showcases a form of evolutionary resilience and adaptation to the problem of a lack of affordable accommodation in Johannesburg's inner-city and surrounding areas. This form of resilience is largely enabled by the ability of the community to adapt, largely through informal means of living space arrangements. These arrangements are designed to enable them to rent out living spaces at lower prices than original layouts and designs would allow. This then results in an organic form of densification and growth of a settlement such as La Rochelle that was initially intended to be of low density and host a lower population size.

The link between the concepts of resilience, informality and organic growth is what my research seeks to look into and how they combine to form what can be described as an evolutionary mode of metropolitan urbanization (Roy, 2005). The report essentially argues how the somewhat myopic and over simplified classifications of the 'formal' and the 'informal' in Sub Saharan African (SSA) cities

has limited the understanding of the process of urban change, growth and development within this context (Roy, 2005; Jenkins & Andersen, 2011). It argues that, more often than not, growth and change in SSA cities cannot be simply classified in to 'formal' and 'informal' as they often exist on a continuum that contains elements of both (Batty & Longley, 1994; Jenkins & Andersen, 2011). La Rochelle illustrates this notion and provides an example of how so called 'informal' activities have emerged within formal settings, resulting in the formation of much more complex and dynamic urban spaces than the aforementioned reductionist classifications suggest.

1.2 Research Background and Material Context

Sub-Saharan Africa is currently faced with the situation of rapid urbanisation where large populations are migrating into cities from rural areas within their countries as well as across international borders (Jenkins, 2012). Metropolitan cities are seen to be absorbing a large number of this migration, gaining at the expense of the secondary urban areas by 4 persons per 1000 population and by 3 persons per 1000 population at the expense of the former homelands in between 1996 and 2001 censuses (Collinson et al, 2007). The City of Johannesburg (which is the focus area for this report) is one of the metropolitan cities in South Africa that is experiencing this absorption and has been the focus of a considerable amount of literature that discusses the implications of this absorption such as the growth of informal settlements and backyarding in formerly black townships (Huchzermeyer, 2004; Simone, 2004; Harber, 2011; Charlton & Shapurjee, 2013). Harrison & Zack (2014, pg.2) describe Johannesburg as "...a city which does feature modestly in world city hierarchies but which has also been frequently discussed in terms of its unique configurations of developmental challenges and social inequalities". According to 2011 statistics, the City of Johannesburg consists of 4,434,827 people and when it is placed as a conurbation amongst places such as Pretoria and Vereeniging (which lie within the broader Gauteng City Region), its population can go up to approximately 12 million (Statistics SA Census, 2011) It also ranks highest amongst South Africa's major metropolitan cities such as the City of Cape Town, eThekwini and Ekhuruleni in terms of population size (Statistics SA Census, 2011).

Johannesburg in itself experienced a population growth rate of 3.18% between 2001 and 2011 with population density sitting at 2696 persons/km^2 in the city in 2011 (Statistics SA Census, 2011). After the official fall of the apartheid system in 1994, it has experienced rapid urban change, both demographically and physically (Crankshaw, 2008). This urban change, which is occurring in what is "arguably a uniquely weak political and economic context" (Jenkins, 2012, 5), has resulted in the production of new types of urbanism and spatial formations that are different from the conventional residential

housing typologies deemed as 'normal' in the global north (Jenkins, 2012). Coupled with largely low–income economic statuses and mobile populations (large portions of the residential occupants seeking temporal living spaces), these residential typologies are being redesigned to allow for flexibility, affordability, increased access to the benefits of the city, and to generate income through renting and/or subletting. 2011 Census data on the levels of employment in the Greater Rosettenville area revealed a 21.7% unemployment rate with a total of 1390 people found to be unemployed in La Rochelle alone (includes discouraged work seekers and those who are not economically active) (Quantec, 2013). Also, the area's population showed a 55% increase since 2001 which was found to considerably higher than the increase in employment opportunities in the area (Turffontein Strategic Area Framework, 2014).

The City of Johannesburg, showcases a unique form of urban and morphological growth containing elements of both conventional and non-conventional (so called informal) dwelling types being developed within its former 'white' (In terms of apartheid planning) inner-city and peri-inner city suburban areas. Many of the white minority that occupied the inner-city and its immediate surrounds during apartheid, 'fled' to peripheral suburbs and gated communities to the north after the regime was abolished, leaving the inner city open to habitation of all kinds of people (Simone, 2004). What became unique about this urban change was the physical transformation of settlement patterns and living spaces of the city's old suburbs located on the periphery of the inner-city. In what Simone (2004) calls a case of the South African townships moving in, formation of make-shift 'informal' type living spaces began to creep into former white 'formal' suburban neighbourhoods, with migrants from within South Africa and other parts of Africa seeking residential spaces to rent.

Areas such as Yeoville, Rosettenville and La Rochelle were amongst those where this living trend developed to greater magnitudes, with abandoned houses being occupied informally as well as small rooms being built in the backyards of single dwelling houses for rent. These emerging types of living space design largely happened outside the recognition of the state (in this case being the CoJ), hence why it is being referred to in the text as 'informal'[1] (Roy, 2005). What seems prevalent in the formation of these informal forms of living within formal residential areas is the need for affordable living spaces in close proximity to economic opportunities found in the nearby city centre of Johannesburg. However, the low density single dwelling type design of these areas meant that there would be limited space to accommodate the increasing demand for residence in the areas. It is in this that the trend of informal living

[1] "…informality as a state of exception from the formal order of urbanization…" (Roy, 2005, 147)

space sharing in the area emerged and has sparked my interest in investigating how these spaces are physically structured and administrated.

1.3 Overall Argument

Although originally planned and developed as a neighbourhood for whites only, La Rochelle, after the end of apartheid in 1994, has undergone substantial demographic, cultural and economic change due to the rapid influx of immigrants moving into the area (Turffontein Strategic Area Framework, 2014). Population growth pressures and demand for accommodation in the inner city of Johannesburg have created a demand for rental spaces in La Rochelle due to its close proximity to the city centre. Formal house owners in La Rochelle have sought to capitalise on this need for accommodation and have entered the (often informal) rental market to provide additional living spaces for rental occupants. This is done through remodelling spaces in the main house to create more bedrooms, by building backyard dwellings and by simply allowing more occupants in without any physical modifications. This form of rental space provision has become an important service for the majority of residents in the area who cannot afford their own private houses. It is this development of 'informal' type living spaces that has resulted in increased population densities within the 'formal' suburb of La Rochelle.

The report in essence argues that the making of living spaces in settlements in Sub-Saharan African (SSA) cities (using La Rochelle as a case study) lies, to a large extent, in the hands of urban residents and landowners, with the engagement by the state and the regulated private sector being relatively limited (Jenkins, 2013). This renders the conventional 'state led' planning approach towards city development ineffective in many instances and reinforces the argument for a non-conventional approach towards planning and design for SSA cities (Koolhaas, 2006) (further discussed in Chapter 6, section 6.2). Here, instead of opposing informal market driven development, perhaps the state should acknowledge the benefits that they bring to the city and its occupants, and work in conjunction with these to make them more economically, socially and environmentally sustainable. Jenkins (2013, pg.10) argues this in saying "… It is essential to understand the dynamics of these processes to, in turn, understand how the city in Africa is developing, and can perhaps be encouraged or guided to develop in better ways".

1.4 Problem Statement

The prevailing issue at hand, in light of the premise discussed above, is a spatial conflict taking place in cities of the Global South. This conflict is between how settlements are 'organically' developing through self-help design and self-administrative means executed by the people owning or occupying them, and the application of

sustainable development and urban design (in conventional terms) as administered and desired by the state (further discussed in Chapter 2, sections 2.4. and 2.5.). The area of La Rochelle provides a case of this conflict as discussed earlier. This informal type development of living spaces is in contradiction with what the City of Johannesburg is proposing for the development of the area, under the Corridors of Freedom project and through the guidance of the recently drafted Turffontein Strategic Area Framework (SAF), which proposes to consolidate the single dwelling plots in the area to allow for high density, multiple storey, social housing as a more sustainable form of residential design (See sections 4.6.4 and 6.2).

Both sets of development approaches provide problems in terms of possible outcomes for the current occupants of the area. On the one hand, the informal manner in which living spaces are currently designed and remodelled, is leading to overcrowding and poor living conditions. This, in most cases, is occurring in situations where there is insufficient infrastructure capacity available to cater for increased occupancy (i.e. insufficient space, toilets, water, sewage and drainage systems etc.), and no minimum standards met in providing housing (see Chapter 5). This, in turn, makes the spaces unsafe and unsecure for occupancy by their residents. On the other hand, the City of Johannesburg, in its plans to redevelop and densify the area under the auspice of the Corridors of Freedom project, currently does not take into consideration these remodelled houses and backroom spaces and what the development of the proposed high rise housing in place of them could mean for the current occupants. Should the proposed new housing typologies lead to increased rental prices, payment of regular rates and service charges as well as stringent rules that prohibit space sharing, displacement of large groups residing in the area may occur (Further discussed in Chapter 6, section 6.2). In the words of Watson (2003, p. 396-397);

> *...[There are]* assumptions that occupants of informal structures will accept the long-term, binding legal and financial obligations that accompany home ownership along with: adherence to various regulations regarding the use of the land and the conduct of the occupants (e.g. respecting noise and health standards), as well as the payment of regular rates and service charges to the municipal authority. Also implicit is the assumption that shack-dwellers will be prepared to commit themselves to a particular piece of land or territory which they will come to regard as their permanent home.

1.5 Research Objective

The objective of the study is to gain understanding of how low rise settlements in Johannesburg are densifying through informal means, using the case study of La Rochelle. These findings will then be evaluated in terms of how property owners and rental occupants

are administering this densification and where and how they may require state intervention to ensure that they are safe, secure and sustainable. The area of La Rochelle, as alluded to in the previous section, provides an example of a residential settlement that is developing out of human agency, in seeking to cater for the particular needs of low income and largely mobile residents in the area. This human agency can be seen as a response to the state's incapacity to satisfy the residents' basic housing needs (Roy, 2005). State intervention in such cases often fails to consider and incorporate the functional aspects of the 'self-help' design methods that these communities deploy in the development of their own living spaces (Huchzermeyer, 2009). This then leads to dissatisfaction and/or displacement of large groups as these new interventions often fail to cater to the type of people currently living there, their needs, and the reasons they have chosen to live there (including cost, location, social connections etc.). The aim of this research report therefore is to investigate how La Rochelle's residents and property owners have self-designed and self-administered their living spaces through remodelling their main houses and providing backroom dwellings to accommodate more occupants.

The study, in a broader sense, investigates the organic growth of human settlements in Johannesburg, using La Rochelle as a case study, and tries to determine the sustainability of the current housing remodelling and backroom development trend. Its main focus is on the idea of shared living spaces as an important aspect of how migrant communities live in the area and how they design their living spaces to allow for it. It looks into housing densities and how housing spaces are remodelled or reconfigured to allow for these densities. It also investigates whether there are suitable infrastructure facilities available in the area to sustain these densities. It then assesses the area's adaptability and/or resilience to the changes (socially and physically) that were brought about by this growing housing demand, with the ever increasing cross-border and domestic migration that is said to be occurring in the City of Johannesburg (CoJ GDS, 2011). The main aim of the assessment is to find out the benefits and limitations of the type of home remodelling occurring in La Rochelle. This could then guide intervention in determining which aspects of the model need to be maintained and enhanced, and which need to be addressed to make them more viable (see Chapter 6).

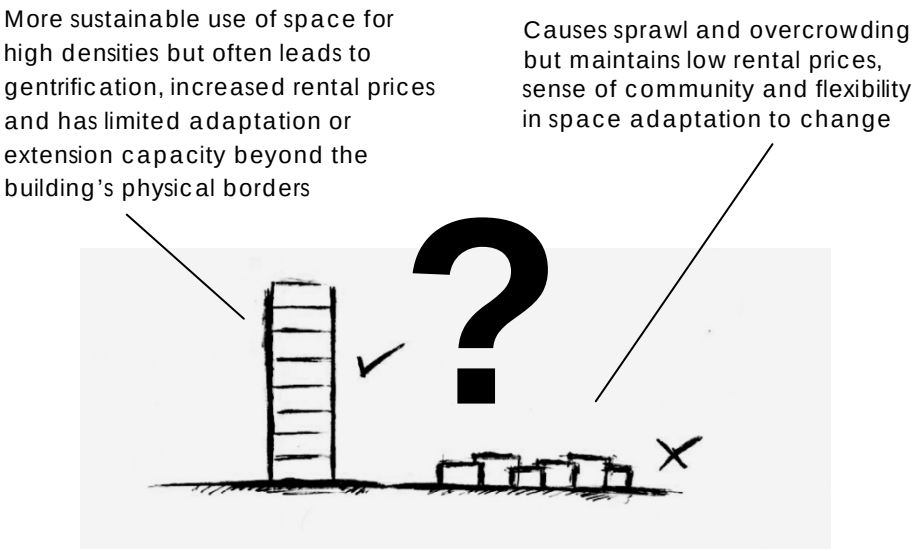


Figure 1 : Is building up the best way to densify low income, low-rise settlements experiencing a growing population & housing demand? (Mavuso, 2014)

1.6 Research Question

In light of the context provided above, the work attempts to answer the following research question and sub questions:

How are property owners and residents of La Rochelle designing and administering informal type rental living spaces within their properties?

1.7 Research Sub-Questions

- What impacts is the informal remodelling of housing space in La Rochelle having on the wider La Rochelle community?
- What drives remodelling of living spaces in the area?
- What form does this remodelling take?
- Which actors drive this remodelling and what mechanisms are used to implement it?
- Are the available services in rental spaces adequate to cater for higher population densities?
- What are the demographics of residents in the area, and how has this changed over time?
- What social structures and arrangements exist within these evolving living spaces?
- What types of tenure do occupants have (formal ownership, rental or none)?
- What is the state of living conditions?
- How are city policies reacting to the informal remodelling of living spaces in La Rochelle?
- What is the City of Johannesburg proposing in the area?

2. Building the Theoretical Framework: Exploring the linkage between Urban Resilience, Informality and Organic City Growth

2.1 Introduction

This chapter makes up the literature review of this dissertation. It focuses on three main concepts towards answering the questions raised in the previous chapter (see section 1.7 & 1.8). The three main concepts that are discussed in the chapter are:

- Urban Resilience
- Urban Informality
- Organic City Growth

It discusses existing literature on these concepts and attempts to draw conclusions on how they relate to the re-modelling of living spaces taking place in La Rochelle. Connections between the concepts of resilience, informality and organic growth are then drawn to argue how urban development processes in the global South occur in a complex manner and often occur in ways that are contrary to those experienced in the context of the global north. These concepts are discussed separately in terms of their meaning within the urban context, with the aim of finding their connecting threads and using them to develop the overall conceptual framework used within the research report.

The chapter begins by discussing the process of urbanisation, which is briefly discussed within the scope of the Sub Saharan (SSA) context, with the aim of giving a broader overview of how issues of high population growth rates in cities of this context have led to the development of so called 'informal' forms of urban settlements. It then moves to discuss the context of South Africa with regards to the patterns of migration that are happening from within and outside of its boundaries, where rural dwellers and foreign migrants are moving in large numbers into its cities. Much more detail is then given the city of Johannesburg in discussing how the city is experiencing an increasing demand for occupation, particularly in places in close proximity to its CBD such as La Rochelle, as people seek access to the socio-economic livelihood opportunities it has to offer.

The concept of urban resilience is the first of the three theoretical concepts to be discussed, where the meanings of resilience as interpreted in the fields of engineering and ecology will be outlined. The writing, in this, seeks to illustrate how these meanings have evolved over the years as understanding and literature on resilience thinking has gravitated towards the development of cities. It is here where the concept of evolutionary resilience and adaptability will be introduced extensively in relation to how the processes of rapid urbanisation currently occurring in cities of SSA (more specifically in South Africa) have resulted in the development of so called

'organic' or 'informal' mechanisms that try and adapt to the high population and physical growth pressures being imposed on them.

The next concept to be discussed is that of urban informality, a phenomenon that has been widely discussed within planning and development literature, particularly within cities of the SSA context. Authors such as Ananya Roy (2005) have described the phenomenon as a "...a distinctive type of market where affordability accrues through the absence of formal planning and regulation" (pg. 149). This description is of utmost importance within the articulation of the state of living conditions in La Rochelle, particularly in relation to the flexibility, fluidity and affordability that the informal modification and remodelling of formal living spaces in the area provides to its residents.

Lastly, the concept of organic city growth is discussed as a broader aspect of the development of La Rochelle, where the city of Johannesburg is analysed on how it is densifying (growing) organically from within its suburban areas that were initially designed to be of a lower density. In this section, the term organic growth will be defined as a process where physical development in the city happens through means and/or conditions that are motivated by natural forces exerted by external pressures such as rural to urban migration within the country and cross-border migration from outside the country. In addition, the term organic growth will be discussed in terms of change of city size and scale through means that are 'natural' or 'organic' versus those which are 'artificial' or 'planned'.

The chapter then concludes by looking into the plans that the city government has for the development and redevelopment of its residential areas, with particular reference to the Sustainable Human Settlement Urbanisation Plan (SHSUP). The SHSUP is the City's latest policy housing provision strategy proposed and aims at supporting small-scale rental housing provisions such as those happening in La Rochelle.

2.2 Urbanization of African Cities and the Lack of Affordable Housing

The world and its cities are developing at a high rate and for the first time there now exists a higher urban population rather than a rural one (UN Habitat, 2010). Sub-Saharan Africa's (SSA) urban population was said to be at 15% in 1950, 32% in 1990, and is currently estimated to be at 38% (297 million people) (Collinson et al, 2007, 77; CoJ SHSUP, 2012). By 2030, this figure is expected to increase to approximately 54% (a population figure of around 1.4 million people) (CoJ SHSUP, 2012, 5). "Southern Africa and South Africa in particular, are among the leading regions in terms of increasing urbanisation in Africa" (CoJ SHSUP, 2012, 5). South Africa (SA) is amongst the countries in this region with the highest urban to

rural population ratios, with a population ratio of 62.2% living in urban areas (inclusive of small towns) (South African Institute of Race Relations, 2012 in Weakley, 2013). These growing urban populations are due to a various set of factors such as; the overall high population growth rates happening at a country-wide level and the various so called 'pull factors' (such as employment, education and better access to health opportunities) that are perceived to be attainable in urban areas (CoJ SHSUP, 2012).

These statistics showcase the rapid population growth that has been experienced in urban areas of developing countries over the last three decades or so, which have resulted in many social challenges that are often associated with urbanisation. These include high unemployment rates, income insecurity and inadequate standards of housing and services in settlements (UN Habitat, 2010; CoJ SHSUP, 2012). Statistics from UN Habitat (2010) predict that this population growth is set to continue, over the next 3 decades with virtually all of it taking place in urban areas. Many urban areas in the developing countries (such as SA) are however lagging behind with regards to the rates of economic growth and infrastructure development as compared to the rates of urbanisation. The assumption that better living conditions are found in cities (rather than in rural areas) has to certain levels been to the contrary in SSA and SA cities, where in some parts rather than reducing poverty, migration to cities of results in poverty persisting or in some cases becoming worse (Weakley, 2013). Regardless of this fact, people in SA continue to move from rural areas to cities rather than vice versa, resulting in the increased demand for services such as accommodation in the city.

The so called 'contemporary' urbanization process, as described by Ernstson et al (2010), is a multi-dimensional process that involves changes in human population and spatial occupation densities in such a rapid manner that the traditional paradigm of planning fails to keep up. As such, the traditional low density design of some of the city's suburban residential areas has not been able to accommodate much of this urbanisation through 'formal' living spaces. "There is a vast gap between the number of housing units produced by the formal sector and the growth of urban populations in most African cities" (Hansen & Vaa, 2004, 9) and South Africa is no exception. This limited supply of formal housing has left access to the available housing (in areas close to economic opportunities) to market forces where rental prices have increased the beyond access of a large number of low income accommodation seekers in the city (Mayson, 2014).

The city of Johannesburg provides a clear example of this where 51.8% of households in the city earn less than R3 200 per month, according to 2011 Census (Tissington, 2013). Rental accommodation options due to this fact are highly limited for those earning this amount per month with the only options for such

earners being RDP houses outside the city, shacks in townships and hijacked buildings in the inner city (Tissington, 2013, pg. 14). This inaccessibility of affordable housing in areas of demand in the city has led to the development of settlements that can be deemed undesirable within conventional planning thinking in the form of, among others, mass informal settlements(referred to internationally as slums) (Roy, 2005; Huchzermeyer, 2009), increased occupancy in formal buildings (formally and informally) and backyarding.

These settlements often represent inadequate building structures, lack of basic services, overcrowding, vulnerability and a wide variety of other hazards, where in arguably 'normal' circumstances people would not choose to reside (Huchzermeyer & Karam, 2006; Weakley, 2013). However, in light of the inability of the 'formal' housing market to sufficiently supply affordable housing to house low income urban dwellers, informal settlements have emerged as a market-adaption that responds to their needs of urban land, shelter, jobs or livelihood opportunities, and basic services (Weakley, 2013). Also, as the report has already alluded to and continues to illustrate, these informal types of living have moved into the 'formal' suburban settlements close to the inner-city and produced this form of market-adaptation (through space adaptation and design) to provide for high occupation within spaces that would otherwise cater for lower densities.

Though these 'informal' living spaces or settlements provide for a means for adaptation, survival and inclusion of the poorest urban dwellers, they are not always a sustainable form of development as urban populations in the city continue to grow. The growing number of new migrants are expanding informal settlements and worsening the problems of overcrowding, pollution, and poor access to basic services such as clean water, sanitation and other social services (Hansen & Vaa, 2004). Also, as older informal settlements continue to grow, new informal living typologies are continuing to appear almost simultaneously in other areas causing an increased expansion of such dire living conditions in the city (Hansen and Vaa, 2004).

In light of this, planning (in this context) is faced with a great challenge of devising new strategies around managing the adverse effects of rapid urbanisation and making sure that it doesn't persist in causing further dire living conditions. The following section of this chapter therefore discusses theories pertaining to; urban resilience, urban informality and organic growth of cities, and how these can be used to analyse the re-modelling living space taking place in La Rochelle in terms of its adaptability to the changes of population growth pressures that the City of Johannesburg (CoJ) is experiencing. It gives particular focus to the problem of lack of affordable housing within Johannesburg to cater for the high

numbers of migrants seeking residence in the city and how home owners and residents of La Rochelle are responding to this need.

2.3 Urban Resilience through Adaptability in the Face of Change

As previously mentioned in the introduction of this chapter, the main theoretical focus of the research report is on urban resilience. Some arguments in recent literature around the concept of resilience thinking suggest that resilience should replace the concept of sustainability in the approach to environmental problems, highlighting the weaknesses in the use of the concept (of sustainability) in it being ambiguous in its reasoning and it being loosely translated in certain instances (Van der Leeuw & Aschan-Leygonie, 2000 in Weakley, 2013). Whether this argument is valid or not, can be assessed within the context where it is taking place. As Davoudi et al (2012 pg.299) state: "It appears that resilience is replacing sustainability in everyday discourses in much the same way as the environment has been subsumed in the hegemonic imperatives of climate change". Resilience, as a term, can be defined as the ability of a system to persist and maintain its stability (equilibrium in economic terms) in spite of external forces (Pike et al, 2010). This definition however is according to engineering resilience thinking which focuses on the ability of a system or a mechanism to return to its original state of equilibrium after experiencing shock or disturbance ('bounce - back ability') (Davoudi et al, 2012). This kind of resilience thinking has however been critiqued for placing emphasis only on the return to equilibrium or the state of normality which raises questions on what it is that defines this 'state of normality'. This definition has therefore been deemed inadequate as it disregards the evolutionary state of cities which are constantly changing both physically and socially (Pike et al, 2010).

The limitations of the engineering based definition of resilience, as alluded to earlier, has resulted in a body of literature that describes resilience within ecological forms of thinking (Walker & Salt, 2006), which brought in the evolutionary or transformative view of resilience (Weakley, 2013). It is in this type of resilience thinking that the notion of urban resilience comes in (Walker and Salt, 2006) where the concept is taken further in its definition to not just consider the system's ability to bounce back from shock but also its ability to adapt to change (Davoudi et al, 2012). Ecological resilience focuses on how systems are able to not just adapt to changes but also on their ability to persist through the process of adaptation. It also rejects the existence of a single state of stable equilibrium, but rather promotes the existence of multiple equilibria that can possibly change into other alternative states or domains of stability (Davoudi et al, 2012, p.301). Evolutionary resilience has therefore emerged as a concept to add the evolution and adaptive aspect of cities to urban resilience thinking. It deems resilience as not simply being the return to 'normality' but rather as

the ability to change, adapt and transform into new forms that better respond to pressures and strains that the city may experience. It is this form of resilience thinking that is best suited to explain the very complex, non-linear and at times self-regulating systems (Davoudi et al, 2012) of La Rochelle's living spaces.

If we consider the city and its inhabitants therefore to be an 'urban system', we can analyse its resilience, in accordance with evolutionary resilience thinking, based on its ability to adapt to external forces or pressures that may result in adverse changes in its spatial formation, socio-economic, political and environmental conditions (Christopherson et al, 2010; Miller et al, 2010). Catastrophic events or periods such as natural disasters, economic recessions and climate change, to name but a few, have been the focus of most literature on resilience (Walker & Salt, 2006). The focus of this report however is on the resilience of the city in dealing with changes brought about by rapid urban growth both in population and spatial densities rather than single catastrophic events. This is with regards to what physical forms the city evolves in to and what adaptive methods or processes it uses to achieve this form. The concepts of adaptation and adaptability explain how the different elements in a system integrate to provide to form a form of resilience within a particular place. Adaptation and adaptability address issues of the time, nature and the rate and/or duration at which systems or places change; with adaptability in particular defining the dynamic capacity of a system or place and its capacity to respond to unforeseen changes (Pike et al, 2010).

As alluded to earlier, the re-modelling of living spaces in La Rochelle can be seen as an evolutionary form of resilience. Here the community of La Rochelle is adapting to increased population moving into the area through a new system of housing provision based on infill development of backrooms/shacks in single dwelling plots to accommodate more residents. This form of activity illustrates the ability of the La Rochelle community to exploit its own territory and existing resources in coming up with new solutions that seek to deal with unforeseen changes of increasing population densities that the initial low density planned design of the area did not cater for. Chelleri (2011) however, illustrates the down side of this form of resilience or adaptation by arguing that resilience should not always be regarded as a positive human response or outcome. This is due to the fact that human adaptive strategies in history have proven to only help to increase resilience in the short term (a few years or even generations), but lead to "…a serious erosion of resilience in the long term, resulting in the collapse of both environmental and social systems" (Chelleri, 2011, p.289).

This is a key point when discussing the implications of the strategies that the residents of La Rochelle have undertaken in adapting to the challenges of their living environment. On the one hand

property owners are capitalising on the demand for affordable housing and are remodelling their housing spaces to allow for rental and served them as a means of extra income. On the other hand rental accommodation seekers are benefiting from this provision of affordable rental spaces and are further remodelling the spaces they are renting to cater for their other social needs such as accommodating their family members who (in certain cases) have just moved into the city and need a place to stay. These actions may easily be interpreted as a positive form of resilience and adaptation to the previously mentioned challenges of living in the city. However, as Chelleri (2011) argues, this could be a possible misinterpretation as in the long term an erosion of this resilience could occur in the form of failures in La Rochelle's capacity (as a low density settlement) to carry increases in population sizes seeking accommodation in the area.

In this argument the focus in resilience thinking has once again (as discussed earlier) moved away from the perspective of viewing the capacity of a system to bounce back to a single equilibrium, towards a consideration of the system's resilience in dealing with multiple set of equilibrium paths (Davoudi et al, 2012), suited to explain the very complex and non-linear systems of areas such as La Rochelle. Emphasis here is placed on the integration of the system's functions within the social dynamics of the context. This could involve issues such as governance and management of the processes of urbanisation, as well as physical design interventions that would contribute towards sustainable development. "Resilience is about adapting and reducing vulnerability. It is the capacity of any system to deal with external changes whilst maintaining its structure, functions and identity" (Chelleri, 2011, p.289). From this statement it can be concluded that the resilience of La Rochelle can only be determined through an evaluation of its capacity, as an 'urban system', to deal with external forces and maintain its structure, function and identity as place where urban migrants are able start up and maintain sustainable livelihoods in the city (see Chapter 5) over the short, medium and long term (Davoudi et al, 2012; Chelleri, 2011).

2.4 Urban Informality: Evolution of Space

'Informality' as a term was initially used in issues of development, particularly within the economic sector, during the 1970s. It was during this time, as is to date, associated with issues of illegality and non-regulation (Jenkins & Andersen, 2011). When thinking about the concept of informality in cities and how to define it, two key phrases need to be considered first in framing the definition; 'organic/lacking order' and 'lack of state regulation'. These two phrases conceptualize most literature written on informality, particularly in the global South (Huchzermeyer & Karam, 2006; Huchzermeyer, 2011; Kanbur, 2009; Roy, 2005; Rakodi, 2002). More often than not informality is associated with 'instability' or is deemed

as a 'lack of organization' or as 'disorderly' (Kanbur, 2009). This relates to how the lack of regulation of informal activities means that there are no state laws that govern and bring order to informal operations, hence rendering them being perceived as 'chaotic'. Literature on urban informality normally considers issues of illegal or unplanned housing (such as informal settlements) and unregistered economic activities (such as informal street trading) (Huchzermeyer, 2011; Roy, 2005; Rakodi, 2002). Due to the topic of this research being on housing spaces, the focus of discussions on informality in this section will be on informal housing and settlements rather than on informal economic activities.

The concept of informality is used in this section to argue how the remodelling of living spaces in La Rochelle is an informal market-adaption in response to increasing demand for access to cities that is not being adequately met by the formal housing market (Weakley, 2013). This argument brings in the link between urban resilience (in relation to adaptation) and informality, which will form an important part of the overall conceptual framework of the report. Also highlighted within the framework, is the strong commonalities that exist between the concepts of urban informality and organic city growth (discussed in section 2.7.2). The so called 'chaos' and 'lack of order' that these cities have has been deemed problematic in large instances due to their unregulated and supposedly unsustainable state of growth and management. The excessive rapid demographic growth faced by African cities as well as their unplanned and sprawling nature has brought about issues of unhealthy living conditions, overcrowding and lack of adequate infrastructure needed to keep up with the effects of a growing population (Rakodi, 2002). In conceiving the nature of how living spaces are remodelled in La Rochelle, and for purposes of clarity in conceptual analysis, this report will regard the practice as 'informal', i.e. not recognized or approved by the state (Huchzermeyer & Karam, 2006). Whether this unregulated state is a 'problem' or not (and from which points of view it may be deemed as such) will be investigated through the case study research findings (discussed in Chapter 5). This report will however in essence propose that informality and formality should be seen in direct relation to each other as being 'acceptable' (to both the public and the state) forms of activity in cities, in the presence of specified regulation(s) (Kanbur, 2009, p.1).

As was mentioned earlier in this section informal housing often exists as an informal market-adaption due to the lack of adequate responses from the formal housing market in meeting the needs of low-income residents in the city (Weakley, 2013, p.12). Roy (2005) also argues this notion stating that informal housing within the urban context occurs as "...a distinctive type of market where affordability accrues through the absence of formal planning and regulation" (pg. 149). International literature on informality generally refers to

housing or settlements that are deemed to be of an 'informal' nature as 'slums'(UN Habitat, 2010; Roy, 2005; Huchzermeyer & Karam, 2006) and not as 'informal settlements', as is the widely used term in South Africa. Though these terms 'slums' and 'informal settlements' are of a similar nature and often overlap in terms of characteristics and definition, they are not precisely the same.

Slums are often classified as lacking in sufficient living area, housing durability, access to adequate and sanitation facilities as well as tenure security (UN Habitat, 2010). The definition 'informal settlements' contains all these elements with the only difference being that informal settlements are developed through unauthorized occupation of land (Huchzermeyer & Karam, 2006). Slums encompass forms of housing that can be deemed as 'formal' such as old hijacked building found in inner-city areas (e.g. Sao Paolo in Brazil, Lagos in Nigeria or Hillbrow in Johannesburg). These are often associated with high population and building densities, poor living conditions and little or no access to basic services, and not necessarily to the lack of legal tenure or official authorization and peripheral location, such as with 'informal settlements' (Weakley, 2013).

Housing in SA's cities takes up many forms of informality that go beyond that of 'informal settlements'. This includes multiple rental housing configurations such as: sub-divided rooms in inner city areas, rooms and flats in multi-storey tenements, rooms in various low-income settlements, sub-let units on rented land and tenant-built units in the backyards of dwellings (Charlton & Shapurjee, 2013, p. 2). This section thus does not discuss informality in relation to 'informal settlements' but rather as informal forms of living that encompass all the previously mentioned informal housing typologies. This is mostly due to the fact that the type of informal occupation that this report is investigating (as is seen in La Rochelle) falls outside the classification of informal settlements according to their definition and physical form. It briefly discusses some statistics (internationally and locally) on 'slums' and 'informal settlements', in order to paint a picture of the scale of the issue being addressed. It however discusses in much greater detail the informal living typology, referred to in existing literature as 'rooms' and 'spaces', formed through internal space remodelling and backyarding, as is seen in La Rochelle (Hungwe, 2013, UN-HABITAT, 2003; Mayson, 2014) (further discussed in Chapter 5).

The world is experiencing a high growth in 'slums' which are currently estimated to contain about 828 million people. By the year 2020, this number is projected to grow by 889 million (UN Habitat, 2010). Africa is amongst the continents that inhabit a large proportion of its urban population in 'slums' and/or 'informal settlements' slums, with this population said to increase by around 7 million people every year (Hansen & Vaa, 2004; Weakley, 2013).

South Africa presents a case where, in 1994 the number of informal settlements in the country was reported to be around 300 and had grown to more than 2600 in 2010 (Weakley, 2013). About 1.96 million households in the country are now reported to live in informal dwellings, which is inclusive of shacks located in informal settlements and shacks that are found in the back yards of formal residences (Weakley, 2013). The 'informal' living space remodeling activity being undertaken in La Rochelle falls within the bracket of informality that exists in the country.

Charlton & Shapurjee (2013) state how 'informal' types of dwellings arguably contradict state housing objectives by symbolising informality and disorder, which is a symptom of inadequacy that the county's housing programme strives to overcome. Roy (2005) however gives a more positive description to these dwellings; referring to them as a creative and spontaneous response to the state's incapacity to provide adequate housing. These housing typologies, according to Roy (2005), exist through informal subdivisions of plots formed through legal ownership and market transaction. La Rochelle showcases this notion and provides an example of Hernando de Soto's (2000)(in Huchzermeyer & Karam, 2006) argument of how informality can readily be incorporated into the formal market, in which it provides low income city dwellers with access to the benefits of formal markets that would otherwise require large income or capital to get into. This particular argument is useful in gaining understanding of why and how the residents of La Rochelle are engaging in this kind of 'living space production' and aids in the assessment of the relevance and possible impacts that the housing plans the City of Johannesburg may have on the area (to be discussed in Chapter 6).

La Rochelle epitomises the challenges and/or inadequacies of post-apartheid housing policy and delivery in South Africa where the spectrum of informality within previously 'formal' domestic living conditions is increasingly extending beyond the boundaries of racial segregation that once existed under the Group Areas Act during the apartheid era (Beall et al, 2000). Beall et al (2000) states that;

> *Although most Johannesburg citizens, including Africans, live in formal housing, there is a rapidly expanding proportion of the urban poor who are housed in informal accommodation, itself a complex category of many different forms". (pg.111)*

This statement has to date proven to be true, as this 'complex category' of informal accommodation types is now found within 'formal' neighbourhood (as in La Rochelle) and is continuously developing in many parts of Johannesburg's peri-urban areas (e.g. Turffontein, Kenilworth and Soweto). According to Huchzermeyer & Karam (2006), such informal dwelling arrangements within South African cities stem from the deep marginalisation and exclusion that the majority of their occupants face. This is with regards to, among

other things, their access to affordable formal living spaces, particularly in areas close to jobs and other economic opportunities. "Informality has made possible the survival of a large percentage of the urban population, enabling a range of precarious livelihoods" (Huchzermeyer & Karam, 2006, 4).

Through such informal forms of living, a large number of low income residents in the city have gained access to land and affordable accommodation. They have also arguably gained access to a more malleable form of living that can adjust to meet their changing needs and be used to generate income through their households (Weakley, 2013). It is in this that urban residents such as those of La Rochelle showcase the human and social living properties that drive the development of the cities of today, where shear tenacity and innovation to adapt to adverse situations enable them to remain resilient. This is form of resilience, enabled through the use of informal means, is what Chelleri (2011) argues is a result of many groups performing the same functions that allow them to be able to help each other to adapt and/or survive in cases of emergency or change.

2.5 Organic City Growth within the "Planned" City

Hillier & Pen (1992, 42) (in Karimi, 1997) describe cities as humanity's largest and most complex creation.

> *With a few exceptions, they come into existence not through design but through a process of growth and change, spread over tens, hundreds or even thousands of years. Each generation extends, substitutes, re-arranges and adapts what it inherits and passes it on to the next generation, so that even a modestly-sized city is an object of such spatial and functional complexity that it seems to defy rational understanding (pg. 42).*

Literature that has been written on organic city growth has mainly looked at macro-scale growth process i.e. looking at the city as a whole and how it is expanding (Burgess et al, 1967; Batty & Longley, 1994; Hillier, 1996; Karimi, 1997) and has seldom looked at how these growth processes occur within micro-levels such as within small settlements or neighbourhoods (such as La Rochelle). This will be, in part, the contribution of this research report, as it aims to extend research on organic city growth, looking specifically at how it happens within a micro-urban scale.

Organically developed or developing cities have proven to be very difficult to study and understand. Their spatial organisation has a kinetic quality that makes them highly complex and not easily understood through the 'old' conventional methods of analysing cities (Gandy, 2005). Some of the main principles around their growth and development (particularly in cities of old such as

Norwich, Rome, Istanbul etc.) have however been understood to be based on compactness, centrality and densification. According to Karimi (1997) it is due to the presence of these principles and laws on urban growth that the genuine character of organic cities has made them highly admired by city analysts. Though the physical shapes of cities vary, one commonality that always exists is the presence of the core, which regardless of the city's shape or size, is often the most important part of cities. The integration of the core of these cities to other locations is what results in the relatively compact structure of the city and brings about the application of the principles of compactness and centrality. Hillier (1996) describes how organic cities maximise the integration of the centre by taking up the role of accommodating all prime urban activities; at the same time, they try to reduce the segregation of the city from outside and the rest of the city from the centre through expansion of major routes. The integration of these cores within cities then results in the formation of a compact, dense and continuous sub-structure in the centre of the city.

The aforementioned theories around organic city growth are useful in explaining and bringing added understanding of why La Rochelle is developing in the manner that it is. As it was mentioned previously, La Rochelle is located in close proximity to the City of Johannesburg's inner-city area (about 4km away), meaning it is located within the core area of the city where the highest demand for space and access to various services is. This close degree of proximity to Johannesburg's largest economic agent is according to Msulwa & Turok (2012) important in all sorts of ways, including density (p.2). There exists a hierarchy of densities and scales of activity within the city and at the top of that hierarchy is the city centre, which has the greatest economies of scale (Msulwa & Turok, 2012, 2). It is therefore not surprising that La Rochelle is experiencing such densification pressure in terms of people seeking accommodation in the area due to its prime location close to Johannesburg's city centre. The World Bank (2008) in Msulwa & Turok 2012) states that the perceived 'chaos' and rush that inner-city areas contain is the driver of the industrialisation and urbanisation of any developing country, thus making it essential if not totally necessary, in order for the socio-economic statuses and livelihoods of urban dwellers to improve. This statement highlights the important link between geographic location of areas within cities in determining how they grow and develop and supports the argument that it is inevitable that La Rochelle as an area will continue to develop both spatially and in size of occupancy.

Like informality, organic city growth is often regarded as falling under the disorganization category which lies outside the 'planned order' and 'harmony' that models such as Burgess' City model suggests (Burgess et al, 1967). Writings within urban studies on organic cities have to date seldom discussed them beyond their

perceived physical attractiveness and architectural qualities; and have often overlooked the fundamental principles behind their formation and the characteristics that make them an effective form of development for a significant portion of the urban population (Karimi, 1997). Organic growth has therefore often been regarded as undesirable form of growth and seen as a threat to cities, particularly in maintaining their attractiveness and order (Huchzermeyer, 2009; Rakodi, 2002). Throughout history and particularly in periods of modernization, cities have been classified into those which grow 'naturally'/'organically' and those which are 'planned'. Distinctions between the two are made with regard to their rate of change as well as the scale of their development (Batty & Longley, 1994). Organically growing cities develop through slower processes than those which are planned, involving a myriad of individual or small communities' decisions at various small scales on the urban landscape that eventually result in larger urban change. Planned growth however occurs under more regular, controlled and coordinated processes with much larger quantities of resources devoted to their development (Batty & Longley, 1994).

The notion of 'organic' has its roots in modern biology and the concept of living organisms (Karimi, 1997). It stems from; "The idea of a city as being composed of a 'heart' - the central business district, of 'arteries' and 'veins' in terms of the hierarchy of transport and communications routes, of 'lungs' in terms of green space and so on" (Batty and Longley, 1994, 31). It has been translated in to conceptualising theory on the development of cities by seeing cities as products of the natural evolution of built-form during a long period of time, hence deeming them 'organic' (Karimi, 1997). This type of development is then considered to have the opposite meaning to 'planned' or 'preconceived' cities. However, if there is a considerable period of natural growth, and if there is no (or limited) imposing power to control the geometrical pattern of the city, even the 'artificially' planned cities can adopt organic patterns. Three elements help in conceptualizing the definition of an organic city;

- the initial layout of the city;
- the duration of the process of natural growth;
- the scale of development

(Batty & Longley, 1994)

It is perhaps the notion of 'irregularity' that is the primary concept which distinguishes organic cities from the other types (Karimi, 1997). Recent urban theorists (e.g. Karimi, 1997; Jenkins, 2012; Jenkins & Andersen 2011; Koolhas, 2006) have dismissed the equivalence of 'irregularity' of cities to 'disorder', 'chaos' or 'disorganisation'. They argue that the freedom organic cities have from a predetermined urban grid creates a highly flexible system of urban growth which intermingles with the demands and/or needs of the city's actors and

occupants. This flexibility allows organic cities to effectively (in most cases) perform the various functions that they need to, in a manner that can often not be obtained in regular patterns (Karimi, 1997). Arguments around the paradoxes of urban growth (i.e. the paradox of 'centrality' and the paradox of 'visibility') provide evidence for the claim that organic cities produce their own kind of order, in spite of their so called 'irregularity' (Hillier, 1996, 340).

La Rochelle serves a prime example that shows how organic growth may not be entirely chaotic and disorganised; but organised by complex informal interactions and forces that seek to create new living spaces that are less stringent, more adaptive to change and more effective in meeting their functions. In fact, these changes are a part of the growth of the city and suggest the nature of the processes of growth. La Rochelle showcases this notion of an 'organized complexity' (Koolhaas, 2006) in how it functions with regard to the provision of housing. Population growth through urban migrants moving into the area and seeking affordable accommodation have prompted the provision of this housing to be done in a manner which falls outside of so called 'formal' planning, ordering and design principles. La Rochelle's residents are making use of the existing demarcated spaces and physical infrastructures provided within the planned jurisdictions of the single dwelling plots (which may be deemed as ordered and formalized) and adapting them to better suit their needs.

As mentioned in Chapter 1 (see sections 1.2 and 1.4) the neighbourhood in its original formal state only allows for a defined number of dwellers to occupy the single dwelling plot, which prohibits high densities of residents from settling in the area. Residents of the area have however, through the re-adjustment of the formally planned spaces, incorporated a more organic spatial formation in the area in order to allow for a higher occupancy of residents. This 'organic' development of the area currently seems to be effective (in most parts) in catering for the provision of affordable living spaces. However, in years to come it may be to the detriment of the area, as the "rather obvious process of the aggregation of urban population" (Burgess et al, 1967, 48) occurs. The question therefore arises of whether these organic spatial formations have the capacity to adequately continue to accommodate urban population growth should it continue to rise.

Analysis of the organic structures of cities has revealed an ability within them to develop according to the ever-changing needs of their inhabitants; where the process of spatial formation and/or evolution over time has been based on the fulfilment of these needs (Karimi, 1997). This can be argued to be amongst the most important elements of the organic city, where it's social and physical function seems to be created around what the city is and what the city is needed to be by its inhabitants (Karimi, 1997). La Rochelle's social and demographic setup, as a migrant hub and

multicultural community, housing people from all over the country and the African continent (as discussed in Chapter 4, section 4.2.), has had an immense influence in the formation of the organic spatial structure of remodelled living spaces within its formal housing structures. The economic need for low cost rental and the cultural practice of space sharing that exist within migrant communities has translated into the physical structures that allow for these practices to take place, which is resulting in the settlement growing (both demographically and physically) in what can be deemed an 'organic' manner.

2.6 Government Intervention: The Sustainable Human Settlements Urbanisation Plan (SHSUP)

Since the inception of the City of Johannesburg's GDS in 2011, the City underwent a self-introspection process of the outcomes of its housing programmes and has upon this agreed that in light of the limitations of previous low-income housing programmes such as the 'RDP type' housing model and the questionable affordability of inner-city Social Housing, a more efficient plan needs to be conceptualised that will reduce the current low-income housing backlog (CoJ SHSUP, 2012). The City also undertook a review of its Growth and Development Strategy during 2011 (GDS 2040) which necessitated a rethinking of the City's approach towards on housing provision and service delivery and its implications on the sustainability of human settlements in the city (CoJ SHSUP, 2012, 6). Through the financial backing of the Department of National Treasury and the Urban Settlement Development Grant (USDG) funds, the city has come up with the Sustainable Human Settlement Urbanisation Plan (SHSUP), which is derived from a combination of the Spatial Development Framework (SDF) and Growth Management Strategy (GMS) philosophies and aims to enhance already existing housing programmes in terms of City building, urban form and in aspects of sustainability (CoJ SHSUP, 2012).

The SHSUP is one of the first, within the City's new range of housing strategies and plans, to acknowledge informality and informal accommodation as not being a housing challenge to be eradicated, but rather as a possible solution to the housing backlog in the city. It acts as the City's first step to better understand the informal accommodation market and support it towards being a sustainable accommodation solution (CoJ SHSUP, 2012). The plan is conceptualised under the vision of a 'sustainable society' where the city's inner-city areas, neighbourhoods and other types of settlements are sustainable, economically prosperous and self-reliant. This vision is underpinned by the fundamental principles of human dignity and social equity, justice and fairness, and democratic governance which form part of the broader national vision of sustainability as stated by the National Spatial Development Perspective (NSDP) and National Development Plan (NDP) where the lives of the poorest South Africans are transformed

in a sustainable manner (CoJ SHSUP, 2012). It is said to be tailor made to fit into the City's Sustainable Human Settlements development goals as identified in Outcome 2 of the GDS which notes the provision of a resilient, liveable, sustainable urban environment.

With regards to SHSUP's contribution to towards the City's affordable housing policy, it has listed under its 'Formal Housing Delivery Methods' incremental housing and home improvements as a crucial response to rapid urban growth and the demand for rental accommodation in Johannesburg's inner-city and old suburban areas, such as La Rochelle (as discussed in Chapter 2) (CoJ SHSUP, 2012). Incremental growth through the support of incremental housing and home improvement looks into how existing housing units in low density neighbourhoods could be extended over time, giving property owners the option to provide affordable rental accommodation for those who cannot afford to buy a house and gives them an added form of income generation. At a city-scale, this incremental typology is aimed at developing a more compact urban form by increasing densities within low density neighbourhoods and will grant property owners building subsidies should they undertake this kind of development.

This formal housing delivery method is of particular relevance to La Rochelle as property owners in the area are already undertaking this kind of affordable housing provision, as it has been discussed throughout this report. The support and enablement of this provision, through subsidies for costs of building and regulation of building standards to address fire, health and other safety measures as is proposed by the SHSUP, is needed in order to ensure the resilience and sustainability of this kind of development to be for the short, medium and long term (see Chapter 5 and 6).

2.7 Development of the Conceptual Framework

The relationships between human cultures, needs and activities and how they manifest to form various spatial structures and urban (physical) elements (e.g. land-uses, architectural structures/spaces and environmental quality) has not been widely discussed in urban literature, particularly in the context of the global south (Karimi, 1997). The previous sections (Sections 2.3., 2.4. and 2.5) have discussed the concepts of urban resilience, urban informality and organic city growth in terms of how they are defined and conceptualised within existing literature. Apart from a few recent writings (Peres & Du Plessis, 2013; Weakley, 2013; Mayson, 2014), which have mostly focused on the link between urban informality and urban resilience (Peres & Du Plessis, 2013; Weakley, 2013) or on urban informality and vulnerability (Weakley, 2013; Mayson, 2014), not a lot of work has attempted to draw connections between all three of the aforementioned concepts, particularly at the level of a settlement or suburban area.

It is therefore the aim of this report, particularly within this section, to contribute to the limited body of literature that has attempted to link these concepts to explain how settlements or areas in Johannesburg that are informal (e.g. Alexandra and Diepsloot) or that possess certain elements of informality (e.g. Soweto, Yeoville, Rosettenvillle and La Rochelle) can be transformed into more sustainable and liveable environments. This section of the chapter therefore investigates issues of space design and spatial formations in La Rochelle by bringing together all three of the previously discussed concepts to form a theoretical conceptual framework.

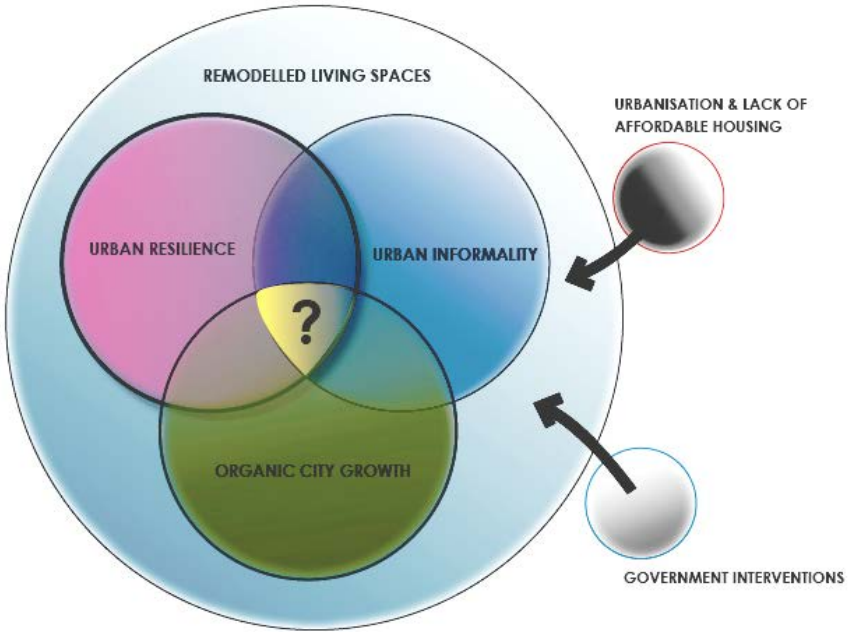


Figure 2: Conceptual Framework diagram – Linking Urban Resilience, Urban Informality & Organic growth (Mavuso, 2014)

2.6.1 Urban Resilience and Urban Informality

This section attempts to link the concept of urban informality with the ideas of urban resilience (as suggested by Miller, et al. 2010, in Weakley, 2013). The section firstly draws comparisons between aspects of urban resilience and informality that are similar and then looks at the conception of 'informality as resilience' (Weakley, 2013, iii) in relation to the living space remodelling activities of La Rochelle. One of informality's greatest strengths is its ability to adapt to certain conditions and situations that have resulted in change. It is this adaptive ability that draws the biggest linkage between informality and the concept of resilience and forms a strong component of the conceptual framework.

While informality is often associated with adversities such as poverty and vulnerability, it can also represent a strong form of resilience, as it is often highly flexible and adaptive to changes that occur in the urban environment (Weakley, 2013, 56). Informal settlements (or slums in other contexts) have been referred to throughout various literature (Huchzermeyer, 2009; Roy, 2003 & 2005; Weakley, 2013) as prime examples of this, where the adaptive capacity that these settlements (or more specifically the households within them) exhibit in dealing with situations of quick or gradual change, has led to them being perceived at as highly resilient. So instead of informality being seen as a form of desperation and poverty, a last resort or even as a coping mechanism for survival, it has been portrayed as

innovation, enterprise and positive adaptability (Weakley, 2013, 71). It is this recognition of the positive and adaptive nature of informality that forms the core of this report's argument for the remodelling of living space activity that is currently taking place in La Rochelle.

The report argues that the La Rochelle community has showcased a high level of internal resilience through the use of informal means to adapt to continuous processes of change such as rapid urban migration, high poverty and unemployment and lack of affordable 'formal' housing (see Chapter 4) that have occurred in the area. The adaptive spatial practices of internal room subdivisions and building back yard dwellings, that fall within the category of informality (see section 2.4), undertaken by households in the area is the type of positive resilience that informality represents. The households of the area have shown a high degree of adaptive capacity to processes of change mentioned above, where, as a 'formal' settlement, they have adopted the innovative ways of informality (Roy, 2003) to undertake a form of space production and rental housing provision that the 'formal' set up of the area is not able to do.

These are the positive attributes of informality that are often disregarded or ignored that allow settlements or areas such as La Rochelle to positively adapt. At the level of the La Rochelle area itself, it is the argument of this work, that the integration of 'informal' methods of space design should be allowed in future development and densification plans proposed by the city rather than exclude them (see Chapter 6), as this may lead to an increase in the area's adaptive capacities through the process of their formalisation.

2.7.2 Urban Informality & Organic City Growth

Sections 2.4 and 2.5 of this chapter discussed the various definitions and perspectives around urban informality and organic city growth. As mentioned previously in the chapter, urban informality is often defined as lacking organization or as 'disorderly' and is associated with 'instability' (Kanbur, 2009). Organic growth is also often regarded as falling under the 'disorganization' category which lies outside the 'planned order' and 'harmony' of urban elements within the city (Burgess et al, 1967; Karimi, 1997). It is therefore evident through these definitions and/or descriptions of urban informality and organic growth that there are very strong commonalities that exist between the two. As is often the case in SSA cities; the rigid binary between planned and organic (which can be compared to formal and informal) more often than not limits the understanding of urbanization processes and provides an over simplified version of what takes place in reality (Jenkins & Andersen, 2011). Cities, particularly in SSA, are often a product of various socio-economic, political and environmental factors which result in a complicated physical structure or layout that (in some cases) cannot be predetermined or planned for. These cities therefore surpass and go

beyond (in both form and function) the limitations of the geometry and so called 'order 'of planned cities (Karimi, 1997).

It is perhaps the notions of 'complexity' (Roy, 2005) and resilience however, that are the primary elements that hold the concepts of urban informality and organic cities together. The development of cities has over long periods of history showcased high levels of 'complexity' and supposed 'disorder' (that are now associated with 'informality') to which planning and design have failed to bring under so called 'order'(Batty & Longley, 1994). "The rhetoric of informality – flexibility, spontaneity, desire, choice – was used to design utopian spaces in cities like London and Amsterdam" (Fabricius, 2011, 145). Informality and the organic development of the city was in this time embraced and seen as a way to move beyond the limitations of state-led planning and design that was dominant during the modernist movement (Fabricius, 2011). It in this context, where the understanding of the city and its development is of a complex and highly multifaceted nature, that the notion of urban informality and organic city growth being perceived as 'disorganised', 'disorderly' and 'lacking harmony' can be proved to not be entirely accurate (Karimi, 1997). The understanding of how these two concepts link or overlap within space to form what is termed as an "emerging form of urbanism that is a way of life in SSA" (Jenkins & Andersen, 2011, 14) is crucial and is part of what this work attempts to do, through the case study of La Rochelle.

As Batty & Longley (1994) state, there has always (throughout the history of cities) existed a continuum that moves from organic to planned growth, where in many of those cases cities have ended up being made up of elements of both. The traditional modernist approach to city planning, that has sought to eradicate informality and organic growth in the city, has come under immense scrutiny within post-modern literature on city planning approaches by authors such as Jane Jacobs (1971), Leonie Sandercock (1998) and Vanessa Watson (2003). These authors have criticised the so called 'quest for a visual order' that the traditional state-led approach to planning has; drawing attention to the adverse socio-economic effects it has had on the city such as high rates of poverty and inequality (Batty & Longley, 1994). Here, the idea of naturally growing cities along with their complexity in terms of how they evolve and function is in fact argued to be more workable, more efficient and more equitable and indeed more democratic (Batty & Longley, 1994).

This section of the chapter therefore argues that the concepts of urban informality and organic growth in cities need to be, as in cities of old, embraced as important part of the city fabric, where they are no longer viewed as a problem to be solved through design but more as a condition that offers its own set of solutions (Fabricius, 2011). The 'organic' and 'informal' processes of internal growth and densification that are occurring in the La Rochelle area need to be

supported by state policy and accepted as an integral part of the city (Further discussed in chapter 5 and 6). In the words of Fabricius (2011);

> *The most successful projects in informal communities – like the much acclaimed interventions in Medellín, Colombia – seem to be the ones that help to integrate these neighbourhoods into the city and provide residents with services comparable to those in the 'formal' city. (pg.145)*

2.6.3 Urban Resilience and Organic City Growth

As mentioned earlier, it is not often that one would find comparisons or connections being drawn between the concepts of urban resilience and organic city growth. This section however seeks to illustrate that connections however can be drawn between the two concepts and can be mainly found in how evolutionary resilience of settlements (see section 2.3) can exist in the presence of incremental, organic (unplanned) growth.

It provides evidence for the claim that organic cities produce their own kind of order, in spite of their apparent 'irregularity' (Karimi, 1997), and that this order can translate into a form of adaptation and/or (evolutionary) resilience to adverse changes in their environment. The link between evolutionary resilience thinking and organic city growth brings to the fore the argument of how incremental and unplanned growth can be a form of positive resilience (Weakley, 2013). In investigating the relationship between the concepts it can be demonstrated that there is a strong correlation between their socio-functional role and how they manifest in space to form various urban elements and urban structures. "Any deep analysis of organic structures can reveal the principles and laws of urban organic growth are based on an evolutionary fulfilment of the inhabitants' needs during the process of spatial formation" (Karimi, 1997, 05.15).

This analysis, in its concern with the exquisite specificity (Harrison & Zack, 2014) of organic spatial formations within an area or settlement, should also be concerned with the ways in which this specificity is configured by external and transnational process and/or influences (such as urbanisation or a global economic recession). Also, by considering organic growth within an evolutionary resilience framework, one can determine the capacity of an area or settlement to reorganize itself in the event of limited space and options to expand this space, in response to population growth increases in that area.

According to Batty & Longley (1994) the organic spatial formations that occur within an area or settlement seem to be an evolutionary product of gradual processes of development and individual interventions that take place over a particular period of time, rather than through instant decisions. It is this evolutionary/transformative

ability, as was mentioned earlier in this section that illustrates the concept of urban resilience existing within incremental, organic (unplanned) growth. The above mentioned 'organic spatial formations' are not only formed or developed over a certain period of time but also possess the ability to evolve over time in order to adapt to the ever-changing socio-spatial needs of that area or settlement. I therefore argue here that it is the organic (unregulated) nature of these spatial formations that allows them to have the capability to adapt and evolve (in various shapes, forms and functions) to changes in the area or the city as a whole; of which if they were not organic i.e. 'planned' or regulated (as argued in section 2.6.1), they would most likely not have this capability.

The residents of La Rochelle's adjustment to the limitations of space in the area (due to its original low density design), through living space remodelling has allowed them to adapt to population growth pressures and demand for accommodation within the area. Households in the area have expanded the number of living spaces and rental options rather than constrain them. This act of space adjustment in La Rochelle to allow for population growth and increased accommodation illustrates how the concepts of evolutionary resilience and organic growth connect and act as a 'withstanding force' for change (Christopherson *et al*, 2010, 8). La Rochelle conveys a holistic approach to evolutionary resilience, where the spatial remodelling is done using people, institutions and 'context-specific' resources, which have proven to be fundamental to their survival. This further illustrates a form of enhanced self-reliance, which according to Christopherson et al (2010, 8) is a form of resilience closely associated with the socio-functional role that organic growth plays in the city, in adapting to people's needs. This therefore reiterates the point made earlier, that organic spatial formations are able to adjust or adapt to change in a manner that 'planned' growth cannot, and thus act as a valuable asset in providing for the ever-changing needs of the users and occupants of the city

3. Research Methods

3.1 Introduction

This chapter gives an account of the methods that I used in undertaking this research. It provides a background of what influenced my interest in investigating this particular subject matter. It describes the approach that I used towards my research findings (outlined in Chapter 5) as well as the reasons why I chose to use this particular approach. After first relating my personal interest in the topic, I outline the methods I used in obtaining quantitative data and the qualitative data I obtained from my time on the field in La Rochelle. Section 3.2 forms the bulk of the chapter, and describes

the research methods, arranged into four sections: Desktop data collection, assessment of physical conditions and available infrastructure, ethnographic and social profile analysis and assessment of proposed housing development plans for La Rochelle (policy analysis). The last section describes the considerations and precautions taken regarding research ethics as well the challenges I faced during the research process.

3.1.1 Personal interest in study

My interest in the matter of remodelling of living spaces in La Rochelle arose through my involvement in the Rosettenville studio that the School of Architecture and Planning in the University of the Witwatersrand hosted between 2013 and 2014. In this studio, during 2013, we as third year Planning students were assigned to undertake a study of the Greater Rosettenville area, which includes Rosettenville, Turffontein and La Rochelle, to investigate certain social, economic, spatial and cultural issues existing in the area. The main theme of our research was based on the condition of living spaces in La Rochelle in relation to whether the people of different origins, ethnicities and cultures that live in the area are able to share living spaces in harmony and what challenges or benefits these people may face in doing so. The group I was allocated to, after our first analysis of the area, decided to investigate a topic on how people of different nationalities, ethnic groups and backgrounds live together in large numbers within the same household. This came about as a topic of interest after one of the people we interviewed (Lloyd) during our first site visit revealed that he lives in a house that he shares with five other families. This he said was happening mostly in the area La Rochelle and that a majority of the families were of different nationalities, ethnicities and cultural backgrounds. As a group we found this to be very interesting and decided to take this finding up as a topic of study to analyse the following questions;

- Why the people in question share living spaces in the manner that they do?
- Was this form of living initiated out of preference or necessity (for instance a desperate situation of a lack of other places of accommodation or affordability)?
    - Are these people able to share the spaces harmoniously without conflict and why?

The main theme of our research therefore was based on the condition of living spaces in La Rochelle in relation to whether the people of different origins, ethnicities and cultures that live in the area are able to share living spaces in harmony and what challenges or benefits these people may face in doing so. We were particularly interested in the social integration of people within these living spaces, amidst the highly segregated nature of most communities in Johannesburg. The ultimate objective of our investigation was therefore to understand how such communities in

La Rochelle maintain social integration within the perceived fragmented society of Johannesburg that it is located in. We then started our analysis based on the hypothesis was that their shared socio-economic status is what enables the residents to live together in harmony. Due to limited time allocated to doing the research in that year, my group was not able ascertain enough information on the subject to answer most of the questions we raised. My personal interest in the subject however remained and I had aspirations to further this research, hence I decided to take this topic up for further study in my Honours year of study.

I decided to tackle the research from a slightly different aspect this time, giving more focus on the physical design aspect of the shared living spaces in terms of how the original single dwelling houses were redesigned/remodelled to allow for more space for accommodation by additional occupants, which was hence how the title of 'Remodelling of Living Spaces in La Rochelle" came about. This study of remodelled living spaces was to be based on the premise of the lack of affordable housing in Johannesburg in close proximity to employment opportunities and how the home owners and residents of La Rochelle have 'made a plan' and provided these, outside of government or planners' interventions. I started consulting some of my lecturers on the subject and also began reviewing literature on the concepts of urban resilience; urban informality and organic city growth that form the theoretical conceptual framework of my research (see Chapter). After consultations and discussions with my lecturers and my current supervisor, I began drafting the exact questions I wanted to interrogate within the study and worked towards writing up a research proposal.

3.2 Methods Used and Rationale for Research Approach in Current Study

My research methods draws together quantitative data, drawn mainly from official census reports, with qualitative data obtained from the outcomes of empirical field work data collection. This included individual interviews, participant observation and other forms of secondary data collection from books, journal articles and reports. This method, which involves using both quantitative and qualitative methods, is referred to as a mixed methods approach (Creswell, 2003) and "... employs strategies of inquiry that involve collecting data either simultaneously or sequentially to best understand research problems" (Creswell, 2003, 18). The quantitative methods used involve the collection of census data, sampling, questionnaires and/or conducting structured interviews. This type of data collection was used to quantify data received and to ensure objectivity and unbiased opinion of researcher (Philip, 1997). While quantitative methods were essential in helping me attain quantifiable data on the area, they mainly served the purpose of helping me acquire background information on La

Rochelle. This included tracing the population growth rate of the area since 1994 and changes in number of housing units as well as tracing the evolution of housing typologies and/or spaces to date.

The main research method however made use of qualitative procedures which were used to obtain information on the nature and state of affairs of the La Rochelle area and its living spaces. I used rigorous on site, exploratory and community involved research as well as empirical observation to investigate the current physical conditions of living spaces in the area as well as the available social and physical infrastructure. To gain a closer understanding of the intersection between spatial and social identities, I conducted a total of 8 interviews which consisted of both home owners and rental occupants. In these specific interviews, I explored the nature of spatial conditions in the area and to what extent their design have been influenced by particular socio-economic and cultural identities as well as needs, with an assessment of whether these spatial configurations are effective in meeting these needs or not.

The interviews also aimed at probing the relationships that different groupings have with each other within shared living spaces and whether the design of these spaces enables them to live in harmony or result in conflict. Through the use of primary data information that include results from the Census 2011 at a sub-place level, which were mainly accessed through Quantec data, as well as secondary data information from books, journal articles and reports written of Johannesburg South, I was able to look at La Rochelle in context rather than as an isolated entity and through this data, analyse the processes of socio-spatial change that have occurred in the area between 1996 and 2011.

3.2.1 Quantitative methods

Quantitative research involves the collection of quantifiable data that can be used to do a descriptive evaluation of the information found (Sarantakos, 2005). It uses predetermined; instrument based questions, performance data, attitude data, observational data, and census data as well as statistical analysis (Creswell, 2003). It further uses statistical techniques to test hypotheses and to verify theory as often an effect tool to ensure objectivity and an unbiased opinion by the researcher (Philip, 1997).

3.2.1.1 Desktop data collection

I conducted a desktop data collection of the area throughout the course of my research which has given me access to census information on population size & growth rates, housing types, income groups and racial profiles. This information has aided me in obtaining an overall understanding of the areas historic development with regards to demographic and socio-economic changes of the residents of La Rochelle as well as the physical transformations of the area over time. This helped to give an

indication of what socio-economic issues are motivating the formation of this kind of space sharing in terms of external forces such as migration flows and population increases that may be leading to increased demand for accommodation in the area. It also aided me in establishing the historic development of the area (demographically, socially and spatially) and how the existing cultures and social mechanisms that are influencing the way in which the living spaces are designed and administered, have developed and/or changed over time.

3.2.2 Qualitative Methods Used

According to Creswell (2003) the qualitative approach comprises of the use of constructivist knowledge claims, ethnographic design, and empirical research where behavioural patterns of participants are observed over a period of time. Interviews, observation data, document data, audiovisual data, text and image analysis are key elements to collecting data through this approach and allow the researcher to establish the meaning of a phenomenon from the views of participants (Creswell, 2003). The empirical research component of my research approach was a way of helping me gain knowledge on the nature of the remodelling of living spaces by means of direct and indirect observation and/or experience.

3.2.2.1 Ethnographic and Social Profile Analysis: Participant Observation, Interviews and Additional Research

In undertaking my ethnographic and social profile analysis I made use of in-depth structured interviews, life histories and participant observation to gather primary data on the kinds of people living in housing spaces in La Rochelle including their; ethnicity, origination, duration of stay, reasons for living in La Rochelle etc. The interviews I conducted comprised of a range of open-ended questions where the interviewees were allowed to elaborate and express their personal opinion on the subject matter at hand. I asked landlords and/or tenants questions on type of ownership, number of occupants, type of rental spaces (backroom dwelling or room within main house) as well as on social aspects such as relationships between home owners and their tenants administration of the households (such as payment of rent and services and the authorisation and financing of the physical modifications to the house). I then supplemented this primary data with secondary data obtained through interviews conducted in 2013 by 3rd year Urban Planning Housing specialization group to add on to my information on people residing in the area (see Chapter 4, section 4.5).

The overall intention of the ethnographic data to be collected from interviews was to engage in a quality of life analysis (Sarantakos, 2005) that sought to;

- establish living condition standards of La Rochelle and whether it has changed over time establish the existing diversity of social, racial and income groupings living within same space
- establish the nature of the existing systems of domestic administration of shared spaces within houses e.g. toilets & bathrooms, kitchen and washing and hanging areas
- determine extent of solidarity between sharing occupants and any existing conflicts between races or genders

3.2.2.2 Assessment of physical conditions and available infrastructure

I went on to investigate the physical condition of the houses that I studied in the area. This was done mostly through personal observation within the internal spaces that I was allowed in to and through unstructured, semi-formal interviews with participants in instances where I was not allowed inside (see Chapter 5). In this I asked both landlords and tenants information on the size of rooms, ventilation, availability of water and electricity, maintenance, number of toilets available and their condition. These interviews also helped me to establish whether any self-administration systems have been created by either the home owners or renting occupants on usage and maintenance of communal spaces and sanitation facilities such as the kitchen, toilets and bathrooms.

3.2.2.3 Assessment of proposed housing development plans for La Rochelle (Policy Analysis)

My data analysis also involved an interrogation of the CoJ's proposed plans for the development of La Rochelle and its surrounding areas at municipal, regional and local/precinct levels. This involved comprehensive reading of the CoJ's Growth Development Strategy (GDS), where I paid particular attention to the city's densification strategy, and the CoJ's Region F Regional Spatial Development Framework (RSDF) on its strategy for a proposed North-South Development Corridor. The main focus of my policy analysis was on the recently announced Corridors of Freedom Project that the CoJ proposes to use to redevelop and densify the city's old suburbs such as Melville, Auckland Park and Westdene, located along the east-west running Empire-Perth Corridor as well as Turrfontien, Kenilworth, Rosettenville and the report's area of focus La Rochelle which lie along the proposed North-South Turffontein Corridor (further discussed in Chapter 4, section 4.6.3). The Corridors of Freedom project is set to use Transit Orientated Development (TOD) as a tool to re-stitch the city's fragmented spatial and densify the city's low density areas that are experiencing a rapid influx of migrant occupants (CoJ GDS, 2011). Under this project lies the Turffontein Strategic Area Framework (SAF) where the Greater Rosettenville area (inclusive of La Rochelle) is classified under, has been targeted for a new high density housing

development plan under the CoJ's GDS densification strategy. This is the main document that I have reviewed and referenced extensively throughout the report as it outlines the city's plans that have been proposed specifically for the La Rochelle area. This I have done particularly with the aim of evaluating the effectiveness of the plans when compared to the actual developments currently taking place in the area (to be further discussed in Chapter 5).

I also attended meetings held or organized by the City of Johannesburg pertaining to the Corridors of Freedom project. These have widened my insight on the vision the City has for housing development in La Rochelle and how the members of the community who attend and participate in these meetings responded to these proposed plans. The meetings I attended include conference events, seminar sessions and community participation meetings where stakeholders and participants of the Turffontein Corridors of Freedom plan (built environment professionals, scholars and government officials) were presenting and engaging in discussions on the proposed plans for the area.

3.3 Approaching the community and the interview process

The participants that were engaged throughout the course of my field work were informed about the nature and aims of the investigation. They were also informed that their participation was voluntary and that they could choose to withdraw from the study at any time. It was also made clear that not choosing to take part in the study would not have any negative impact on them. The participants were also informed that there would be no rewards for taking part in the study. Participants were also assured that they would remain anonymous throughout the study and in any resulting reports. Participants were asked if they are willing to reveal their names and in the case where they were not, a false name was requested to avoid having to assign a number to them. This was done to give life to their stories and render a more personal description of their biographies, current living conditions and way of life.

3.4 Ethical Considerations & Challenges Faced In Study

My engagement with the residents of La Rochelle was a particularly challenging task. I faced challenges within the community engagement process as people of the area were either very sceptical of my intentions on interviewing them or claimed to not have time to speak to me. I faced greater difficulty however in accessing a majority of residents' living spaces, which delayed the progress of me attaining findings. This made the process of obtaining information long, tedious and costly as I had to travel to the area more times than I had initially planned. With regards to residents that agreed to take part in my study I had to take caution and be sensitive towards the extent of my interrogation and documentation of the interviewee's backgrounds and private

spaces. A lot of the foreign nationals were not comfortable with me documenting their internal private spaces through photographs, so I had to take pictures of the exterior parts and make hand drawn sketches of the internal layout of the houses. Part of this sensitivity was also in giving them a chance to maintain anonymity, as (I suspect) some of the foreign nationals may have been illegal occupants of the houses in question. As part of my ethical considerations I also attempted not to raise any expectations amongst the respondents, on my research improving their living conditions and economic statuses in any form or way.

Documentation of Findings

I used 2D drawings (floor plans) and 3D drawings, photographic recordings and other mapping techniques as visual aid to represent my findings on the physical state of the living spaces. I have used the names given to me by the respondents and photographs taken of the households based upon obtaining their consent.

4. La Rochelle – A Migrant Destination & Cultural Melting Pot

4.1 Introduction

This chapter focuses on the case study area of the research report La Rochelle. It begins by giving an overview of the area in terms of its location at a regional and metropolitan scale within the City of Johannesburg and moves on to tell the story of its history and the stages of its development, both physically and in its demographic make-up. It gives an in-depth description of how the greater area of the southern suburbs of Johannesburg (better known as the 'Old South') has developed over the decades, as outlined by Harrison & Zack (2014), since their establishment in the late 1800s. It then gives a descriptive and statistical analysis of La Rochelle at the scale of the sub area, down to scales of the households and individuals. All this is contextualised within the wider region of SSA, SA and the city of Johannesburg.

A brief background on the backlog in the provision of 'formal' housing in the country is given in the beginning of this section to set the tone for the discussions to follow on the current situation in La Rochelle on home ownership and rental as well as residents' livelihoods. The chapter is then concluded by looking into the plans that the city government has for the redevelopment of the area, particularly with regards housing provision and densification strategies. This is done with particular focus on the Turffontein Strategic Area Framework (SAF) which was written under the auspice of the Corridors of Freedom (see section 4.6), that has proposed a densification and design strategy for La Rochelle and its surrounding areas located within the Turffontein Node.

4.2 Introducing La Rochelle: Place & Its Location

La Rochelle is located in Region F of the City of Johannesburg (See Figure 3). The suburb is in the south-eastern part of the region, approximately 4km south of Johannesburg Inner City. It is bordered by the M2 to the North, M19/ Marjorie Street to the East and Kliprivier Drive/M1 to the west and N12 to the south, which form an extensive network of freeways that separate the area from Soweto and Alberton in the Ekhurhuleni Metropolitan Municipality (Turffontein SAF, 2014; Harrison & Zack, 2014). Region F has various land uses and economic sectors however these are divided within the region by the M2 as well as the mining belt that runs east to west and past Rosettenville. La Rochelle mostly consists of a low rise (single storey) residential character and is surrounded by other residential suburbs of Turffontein, Kenilworth, Rosettenville, as well as Oakdene and Linmeyer further south closer to the N12, that all form the Greater Rosettenville area.

The 'Old South' of Johannesburg, as this area is often referred to, has a unique history that is linked and almost exclusively influenced by the early development of Johannesburg, which was established as a village in 1886, on a piece of state - owned land known as Randjeslaagte to house mine workers (Turffontein SAF, 2014). "The area was bordered to the east by Doornfontein, to the west by Braamfontein and on the South by Turffontein" (Turffontein SAF, 2014, 17). It is an area that is not as well connected to global corporate networks the way that places such as Sandton or Midrand (also in Johannesburg) are but also doesn't form part of marginalized areas of the city such as former black townships and informal settlements (Harrison & Zack, 2014, 2). "It is an in-between space that has locally rooted identities, but which has also been profoundly linked through its entire history to the shifting networks of a global diaspora" (Harrison & Zack, 2014, 2). The area also lies away from the more affluent suburbs located in the north Johannesburg, along the noisy and dusty industrial and mining areas of the city. This location is characteristic of the historic socio-economic and spatial segregation of the apartheid era that (to a large degree) dictated the fundamental layout of the city and continues to exist to this day (Turffontein SAF, 2014).

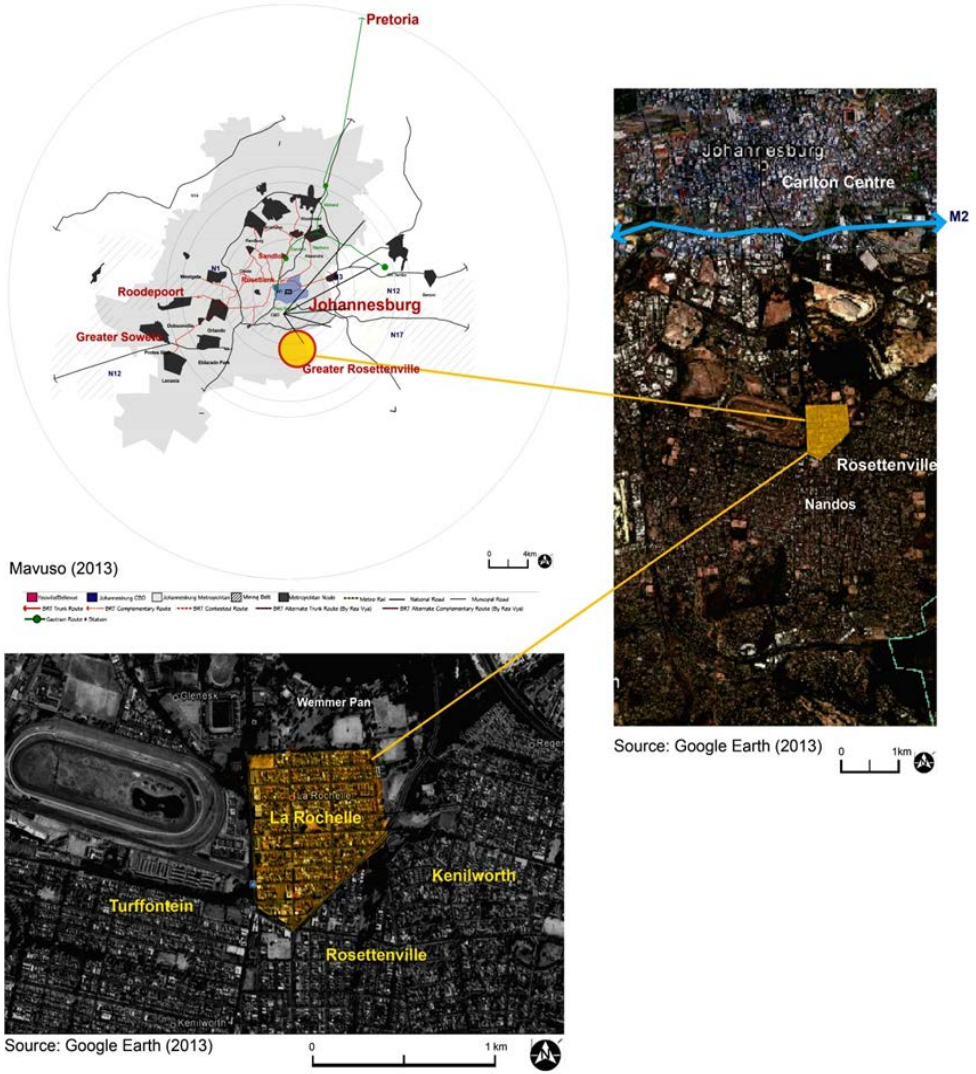


Figure 3: Location of La Rochelle within the Johannesburg Metropolitan Region (Mavuso, 2014).

La Rochelle's close proximity to the inner city has caused it and surrounding areas to lose investment over the years as more and more disinvestment and degradation in the inner city occurred which has led to it becoming an area in decline. However, after the recent football world cup in 2010, investment has come back to the inner city along with urban regeneration and upgrading, which has sparked opportunities for La Rochelle's redevelopment. There is has been tallk over the last 4 years of developing the East-West Development mining corridor and a North-South Transport Turffontein Corridor under the Corridors of Freedom transport initiative, as announced by the CoJ Mayor Mpho Parks Tau in 2013 (See Section 4.6).

These corridors are to run through and interconnect La Rochelle to the CBD of Johannesburg as well as areas such as Soweto in the south-western parts of the city (Jo'burg Southern Inner City Belt UDF, 2009; Turffontein SAF, 2014). It is also located next to an environmentally sensitive area further south of its boundary and lies just within the urban development boundary which has had an impact on the infrastructure development and expansion of the area. The location of the mining belt in close proximity to the area could also have great risks for the area, for instance – mine water drainage, dust and air pollution which might affect visibility and health of residents within the area (Jo'burg Southern Inner City Belt UDF, 2009).

The area has been dubbed as the 'Gateway to the City' as migrants moving into Johannesburg use it (amongst other areas such as Hillbrow and Yeoville) as an entry point in terms of obtaining an affordable place to live that is also within a walking distance to employment opportunities within the area and to the inner-city which is approximately 4km away (Turffontein SAF, 2014). This role also results in La Rochelle being a place of temporary residence for a large amount of its migrant population; hence it is experiencing a great amount of demographic and physical change over the years through the ever-changing rate of in and outward migration. Since 2001 La Rochelle and its surrounding areas have experienced a 55% increase population growth, which is considerably higher than the increase in employment opportunities in the area (Turffontein SAF, 2014). These statistics imply that La Rochelle (and the Greater Rosettenville area as a whole) are) not gaining a substantial amount of economic investment to support its strategic location.

4.3 History of La Rochelle & its Early Developments

La Rochelle was established in 1895, along with similar suburbs south of Johannesburg such as Ophirton (1886), Booysens (1887), Rosettenville (1889), Turffontein (1889), Regent's Park (1904) and Kenilworth (1907) (Moyo & Cossa, forthcoming). It (and the rest of the Old South) was established as a working class area and nurtured a nascent working class identity amongst the white English and Afrikaans working class of the time (Harrison & Zack, 2014). The area's history portrays a huge Portuguese influence and legacy due to the Portuguese migrant communities that moved into South Africa during the 1950s and 1960s period and eventually moved into the southern suburbs of Johannesburg (Old South) in the 1960s. The Portuguese first settled in La Rochelle and Rosettenville between 1960 and 1972 and had mostly migrated from Portugal (Madeira) due to the Second World War (Turffontein SAF, 2014). Mainland Portugal, during the 1950s and 1960s, was caught in the growing intensity of colonial wars, which saw many of Portugal's skilled workers flee the country and move into South Africa in attempts to avoid military conscription (Morier-Genoud & Cahen, 2013).

South Africa at that time offered enormous opportunities for skilled workers or artisans in areas such as brick laying, carpentry, mechanics and boiler making. This was mainly due to the growing need for workers in the then affluent industries of building, engineering and steel, a majority of which were located in Johannesburg. This recruitment came with privileges for the workers such as good wages, access to health and education as well as affordable and spacious housing (Morier-Genoud & Cahen, 2013). The area was attractive for immigrants due to the low cost of stands for housing in the area and its close proximity to the inner-city. This was also coupled with the Portuguese migrants' (who occupied most of the area) low socio-economic and financial conditions which translated into more affordable property prices (Turffontein

SAF, 2014). "It made a lot of sense to buy and rent houses there; especially once the enclave in itself became a drawing card" (Morier-Genoud & Cahen, 2013, 221). All these reasons became very important for the choice of La Rochelle as a place of residence for a lot of foreign migrants moving into Johannesburg from all over the African continent such as Mozambican immigrants who grew in numbers in the area after the country gained independence in 1976 (Moyo & Cossa, forthcoming). The 'Old South' of Johannesburg as a whole was predominantly a white working class area during the pre -1950s period. Hepple (2011) (in Moyo & Cossa, forthcoming) writes;

> *The suburb was inhabited by white working-class people, most of the men working in the gold mines, others for engineering works or the state railways....The eastern and southern suburbs of Johannesburg were something like a small industrial town in England, although not as crowded* (p.18)

There was however always a certain level of diversity in terms of ethnicity, language, occupation and income level in the area with the existing black African minority mainly living in backyards as domestic workers (Harrison & Zack, 2014, 4). Until the late 1950s the population of the area grew steadily and stabilized at around 80,000 people, then grew again during the post-apartheid era in the mid 1990's, (through densification of existing suburbs) to around 170,000 by 2011(Harrison & Zack, 2014, 4). There were essentially four waves of migration that had an impact on the socio-spatial patterns of the 'Old South' and produced the diverse demographic composition that exists in the area today. These waves included; the arrival of international migrants from all over the world in what was called 'The Witwatersrand Gold Rush' in 1886, the arrivals of the Afrikaans -speaking populations from 'the platteland'[2], the Southern Europe migrants who arrived mainly in the aftermath of World War II, the arrival of the colonial Portuguese in the 1970s after the decolonization of Mozambique and Angola, and lastly the migrant influx of the early 1990s after the official end of the apartheid regime in 1994 (Harrison & Zack, 2014). Off all these, the most important wave with regards to the subject of this report is the post -apartheid influx of migrant population into the Old South, which included international migrants from all over Africa (and elsewhere) as well as formerly oppressed non-white (black, Indian and coloured) South Africans. It was this influx of migrants that had the most influence on the living space remodelling practices that the residents of La Rochelle began to engage in, in order to accommodate these increasing populations.

[2] 'The Platteland' is a term used to refer to a remote rural district in South Africa.

4.4 The Post 1994 migrant influx into La Rochelle

As has been alluded to in the previous section, the end of the apartheid era in 1994 has seen a massive transformation of areas in the 'Old South' that were originally developed and planned as neighbourhoods for whites only. These southern areas have transformed into diverse, multicultural and multinational cosmopolitan areas, driven by migration movements in and out of the area, as was originally done by the Portuguese population in the early 1960s (Turffontein SAF, 2014). "The population of the 'Old South' nearly doubled between 1996 and 2011 from 87,500 to 170,597" (Harrison & Zack, 2014, 9). Its close proximity to the Johannesburg CBD (amongst other things) has attracted a large number of black populations to move out of the township areas such as Soweto and move into the area to access better economic opportunities. The ever changing population dynamics of the area has led to its growing cosmopolitan nature hence establishing La Rochelle and its surrounding areas as a 'cultural melting pot' (Turffontein SAF, 2014).

This growth in population in the area has been also been accompanied by a great shift in the racial structure. Census data (Quantec, 2013) and studies done in the area (Harrison & Zack, 2014; Moyo & Cossa, forthcoming) indicate a radical shift socio-spatial mix of the 'Old South' areas where low-income black African renters have replaced the previous white owner-occupiers and renters. This is occurring in a process that is seeing a large amount of white occupation give way to the black African population seeking accommodation in the area, leading to what Moyo & Cossa (forthcoming) call new 'racial enclaves'. La Rochelle is one of the areas where this new racial enclaving is occurring, along with its neighbouring sub areas of Rosettenville, Turffontein, Kenilworth and Regent's Park, and now contains an overwhelming majority of black African people.

"Here, more than three-quarters of population is now black African and the white population have plummeted in proportional and absolute terms" (Harrison & Zack, 2014, 10). According to Harrison & Zack (2014) there has been a drastic increase in foreign citizenry in the 'Old South' between 1996 and 2011, where the numbers have soared from 2898 in 1996 to 28,497 in 2011 (approximately a 10-fold increase). Out of all the areas of the 'Old South', 2011 statistics show that foreign citizenship is highest where the Portuguese population clustered such as in La Rochelle, which contained 9% of the foreign population residing in the 'Old South' (Harrison & Zack, 2014). La Rochelle has been especially attractive to Portuguese speaking foreign citizens, specifically black Mozambicans and Angolans, where Mozambicans have been able to obtain rental accommodation from white Portuguese whilst wealthy black Angolans have bought properties into the area (Harrison & Zack, 2014, 15).

It is highly evident within the previously discussed statistics that the end of apartheid in 1994 has seen an astounding change in the demographic composition of La Rochelle and the whole of the 'Old South'. Since 1994 the racial composition has almost reversed where of all the 17 suburbs in the 'Old South' eight are now more than 50% black African, compared with none in 1996 (Harrison & Zack, 2014, 9). The removal of all of apartheid's oppressive laws towards black Africans, such as the Group Areas Act, has allowed the black African population to move into areas such as La Rochelle in search for better opportunities. "In terms of absolute numbers, black Africans grew from 19,817 to 96,782, while numbers of whites reduced from 56,354 to 35,671" (Harrison & Zack, 2014, 9).

Though the population of the 'Old South', including La Rochelle, has grown immensely since 1994, there has been very little change to its overall footprint, resulting in it nearly doubling in occupation density. This therefore once again illustrates that the area is densifying internally, within the jurisdictions of its original boundaries, and reinforces the argument of the organic growth process that has occurred in the area (as discussed in Chapter 2, sections 2.5 and 2.6), as well as raises the question once again of whether it has the (physical) capacity (in its current state) to handle this growth should it continue.

4.5 The Current Situation in La Rochelle: An Ambiguous & Hostile Environment

4.5.1 Demographic composition and community relations

In 2011, according to census data, La Rochelle had a total population size of 5129 people (Quantec, 2013). Statistics reveal that South African's dominate occupation in La Rochelle, despite the apparent influx of international immigrants coming into the area that was discussed in the previous section, with a total of 2827 people being born in SA out of the total population of 5129 people (Quantec, 2013). The 2011 census recorded a total of 894 people in La Rochelle to be originally from SADC countries and only 192 people to originate from countries from the rest of Africa (Quantec, 2013). It is however questionable whether these numbers are accurate, particularly with regards to the number of people from the rest of Africa.

The 2011census data has seemingly failed to give an accurate breakdown of the citizenship of people in the area. The census recorded a total of 656 people who were non-SA citizens from an unspecified region. This number may consist of a large number of Africans that did not reveal their origin. Harrison & Zack (2014) reveal that around a third of non-SA citizens who live in the 'Old South' did not give their citizenship during the 2011 census. This they argue was perhaps due to high levels of anxiety or a preference of

anonymity by the foreign residents of the area. The inaccuracy in this data reflects the current challenge faced within the African continent with regards to keeping record of migration patterns and the ever-changing nature of informal types of expansion and densification (Weakley, 2013) within settlements such as is seen in La Rochelle. This also indicates the complexity in terms of the racial, social and spatial mix that exists within the area, which is revealed through the highly differentiated pattern of racial integration and/or segregation in certain instances within the neighbourhood and has resulted in what Harrison & Zack (2014) call an "overtly hostile environment" (pg.13).

Findings that were obtained from the empirical research done by Wits University students in the area, including myself (see chapter 3, section 3.3.1) as well as in academic writings such as Moyo & Cossa (forthcoming) and Harrison & Zack (2014), are in some categories in contradiction with 2011 statistics. Based on this field work research, that involved a household survey, focus group meetings and interviews with residents, landlords, traders (formal and informal), shop owners, as well as general people on the streets, La Rochelle was found to be a home to a large number of immigrants coming from the South African Development Community (SADC) and non - SADC states in Africa; with a strong presence of Mozambicans, Congolese, Nigerians and Zimbabweans.

Interviews that were done with some of the residents of the area reflect some of the negative experiences and interactions between diverse community members that have led to some people in La Rochelle resenting their neighbourhood. However, these experiences vary, with a seemingly large proportion of the interviewed residents in the area giving positive remarks about La Rochelle as a great and pleasant place to live in, whilst others attested to the stagnant development and lack of physical intervention in the area as it had not changed much since they moved. According to the student interviews, some residents made remarks on the non-judgemental nature of the community that allows them a certain level of freedom of expression in the area (ARPL 3013 Housing Students, 2013)[3].

There seems to be a strong sense of community amongst the foreign residents which has seen them create certain spaces for themselves within the area, such as pubs and eating spots along Johannesburg Road, where they congregate, interact and feel a level of comfort and security. There do exist some differing perspectives amongst

[3]This information is obtained from a project called "Ekhaya in Rosettenville" that was undertaken by 3rd year ARPL3013 Housing students, from the Wits University School of Architecture and Planning, in 2013. The project attempted to uncover the housing dynamics and circumstances of Rosettenville, La Rochelle and Turffontein residents, and relate these findings to broader aspects of housing in Johannesburg.

many of the remaining white residents however. Harrison & Zack (2014) state that a number of them, within the focus group interviews they conducted, associated the new immigrants with the physical decay of the area, as well as with increased levels of crime and other illicit activity.

> *In our interviews, they all lamented the extent to which the once safe and family-oriented 'Old South' is becoming associated with prostitution, drug-dealing, building hi-jacking and a general disregard for city by-laws. However, this perception resides alongside the view of the new migrants that the South is a place of relative order and safety, that the crime that does exist is predominantly perpetrated by South Africans and that the property decay follows from unscrupulous landlords* (Harrison & Zack, 2014, 13).

4.5.2 Livelihoods

The dominant economic status of the people who live in La Rochelle is low–income with a large amount of these deriving their income from the informal sector. Census data on the levels of employment found a total of 565 people to be employed and 260 people to be unemployed in La Rochelle (includes discouraged work seekers and those who are not economically active) (Quantec, 2013). People that are employed mostly work as guards, street traders, service providers, security attendants or business owners. The unemployed mostly consists of those who were still searching for work or stay at home mothers who are supported by their spouses or families. There is a significant amount of mobile (mostly male) workers in the area who sit in the park spaces and wait for temporal jobs that come from people who are looking to hire in areas such as plumbing, bricklaying, gardening or other household or masonry services. Other males in the area occupy positions as panel beaters, motor mechanics and security guards whilst women often occupy positions as hairstylists, waitresses in Portuguese restaurants or domestic workers in Portuguese households.

A lot of the interviewees also attested to living in La Rochelle because of the need to live close to income earning opportunities and to minimise the cost and time spent in getting to work. The affordable rental accommodation that is available is therefore deemed by them of great importance in order to sustain them economically (ARPL 3013 Housing Students, 2013). The job opportunities in the formal labour market are in many cases over capacitated and are mostly limited to South African citizens. This has led to a large number of international immigrants in the area turning to the informal sector (more specifically street trading) to create means of income. The dominant trend within the people that are working in La Rochelle, particularly amongst the migrant populations, is that they are working to support themselves and their

families back home (ARPL 3013 Housing Students, 2013). The affordable rental housing available in the area once again plays a vital role for the migrants in this instance as their main priority in most cases is saving or sending money back home.

There is clearly, in light of all this, a relationship between incomes and type of accommodation required in La Rochelle. As is the main argument throughout the report, the remodelled spaces being investigated allow for the poorer migrants of the area to enter the urban system (see Chapter 2), thereby supporting economic livelihoods and offering quick access to cheap, flexible housing, which is located relatively close to employment opportunities and amenities (Charlton & Shapurjee, 2013, 4). The unemployed have rental insecurity and they are vulnerable to rental increases and need to be relatively mobile. Therefore they may not sign long leases and they often look for the cheapest accommodation which may entail crowded and sub-standard living conditions. It is important to note that income determines where people can or may stay.

4.5.3 Home Ownership and Rental Accommodation

La Rochelle provides for a diverse set of housing typologies that consist of single or semi-detached houses, flats, backrooms, shared complexes and shacks. It is however not all of these housing typologies that were initially planned for the area. As was mentioned in section 4.3 of this chapter, the suburb was initially planned to be occupied by white middle class workers who purchased and owned properties in the area to reside with their single families. This dominant trend of home ownership was also coupled with the Portuguese migrants' (who occupied most of the area) low socio-economic and financial conditions which translated into more affordable property prices (Morier-Genoud & Cahen, 2013). However, the end of the apartheid era saw an influx of migrants into the area who were attracted, amongst other things, by its location in close proximity to the inner-city.

The move of low income black Africans into the formerly white spaces of the suburb has resulted in the development of a large measure of rental-based housing typologies in the form of back rooms shared complexes and shacks. With 'white flight' out of the area continuing to increase as the years go by, a larger stock of good quality rental accommodation is becoming available as the single or semi- detached houses, that used to be occupied by single white families, are being rented out by a growing number of households in the area. Harrison & Zack (2014) reveal that in 2011 around 80% of households in La Rochelle, and its surrounding areas of Rosettenville, Turffontein, Kenilworth, rented rather than owned their accommodation. Statistics show that over 50% of all dwellings in the area have rental accommodation, either in the form of backrooms or internally partitioned spaces (Turffontein Strategic

Area Framework, 2014). This has become a particularly viable trend to follow for the home owners (both who live or do not live in the area) as a majority of these migrants are people who earn a minimal income and cannot afford to pay the high rental prices of other places in the inner-city, hence they are willing to rent dwellings that are of relatively small size for a lower rent.

A notice board is located in the area, on corner Pan Road and 7th street, where home owners or rental residents put notices for available rooms and or spaces for rent that month. This practice is however not unique to La Rochelle as places in the inner-city, such as Yeoville, have similar walls for notices, but at a much larger scale. "On a similar wall outside the old post office in Hillbrow, there are hundreds more; outside Ponte Tower, the same. Outside Sunnypark Mall in Pretoria, though the accommodation is known by slightly different names, the number of advertisements is almost as many" (Mayson, 2014, 1). This illustrates how the idea of rental rooms and spaces, based on the quantity of them being advertised, is a widespread phenomenon (Mayson, 2014, 1), particularly in areas in Johannesburg and the rest of the Gauteng province.

There is currently also a growing rate of building invasions in La Rochelle where abandoned houses are being taken over by slumlords for rental purposes or groups of homeless people who are looking for shelter (See example of this in Chapter 5). These types of houses illustrate a different strata of low-income rental accommodation available in the area where the employed people are on the higher band of low income people occupy higher rental rooms within stable households whilst the lower band of unemployed people live in illegal accommodation such as abandoned houses or in backroom shacks.

4.6 Government Plans & Responses to lack of Affordable Housing

This section aims at creating a historical profile on the interventions that the CoJ government has attempted in dealing with 'formal' housing backlog issues in the city and assessing whether any of these interventions have been done within La Rochelle with any success. It begins with discussions on housing backlog issues experienced from 1994 to date and how housing policies such as the The Reconstruction and Development Programme (RDP) and Breaking New Ground (BNG) have attempted to deal with this backlog. It then narrows down its focus towards planning interventions that have been proposed for the La Rochelle area, particularly on the recently announced 'Corridors of Freedom' project by the CoJ Executive Mayor Mpho Parks Tau on the 9th of May 2013[4], that has proposed a densification plan in some of the

[4] Delivering his State of the City Address, Mayor Tau, said the new spatial master plan will transform entrenched apartheid settlement

city's old suburbs such as Mellville, Auckland Park, Turrfontien, Rosettenville and the report's study area La Rochelle. This project is discussed with particular reference to the Turffontein Strategic Area Framework (SAF) where La Rochelle (and the Greater Rosettenville area) has been targeted for a new high density housing development plan, in accordance with the CoJ GDS densification strategy. This is the main document that I have reviewed and referenced extensively throughout the report as it outlines in greater detail the city's plans that have been proposed specifically for La Rochelle.

4.6.1 The Formal Housing Backlog Challenge & Need for Rental Accommodation

Despite the efforts of South Africa's 'housing programme', where it has delivered approximately 3 million 'formal' houses since 1994, the 'informal' housing typology still persists in the country till this day (Charlton & Shapurjee, 2013). 2011 Census data revealed that the Gauteng province hosts a population of 12.3 million people (the highest in the country) with the City of Johannesburg (CoJ) hosting over one million residents on its own (Statssa 2011; CoJ SHSUPS, 2012). The CoJ is one of the major cities in the country (and in Africa as a whole) that hold such a high population size and it is expected that the City will continue to absorb a higher population size in the decades to come (CoJ SHSUPS, 2012, 5). As alluded to earlier in Chapter 2 of the report (see section 2.2), these growing populations have resulted in the city facing great challenges in accommodating these high populations within the city's formal housing structures and settlements. There currently exists a 'plethora' (Tissington, 2013, p.31) of complex policies and programmes that have sought to solve these housing challenges, however a 'backlog' in Government's delivery of housing still remains both at a national level and a local level (City of Johannesburg) where there is a large unmet demand for low-income rental housing, particularly in the inner-city Johannesburg (Mayson, 2014, 6). "Housing provision in South Africa has focused on the delivery of houses at the expense of other forms of tenure and types of accommodation" (Poulsen, 2010, p.1).

Some of the downfalls of housing policy and delivery over the last two decades that the CoJ has identified include:

- RDP 'matchbox', housing as predominant housing delivery type

patterns and build a vibrant middle class environment where everyone can feel safe. The new *'Corridors of Freedom'* will form part of a R100-billion investment in infrastructure over ten years and represents a decisive move away from private vehicle use towards public transport, bicycle routes and pedestrian walkways. This plan forms part of the city's broader goal of developing around efficient transport systems or rather Transit Orientated Development (TOD) as it is better known as (accessed from www.joburg.org.za, 19/09/2014).

- The marginal location of housing and insufficient/ lagging provision of social services, security and socio-economic opportunities;
- Focus on ownership in housing provision rather than other alternatives such as rental housing;
- Lack of consideration for changing needs within households being provided for and no facilitation for alterations by households to suit changing needs.
- High focus on initial cost-saving within housing delivery projects and neglect other costs that arise within the project life-cycle for both households and municipalities;

(CoJ SHSUP, 2012)

The challenge that the city is faced with, in light of this, is coming up with strategic housing policy frameworks and programmes that will address the above mentioned problems and fill the gaps that exist within current policy. Historically housing policy at a national scale has attempted to address the housing backlog problem discussed earlier in this section, particularly with regards to the provision of low income housing and the broader goal of the development of sustainable human settlements. Policy frameworks such as the 2004 'Breaking New Ground: A Comprehensive Plan for Housing Delivery' have sought to promote affordable housing within or in close proximity to the inner-city through encouraging developments such as 'social housing' and other forms of accommodation that meet spatial and affordability requirements. These include a range of housing typologies catering to different household compositions, including communal housing, single room accommodation (with shared kitchen and toilet facilities) and hostels (SERI, 2014).

The CoJ's 2011 Growth and Development Strategy (GDS) explicitly took up the issue of affordable accommodation for low-income residents in appropriate locations (CoJ Inner City Housing Action Plan, 2007, 5). As it is outlined as part of the GDS' six principles for development, the city has committed itself to building Sustainable Human Settlements (SHS) which will involve the provision of high quality, high density mixed income housing in the city that will cut across all race and class lines creating more liveable environments; and confront the post-Apartheid reality of urban exclusion (CoJ GDS, 2011, 34). Part of this principle, and what is of key interest to the subject matter of this report, is what the GDS (2011) calls the 'Proactive absorption' of the urban poor (p. 33) into these SHSs.

The City, through the GDS and other spatial frameworks and policies proposes that it will work boldly and innovatively to address the conditions of the urban poor in the city, so that they can access basic livelihoods, negotiate urban costs of living and ultimately climb the ladder of socio-economic prosperity (CoJ Inner City Housing Action Plan, 2007). For the above mentioned principle of

'Pro-active absorption' of the poor, the City needs to ensure that it can provide and retain decent low cost rental housing opportunities within close proximity to employment and other kinds of economic opportunities. Part of this, according to the CoJ Inner City Housing Action Plan (2007), will be ensuring that the provision of this low(est) cost rental housing for the poor is maximised within inner-city and its old suburban locations such as La Rochelle, where they are able to enjoy acceptable standards of accommodation.

4.6.2 The City of Johannesburg's Housing Development Policy Plans for Affordable Rental Housing

Rental housing is an important form of accommodation for those who cannot afford to buy a house, particularly for migrant low-income workers who don't have intentions of permanent residency in the city. According to UN-HABITAT (2003) informal rental tenure in particular, is an 'essential option for the urban poor in developing countries' (pg. i). In South Africa about 25% of households rent their accommodation, with the Gauteng province containing the highest percentage of renters of over 37% of the total number of renters in the country (Tissington, 2013, 11). Housing policy in South Africa has however led to the severely limited supply of available and affordable rental housing for the urban poor (Watson and McCarthy, 1998 in Charlton & Sharpujee, 2013).

Besides the 2009 Commune Policy, there is no other CoJ housing policy that deals directly with small-scale private rental in the form of (back) rooms and shared spaces that are being offered in places such as La Rochelle, Yeoville and Hillbrow. This Commune policy is also limited, as communes count mostly as affordable rental for students and entry-level workers and do not cater for other groups such as families. Instead, the CoJ's bylaw on Accommodation Establishments (2004) and Draft Bylaw on Problem Properties (2013) are seemingly in opposition to this type of rental accommodation; as in the past, based on these bylaws, evictions of occupants of rooms and spaces on the informal market have taken place (Mayson, 2014; Tissington, 2013).

The CoJ's approach to affordable housing delivery in Johannesburg has, in the last few years, has been structured around inner-city regeneration, where private corporate providers of accommodation have been called upon to develop middle to upper-income residential accommodation in a bid to entice property investors back to the inner city and eliminate so called 'bad buildings' (Tissington, 2013; Mayson, 2014). The focus in the past decade has been on the redevelopment and rejuvenation of 'hijacked', underutilized, dilapidated buildings in the inner city and surrounds into effective and dignified accommodation (CoJ SHSUP, 2012, Chapter 4). The provision of social housing was one of the main approaches taken up by the City, as part of the regeneration

process, to increase housing options available in inner-city areas which has led to the development of a number of programmes and institutions to facilitate this type of housing; most notably the Johannesburg Social Housing Company (JOSHCO) (Tissington, 2013, p.11).

This model of regeneration, although effective in bringing back investment and improving the physical conditions of the inner-city, has brought about tensions between the practices of regeneration and the high demand for low income rental (Mayson, 2014). This has been mostly due to the fact that rental prices for social housing have tended to range between R3 500 to R7 500 per month (Tissington, 2013) which is a price that can be afforded by middle to high income earners but is too high for low income earners. Contradictions therefore exist with regards to the development objectives and/or obligations of the city's housing policy as the National Housing Subsidy Scheme's goals (as mentioned earlier) to subsidize rental accommodation and make it affordable for low income groups earning R3500 or less is not being realised through social housing initiatives.

This has therefore meant that there still exists a high demand for low-income rental accommodation in the inner city (and elsewhere in the city), as the current supply of inner-city social housing is too expensive for poor and low-income residents (SERI, 2014). Further contradictions are illustrated within the Social Housing Act 16 of 2008 stipulates that national, provincial and local government and Social Housing Institutions must 'ensure their respective housing programmes are responsive to local housing demands, such as affordability and inclusiveness in rental prices, and that it must 'support the economic development of low to medium income communities by providing affordable housing close to job or business opportunities, markets and transport (Mayson, 2014, 6). Despite these policy stipulations however, the reality that is seen upon the implementation of inner-city housing programmes is that they continue to be exclusionary to lower income earners and have hence failed to meet the demand for affordable accommodation in the city.

In the words of Tissington (2013);

> *While the issue of low-income rental housing in the inner city has been repeatedly stressed in the myriad of policies, plans, programmes and strategies developed over the years, the reality is that very little has actually been done to address the lack of supply (p. 47).*

The City is therefore faced with the challenge of balancing the community's needs on housing by providing and/or 'allowing' affordable rental housing in convenient locations (such as La Rochelle) for students and workers (and families) close to their areas

of education and employment (CoJ Commune Policy, 2009). They also serve to provide a choice in housing typologies, in line with the City's Spatial Development Framework on housing and densification strategies as well as principles of Breaking New Ground and inclusionary housing (CoJ Commune Policy, 2009; 5), which will be based on adequate research; where a 'first action' is to 'define the housing need and potential housing (Charlton & Shapurjee, 2013; Mayson, 2014). The next section discusses the Corridors of Freedom project and housing densification and redevelopment proposals that it has for La Rochelle, as outlined in the Turffontein Strategic Area Framework (SAF). The Turffontein SAF is evaluated in terms of whether or not it proposes to support the act of remodelling of living spaces in the area and assist in improving the conditions and viability of this kind affordable rental housing.

4.6.3 The Corridors of Freedom Project: Evaluating the Turffontein Strategic Area Framework (SAF)

The City of Johannesburg is embarking on a new spatial vision for the city in line with its Growth and Development Strategy 2040, based on corridor Transit-Orientated Development (TOD). The shape of the future city will consist of well-planned transport arterials, dubbed as the 'Corridors of Freedom' that will be linked to interchanges where the building of high-density mixed-use development and accommodation will be promoted, supported by office buildings, retail development and opportunities for leisure and recreation (Turffontein Strategic Area Framework, 2014, 4). According to the CoJ Executive Mayor Mpho Parks Tau, the city has set its sights on reversing the existing urban spatial form of Johannesburg where the majority of its residents live far from where they work (CoJ Integrated Annual Report, 2013). The Mayor in the CoJ Integrated Annual Report (2013) states that;

> *We (the CoJ) have demonstrated our commitment to our vision by committing to invest R100 billion in infrastructure development over ten years with the aim of eradicating spatial inequality. This will be achieved by 're-stitching' the City of Johannesburg and reclaiming parts of the City to ensure that transport nodes become "Corridors of Freedom"; and that Johannesburg's urban form is transformed into one where residents live and play close to where they work (p. 12).*

The 'Corridors of Freedom' project aims at contributing towards the development of a liveable, sustainable and resilient Johannesburg. Through infrastructure investment the City has set its sights on transforming the urban spatial form of Johannesburg by providing affordable, safe, reliable and efficient public transport systems (CoJ Integrated Annual Report, 2013). Though the main focus of the project will be around implementing an efficient public transport system, part of its development objectives is to achieve high-density

housing along these transport routes. The project is said to have been conceptualised in line with the principles and objectives of the Sustainable Human Settlements Plan (SHSUP) (discussed in Chapter 2, section 2.6). As was mentioned earlier in the chapter, La Rochelle has been targeted as one of the areas for densification of housing under the Turffontein Strategic Area Framework (SAF), which is a strategic document that has been derived to outline the plans for the Turrfontein node, where La Rochelle is located. The Framework outlines the development strategy for the Greater Rosettenville area which includes Turffontein, Kenilworth, Rosettenville, Regents Park and La Rochelle.

4.6.3.1 SAF Plans for Residential Development in La Rochelle & Surrounds

As was mentioned in section 4.5, there is currently a large supply of affordable (often informal) rental housing stock that can be found in the study area. These are closely link to the income levels and population figures discussed above. It is in essence important that the corridors' TOD provides a variety of housing options for different income groups. The majority of dwellings in the area are rented (52%) which can be attributed to the income levels present in the area (Turffontein Strategic Area Framework, 2014, p.47). A Residential Life Cycle Graph has been drafted by the SAF (pg. 38) to try and convey the current residential character and condition of La Rochelle and its neighbours (Turffontein, Rosettenville, Kenilworth and Regents Park). As per the Residential Development Life Cycle, informal densification (done through backyard structures and internal conversions) is prevalent within these suburbs which has placed them in stage 4 (Downgrading) and stage 5 (uncontrolled influx of population) of the cycle (Turffontein Strategic Area Framework, 2014, p. 38).

According to the SAF these neighbourhoods are reaching a point of extreme densification in terms of population size and informal housing occupancy. The SAF has alluded to the downgrading urban character of these suburbs as being caused by densities becoming too high to substantiate the current character of the suburbs, which is contributing to their degeneration. Lower property values and informal densification makes these areas the critical housing and public environment intervention areas (Turffontein Strategic Area Framework, 2014, 38). Two outcomes are possible for these areas within the coming years according to the SAF; the prevalence of informal settlements if no intervention is made by the municipality or the controlled and regulated development if interventions are implemented. Critical intervention is therefore needed in these suburbs to prevent further urban decay. A high quality public transport route serving these areas can act as a catalyst for regeneration (Turffontein Strategic Area Framework, 2014, 38).

In light of this the SAF presents opportunities for transit-supportive development as it is a catalyst for redevelopment and intensification. It aims at achieving increased liveability, safety and resilience in these areas through street design that discourages the use of private vehicles and promotes walking, passive street surveillance and a healthy and sustainable environment (Turffontein Strategic Area Framework, 2014). The SAF has outlined a set of principles that are based on Transit Orientated Development (TOD), referred to as the 6D's, which form the basis of the new spatial vision. The 6D's are: Destinations, Distance, Design, Density, Diversity and Demand Management (p. 9). Of these 6 principles, Density, Design and Diversity are of relevance to the subject of remodelled living spaces and shall be the focus of this section's review of the Turffontein SAF.

Density

Densification is defined as the increased use of space both horizontally and vertically within existing areas/properties and new developments accompanied by an increased number of units and/or population thresholds. The population growth rate for the area for the past 10 years was approximately 5.8%. It is however projected that through the promotion of appropriate and responsible densification, population growth could increase to approximately 10% in future (Turffontein Strategic Area Framework, 2014). The Turffontein SAF therefore states the critical importance of the consideration the socio-economic and demographic situations of the residents of an area has been earmarked for densification. The currently higher population density areas such as La Rochelle and Rosettenville are associated with poor or lower income occupants. There is therefore an urgent need to intervene in degrading housing stock.

The SAF identifies a strong link between Population density, Housing, Public transport facilities to ensure the viability of TOD projects. The densification plan/strategy is therefore a crucial component of the SAF with regards to its proposed housing interventions and how they link to public transport facilities. Current conditions in La Rochelle and its surrounds consist of low density (single or semi-detached) housing structures but a rather high population density that occupies them (see section 4.5). This indicates that land uses and building densities need to increase significantly to support this high population density and ensure the constant usage of the implemented public transport system. Higher density developments are proposed by the framework to be focused in and around transport stations, such as the Metro Bus or Bus Rapid Transport (BRT) stations, and encourage mixed-use redevelopment along their route and within a highly accessible/ walkable zone (Turffontein Strategic Area Framework, 2014, p. 43).

The framework proposes that these new developments consist of increased vertical densities with increased connected active public space amenities that directly benefit the building's residents and tenants (both soft/green open space). Plans for increased density should also take cognisance of the existing character and built form in and around existing (and future) economic nodes and promote a high quality of life (Turffontein Strategic Area Framework, 2014, 82). The general process of densification is proposed to take place in a number of ways and will be supported by a range of zoning and land use regulations. These densification methods will include;

- Additional dwelling units: Construction of attached/ detached second dwellings including the changing of non-residential buildings, or parts of buildings, to residential buildings (e.g. garages). Subdivisions: Subdivision of land and redevelopment at higher densities
- Consolidation with redevelopment at higher densities including the demolition and integration of existing structures
- Increased land use rights: Increasing the existing bulk rights through the extension of the building or adding one of floors to accommodate an increased number of units
- Higher density infill on underutilised land: Higher density infill on vacant and under- utilised land throughout the built area of the City
- Large scale precinct development: Consolidation of sites within a street block to create a single larger parcel for redevelopment into multi-storey units

  (Turffontein Strategic Area Framework, 2014, p. 82)

Design

As part of the design principles of the SAF, the creation of transit-oriented neighbourhoods that are designed to meet the needs of a range of users, are proposed along the Turffontein Corridor. According to the SAF, the development of these transit-oriented communities must reinforce the distinct history, culture, and character of the corridors' various neighbourhoods using context-sensitive design and enhancing the pedestrian environment (Turffontein Strategic Area Framework, 2014, 11). The development of Affordable higher density residential Development is said to facilitated by the JDA and will cost approximately R11 800 000 (Turffontein Strategic Area Framework, 2014, 124). New buildings along the main transit spine and in other key opportunity areas are planned to be a mid-rise scale of at least 4 to 6-storeys. This will be done to promote human scaled development and minimize adverse impacts on adjacent streetscapes, and provide appropriate transitions to nearby residential neighbourhoods (Turffontein Strategic Area Framework, 2014, 95).

All new buildings within mixed use zones must achieve a minimum height of 7.5 metres (2-storeys) to promote intensification and ensure the most efficient use of existing infrastructure. Buildings along key public connectors should have a lower - rise scale (2 to 3 stories, with 4 - 5 storeys in certain areas) that promotes human-scaled development, minimizes adverse impacts on adjacent streetscapes, and provide appropriate transitions to nearby residential neighbourhoods (Turffontein Strategic Area Framework, 2014, 95). The proposed high density development for La Rochelle is said to consist flat type housing going up to 4 storeys and will be able to provide a mixture of affordable housing typologies that will accommodate 5 times current number within next 40 years (Turffontein Strategic Area Framework, 2014).

Diversity

The SAF identifies that the corridor needs to provide a wide range of housing options and facilities for a wide variety of users, thereby increasing the diversity of the area and ensuring that these housing options and facilities are able to adapt and change as population changes over the coming years (Turffontein Strategic Area Framework, 2014). Under the principle of diversity, the SAF aims at creating an internally diverse and vibrant mixed-use community through the provision of a range of housing choices, services and facilities which improve the quality of life for residents and businesses.

According to the SAF, it is important that in a TOD that a variety of housing options are provided for different income groups and particularly serve the affordable rental market that currently dominates in the area (see section 4.5.3) (Turffontein Strategic Area Framework, 2014). In accordance with the Housing Act (Act 107 of 1997) which defines housing development as permanent residential structures with secure tenure, ensuring internal and external privacy and providing adequate protection against the elements as well as basic services such as potable water, adequate sanitary facilities and domestic energy supply, the SAF proposes that the proposed housing development along the corridor provide all these elements, as they are essential in meeting current needs for low income occupants in the Greater Rosettenville area (Turffontein Strategic Area Framework, 2014, 47).

Weaknesses of Turffontein SAF document

In my assessment of the SAF, I have come with a set of critiques with regard to the densifiction strategy it proposes for La Rochelle and its surrounds. This critique is based on my and other researchers' empirical research in the area. I acknowledge that Turffontein SAF clearly articulates the principles and supposed benefits of TOD led densification. However, in doing so, I believe it has overlooked certain vital socio-economic aspects that exist in the area that could result in some of its proposals being to the detriment of current residents.

Firstly, I argue that the fails to take into account the reality of migrant populations in the area who are highly mobile and may have totally different needs to what the framework is proposing. The area currently consists of a large low-income and migrant population that needs to benefit for the new developments. However, the framework rarely mentions how it plans on ensuring that affordability in the new developments will be ensured to avoid displacement of current low-income residents.

Secondly, the framework fails to discuss how it plans to work with existing (informal) densification practices. The main focus of proposals seems only around new development between La Rochelle & existing Dam/ Recreational Precinct & along major TOD spines where consolidation and redevelopment as well as high density infill will occur. It has not reflected the impact that informal spatial practices that property owners and residents are doing, who as single actors have had a significant influence on the spatial development of the area.

Lastly, I argue that the framework uses a fairly top-down, technical, statistics and empirical approach to planning that is detached from the socio-cultural aspects of a neighbourhood. The document has failed to portray the true picture of the kind of people and the kind of needs of the people living in the area. This is testament in the community participation process that was undertaken in coming up with strategic plan.

Though community meetings were announced and held, very few community members attended and had their say on the plans. Minutes form the meetings reflect attendances of less than 30 people, of which in these a majority were students from Wits University and their lecturers, city officials and a few resident home and business owners (Turffontein SAF Draft Report, 2013). It has therefore failed to get enough 'buy-in' from the community on its densification plan/strategy to ensure its relevance and applicability.

4.6.4 Policy alternatives: Informal Rental Enablement Programme (IREP)

The definition of rental accommodation was initially conceptualised within the South African context as housing or accommodation that would be targeted for households or individuals that earn a combined or individual income of under R3 500 per month (Mayson, 2014). This definition was used as a qualifying criterion for developments that were to be awarded a housing subsidy under the National Housing Subsidy Scheme (Mayson, 2014). The principle that informed this was based on "...the commonly accepted rule that total cost of accommodation should not be more than 30% of income (ibid), the total cost of rent and services in affordable housing should be R1 150" (Mayson, 2014, xiv).

According to the 2011 Census, approximately 122 000 people (34 000 households) living in the inner city of Johannesburg earn below R3 200 per month. This comprises almost 50% of all households in the inner city, who can afford rent of R800 or less per month (Charlton & Shapurjee, 2013; Mayson, 2014). These statistics indicate the level of need for low cost rental accommodation for a large population of Johannesburg's residents. As part of the SHSUPS's (discussed in section 4.6.3) aim of to legitimize the informal rental market and development of property market the Informal Rental Enablement Programme has been derived. The programme seeks to understand the informal rental market to establish what the appropriate standards and regulations, infrastructure implications, cost parameters before any sort of intervention is proposed. It advocates for a conceptual shift towards supporting, recognising and facilitating informal rental housing and the need to develop a well-researched process of land assimilation/intervention in response to the strategic areas identified.

It aims at ensuring that the informal rental housing spaces that exist in the city are assisted to reach adequate housing standards and building materials (SANS approved) (CoJ SHSUP, 2012). It also aims at promoting health and safety in neighbourhoods, which has implications for community facilities and the provision of services to ensure more liveable urban environments. Part of the implementation process of the programme will involve use of 'Prototype demonstration initiatives' as well as innovative design methods and use of materials.

The programme in essence seeks to ensure that the new plans proposed by the City for residential developments reflect the reality of informal rental housing in terms of making provision for incremental developments where layout designs and the capacity of bulk infrastructure in privately owned properties is able to adjust/adapt to the additional rental component. Under the broader goals of local economic empowerment, capacitation and affordability, it aims at promoting: the availability of micro finance to upgrade rental units; upgrading engineering and transportation infrastructure in existing areas; increasing/enhancing numbers and capacity of community facilities and services; allocation of land parcels to groups of households on a leasehold basis; making available standard lease agreements and legal mechanisms to deal with disputes; and ensuring that temporal rental tenure can be upgradeable to full tenure later on.

La Rochelle's property owners and rental occupants resonate with the Informal Rental Enablement Programme as they are already engaging in a similar form of self-funded and managed rental stock through their remodelled living spaces (Charlton & Shapurjee, 2013). They have served as astute innovators in shelter and livelihood provision in the area for many years and have used their houses as

quick, flexible and regenerative assets (Charlton & Shapurjee, 2013, 1) for their own financial gain and for the aid of many rental accommodation seekers in the city. It is therefore crucial, in the City's plans of opening up new rental opportunities in well located areas that such rental markets are accepted into the City's legal policy by-laws and that areas such as La Rochelle supported by the way of a community supported 'building certification' system and regulation of the number of informal rental units per erf (CoJ SHSUP, 2012).

5. Case Study Findings: The Adaptive Living Space Remodelling Practices of La Rochelle Residents

5.1. Introduction

Just as ambiguity exists in understanding informal settlements and 'slums' (Weakley, 2013, pg. 59), as much ambiguity (possibly greater) exists in understanding remodelled living spaces found in the old suburbs of Johannesburg South such as La Rochelle. Their relatively hidden state, which relates to the high levels of anxiety that the migrant populations that occupy them have (Harrison & Zack, 2014), and their unauthorised construction, renders them a difficult terrain to immerse one's self in and understand. What also contributes to this ambiguity is the very nature of informal type settlements (or in the case of La Rochelle 'informally' remodelled living spaces) where obtaining accurate statistics on their condition is difficult and if obtained, is quickly subject to change (Huchzermeyer, 2011 in Weakley 2013).

As mentioned in Chapter 4 (section 4.2.1) inaccurate data on areas such as La Rochelle relates to their ever-changing nature due to migration, expansion and densification. The figures released by Census 2011 seemingly contain a significant level of inaccuracy particular in the number of foreign born citizens of the area and possibly in the total population size of La Rochelle (see Chapter 4, section 4.5.1). They do however provide a valuable (though vague) indication of the presence of foreign migrants and how they are influencing socio-spatial processes in La Rochelle and across the 'Old South' suburbs (Harrison and Zack, 2014). The 2011 Census records a relatively large number (656) of immigrants whose place of birth is unspecified, representing about 12.8% of the total population (Moyo & Cossa, forthcoming). It is probable, however, that foreign migrants constitute a much larger proportion than the Census suggests. This therefore highlights the need for this Census data to be complemented with qualitative studies that explore the socio-spatial dynamics of these areas.

In light of this high level of ambiguity with regards to both the practice of living space remodelling and the migrant populations that occupy them in La Rochelle, I sought to do a qualitative analysis of the area through means of individual interviews and

empirical observation to gain knowledge and experience on the conditions of these remodelled living spaces. Through this, I attempted to obtain information on the number of migrants that occupy these living spaces and why their occupants choose to live in the manner that they do. The study was not aimed at doing a comprehensive and thorough survey of the whole of La Rochelle but rather aimed at portraying examples of some of the living space remodelling practices happening within the area. To obtain a well-rounded and informed understanding of this, I sought perspectives from both home owners and rental occupants in the findings of my research. I conducted qualitative, semi-structured interviews with landlords and tenants of houses in the area.

Here I interrogated the physical conditions of the respondents' living spaces as well as the social relations amongst rental occupants (discussed in greater detail in section 5.2). The relationship between home owners and their tenants was not the focus of my investigation. However, some questions were asked on the subject to obtain information on administrative issues of the households including rent and services payments and the authorisation and financing of physical modifications to the houses (subdivisions and backroom extensions).

5.2. Field Work Findings

I was able to do a study of 6 houses in La Rochelle and conduct a total of 10 interviews (1 property owner and 9 tenants)[5], with the assistance of my classmate and field work research partner, Thato Nkoane, who was also doing research in the area. The interviews were captured in the form of field work notes and voice recordings and are presented as a series of biographies of the respondents and descriptions of their living spaces. This is done with the aim of presenting a more qualitative narrative of the research findings through telling the individual stories of the research respondents. However, to "derive detailed insight to support a reflexive discussion" (Charlton & Shapurjee, 2013, 6), the small sample size of houses and personal interviews was supplemented with an in-depth analysis of secondary data obtained from existing qualitative research that has been done on the area (i.e. reports, journal articles and student projects).

Findings from the field work are organised into two sections. First, the physical attributes of the houses are described which include; type of rental accommodation (back rooms/internal rooms/shared space), available infrastructure and amenities and how they are

[5] Home/Property owners were very hard to access during the study as they either did not live in the area or were at work during the time of conducting interviews. This led to a higher number of rental occupants interviewed within the sample size as opposed to only 1 property owner.

shared, quality of physical conditions, property ownership and how the houses have been physically modified over time. Layout plans, 3D illustrations and images are used within this section to detail the physical characteristics of rooms and space and how these spaces and services are shared in each household. Second, the social attributes of remodelled spaces are discussed which include; reasons for renting rooms or spaces (social, economic, cultural), demographic relations (nationality, age, gender), mobility of residents (duration of stay), socio-economic status and household management arrangements (cleaning, payment of rent & bills and maintenance).

Extracts from the interviews that were conducted with selected respondents are used to analyse and draw conclusions on the socio-spatial relationships that exist within the houses and their overall impact on the neighbourhood. My study involved looking at two type of typologies; internal subdivided rooms/spaces and backyard rooms/spaces. All six of the houses where interviews were conducted, were predominantly occupied by foreign nationals and were single dwelling houses that had been remodelled to allow for additional occupants.

5.2.1 The 'Shared Housing'/'Rooms' & 'Spaces' Typology in La Rochelle

La Rochelle is characterised by a number of different accommodation typologies ranging from single/semi-detached houses, flats, backyard dwellings, and 'rooms' and 'spaces' that have been remodelled within the main house. It is this typology of 'rooms' and 'spaces' that is the focus of this section. The section deals with the physical characteristics of these 'rooms' and 'spaces' based on field work findings. It presents an analysis of socio-spatial relationships within these spaces with regards to how they have been physically designed and laid out to meet the social (amongst others) needs of their occupants.

This analysis serves as both an architectural review of the physical design of these spaces as well as an illustration of participants' experience of these physical spaces. It analyses both the socio-spatial aspects respondents spoke about in the interviews, as well as my own experiences and perceptions of the physical nature and way of life of the occupants of these spaces. Through this analysis, it then draws conclusions on the socio-spatial functionality of these spaces and how they have had an impact on the general livelihoods of the people that occupy them. This section therefore looks at the remodelled living spaces as a whole with regards to the nature of internal partitions, the internal services and facilities available to occupants, and their hygiene, safety and security as reported by participants.

5.2.2 Defining 'Shared Housing'/'Rooms' and 'Spaces'

The remodelling of living spaces in La Rochelle to form rental 'rooms' and spaces', as has been mentioned earlier (see Chapter 1, section 1.2), is done by both home owners and rental occupants with the aim of creating additional spaces for high occupancy of residents within home spaces that initially wouldn't allow such high numbers. This practice has been referred to within existing literature as the 'shared housing' or 'rooms' & 'spaces' typology (Hungwe, 2013, UN-HABITAT, 2013; Mayson, 2014). UN-HABITAT (2013) defines 'shared housing' as housing units where the kitchen area is shared by more than two unrelated adult occupants (with or without children) who are either single or married. The definition is however noted by UN-HABITAT to be highly limited, particularly within the African and Asian contexts where single households host high numbers of unrelated adults (along with their partners and children) who often share a much wider set of spaces within their homes than just the kitchen area (such as toilets, bathrooms, bedroom spaces and varying combinations of these, as is seen in La Rochelle) (UN-HABITAT, 2013).

Mayson (2014, p. xvi)) defines what he refers to as the 'rooms' and 'spaces' typology in a similar but slightly different manner to 'shared housing' as he calls "both a 'room' and a 'space' a portion of a flat or house, larger building or property that is designated as personal private space, where occupants share facilities (toilet, bathroom, or kitchen) and common areas including access points (doors, gates and corridors). Both rooms and spaces have some form of demarcation that can be either built in (such as brick, dry-walling, glass or hardboard) or moveable such as curtains, moveable furniture such as cupboards or simple furniture (re)arrangements (Mayson, 2014). These 'rooms' and 'spaces' are in most cases designed for the purposes of rent, by individual or sharing rental occupants. These occupants also vary within each of these rooms and spaces where people with no previous relations or ties to the other occupants share these spaces as either individuals or as families of up to four or five people (Hungwe, 2013; Mayson, 2014). These kinds of living arrangements are usually the case amongst foreign migrant rental occupants, as the case study findings show.

"One of the key characteristics of shared housing is that it is highly flexible. Sharer families include both households sharing a property with the owners, but not forming part of the owner's household, and households living as part of an extended household, in any kind of tenure, without being the householders" (UN-HABITAT, 2013, XV). Another key aspect of these shared rooms and spaces is that there is rarely a regular rental payment, although money is frequently offered to cover the costs of services and general expenses. Hungwe (2013) writes about the living conditions and sleeping conditions of Zimbabwean migrants in Tembisa, a large township

situated in the City of Ekhuruleni in the East Rand of Gauteng South Africa, stating:

Migrants in Tembisa can share accommodation such that 4 or 5 adults can sleep in one small room regardless of sex and social distance. This means that one room can house men and women who are relatives and friends sometimes including brothers and sisters-in-law or uncles, aunts and nephews and nieces... They live and sleep in the same room…To cope with the situation migrants take turns to bath and dress while others go outside the room and just stand or walk around the house (pg. 133).

Based on the definitions discussed in this section, the remodelled living spaces found in La Rochelle are best characterised by the 'rooms' and 'spaces' definition rather than that of 'shared housing'; hence the next section focuses on this typology and its existence within the households of La Rochelle.

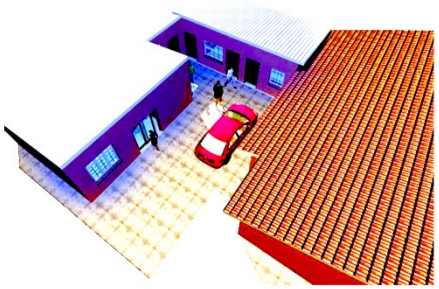
5.2.3 Documenting the 'Rooms' & 'Spaces'

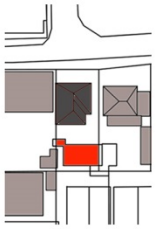
A large amount of the documentation of the remodelled spaces in La Rochelle relates to backroom spaces in the area as opposed to internal subdivided spaces the main houses. This was largely due to their domination in terms of low cost rental spaces available in the area, as almost every single detached house in the area has one or more backyard rooms and also due to the backyard areas being more accessible as an outsider in comparison to internal spaces. As mentioned in Chapter 4 (section 4.5.3) 50% of all dwellings in La Rochelle have rental accommodation (Turffontein Strategic Area Framework, 2014) and a majority of these come in the form of backrooms. I was therefore able to photograph and visually map out more back room spaces than internally remodelled spaces in the study.

According to Charlton & Sharpujee (2013), backyard dwellings in most cases offer more benefits to poorer migrants who are still working their way into establishing themselves (socio-economically) within the urban system. They therefore offer quick access to cheap, flexible housing, which may be relatively close to employment opportunities and amenities that help in sustaining their economic livelihoods during the period of their arrival and in some instances, for the entirety of their lives in the city (Charlton & Shapurjee, 2013).

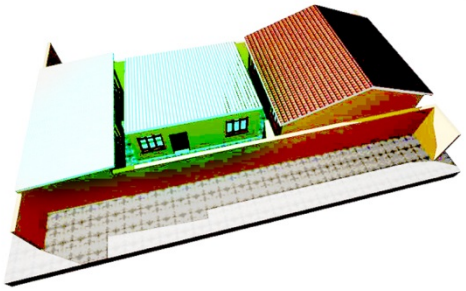
Backyard spaces have developed in an organic and incremental manner in La Rochelle over the post-apartheid period and have served as a spatial adaptation to the need for affordable accommodation for rental seekers as well as served as a means of income generation for property owners who rent out these spaces. Four out of the six houses investigated contained backrooms with the other two only containing internally shared spaces. The following section illustrates the six households investigated, including landlord/tenant profiles and the physical and social attributes of the rental rooms and spaces.

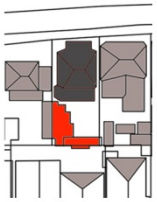
House 1



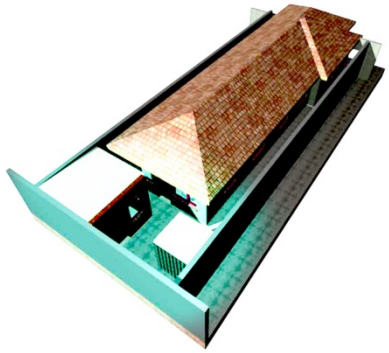


House 2





House 3







Plan illustrating distribution of backroom spaces in La Rochelleand those located in the houses that were investigted



House 4



By Mavuso, (2014)

Our investigation began along 6th street where Thato and I decided to begin due to the location of Boland Park along the street. This was purposefully done as Thato's research involved looking into the safety of women in public and private spaces in the area so we began by approaching women in the park and along the street and asked if they would show us their homes. In this way we were able to gain information on both types of spaces.

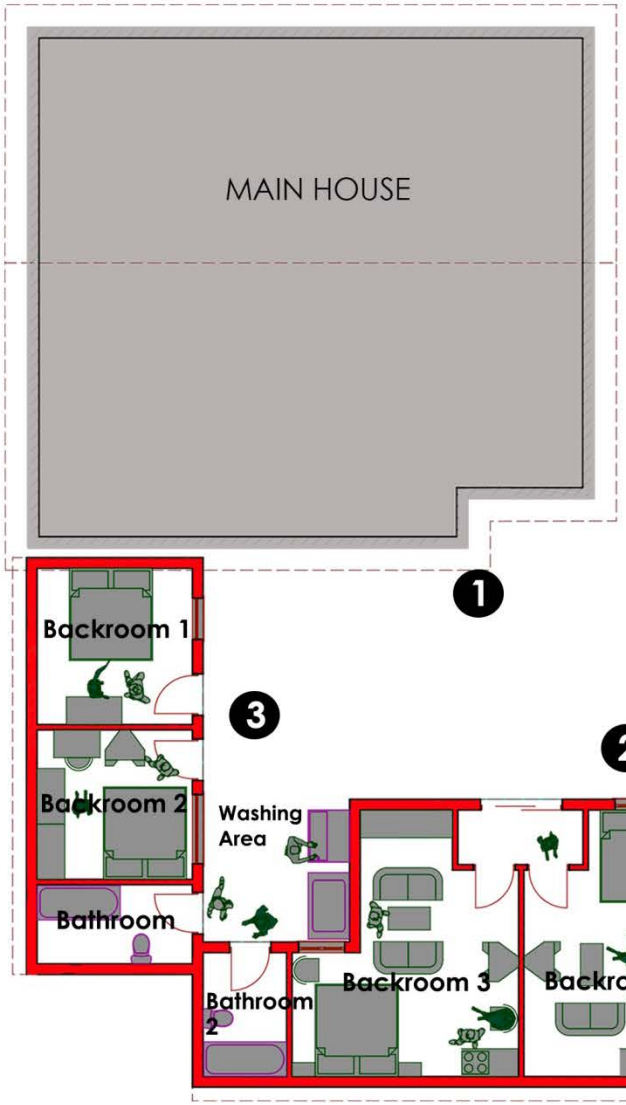
HOUSE 1

The first house we investigated was located within the central parts of La Rochelle. We were let in by a young girl we approached next to Boland Park who took us to her parents (The Kamnqas), who happened to be the owners of the house, to request if we could interview them. We were let into the house and found both parents in the sitting room. Upon introducing ourselves and stating the purpose of our visit Mrs Kamnqa (wife and mother) told us they had backrooms they were renting out and agreed to have an interview with us as well as show us the backrooms

She told us that she rented out 4 backrooms that were all occupied by 3 families and one single person. We were only allowed to view the outside of these rooms and asked her to describe their physical state and arrangement as well as the services available to each room and how they are shared. She also informed us on the number of occupants in each room, their nationalities, gender, duration of stay and the amount of rent each occupant pays.



Figure 4 : Thato (Research Partner) standing in front of one of the backrooms and the shared washing area, as Mrs Kamnqa explains the physical structure of the household to us.



Extended Rooms

By Mavuso, (2014)



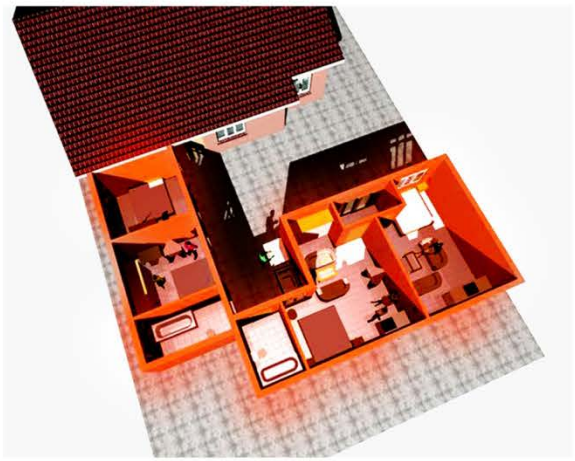
Front View of the house

- Home Owner is a Xhosa speaking South African originally from the Eastern Cape
- Lives with family of 6, wife, 4 children and helper in Main house (7 Occupants in total)
- Rents out 4 Backrooms which are all occupied

- House & Backrooms have a total of 3 Toilets and 3 Bathrooms (1 for Main house & 2 for Backrooms)
- Backrooms have no kitchen space. Occupants have to cook inside their rooms
- The household hardly experiences infrastructure problems (water and electricity).
- Toilets and bathroom spaces are adequate.
- Household seldom experiences safety issues such as unknown intruders.

HOUSE 1

Main house	Number of People in House	Duration lived in House	Services Shared	Nationality
Nuclear Family	7	10 years	Kitchen, bathroom & toilet	South African
Backrooms	**Number of People in Room**	**Duration lived in House**	**Services Shared**	**Nationality**
Nuclear Family	3	5 months	Washing area, bathroom & toilet	South African
Nuclear Family	3	2 months	Washing area, bathroom & toilet	Mozambican
Nuclear Family	4	3 months	Washing area, bathroom & toilet	South African
Single Male	1	4 months	Washing area, bathroom & toilet	Mozambican
Total Number of Occupants	18			



Views of backrooms and courtyard space







Landlord & tenant profile

The landlords of house 1 were a Xhosa speaking married couple who originate from the Eastern Cape. They have been living in La Rochelle since 2004 (10 years) and have 4 children and a helper who live within the main house (**7 occupants in total**). Mrs Kamanqa, who we interviewed, said she works in the Eastern Cape as a school teacher during weekdays and comes back to area on most weekends and during school holidays. The four rental backrooms are occupied by a total of 11 occupants consisting of 7 foreign nationals and 4 South Africans.

- Backroom 1: 1 occupant
- Backroom 2: 3 occupants
- Backroom 3: 3 occupants
- Backroom 4: 4 occupants

  Total occupants – 11

Total occupants in Main House + Backyard - 18

Physical Attributes of house

Quality of physical conditions

Both the house and the backrooms were in a good physical condition and seemed well maintained. Although we were not allowed to go into the internal spaces we were able to get a glimpse from outside on the cleanliness of some of the rooms. Our questions to Mrs Kamnqa on availability and function of services and infrastructure in both the main house and backrooms also gave an idea of the state of physical conditions in relation to sanitation, health and hygiene within the rooms.



Figure 5: Thato and Mrs Kamnqa standing in the courtyard space of the main house and backrooms, discussing the state of affairs in the household.

Available infrastructure and amenities

The main house and backrooms have a total of 3 toilets and 3 bathrooms (1 for Main house, 2 for Backrooms). The backrooms have no designated kitchen spaces however the tenants are able to cook inside their rooms. According to Mrs Kamnqa the household hardly experiences any infrastructure problems such as water and

electricity shortages. She believes the toilet and bathroom spaces they made available to their tenants are adequate to serve the hygienic needs of all the occupants.

Sharing of space and services

The Kamnqa family share the kitchen, bathroom and toilet spaces in the main house and hardly make use of any of the backroom facilities. Backroom occupants share the bathroom, toilet and washing area facilities, located in the backyard and never make use of the main house facilities.

Social Attributes of house

Household management arrangements

Mrs Kamnqa informed us that either herself or her husband authorise and finance any construction or physical modification that happens within the household. Her husband deals with any maintenance issues within both the main house and backrooms. Mrs Kamnqa is responsible for advertising available rooms either by word of mouth or on the community notice board. She also calculates and collects the total rent (including water & electricity) for all the tenants. The tenants are only responsible for ensuring the cleanliness of their own rooms as well as the bathroom, toilet and washing areas.

Safety and security

According to Mrs Kamnqa, the household seldom experiences safety issues such as burglaries or unknown intruders. The internal spaces are according to her very secure and the occupants are able to safeguard their rooms on their own. Despite this, Mrs Kamnqa does recognise that the area in general is not particularly safe, noting:

"Internally [including backrooms] we haven't had any safety issues. It is only outside on the street where one fears for their lives during late hours. Just last week we heard gun shots at night outside my neighbour's house. Apparently someone was killed inside their car over a dispute" (Mrs Kamnqa, 2014).

Demographic relations (Nationality, age, gender)

The household contained a diverse set of gender, ages and nationalities, with the majority of occupants being female (11 out of the 18 total occupants of the stand) and being of differing nationalities. One tends to anticipate a certain amount of conflict in such a setup however Mrs Kamnqa stated the contrary:

"We never have conflicts amongst each other, but yes (she laughs); there sometimes are quarrels amongst my tenants, especially amongst the women. They often argue about small things like their bathroom spaces but it never becomes anything bad" (Mrs Kamnqa, 2014).

HOUSE 2

Upon finishing with investigating house 1, Thato and I went back to Boland Park to find more women to interview on safety issues in public spaces. We met with a young girl called Elizabeth, who after she was finished with her interview with Thato, agreed to show us the house she lived in. Elizabeth indicated that she lived in a backroom in the house that she shared with her older sister. She agreed to let into the backyard area to see the rooms but was not comfortable in showing us the inside of her room. Elizabeth agreed to answer a few questions on the household and then referred to another two occupants, Thomas and Zanele (separate occupants), who rented rooms in the main house for interviews.



Figure 6: Thato interviewing Elizabeth (standing) and her friend who had come to visit her for the day, inside Boland Park.

Landlord & tenant profile

The house Elizabeth took us into was a single semi-detached house whose main house and backrooms were fully rented out as the owner lived elsewhere. The main house had 4 rental rooms that were rented out by 3 families and one single person (10 occupants in total) whilst the backyard contains 4 backrooms that are also occupied by 3 families and one single person.

Main house

- Room 1: 4 occupants (2 Adults + 2 Children)
- Room 2: 1 occupant
- Room 3: 2 occupants
- Room 4: 3 occupants

Total occupants in house – 10

Backrooms

- Backroom 1 : 2 occupants
- Backroom 2 : 1 occupant
- Backroom 3 : 2 occupants
- Backroom 4 : 2 occupants

Total backyard occupants– 7

Total occupants in Main House + Backrooms - 16 occupants



Converted Rooms

Extended Rooms

By Mavuso, (2014)



Front View of the house



HOUSE 2					
Type of occupant	Number of People in Room	Duration lived in House	Nationality	Rent Paid	Services Shared
Couple	2	Unknown	Mozambican	R1800	kitchen, bathroom & toilet
Single Male	1	Unknown	Unknown	R1800	None
Single females	2	6 months	South African	R1800	kitchen, bathroom & toilet
Couple	2	Unknown	Zimbabwean	Unknown	kitchen, bathroom & toilet
Single Males	2	3 months	South African	R1400	kitchen, bathroom & toilet
Nuclear Family	4	2 years	Zimbabwean	R1400	bathroom & toilet
Single Males	2	Unknown	Ghanaian	R1200	bathroom & toilet
Couple	2	Unknown	Congolese	Unknown	kitchen, bathroom & toilet
Total Number of Occupants	17				

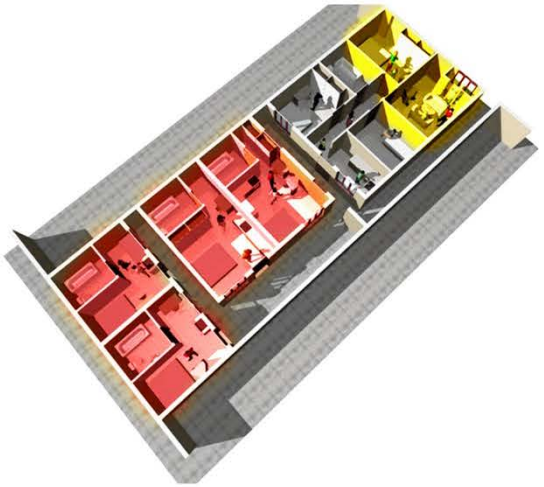
- Owner does not live in house

Main house

- Has 4 rental rooms: 3 Bedrooms and 1 Sitting room that has been converted into a room
- Has 1 kitchen and 1 Bathroom which is shared by 3 families
- Uses pre-paid electricity (Cost divided amongst occupants)
- Rent is paid directly to home owner's account individually by each occupant

Backrooms

- 4 backrooms in total
- Each Backroom has its own bathroom, toilet & kitchen
- Electricity & water: Same as Main house
- Occupied by 3 families and one single person





Elizabeth walking down narrow passage way as she takes into the backrooms



Washing and hanging area used by both main house & backroom tenants



Front view of Backroom 3 that is rented out by Elizabeth and her sister

As mentioned earlier in this section we were able to interview three rental occupants in house 2 (Elizabeth, Thomas and Zanele) and their profiles are as follows;

1. **Elizabeth (South African)**

- Rental occupant of backroom
- Originally from KwaZulu Natal
- Shares backroom with her older sister
- She is currently unemployed and is looking for a job
- Her sister is working and pays for the rent, food and other expenses
- They were told about the availability of the room by a woman who lives in the main house

2. **Thomas (Ghanaian)**

- Rental occupant in the main house
- Rents a room in main house and shares with his cousin brother
- Moved to La Rochelle from Yeoville early 2014 for work reasons as he was transferred to work in Main Street Rosettenville
- Was informed of the availability of the room by a co-worker who is a friend to one of the tenants

3. **Zanele (Not real name) (Zimbabwean)**

- Rental occupant in main house
- Has been living in La Rochelle for 2 years and is a stay at home wife
- lives in the front living room area of the house which was converted into a rental room
- lives with her husband and two children

Physical attributes of house

Quality of physical conditions

Similar to house 1, the physical conditions of both the main house were good and seemed well maintained. Access to the backrooms was through a narrow, dark passage that was very clean with no litter or water logging. When we asked Elizabeth about maintenance issues she stated that there is a cleaner who is employed to clean the external spaces of the household once a week.

Available infrastructure and amenities

Elizabeth informed us of the infrastructure and amenities available in the backrooms whilst Thomas and Zanele informed us of those in the main house. According to Elizabeth the backrooms each had their own bathrooms and toilets, as well as a designated kitchen area. We were then later informed in our interviews with Thomas and

Zanele that the main house has only one bathroom and toilet which is used by all 10 of its occupants.

Sharing of space and services

The only services and spaces that are shared communally within the main house are the bathroom, toilet and kitchen. The different rooms are however also shared by multiple occupants who are in most cases related. The backrooms do not have any communally shared services as they have their own self – contained kitchen, bathroom and toilet areas. The only space that is used by all the occupants is the external passage space that, along with access, is used for hanging clothes and doing washing.

Social Attributes

Household management arrangements

The owner of house 2, as it was mentioned earlier, does not live within the household and the area. He/she is only available via telephone call or corresponds through one of the occupants (a woman who lives in the main house). Payment of rent is in most cases done by each individual to the home owner directly to his/her account. Elizabeth however mentioned how in some cases her sister and she pay through the lady who corresponds with the owner in the main house. Both the main house and backrooms use prepaid electricity with the total cost being divided amongst all occupants. The water bill is paid by the home owner who calculates the cost into each tenant's rent.

Mobility of residents (duration of stay)

A majority of the tenants of the main house were not present during the time of our visit so information on mobility of residents is limited to only the three occupants we found available. All three of our respondents expressed a desire of not staying in the house for a long time as they wanted to obtain better accommodation. In our interview with he told us that he lived in another house in La Rochelle for about a month but did not like the people he shared with. He then moved to house 2 soon after and had been living there for about 3 months. He indicated how doesn't plan on living in the house (or the area) for a long time and is looking for a better but affordable house elsewhere.

"I don't like living in the house very much but I like how affordable it is and that it is a walking distance from where I work" (Thomas, 2014)

Elizabeth indicated that she had recently moved to the area (about 3 months prior to the interview) from KwaZulu-Natal and would have not moved there if it was not for her renting out the room. She indicated that she was not comfortable in living in a setup of so many people and would rather live elsewhere. Zanele was the only respondent who had lived in the house for a longer period (2 years). She however expressed a desire to move elsewhere with her husband and children should the opportunity avail itself.

"This room is very small for all of us to live in. You see how it is here (pointing out to her mini lounge area), we can't even move around properly because the couches are so cramped together... I would definitely like to move to a better place where I can have more space for all my things" (Zanele, 2014).

Reasons for renting rooms and sharing spaces

In relation to the previous discussions on the mobility of the residents, we asked the respondents about their reasons for living in the rooms. Elizabeth said that she lived there because of social relations as she wanted to live with her sister. She also said it was more of a need for her at that moment as she needed her sister for financial support whilst she was looking for a job. Both Thomas and Zanele said that their main reason was affordability. For Thomas affordability was in terms of both the low rental price and the closeness of the house to his work place which allowed him to walk there without having to pay for transport.

Demographic/social relations

When asked about the social relations between tenants in terms of renting and sharing rooms, responses differed. Elizabeth said she didn't feel she could say much about social relations between occupants of the house and rooms as she hadn't lived in the house for long.

"I don't know much about the other people who live here as I hardly see them. I just stay in the room when my sister is at work and go out when I have to buy something or to hang out in the park. People who live here are always at work so we hardly see or talk to each other" (Elizabeth, 2014)

Thomas mentioned that he was able to share his room space with his cousin, which was good for him as they are able to support each other in times of need and also keep each other company. He also said he didn't interact much with the other tenants as he and his cousin spent most of their time at work.

"We don't really have much interaction amongst each other in the house as we are often not here at the same times. The couple that lives in that other room for instance is normally here during weekdays and then go to visit their family in Soweto on weekends. My cousin and I are also hardly around on weekdays as we go to work early and break off late. It's during weekends that we spend time in the house" (Thomas, 2014).

In terms of social relations in the sharing of space and services, both Thomas and Zanele alluded to the existence of conflict amongst tenants on usage and maintenance of these spaces. They both alluded to the kitchen and bathroom areas not always being kept clean but the other tenants which sometimes cause quarrels. They however did not have any conflict amongst each other on gender,

nationality or cultural issues, particularly in how they use the shared spaces.

"Yes, we do have quarrels about the kitchen as some people do not clean it after they cook but we have drafted a cleaning roster for both the kitchen and the bathroom. The only problem is that people don't follow it so it is kind of useless" (Zanele, 2014).

HOUSE 3

The next house Thato and I identified was around the other public space in La Rochelle called Hunt square, located on corner of Turf road and 11th street (see figure X). Hunt Park is known within the area for being the location for freelance workers who wait in the park for day jobs in work such as bricklaying and plumbing. We approached some of these workers and asked them if they rented any rooms or spaces in one of the houses in the area and if they would be willing to take us into one of them.

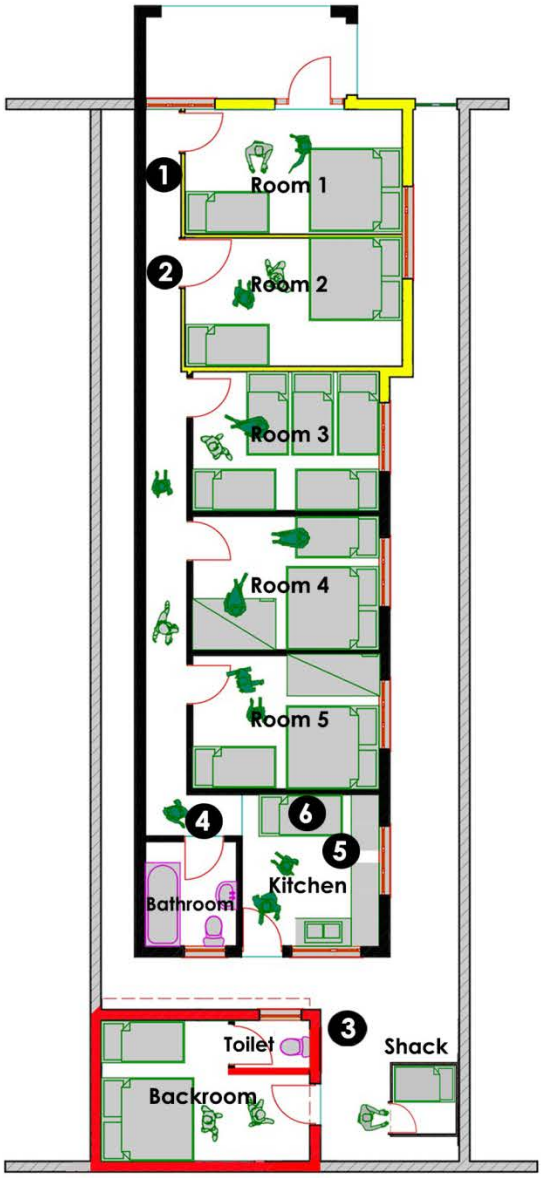
One of the men agreed to take us into a house he knew that had rental rooms and spaces located adjacent to the park. He ushered into the front gate of the house and said we can go in and speak to anyone who was in the house. Upon entering, we were welcomed into the kitchen area by a woman (Ms Ndimande) who agreed to be interviewed by us about the house and its socio-spatial arrangement.



Figure 7: Freelance workers sitting at Hunt Square waiting for day jobs from willing employers. The open space is also used as a play area for children and as a mini football field during the evening.

Landlord & tenant profile

House 3 was a single house located on 10th street opposite Hunt Park. The main house consists of 5 families who rent out rooms within the main house and two back yard rental rooms (one brick structure and a mini shack like structure). According to Ms Ndimande the house is owned by a man who runs a restaurant on 9th street, opposite to where the house is located. The house was first rented to Ms Ndimande who then got other people to rent out both the internal and backrooms.



By Mavuso, (2014)



Front View of the house

Converted Rooms

Extended Rooms



HOUSE 3			
Type of occupant	Number of People in Room	Duration lived in House	Services Shared
Couple	2	Unknown	kitchen, bathroom & toilet
Couple	2	Unknown	bathroom & toilet
Single Mother & Children	5	12 years	kitchen, bathroom & toilet
Grand-mother & daughters	4	5 years	bathroom & toilet
Sisters	2	Unknown	bathroom & toilet
Single Male	1	3 months	bathroom & toilet
Single Male	1	1 year	bathroom & toilet
Total Number of Occupants	17		

- Owner does not live in house
- Has Main House and backrooms

Main house

- Has 5 rooms (3 original bedrooms + Lounge divided into 2 rooms)
- 1 Kitchen which is used as bedroom at night
- 1 Toilet and Bathroom shared by all occupants of Main House
- Uses prepaid electricity and water

Backrooms

- 2 Backrooms
- 1 toilet and no bathroom for back rooms



Bed located in kitchen that is used to sleep by one of the occupants at night



Kitchen area shared by all occupants of the main house



Remodelling of sitting room through dry wall partitioning to form Room 1



Dry wall partitioning used to form Room 2



Formal backroom that is rented out by single male occupant



Bathroom and toilet area shared by all occupants of the main house

Ms Ndimande's profile is as follows;

- She is a South African originally from Kwazulu Natal
- She has been in La Rochelle for 12 years (since 2003)
- She lives in main House with her 5 children and Mother
- She shares a room with 3 of her daughters and her mother
- Her two sons have a small bed in the kitchen that they sleep in at night
- She was the first tenant of the house and is the one who pays directly to the house owner

The main house contains a total of 17 occupants in total who occupy all five rental rooms. The backroom and shack are occupied by a single person each,

Main house

- Room 1: 2 occupants
- Room 2: 2 occupants
- Room 3: 4 occupants
- Room 4: 5 occupants
- Room 5: 2 occupants
  Total occupants – 15

Backrooms

- Backroom 1 : 1 occupant
- Shack : 1 occupant
  Total occupants: 2

Total occupants in Main House + Backrooms – 17

Physical attributes of house

Flexibility and Adaptability (physical changes of house over time)

According to Ms Ndimande the house was originally a three bedroom house with a lounge. It also had a small shed at the back that the home owner's used for storage. After she moved into the house in 2003, she organised the conversion of the sitting room to make two extra rental rooms through subdividing dry walls. This allowed two more families to move into the house and rent out the rooms. Also, a diminutive figured male approached her to let out a room or space in her backroom or house.

Since the house and the brick structured backroom was fully occupied, the man proposed that he could convert the storage shed into a room since he was small enough to fit and she agreed to rent out the shed to him. She also told us of how her kitchen had over time become used as sleeping area by her two sons at night as they did not have a room to stay in. This bed is then used as a make shift sitting area during the day to eat or when having conversations within the kitchen area.

Quality of physical conditions

House 3's physical condition was as good as the previous houses; with a well maintained external spaces and building structure. Access to the back yard was also through a narrow, dark passage that was clean with no litter or water logging. Internally however, conditions were slightly less well maintained. Ms Ndimande informed us of the problems they have with the physical state of the house due to the modifications that were made such as subdivision of the sitting room with a dry wall to form two rental rooms.

The installation of the dry wall meant that the front door and window to the house would be blocked off, which has affected the level of lighting and air that comes into the house and has reduced the number of access points to only one (through the kitchen). This she deems is a problem as all the occupants would have no alternatives exit point in case of a fire in the kitchen. She also pointed out the roof and ceiling as having leakages during rainy days which causes damping within the passage way.

Available infrastructure and amenities

The main house contains one bathroom and kitchen that is shared by all its 15 occupants (both male and female). The backroom has 1 toilet and no bathroom or kitchen. The shack has no toilet or bathroom of its own with its occupant sharing the toilet with the more formal backroom occupant.



Figure 8: Image on the left illustrating the narrow and dark passage that tenants walk in the house to access their rooms. This lack of light and air circulation is, according to Ms Ndimande (in image on the right), causing the slow degradation of the internal walls and ceiling (illustrated in image on the right)

Social Attributes

Reasons for renting rooms and sharing spaces

When we asked Ms Ndimande the reasons why they opted to live in the manner they do she said it was nothing but financial constraints that forced her to rent out the rooms and share spaces in the house. She said that it was not financially viable for her to rent the whole

house to herself as she didn't earn enough to cover all the rent and still pay for other costs such as food, travelling and electricity and water bills. She had no other choice but to use the other rooms to reduce her individual rent amount by renting them out to other people.

"We don't wish to live like this my child. We only do it because it is the only way we can afford paying rent in a place that is close to employment opportunities. The jobs I get pay me very little money which all goes to rent, travelling costs, food and other things such as my children. It is not easy being a single parent so I have to make ends meet and living like this helps me do that" (Ms Ndimande, 2014)

Household management arrangements

As was mentioned earlier House 3 is owned by a business owner who does not live in the house. The owner originally rented the house to Ms Ndimande who decided to rent out the other rooms in the house to other tenants. Through this arrangement, she took the role of the resident landlord or housekeeper as she is responsible for rent collection and payment to the homeowner and also facilitates payment of services such as water and electricity.

"I have become the mother of this house in a way. I am responsible for almost everything in this house. I make sure that everything runs smoothly. I organised the other tenants and paid for the dry wall that was used to subdivide the sitting room into two rooms and I collect the rent from all the tenants to pay to the home owner and to pay for water and electricity" (Ms Ndimande, 2014).

She manages the house by calculating all the costs of the household including the rent that each occupant has to pay. She also assists some of the other occupants with regards to payment for services in times when they cannot afford to pay for them.

"When things such as electricity run out in the middle of the month I sometimes have to fork out my own money to pay for them before the tenants pay at the end of the month" (Ms Ndimande, 2014)

When asked about the involvement of the home owner in the management and maintenance of the house she said the owner was seldom involved in the affairs of the household.

"The owner doesn't care what goes on in this house. They never even come to the house to see if it is still in a good condition. All they want is their full rent at the end of the month (Ms Ndimande, 2014).

Demographic/social relations

House 3 has a demographic composition that is dominated by women and South African citizens. The main house occupies 11 females out of the total of 15. The main house is occupied by only South Africans with the 2 occupants that occupy the backrooms being from Mozambique. In our interview with Ms Ndimande she said she was happy to have South Africans fill up rooms in the main house as she doesn't like sharing with foreign nationals.

"I don't like some of the things these people [foreign nationals] do, particularly in the kitchen. They cook certain kinds of foods that I am not used to and are often untidy. I am quite relieved I was able to get only South Africans to the share main house with and rent out the backrooms to the two Mozambicans" (Ms Ndimande, 2014).

Sharing of space and services

The availability of only one bathroom and toilet space in the main house is said to be very problematic by Ms Ndimande. She explained how the high number of occupants as well as the dominance of females in the main house causes a lot of conflict amongst the occupants in terms of cleanliness of the space and time spent in usage by individuals, particularly during mornings when preparing to go to work. She noted that the female occupants tend to spend a longer period of time using the bathroom space than the male occupants whilst the male occupants are said to be less cleanly than the females. This often causes quarrels and social tension between occupants.

She also mentioned how the single bathroom also becomes a health hazard at times as instances where a person was sick with diarrhoea and vomiting and they couldn't gain access to the toilet to relieve themselves as it was constantly in use by the other occupants.



Figure 9: Informal shack located in the backyard of House 3. The shack was converted from being a tool shed and is rented out as a room by a diminutive single male, who is able to fir in it due to his short statue

HOUSE 4

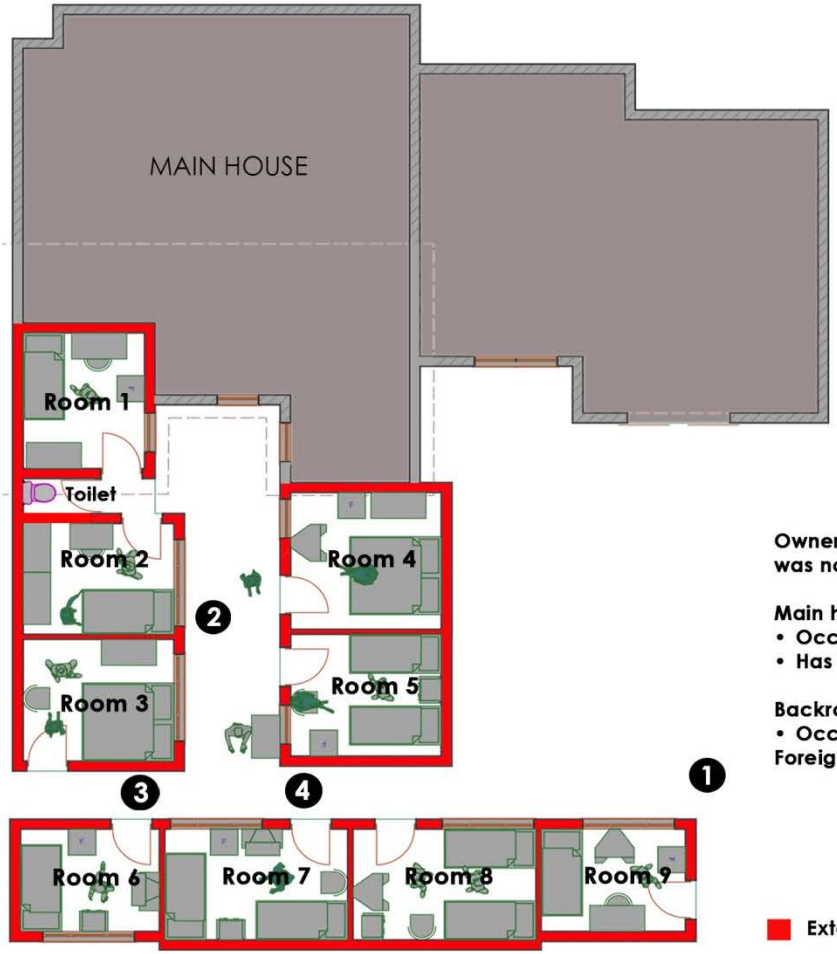
Our investigation of remodelled living spaces in La Rochelle continued a few days after visiting houses 1 – 3. Our first study was done during the weekend so we decided to come during a weekday (Wednesday) to see if we would notice a change in the type of occupants we found in the houses. The fourth house we were able to access is located the western part of La Rochelle. We were informed about House 4 by a woman, Memory (not real name); who we approached walking along the street for an interview on Thato's subject of research. Upon agreeing to speak to us she informed us that she lived in a house that had 9 backrooms constructed in its backyard. We were fascinated by this and asked if she could take us in to see these rooms, however she refused as she said she was a relatively new tenant and wasn't comfortable letting us in without the owner's permission. We then asked her to tell us about the house and its backrooms as well as how many occupants each room had.

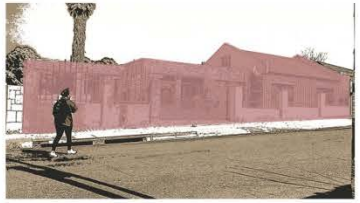
Landlord & tenant profile

In the interview with Memory she informed us of the following about herself;

- She is a Zimbabwean originally from the city of Harare
- She rents a backroom in House 4 that she shares with her cousin
- She has been living in La Rochelle for 3 months
- She works in Oakdene, where she walks every morning

She informed that the home owner lived in the main house with his family and that he was currently not home. She told us that she was not sure about how many occupants rent out the other rooms as she hadn't lived in the house for long. After finishing with our interview with Memory, Thato and I decided to wait for someone else who lived in the house so we could request permission to enter and see the rooms. After a long wait in front of the gate we were confronted by two males who were passing us by, who asked us if we were looking for someone in the house. One of these males happened to be a former tenant of one of the rental rooms and he agreed to let us in to the house and introduce us to one of the tenants. We entered the backyard of the house and were introduced to a man, who called himself Sibusiso (not real name) and a lady by the name of Zandile who were requested to have interviews with.





Front View of the house

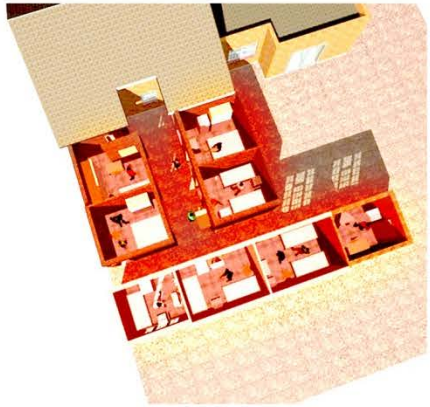
HOUSE 4				
Type of occupant	Number of People in Room	Duration lived in House	Nationality	Rent Paid
Couple	2	8 months	South African	R1800
Single female	1	Unknown	South African	R1000
Single females	2	3 months	Zimbabwean	R1500
Couple	2	Unknown	Zimbabwean	Unknown
Single Males	2	1 year, 6 months	South African	R1800
Nuclear Family	3	Unknown	Mozambican	Unknown
Single Males	2	Unknown	Mozambican	R1200
Couple	2	Unknown	Zimbabwean	Unknown
Nuclear Family	3	Unknown	Mozambican	Unknown
Total Number of Back-room Occupants	19			

Owner lives in Main house with family but was not available for interview

Main house
- **Occupied by home owner and his family**
- **Has 9 Backrooms which are all occupied**

Backrooms
- **Occupied by 5 South Africans and 14 Foreign nationals**

Extended Rooms



Views of backrooms and backyard spaces









By Mavuso, (2014)

Main house

- occupied by South African home owner and his family
- Home owner was not available for interview for information on main house

Backrooms

Occupied by 3 South Africans and 16 foreign nationals

- Room 1: 2 people
- Room 2: 1 person
- Room 3: 3 people
- Room 4: 2 people
- Room 5: 2 people
- Room 6: 2 people
- Room 7: 2 people
- Room 8: 2 people
- Room 9: 3 people

Total occupants in backrooms - 19

Physical attributes of house

Flexibility and Adaptability (physical changes of house over time)

In our survey of house 4 we observed that the back yard landscape was under construction with a pool and sitting areas being built adjacent to where the backrooms were located. Some of the backrooms themselves looked as if they were recently constructed as they were not fully painted. Due to the home owner not being present for an interview we could not verify these observations. Memory, Zanele and Sibusiso also did not inform us of when the backrooms were constructed and in which order.

After our site visit I decided to investigate this aspect of the house by attempting to track the changes to the house over the last 5 – 10 years on Google earth. The aerial images revealed that in 2007 the house only had a single structure and by 2014 the house the house has had an extension of the main house, the construction of 9 back rooms and a swimming pool area.



Figure 10: A 2007 aerial image of House 4 which reveals a large amount of vacant space around the main house which seems smaller than its current size.



Figure 11: An aerial image of House 4 in 2014 illustrates an extension of the main house and construction of additional units in the back yard along with a pool area (Google Maps, 2014)

Quality of physical conditions

The external environment of the back room area was very dusty and filled with rubble, piles of soil and scraps of construction material due to the current construction of the pool and sitting area. The exterior wall finishing of the rooms was fairly uneven as some of the rooms had plaster finishing whilst others had face brick finishing. The spaces between the backrooms themselves were however clean and well-kept with very little signs of litter or water logging.

We were only allowed into the inside of Sibusiso's room which we also found to be in an adequate condition for habitation. It did however lack a lot of interior finishing such as painted walls, floor tilling and a roof ceiling. This, based on observation from the outside, we assumed was the overall condition of all 8 of the other backrooms.



Figure 12: Zandile standing in front of one the rooms in the backyard of House 4. Behind her is a swimming pool area that is under construction by the home owner

Available infrastructure and amenities

House 4 was lacking in terms of infrastructure and amenities that adequately cater for the number of people in the back rooms. The back yard had only one toilet space that is shared by all 19 occupants of the rental rooms. The main house has more toilet

spaces available however our interview with Zandile revealed that the rental occupants are not allowed access to those. There was no designated bathroom space in the back yard as well, with occupants using their own rooms to bath. There was a tap located near the toilet where occupants would get water from and a table placed in front of one of the rooms which was used as a washing area.

Social Attributes

Reasons for renting rooms

When asked about the reasons for renting the rooms all three respondents mentioned affordability and location as the main reasons. Memory and Zandile alluded to how the low rent they paid by renting rooms in the house and its close proximity to their places of work within a walkable distance, has allowed to cut costs of living significantly. Sibusiso also said the low rent they paid for the rooms was the main reason they rented the rooms.

"We are able to save a lot of costs by renting here my friend. This then allows us to send money back home to our family in the Eastern Cape" (Sibusiso, 2014).

Household management arrangements

All physical modifications to the house and backrooms were authorised and facilitated by the home owner. He also collects rent from the individual occupants and calculates costs of electricity and water to each tenant's rent. He is also the one who advertises available rooms but allows the tenants to get their own people to share a room and rent with. We asked the respondents on their relationship with the landlord and if he ever interacts with them. Both Zandile and Sibusiso said that the landlord was very nice to them and in some cases he would come out to sit and chat on weekends when he is not at work.

"He is very nice to us that man. He comes to check on us regularly and sometimes hangs around the backyard whilst chatting to some of the tenants. We hardly have any problems with him, unless if we are late on rent" (Sibusiso, 2014).

Demographic/social relations

House 4's demographic composition showcases a dominance of foreign nationals originating mostly from Mozambique or Zimbabwe. Only 3 out of the 9 backrooms were rented out by South Africans. All the respondents, when asked about any conflicts that occur due to nationality or cultural differences, said there was never any conflict based on nationality, gender or culture in the rooms as everyone mostly kept to themselves or spend a majority of their time at work.

HOUSE 5

The fifth house Thato and I went to was one we were had previously visited in 2013 when we first did a study on the La Rochelle (see Chapter 1, section 1.3). Thato wanted to interview a lady who lived in the house called Elvina, on questions related to her research topic and I wanted to re-document it and look specifically into its physical aspects to add on the information on its social aspects that I had collected in my previous study.

Landlord & tenant profile

The house was owned by a man who didn't live in the house but rented it out to one of his workers (Elvina's husband). Elvina and her husband were the first occupants of the house and they rented the house from its owner. They then rented the other rooms in the house to more occupants to share the costs of rent and services. We able to interview only Elvina in this house as the other occupants declined our interview requests. Elvina's profile is as follows;

- She is a wife and mother of two children and originates from Malawi
- She and her family rent a room in House 4 that was converted from being a garage.
- She has been living in La Rochelle for over 5 years
- She is a stay at home wife and is responsible for watching over the house during the day when her husband and the other occupants are at work

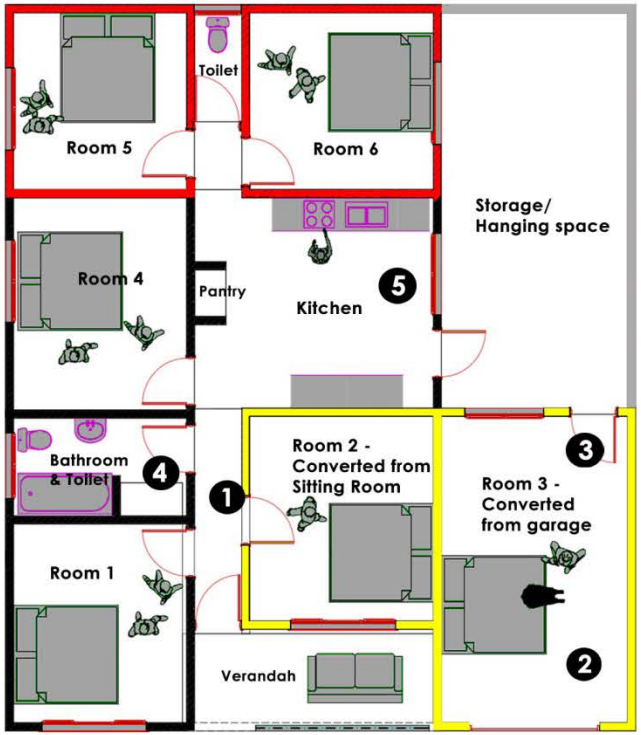
Physical attributes of house

Flexibility and Adaptability (physical changes of house over time)

House 5 used to be a 2 bedroom house and as time went by 2 more rooms were added on to the house, with the lounge and garage were turned into rental rooms, turning the house into a 6 roomed house. The new rooms were designed to be spacious enough to fit in other pieces of furniture besides beds, allow easy movement of people and perform other activities. The internal living arrangements were also designed by the occupants to be able to cope with the increased threshold of residents as space available allows for a family of three or four to occupy them without contention.

Sharing of space and services

The families in the house all share the bathroom and toilet spaces. Some families share the kitchen while some have created their own kitchen spaces in their rooms. The house has one bathroom, two toilets, a pantry for storage and an outside storage/hanging area that is shared by all the occupants.



Converted Rooms

Extended Rooms



Front View of the house

- Owner does not live in house
- 5 families and 1 single person occupy the house
- The house used to have 2 bedrooms and overtime has been remodelled into a 6 bedroom house
- 2 of the 4 new rooms were converted from a garage and sitting room whilst the other 2 rooms were constructed as extensions to the house
- The families share the bathroom and the kitchen communally

HOUSE 5

Type of occupant	Number of People in Room	Duration lived in House	Services Shared	Rent Paid
Nuclear Family	4	5 years	kitchen, bathroom & toilet	R1500
Couple	2	5 months	bathroom & toilet	R1200
Single Mother & Child	2	2 months	kitchen, bathroom & toilet	R1500
Couple	2	3 months	bathroom & toilet	R1000
Single Male	1	3 months	bathroom & toilet	R1000
Nuclear Family	3	4 months	kitchen, bathroom & toilet	R1500
Total Number of Occupants	14			





Dry wall partioning that was used to convert sitting room into Room 2



The inside of Room 3 showing how rooms are able to fit all sorts of furniture such as a tv set and wardrobe



Elvina (left) explaining how the house was remodelled



Bathroom and toilet shared by all occupants of the house.



Kitchen and pantry that is shared by all occupants of the house.

By Mavuso, (2014)

Social Attributes

Demographic/social relations

With reference to the information we collected in 2013 on the house; we discovered that there are people of different nationalities that reside there. This is inclusive to Malawian; Congolese; Nigerian and South African residents. Most of the couples moved from their home country together, for example the Congolese couple that got married before moving to South Africa. A different case was however with the South African woman who is married to the Nigerian man whom she met in South Africa.

Household management arrangements

Elvina and her husband act as the resident landlords of the house as they facilitate the collection of rent to be sent to the home owner. They were also behind the facilitation of the remodelling of the house on terms of paying for the dry wall partitioning, garage conversion and room extensions. With regards to the everyday running of the household, it was the ladies of the house that seemed to be responsible.

A lot of the women we found in the house were stay at home wives and they were responsible for keeping their rooms and the shared spaces neat and clean. Similar to House 3, occupants of house 5 compiled a cleaning roster that allocated the set of chores each occupant had to do on specific days. The responsibility of laundry however is not shared. Everyone is responsible for their own laundry and making sure that their rooms are well maintained. Contribution also goes towards the payments of electricity and water.

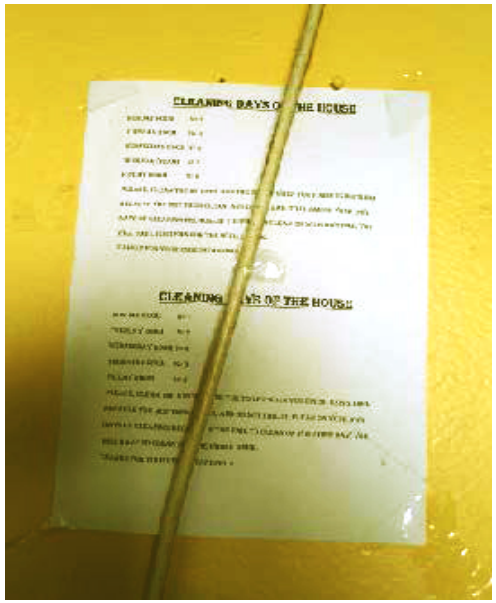


Figure 13: Cleaning roster pasted on the kitchen wall allocating chores to different families

Socio-economic status of tenants

Most of the male residents in the house were working in some sort of formal employment. Although some of the female residents were not formally employed, they occasionally did occasional work such as hairdressing to make some form of income.

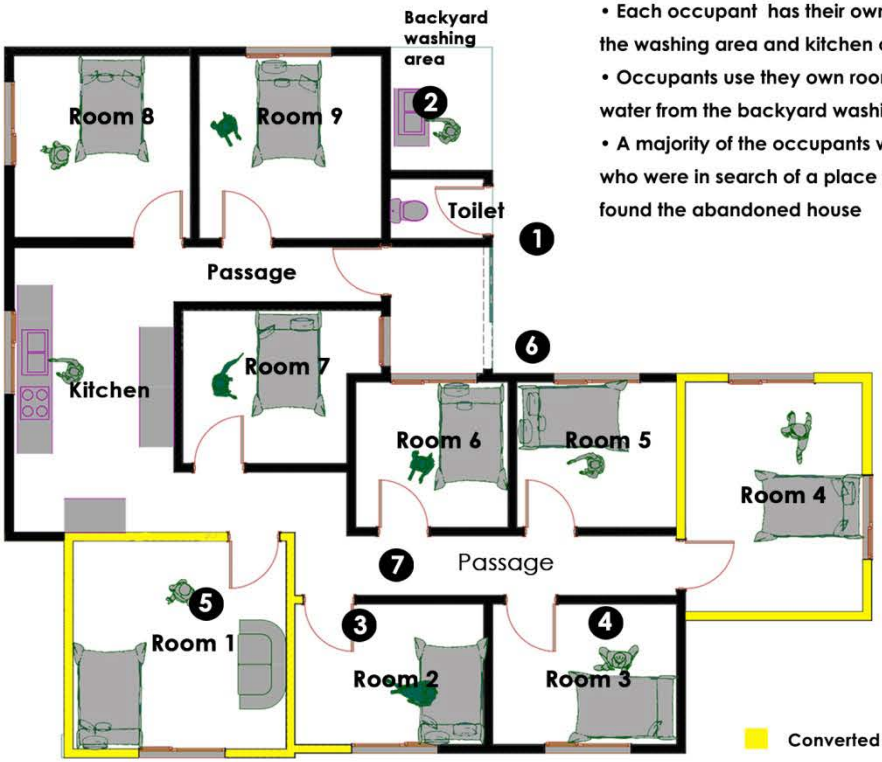


Front View of the house

House 6 is an abandoned house that has no identified formal ownership

- The house has 9 rooms witih a total 10 people occupants
- It originally had 7 bedrooms with the other 2 rooms added as conversions from a sitting room and family room.
- The house has access to water but has no electricity
- Each occupant has their own room and only use the washing area and kitchen communally.
- Occupants use they own rooms as bath areas and access water from the backyard washing area
- A majority of the occupants were homeless individuals who were in search of a place to sleep at night before they found the abandoned house

HOUSE 6			
Type of Occupant	Occupation	Duration lived in house	Services shared
Elderly Woman 1	Unemployed	5 years	washing area, kitchen & toilet
Middle Aged Woman	Unemployed	4 years	washing area, kitchen & toilet
Young Girl	Employed	1 year	washing area, kitchen & toilet
Young Males	Employed	8 months	washing area, kitchen & toilet
Middle Aged Male	Unemployed	8 months	washing area & toilet
Elderly Woman 2	Unemployed	5 years	washing area, kitchen & toilet
Young Male	Employed	1 year	washing area & toilet
Elderly Woman 3	Unemployed	5 years	washing area, kitchen & toilet
Elderly Woman 4	Unemployed	5 years	washing area, kitchen & toilet



















By Mavuso, (2014)

HOUSE 6

After finishing with our analysis of house 5, we were informed by one of Elvina's friends of an abandoned house, close to where house 5 was, where about 10 people lived in 'illegally'. Thato and I decided to go there to attempt to investigate the house with the assistance of Elvina's male friend Ben (not real name). My expectations of the house were of emptiness, lack of order and a dilapidated structure, danger and illegal activity.

Landlord & tenant profile

Upon arrival to the house, its physical condition was to what I had expected however what was unexpected was the kind of people we found living there. There are 10 occupants living in the house and the people that live here do not have any children living with them. The house has 9 bedrooms and 10 occupants.

In my mind I could imagine only males being able to live in an abandoned house that was dilapidated and lacked proper services such as clean toilets. This was not the case in this house as 8 of the 10 occupants were women of an elderly age with only one of the occupants being male. They came together as homeless individuals in search of a place to sleep at night. The owner of House 6 is not known to the occupants and has never come to the house since they moved in to it.

We were able to get an interview with one of the occupants called Mapaseka who told us about the state of affairs of the house. Mapaseka's profile is as follows;

- She is an elderly woman that originates from a place called Kroonstad in Lesotho and now lives in La Rochelle
- She is unemployed and has been living in the house for over 5 years

Physical attributes of house

Flexibility and Adaptability (physical changes of house over time)

The house was originally a 7 bedroom house with a sitting room and family room. However when the first occupants after its abandonment came in they converted the sitting room and family rooms into extra bedrooms.

Quality of physical conditions

Out of the houses we investigated house 6 had the worst physical conditions. The house was dilapidated with run down, decaying walls and eroded doors, windows and furniture. The condition of the single toilet and backyard washing area (where some occupants take baths) was in a more dilapidated state.

Social Attributes

Demographic/social relations

Most of the occupants were of South African descent with two coming from Lesotho. As was previously mentioned, 8 of the 10 occupants were female with 4 of these women being of an elderly age. There was a surprising dominance of elderly people in the house as only 4 of the occupants were of an age below 30.

Sharing of space and services

The occupants of House 6 share the toilet, washing area and kitchen and water is used by everyone with no payments being required. There is no electricity in the house so no payments are required for that as well.

Tenure security

Of all the houses we had investigated, house 6 was the only one where the occupants had informal tenure. However, to my surprise Mapaseka, spoke of how the issue of tenure does not seem to be an issue to her. When we asked her whether they had ever been threatened with eviction by potential buyers or the police she said they hadn't yet been threatened with eviction.

"No there hasn't been anyone who has been interested in buying the house and the police have not tried to evict us, instead they come by to see how we are doing" (Mapaseka, 2014).



Figure 14: To the left; an image of Mapaseka sitting at the front door of the house and on the right an image of the inside of one of the rooms in the house.

Socio-economic status of occupants

A majority of the residents of the abandoned house were unemployed. This was particularly the case with the elderly occupants of the house as all 3 of the younger occupants had jobs.

"I am unemployed, just like most of the people that are living here" (Mapaseka, 2014).

Mapaseka mentioned how the abandonment of the house was a huge help to them as it required no rent payment and gave them free access to a place to sleep and water to drink and bath.

Mobility of residents (duration of stay)

There seemed to be a sense of an undefined permanency with the occupants of House 6. According to Mapaseka most of the people do not live there or spend their day in the house. They just go there at night to sleep. For them; the house is a form of a shelter and not necessarily a home**.** What was more interesting was that they had never been threatened with eviction by the police or higher authorities but were rather checked upon on a regular basis by them to see if they were surviving. This for me proved wrong the perception of legal authorities being uncompassionate and applying the law without consideration of people's circumstances and situations for why they occupy such places.

From the interview with Mapaseka we could deduce that the majority of the people who occupied the house were nomadic, which was something I had initially expected when imagining an abandoned house. However Mapaseka and three of the other elderly ladies had been living in the house for 5 years meaning they had almost permanently settled there. It was the younger occupants that were said to stay for a shorter period of time, which according to Mapaseka was due to them getting better paying jobs and moving to rent in houses in a better physical condition.

5.3 Reflections and Analysis of Findings

5.3.1 The 'Rooms' and 'Spaces' of La Rochelle: A Product of Necessity or Preference?

One never knew what to expect when approaching the people of La Rochelle, particular when entering into their living spaces. In some cases I expected to see very dire living conditions, lack of order danger and illegal activity. Upon arrival to most of the houses however what I unexpectedly found was the strong sense of social resilience that existed amongst the occupants of these spaces in the face of extreme poverty and a shortage of affordable accommodation in Johannesburg's inner city (Tissington, 2013). For instance, in my mind I could only imagine males being able to live in such spaces where the is a lack of privacy and sense of security amongst unknown (upon arrival) house mates as well as the dilapidation and lack of proper services such as clean toilets.

This was however not the case in cases such as in house 4 and 6 where a majority of the occupants were women of an elderly age and few occupants being male (see section 5.2). From the sample of interviewed participants, a majority indicated that they were renting a flat with either their friends or family, as an effort to reduce the affordability of the rent in the area. A number of the respondent sublet backyard rooms and/or chose to stay in subdivided single

houses. Many indicated that they are subletting with at least two households and some are sharing one room with two or three people, depending on the terms and conditions of the landlord. In terms of backyard rooms and subdivided rooms in the main house, the rent ranged from R1000 to R2500 depending on the size of the room and also the section where it is located, thus indicating a strong relationship between the rent paid and the type of accommodation offered. There were very few cases where tenants indicated they were not sharing which was either out of choice, due to their economic or single status or the small size of their room. Occupants in the area were willing to reduce the size of their living spaces to accommodate paying less rent due to their fluctuating incomes and instabilities in their social situations (such as needing to accommodate a sibling or support family back home).

The findings also suggested lessons of the different dynamics, situations and circumstances that result in the inhabitants living the way they do. These dynamics include: the residences' socio-economic status, cultural background, nationality and gender. The question of harmony amongst occupants in these shared living spaces formed part of the sub questions of this research and although my hypothesis was that their shared socio-economic status is what enables the residents to live together in harmony, however I found that various factors had contributed to this phenomenon.

These are inclusive of:

- Mutual respect for people's living areas (boundaries set by the divided bedrooms for example)
- Tolerance levels for other people's cultural backgrounds and;
- A set of rules that govern the manner in which these people live together within these limited spaces (particularly within shared spaces such as kitchen and bathroom areas).

As one of the interviewees said: "necessity is the mother of need" (Mapaseka, 2014) and can be made testament in how people in these spaces are able to live harmoniously, despite their dire living conditions and differing socio-cultural backgrounds. There was also much to be learnt from the flexibility in which the 'informal' act of remodelling to create rooms and spaces for rent, which has enabled occupants, particularly foreign migrants, to cope with the insecure socio-economic status as well as lack of tenure security (Mayson, 2014).

5.4 Conclusion: Is There A Need For Intervention In La Rochelle?

In the process of analysing the remodelling of living spaces in La Rochelle, I have developed an understanding of the reasons why residents of the area are engaging in such an activity. With the

problems of unemployment, low income and increasing populations in cities such as Johannesburg, it is evident that the design and development of the 'Rooms' and 'Spaces' housing typology is an adaptation to lack of affordable housing in well located areas such as La Rochelle. I have therefore developed substantive grounds to defend the kind of living space design that the people of La Rochelle are engaging in; arguing that it enables them to afford to live in an area well located to the inner-city.

However, with reference to the discussions on resilience, informality and organic growth in Chapter 2, it would be naïve for me to conclude that this 'informal' living space typology is ideal. One cannot deny that this kind of accommodation is often inadequate and that many of the houses where tenants rent and share spaces would fail any conscientious housing inspection (UN-HABITAT, 2003, iii). Cases where single houses are remodelled so that they are able accommodate over ten occupants (excluding backrooms) whilst there is only one toilet and bathroom (e.g. House 3 and 6), indicate the need for intervention in some of these houses. This further emphasises the point that the increasing population densities might be a problem in the area and the pressure exerted on existing infrastructure can lead to problems in the future (ARPL3013 Housing Students, 2013).

According to some of the responses from the occupants that Thato and I interviewed, people in La Rochelle expressed frustration in how the City is not doing anything to improve the state of their living conditions within the neighbourhood. They said that they do want the City to intervene in the area in providing better places for them to live, with adequate infrastructure as well improved access to job opportunities. However, emphasis from their side was put on these interventions maintaining affordability and inclusivity.

"Those people are useless [referring to the CoJ]. All they do is come to shut down electricity and water if you don't pay. They don't help us with anything else. I have been waiting to get an RDP house for years and still nothing, hence I am living like this. I would be happy if they would do something to build us better living spaces in the area, as long as it remains affordable" (Ms Ndimande, 2014).

As was mentioned in Chapter 2 (section 2.6.2) the informal rental typology that exists in La Rochelle through the remodelling of living spaces needs to be supported [rather than eradicated] by state intervention through the provision of the required policy interventions, regulatory frameworks and infrastructure such as subsidies for small-scale incremental development of housing and improving fire prevention and other safety precautionary measures. People in La Rochelle are willing sacrifice the amount of space they have to reduce or subsidise their rental costs and need ways of maximizing the utility of these small spaces in catering for all their

needs. This is essentially the role that the city has to play in terms of 'formal' interventions, through the use of innovative spatial design concepts and applications.

Policy and programmes such as the Informal Rental Enablement Programme (discussed in Chapter 4, section 4.6.4) are needed to support the current 'informal' incremental housing space development occurring in the area. Based on the findings, it was established that is the socio-economic needs of the people in La Rochelle that is shaping its spatial development. Therefore any proposed intervention should explicitly outline these and seek to work in coherence with what's there rather than oppose it.

6. Final Conclusions & Recommendations

6.1 Introduction

The process of urbanisation in South African cities poses major challenges for city architects to plan properly for new developments (see Chapter 2 (section 2.2). A lot of people move from rural areas to the city due to lack of development in those areas which causes an influx in cities and posts as a threat to service delivery particularly in the city of Johannesburg. My research on the remodelling of living spaces has looked into two types of housing typologies which are provided as affordable rental housing options in the area of La Rochelle. These were in the form of internally subdivided rooms and spaces as well as backyard rooms.

It looked at the socio-spatial characteristics of the development of these spaces based on the ever-changing needs and wants of its occupants and how they have managed to secure a form of accommodation that supports their livelihood strategies as best as possible (Mayson, 2014, 98). The concepts of urban resilience, urban informality and organic city growth were used, with reference to existing literature, to explain to argue against the notion of informal and organic development of residential neighbourhoods in African cities being deemed as disorderly, chaotic and dysfunctional. In this argument the 'organic' and 'informal' nature of the remodelled living spaces of La Rochelle has been illustrated to allow low income communities to gain access to accommodation in a well located area close to the inner-city of Johannesburg. I have through my research findings illustrated how the property owners and residents in La Rochelle have actively taken up this 'culture' of developing rental rooms as they are seen as an asset for both themselves and the people they rent out to. It is through these findings that I have formulated a base to my argument for the recognition of this kind of development as beneficial to the communities that undertake it (see Chapter 5).

My research has demonstrated the resilience that people seeking a livelihood in Johannesburg display through spatial innovation and social management systems to allow for multiple families to share houses and spaces that would ideally be occupied by a single family. It has also sort to illustrate how the lack of affordable housing in places near employment opportunities for low income city dwellers is a state of disaster in itself (Weakley, 2013). However, rather than being a single catastrophic event, this problem can be seen as an everyday state of disaster for low income dwellers in Johannesburg. The space remodelling practices of La Rochelle residents, in light of this, demonstrated how low-income communities in the city are adapting to this every day state of disaster through 'informal' spatial design practices. They have demonstrated a form of resilience in their ability to endure or continue to survive in the midst of high levels of unemployment and poverty and the lack of suitable intervention in the provision of affordable housing options in the inner city of Johannesburg. The remodelled spaces have proven to be responsive to the needs of the rental seekers of La Rochelle both in terms of the spatial and socio-economic aspects required in maintaining sustainable livelihoods in the city.

This chapter aims at discussing the way forward in terms of what I choose to call an 'enablement' rather than an intervention on the current living situations of the residents of La Rochelle. Here; in seeking to answer the question of whether building up is the best way to densify low income, low-rise settlements experiencing a growing population and housing demand, I draw comparisons and evaluate the current densification practices of La Rochelle against the densification strategy proposed by the City of Johannesburg in the Turffontein Strategic Area Framework (SAF). In this I argue for the recognition and acceptance of informal spatial practices and housing typologies as a part of the city fabric (Roy, 2005; Huchzermeyer & Karam, 2006; Jenkins & Andersen, 2011, Huchzermeyer, 2011; Fabricius, 2011) in opposition to them being eradicated.

I use the ideas presented by Jenkins & Andersen (2011) and Koolhaas (2006) on understanding and using the positive aspects of both conventional (formal) and non-conventional (informal) densification processes in planning and designing for La Rochelle; to ensure inclusivity, choice and increased resilience of its low income residents. I in this argue for the adoption of the principles of recognising, supporting & facilitating informal rental stock, as contained in the Sustainable Human Settlements Urbanisation Plan and Informal Rental Enablement Programme (discussed in Chapter 4, section 4.6.3 and 4.6.3.1) into the Turffontein SAF. Here I discuss the benefits of the 'self-help' approach to housing provision and how the City's plan can work with this approach to ensure inclusivity within its new residential densification proposals.

6.2 Recommendations: Planning for a 'Conventional' and 'Non-Conventional' City

As stated by Professor Paul Jenkins (at a lecture held at Wits University on the 26th of March 2014) "We (built environment professionals) need to investigate how African dwellers continue to shape and adapt to land use conditions to suite their cultural needs". He argues that urban areas in Sub-Saharan Africa cannot be defined or viewed within the categories of 'formal' or 'informal', in terms of their physical state and function, as they exist as spatial forms that contain elements of both (Jenkins & Andersen, 2011). The categorisation of urban development into 'formal' and 'informal' has according to Jenkins & Andersen (2011) "...led to negative consequences and hindered the more appropriate development of cities, especially in the global South" (pg.1). An area such as La Rochelle that has developed rental living spaces in a manner that may be deemed as 'non-conventional' attracts hundreds of people every year due to the flexibility and inclusive nature of how its spaces are formed and operate. People in these kinds of situations are not always looking to be provided with so called 'formal' housing as a solution to the inadequacies of their living conditions. They are in large instances happy to provide living spaces for themselves in a manner that is suitable to them and flexible to their ever-changing needs (Watson, 2003; Roy, 2005; Weakley, 2013)

This 'non-conventional' approach to housing provision is however contrary to what the City of Johannesburg's spatial policy vision and plans with regards to the growth and development of its residential neighbourhoods. The Turffontein SAF (discussed in Chapter 4, section 4.6.4) under the auspices of the Corridors of Freedom, is proposing high density, high rise social housing around the La Rochelle edge with the aim of creating a more positive interface, as well as expanding the existing land use mix (Turffontein Strategic Area Framework, 2014). The framework (as argued in section 4.6.4), seems to ignore the current informal densification practices being undertaken by property owners and residents in the area.

The densification strategies that the framework suggests including the construction of secondary dwelling units and the conversion of non-residential (parts) of buildings such as garages to allow for higher density of occupancy is already taking place informally in La Rochelle. The framework mentions no plan to work with the existing (informal) densification practices in the area and how it seeks to retain the well-functioning aspects of the existing housing typologies. The main focus of the proposals is only around the development of new 4–8 storey housing units between La Rochelle, Pioneers Park Dam/Recreational Precinct and along major TOD spines.

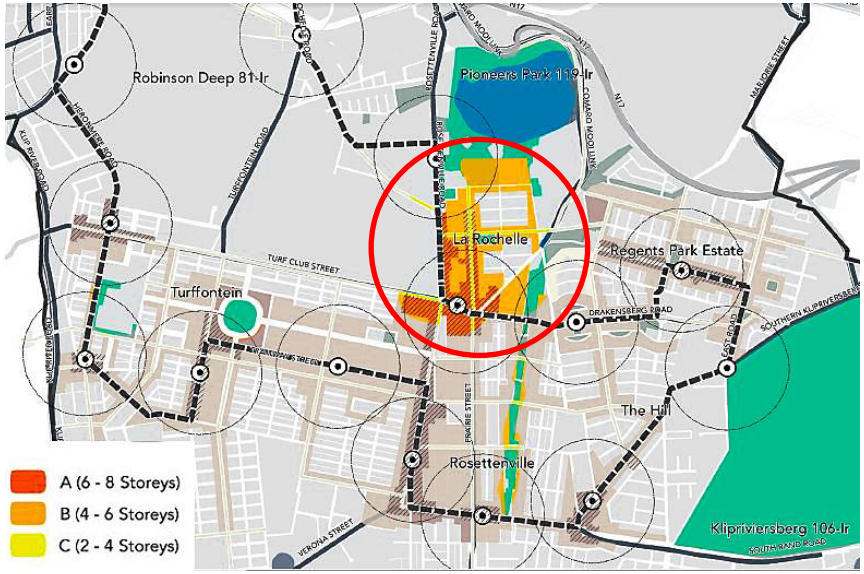
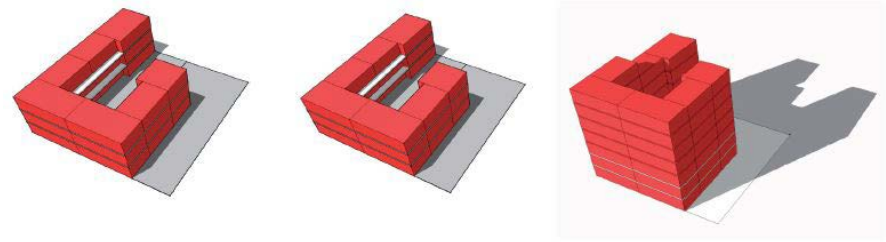


Figure 15: Turrfontein SAF plan illustrating identified areas where densification and intensification of existing areas is proposed, to be located along proposed transport spines and open spaces. Image adopted from Turffontein Strategic Area Framework (2014).

The question of inclusiveness however, brings us back to the question of whom and how many people are able to access the proposed new types of accommodation in the area. The informal state of rental spaces in La Rochelle, though congested, poorly maintained and (arguably) unsustainable, allows a high magnitude of low-income people to access the city and the socio-economic opportunities it offers to improve and better sustain their livelihoods. It is therefore questionable whether the so called 'conventional' developments proposed in the Turrfontein SAF will maintain this inclusiveness or will limit the number and diversity of people that will be able to occupy them.The densification strategy will essentially focus on large scale precinct development, consolidation and redevelopment of existing housing and higher density infill development on underutilised land (Turffontein Strategic Area Framework, 2014, pg.61). The framework explicitly states (pg. 61) that the typical methods of densification that are currently occurring in the area were omitted as being not applicable to the study area as they were leading to urban decay in the areas where they are taking place.



LARGE BLOCK		LARGE BLOCK (GF RETAIL)		LARGE BLOCK (ALT)	
UNIT SIZE	40-85m^2	UNIT SIZE	25-40m^2	UNIT SIZE	25-50m^2
NO.OF UNITS	54	NO.OF UNITS	46	NO.OF UNITS	90
RATE / M	R8,000	RATE / M	R5,500	RATE / M	R6,500
UNIT COST	R320-680,000	UNIT COST	R138-220,000	UNIT COST	R162 -325,000

Figure 16: Illustration of 4-8 storey residential blocks proposed for La Rochelle to be achieved through consolidation and redevelopment and higher density infill development on underutilised land. Image adopted from Turffontein Strategic Area Framework (2014).

Based on my findings (illustrated in Chapter 5) I argue that the needs of current residents of the area may require totally different interventions to what the framework is proposing. The processes of informal growth and densification occurring in La Rochelle need to be supported rather than eradicated by the Turffontein SAF. The projected organisation, order and sustainability of the proposed high rise, high density social housing may (if left to market forces) exclude a lot of low income city dwellers from affording or utilising their rental accommodation in the manner that they currently do in areas such as La Rochelle.

The rental rate per month projected by the SAF for the high rise blocks ranges between R5500 and R8000 which is more than 8 times the current rate of the lowest rental room or space in La Rochelle currently (see Figure 16). These new residential structures may also be less adaptive to the needs of low income residents such as the need to share rooms in cases or times of social or financial need such as family members or friends moving to the city and needing a place to stay (as seen in the case of Elizabeth in house 2). I, in light of this, argue that due to the affordability and flexibility that space remodelling in La Rochelle allows, it should continue to function in its so called 'non-conventional' manner in order to benefit the masses of stuck in poverty. This 'self-help' approach to housing however needs to be supported through the provision of the required regulatory frameworks and infrastructure to legitimise the small-scale incremental interventions in housing occurring in the area.

As was illustrated in chapter 5, a majority of the houses I visited lacked adequate sanitation infrastructure such as bathroom and toilet facilities to cater for the high numbers that occupied them. Though property owners and residents were able to undertake room extensions and conversion to non-residential spaces to allow for increased occupancy, they were in large instances not able to increase the amount of available infrastructure to support this increased occupancy. It is particularly in this aspect that the rental housing provided requires assistance in order for them to be physically sustainable for the future.

This kind of infrastructure support will have to come through 'conventional' types of intervention such as building regulation by-laws and financial models to fund the development of this infrastructure within the current households. Also investment from either the City or the private sector into providing and/or maintaining infrastructure and facilities will enable the improvement of the physical conditions of these spaces and work in accordance with the existing informal organisation systems that the city's dwellers already have in place.

It is in this type of intervention where both 'conventional' and 'non-conventional' aspects of development are used to allow for its low

income residents to continue to provide affordable accommodation with the adequate infrastructure in place to ensure its sustainability. Though in practice this would not be an easy task to achieve, due to the time and financial costs (from the city's point of view) involved, if focus can be on doing this, slowly but surely the mandate of improving the quality of the urban landscape of La Rochelle can be eventually achieved without the area being exclusive. How then can planning and design come in to help them achieve this and still maintain this form of self-sufficiency?

6.3 Legitimising the Development of Self-Help housing through Regulation & Innovative Design

UN-HABITAT (2003) argues that:

"The efficiency of extensions made for renting out, in areas where services are already in place, deserves more attention. Adding rooms to an existing house is comparatively inexpensive – possibly as little as half the price of new buildings, as no new land is required and at least some of the structure is already in place. Yet, because extensions are discouraged by planning regulations on maximum use of plots or by estate owners, occupants of relatively well-built and well-located housing may be discouraged from supplying rooms for rent which they can well afford to build"(pg.148).

The research, through various theoretical arguments and field work findings, has sought to answer the question raised in the introduction of the report (see section 1.7) on how the property owners and residents of La Rochelle are designing and administering informal type rental living spaces within their properties. Findings in the report show that both property owners and residents in La Rochelle have the capacity to effectively design and extend their spaces and/or properties to create spaces to rent out. Subdivisions and conversions of existing rooms as well as construction of additional units have been financed by these residents with success and have served for both the owners of properties and rental occupants.

6.3.1 An Incremental Typology: Working with what's there

"Government interventions should 'do no harm' where aspects of accommodation are 'currently working" (Mayson, 2014, 99). The city should not close its eyes to the reality of informality and the benefits it offers within the provision of rental accommodation. It should instead accept that low-income households and migrant populations need flexible and adaptive types of rental spaces to suite their ever-changing needs (UN-HABITAT, 2003). There therefore needs to be a re-directing of the city's housing policy towards supporting participatory and people-centred development programmes (South African SDI Alliance, 2012) which will work with

the community to come up with context specific and applicable neighbourhood design solutions.

Current literature on the legitimisation of self-help housing suggests the offering of micro-finance to existing and potential landlords (UN-HABITAT, 2003). Such an approach has the potential to compensate for the failures of the state-led post-apartheid era of housing delivery (Charlton & Shapurjee, 2013) where urban policy moves away from crisis-led reactive interventions towards forming partnerships with communities currently involved in providing housing themselves. This revised model of housing development (South African SDI Alliance, 2012) I believe would create 'win-win' situations for both the state and low income communities.

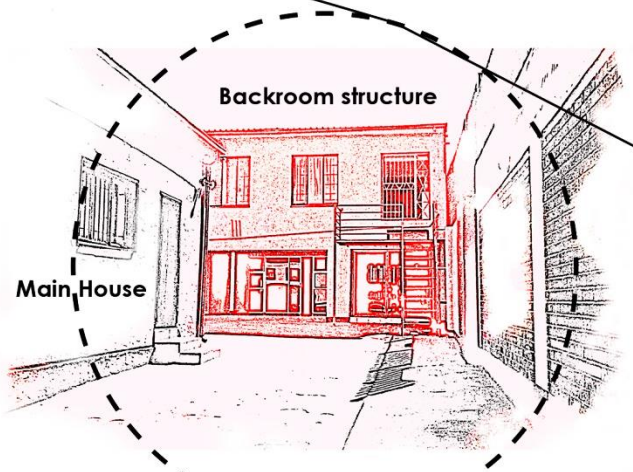
The design interventions proposed in the Turffontein SAF (see chapter 4, section 4.4) need to manage, guide and direct what is already happening in these areas: including existing informal rental areas and the proposed new residential areas. I argue that the Turffontein SAF needs to adopt the principles of policy frameworks and programmes recognising, supporting & facilitating informal rental stock, as contained in the Sustainable Human Settlements Urbanisation Plan and Informal Rental Enablement Programme (discussed in Chapter 4, section 4.6.3 and 4.6.3.1) to support the current 'informal' incremental housing space development occurring in the area.

Based on my findings, I established that is the socio-economic needs of the people in La Rochelle that is shaping its spatial development. Therefore any proposed intervention should explicitly outline these and seek to work in coherence with what's there rather than oppose it. Micro-financing models and subsidies on costs of building will act as incentives for property owners who are engaging in this small-scale incremental development of housing to improve the overall physical conditions of the houses and ensure that the necessary building construction and safety standards (according to SANS regulation) are met.

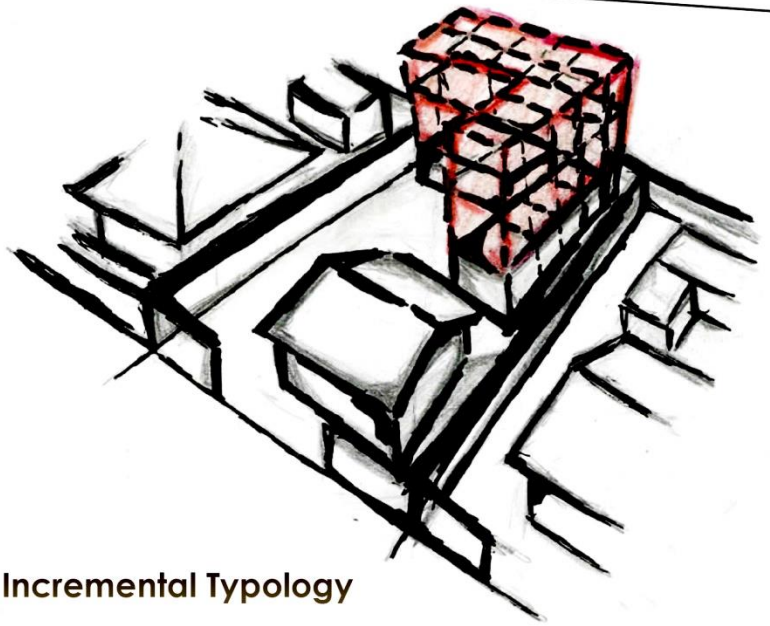
My findings showed how a majority of the La Rochelle property owners who lived in the area invested in the inside and exterior finishing and cleanliness of their houses and rental rooms (e.g. house 1 and 4). However, owners who did not live in the area and had left their properties to be managed by their rental tenants did not invest much in the interior and external environment of the houses and rooms. This illustrates the limited reach and resources that rental residents have in shaping and maintaining their spaces. Property owners who live outside the area seem to only focus only on expanding the size and amount of occupation of their properties and neglect issues of sanitation, health and safety of their tenants.



Illustration of possible future backroom structures developed by home owners over time



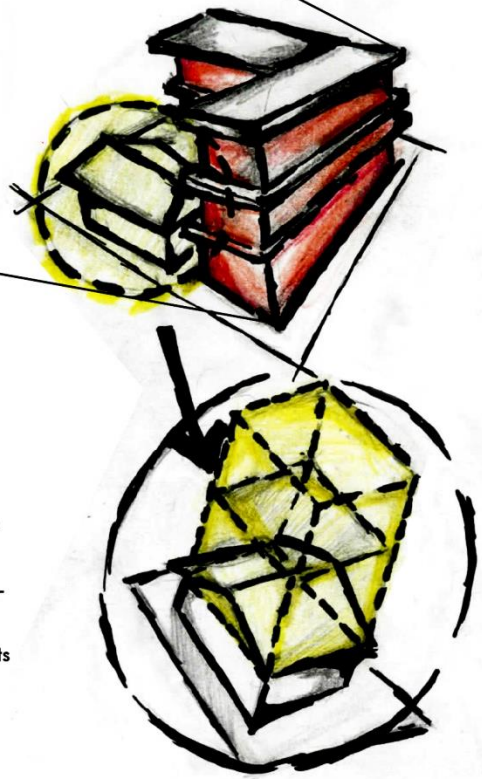
Turffontein SAF plans for residential densification should work in corporation with the reality of informal (backyard) rental developments rather than oppose them. Capacity of bulk infrastructure should be provided within units to enable current residents to develop their properties incrementally over time.



Layout designs should make provision for incremental developments through;

- Provision of bulk infrastructure (designs/capacity of bulk infrastructure to anticipate the additional rental component)
- Promoting availability of micro finance to upgrade rental units
- Making available standard lease agreements and legal mechanisms to deal with disputes

(CoJ SHSUP, 2012)



Time-Based Architecture: Single dwelling units provided with infrastructure to adapt to construction of additional units over time (Osman & Herthogs, 2010)

An Incremental Typology

By Mavuso (2014)

Tenants in these kinds of households fail to provide this on their own as it is difficult and costly. The City therefore needs to intervene in such situations, through the use of property by-laws and SANBS regulatory standards, to push property owners who are neglecting the maintenance of the rooms they are letting out towards investing into the improvement of their physical conditions. The city government should as such encourage the private sector (such as banks) to move into supporting the provision of low-income housing by lending to property owners/landlords who wish to enlarge or modify their properties for rental (UN-HABITAT, 2003, 148).

6.3.2 New Residential Developments – Inclusivity through design

With regards to the new high density, high rise social housing proposed to be development around the La Rochelle edge; I argue that they must also be designed to ensure inclusivity and flexibility, particularly for low income residents currently in the area and those projected to move into the area in future. There should be a range of housing product designs provided that will both meet spatial and affordability needs. In re-iterating calls for innovation in supporting cheap rental accommodation supply in poorer contexts (Charlton & Shapurjee, 2013, 3) I argue that the new developments should make provision for the rooms and spaces typology. They can provide an opportunity for a pragmatic and a proactive response to poverty in Johannesburg, by offering alternatives to the spatial marginalization and exclusion that previous housing solutions in the city (such as RDP houses) provided.

According to Hatchuel & Weil (2003, p.2) "Design is not only a mode of reasoning. It is also a human collective process shaped by history, culture, and social or organizational norms". In continuing the argument for 'working with what's there' (see section 6.3.1), I propose that the 'rooms' and 'spaces' should be incorporated into the design of the proposed high rise development in La Rochelle and its surrounds.

6.3.2.1 Designing for choice: Rental beds and shared facilities

In accordance with the principles of SHSUP and IREP (see sections 2.6 and 4.6.4), layout designs in the new developments should allow for space sharing where rooms are fitted with single beds that contain lockable storage spaces where rental occupants to store their belongings[6]. These bed designs should allow for 3 -4 occupants to share a room of a relatively small size in order to keep rental prices low. Tenants in this scenario would rent out the single bed and lockable storage space attached to it rather than the whole room, meaning the total cost of the room will be divided amongst

[6] Rental Beds idea adopted from the Ekhaya Overnight Shelter in Hillbrow Johannesburg, designed to cater for homeless people who pay about R8 per night for a bed and storage space

the occupants. These types of rental spaces would be targeted for targeted for low-income single persons and would be shared according to gender. The design of these beds is not intended to create hostel type living situations but rather aims at providing more flexible rental options to individuals earning a very low income who cannot afford to rent out a whole room to themselves for an extended period of time. The aesthetic look of these beds would perhaps not be highly luxurious; however they would be of a low cost and allow their users to keep their belongings safe for the temporary time that they occupy them.

In terms of provision of infrastructure and capacity anticipate the additional rental occupants, communal bathroom and kitchen designs should be incorporated on each floor that will be sufficient, in terms of projected numbers, to adequately cater for all occupants and different genders. With regards to management and administration of these spaces, standard lease agreements and legal mechanisms (to deal with possible disputes), would be made available to occupants. However, terms of lease would allow for short term durations of stay, with the option to extend to longer durations in future, to allow for ease of mobility for tenants who wish to use rental spaces as temporary accommodation purposes. This temporary rental leasehold type agreement would however need to be researched in greater detail before implementation.

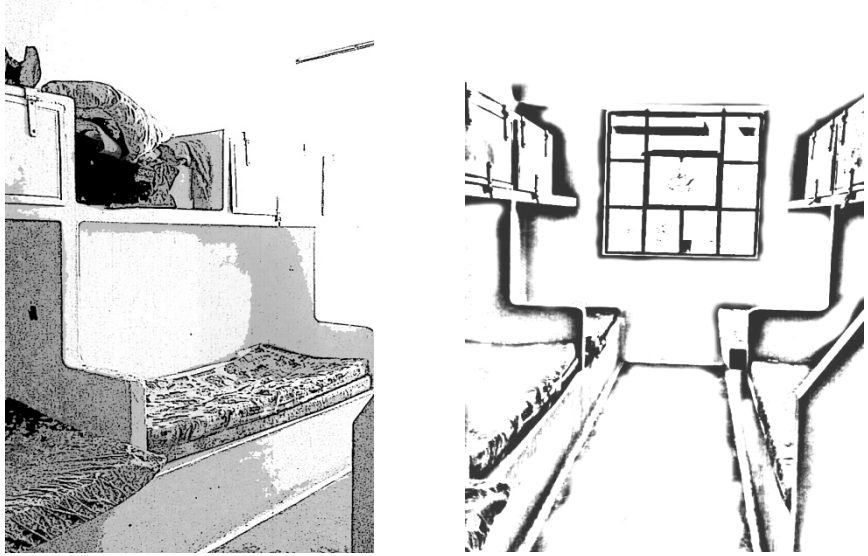


Figure 17: Illustrations of single rental beds that can be rented out by single occupants for a low rental cost (Mavuso, 2014)

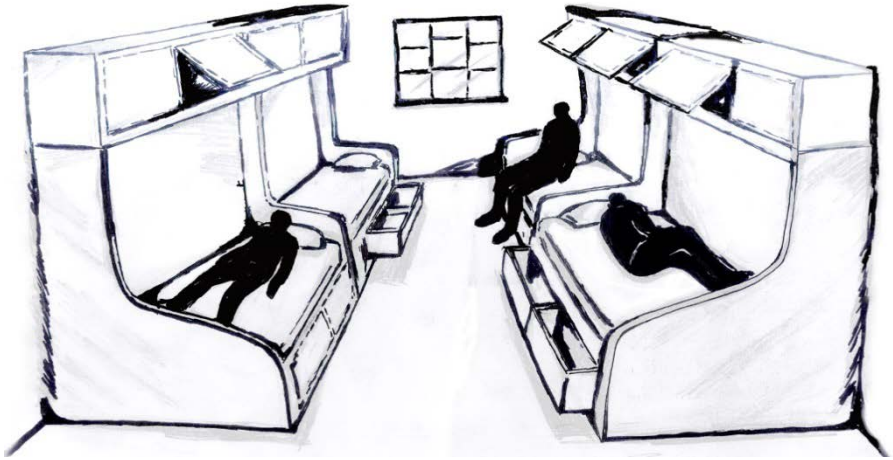


Figure 18: Illustration of rental beds with lockable storage designed to accommodate up to 4 occupants in one room. (Mavuso, 2014)

6.4 Conclusion

The report has sought to illustrate how the informal rental living spaces of La Rochelle are designed, used, shared and managed by both home owners and rental tenants in the area. It has used the theoretical concepts of urban resilience, informality and organic city growth to analyse how informal housing typologies in cities around the world, in particularly within the global South a becoming more prominent. It discussed the urbanisation process occurring in Sub Saharan African cities and its influence on spatial densification where increasing low-income populations are demanding living spaces within well located areas close to economic opportunities. This growing demand is however not adequately met by the availability of formal, affordable rental accommodation within these areas. This has hence led to the development of 'informal' living spaces within 'formal' areas located close to city centres that accommodate a higher number of people and allow occupants to subdivide and share spaces to enable them to share living costs.

The adaptive capacity of the residents of La Rochelle was assessed in relation to the flexibility of the living spaces they occupy to change and adapt to their needs over time. La Rochelle's resident's resilience towards lack of affordable accommodation close to economic opportunities has been illustrated to be their ability to remodel the formal low density residential configuration of the area to allow for increased numbers of occupants within relatively small spaces. This resilience (adaptability) is vested in the principles and practices of informality and has led to the organic growth and densification of the area, which were used to form the theoretical framework of the research (see Chapter 2). The benefits of living in La Rochelle within these shared spaces were identified to be, amongst others: locational advantage, affordable accommodation and sense of community and/or solidarity according to relation, shared origin and culture. Disadvantages or negative aspects of these living spaces were also identified which related mostly to overcrowding, lack of adequate infrastructure such as toilets and bathroom facilities as well as social tensions amongst occupants of different genders or cultures in how they use and maintain the shared spaces.

In evaluating the pros and cons of the remodelled spaces of La Rochelle the report has reached conclusions that the spaces are greatly beneficial to their occupants, particularly to those who cannot afford to pay high amounts for rental and who are seeking temporary shelter while looking for employment and other socio-employment opportunities in the city. Social solidarity amongst friends, kinsman and family members is also a benefit provided by these spaces as they are able to share costs of living in the city amongst each other and assist each other with other social needs such as safety and security.

Though positives of living in these spaces dominate, there are a great deal of negatives that were identified within the study, particularly with regards to overcrowding, lack of adequate sanitation infrastructure such as toilets and bathrooms and social conflicts that occur amongst occupants of different gender, origins and cultures on how they use and maintain their shared spaces. It was therefore concluded that there is a need for intervention within the area and its remodelled spaces, particularly in relation to provision of infrastructure that will improve the quality of current living conditions, on condition, however, that low rental costs and flexibility of usage needs to be encouraged and maintained.

In critique of the City of Johannesburg's plans for the redevelopment and densification of La Rochelle (as outlined in the Turffontein SAF, see Chapter 4), the report has essentially argued against informal living spaces being perceived as undesirable and a 'problem' that needs to be eradicated from the city. It has rather argued for the acceptance of the informal rental typology (referred to as 'rooms' and 'spaces') as an essential component of the city of Johannesburg's urban landscape that contributes towards affordability, flexibility and socio-economic development, amongst other aspects, for the city's low income residents. According to Koolhaas (2006) cities in Africa will become a mixture of formal, serious, complex structures, and lightweight, informal, impermanent and flexible entities. This combination of rigid and free is already visible in La Rochelle and with the correct investment, I argue, a lot of improvement will occur in the area. Residents of the area, as mentioned in Chapter 5 and 6, have little power to shape their communities as a whole and require assistance in improving the conditions of their small-scale housing interventions (Fabricius, 2011). I commend the City of Johannesburg for identifying the need for re-development in La Rochelle and its surrounding areas within the Turffontein Node in proposing to provide much-needed services such as transportation, improved walkability and increased opportunity for housing provision in a well located in the city. I however urge the city not to work against the flexibility, spontaneity, and choice (Fabricius, 2011) that the remodelled living spaces provide for its low income residents but to rather incorporate the positive aspects of these spaces into their plans and designs.

The inclusiveness of re-designed and newly developed housing in the area could become an example within the country and possibly the whole of Sub Saharan Africa, on how creative and innovative design along with community involvement in the process of design conceptualisation, can improve the physical environment and safety of the neighbourhood while ensuring that it remains resilient, fair and affordable to its residents. I therefore hope that my literature and conceptual analysis, research findings and proposals can be used for possible debate on the effectiveness and/or applicability of

the City's plans for La Rochelle and possibly have a positive impact on the current and future livelihoods of its residents.

References

ARPL 3013 Housing Students (2013); *Ekhaya in Rosettenville*, Wits University School of Architecture and Planning.

Batty, M & Longley, P. (1994), Fractal Cities: *A Geometry of Form and Function*, Academic Press, San Diego, CA and London.

Burgess, E. Park, R. and McKenzie, R. (1967), *The City*, The University of Chicago Press, Chicago & London.

Charlton, S. & Shapurjee, Y., (2013); Transforming South Africa's low-income housing projects through backyard dwellings: intersections with households and the state in Alexandra, Johannesburg. Journal of Housing and the Built Environment 28(4), 653 – 666.

Chelleri, L. (2011), *From the Resilient City to Urban Resilience*, a review essay on understanding and integrating the resilience perspective for urban systems, Documents d'Anàlisi Geogràfica 2012, vol. 58/2 287-306 Universitat Autònoma de Barcelona.

Christopherson, S., Michie, J. and Tyler, P. (2010), *Regional resilience: theoretical and empirical Perspectives*, Cambridge Journal of Regions, Economy and Society 2010, 3, 3–10.

City of Johannesburg 2040 Growth Development Strategy.

http://www.joburg.org.za/gds2040/pdfs/joburg2040_gds.pdf (accessed 25/10/2013).

City of Johannesburg Commune Policy (2009), Development Planning and Urban Management Department.

CoJ Inner City Housing Action Plan (2007).

http://www.joburg-archive.co.za/2011/inner_city/charter/assessment_evidence_housing_action_plan.pdf (accessed 24/08/2014)

City of Johannesburg Sustainable Human Settlements Urbanisation Plan (SHSUP) (2012).

Creswell, J. (2003), Research Design: Qualitative, Quantitative and Mixed Methods Approaches. Thousand Oaks: Sage Publications.

Crankshaw, O. (2008), Race, Space and the Post-Fordist Spatial Order of Johannesburg. Urban Studies, 45(8), 1692-1711.

Cohen, S. (1971); Clustering Characteristics of A Migrant Population in the Core of A Primate Centre, BA (Hons) Dissertation, University of the Witwatersrand.

Collinson, M A. Tollman, S M. and Kahn, K. (2007); Migration, settlement change and health in post-apartheid South Africa: Triangulating health and Scand J Public Health demographic surveillance with national census data, 35: 77

Corridors of Freedom Announced

http://www.joburg.org.za/index.php?option=com_content&id=8623:corridors-of-freedom&Itemid=114 (accessed 24/08/2014)

Davoudi S. (2012), Applying the Resilience Perspective to Planning: Critical Thoughts from Theory and Practice. Resilience: A Bridging

Concept or a Dead End? School of Architecture, Planning and Landscape, Newcastle University, UK.

de Soto, H. (2001). In Roy, A. (2005), Urban Informality: Towards an epistemology of Planning, Journal of the American Planning Association, Vol. 71, No. 2, pp 147-158.

Ernstson H, van der Leeuw S E. Redman C L. Meffert D J. Davis G, Alfsen C , Elmqvist T. (2010), Urban Transitions: On Urban Resilience and Human-Dominated Ecosystems, 39:531– 5.

Elizabeth (2014, July 15). Personal Communication. (Nkosilenhle Mavuso, interviewer) La Rochelle, Johannesburg.

Elvina (2014, July 27). Personal Communication. (Nkosilenhle Mavuso, interviewer) La Rochelle, Johannesburg.

Fabricius, D. (2011), *Looking Beyond Informality,* John Wiley & Sons Ltd.

Gandy, M. (2005); *Planning, Anti-planning and the Infrastructure Crisis Facing Metropolitan Lagos*, Department of Geography, University College London.

Hansen, K T. and Vaa, M. (2004); Reconsidering Informality: *Perspectives from Urban Africa*, Grafilur Artes Gráficas, Spain.

Harber, A. (2011), Diepsloot. Johannesburg: Jonathan Ball Publishers

Harrison, P. and Zack, T. (2014), Between the ordinary and the extraordinary: *socio-spatial transformations in the 'Old South' of Johannesburg*, South African Geographical Journal.

Hatchuel, A. and Weil, B. (2003), A New Approach Of Innovative Design: *An Introduction To C-K Theory International Conference On Engineering Design Iced* 03 Stockholm, August 19-21, 2003.

Hepple (2011). In Moyo K. & Cossa, E. (forthcoming); Ethnic enclave without the ethnic? Mozambicans in La Rochelle, Johannesburg.

Hillier, B., and Penn, A. (1992). In Karimi, K (1997); *The Spatial Logic Of Organic Cities In Iran And The United Kingdom,* Space Syntax First International Symposium, Proceedings Volume I, Comparative Cities, University College London, London.

Hillier, B (1996), Space Is the Machine; *a configurational theory of architecture,* Cambridge: Cambridge University Press.

Housing Act 107 of 1997, As Amended By Housing Amendment Act 28 Of 1999, Housing Second Amendment Act 60 Of 1999, and Housing Amendment Act 4 Of 2001.

http://www.dhs.gov.za/sites/default/files/legislation/Housing_Act_107_of_1997.pdf (accessed 28/08/2014).

Huchzermeyer, M. (2004b). From "contravention of laws" to "lack of rights": *Redefining the problem of informal settlements in South Africa*. *Habitat International, 28*(3), 333-347.

Huchzermeyer, M., & Karam, A. (2006), Informal settlements: A perpetual challenge? (pp. 1-19). Cape Town: UCT Press.

Huchzermeyer, M. (2009); The struggle for in situ upgrading of informal settlements: A reflection on cases in Gauteng. *Development Southern Africa, 26*(1), 59-74.

Huchzermeyer, M. (2011). In Weakley, D. (2013), *Recognising Vulnerability and Resilience in Informal Settlements*: The Case of Kya Sands, Johannesburg, South Africa, A Dissertation submitted to the Faculty of Architecture, University of the Witwatersrand Johannesburg for the Master of Science in Town and Regional Planning.

Hungwe, C. (2013). Surviving social exclusion: *Zimbabwean migrants in Johannesburg, South Africa*, Dissertation submitted for a Doctor of Literature and Philosophy in the subject of Sociology, University of South Africa.

Jenkins, P. (2012) Context Report, Home Space, March 2012

Jenkins, P. (2013) Urbanization, Urbanism, and Urbanity in an African City, *Home Spaces and House Cultures*, Palgrave Macmillan, London.

Jenkins P. (2014); Public lecture held at Wits University on the 26th of March 2014

Jenkins, P., and Andersen J E. (2011), Developing Cities in between the Formal and Informal, 4th European Conference on African Studies - Uppsala 15-18 June 2011 - Panel 85.

Joburg Southern Inner City Belt Urban Development Framework (2009)

http://www.joburg-archive.co.za/2011/inner_city/sicb_udf2009_characteristics.pdf (accessed 28/04/2013).

Kanbur, R. (2009); Conceptualising Informality: Regulation and Enforcement www.people.cornell.edu/pages/sk145 (17/03/2014)

Karimi, K (1997); *The Spatial Logic Of Organic Cities In Iran And The United Kingdom,* Space Syntax First International Symposium, Proceedings Volume I, Comparative Cities, University College London, London.

Koolhaas, R. (2006); *Lagos Wide & Close Interactive Journey into an Exploding City*, Documentary Film, Rem Koolhaas voice (Actor), Bregtje v/d Haak (Director).

Mapaseka (2014, July 27). Personal Communication. (Nkosilenhle Mavuso, interviewer) La Rochelle, Johannesburg.

Miller, F., Osbahr, H., Boyd, E., Thomalla, F., Bharwani, S., Ziervogel, G., et al. (2010). Resilience and Vulnerability: *Complementary or Conflicting Concepts*? Ecology and Society, 15(3), 11.

Morier-Genoud, E & Cahen M (2013), Imperial Migrations: Colonial Communities and Diaspora in the Portuguese World, Palgrave Macmillan.

Moyo K. & Cossa, E. (forthcoming); Ethnic enclave without the ethnic? Mozambicans in La Rochelle, Johannesburg.

Mrs Kamnqa (2014, July 15). Personal Communication. (Nkosilenhle Mavuso, interviewer) La Rochelle, Johannesburg.

Msulwa R., and Turok I. (2012); *Does density drive development*?, South African Research Chair in Development Planning and Modelling, School of Architecture and Planning, University of the Witwatersrand.

Norris F H., Stevens S P., Pfefferbaum, B., Wyche K F. and Pfefferbaum R L. (2007). Community Resilience as a Metaphor,

Theory, Set of Capacities and Strategy for Disaster Readiness, 7Am J Community Psychol 41:127–150.

Osman, A. and Herthogs, P. (2010), Medium-Density Mixed Housing: *Sustainable Design and Construction of South African Social Housing*, Department of Architectural Engineering, Vrije Universiteit Brussel (Belgium), CSIR Built Environment.

Peres, E., & Du Plessis, C. (2013). In Weakley, D. (2013), *Recognising Vulnerability and Resilience in Informal Settlements*: The Case of Kya Sands, Johannesburg, South Africa, A Dissertation submitted to the Faculty of Architecture, University of the Witwatersrand Johannesburg for the Master of Science in Town and Regional Planning.

Phillips, J. (1997), Combining quantitative and qualitative approaches to social research in human geography – an impossible mixture? Department of Geography and Topographic Science, University of Glagsow, Glagsow Scotland.

Pike, A. Dawley S and Tomaney J. (2010), Resilience, adaptation and adaptability, Cambridge Journal of Regions, Economy and Society 2010, 3, 59–70.

Poulsen, L. (2010). A room in the city: *strategies for accessing affordable accommodation*. Urban Forum, 21, 21–36.

Quantec. (2013). *EasyData.* Retrieved March 26, 2014, from Census 1996, 2001 & 2011 (2011 census demarcation, sub place level).

http://www.easydata.co.za/

Rakodi, C., 2002, Order and Disorder in African Cities in pp.45-80 in Enwezor O et al. (Eds), Under Siege: Four African Cities – Freetown, Johannesburg, Kinshasha, Lagos.

Redman, C. L. and A. P. Kinzig. 2003. Resilience of past landscapes: resilience theory, society, and the longue durée. Conservation Ecology 7(1): 14.

Roy, A. (2003). Transnational Trespassings: The Geopolitics of Urban Informality. In N. Alsayaad, & A. Roy (Eds.), *Urban Informality: Transnational Perspectives from the Middle East, Latin America, and South America* (pp. 289-319). Lanham: Lexington Books.

Roy, A. (2005). Urban Informality: Towards an epistemology of Planning, Journal of the American Planning Association, Vol. 71, No. 2, pp 147-158.

Sibusiso (2014, July 22). Personal Communication. (Nkosilenhle Mavuso, interviewer) La Rochelle, Johannesburg.

Sarantakos, S. (2005), Social Research, Palgrave Macmillan, London.

Socio-Economic Rights Institute of South Africa (SERI). (2014), Filling the Gap: *Towards the Supply of Low-Income Rental Accommodation in Inner City Johannesburg,*

Simone, A. M. (2004), People as Infrastructure: *Intersecting Fragments in Johannesburg,* Public Culture 16(3): 407–429.

South African SDI Alliance (2012), FEDUP Development Initiative

http://sasdialliance.org.za/about/fedup/

StatsSA (2011). Census 2011: Fact Sheet. Statistics South Africa, Pretoria.

Thomas (2014, July 15). Personal Communication. (Nkosilenhle Mavuso, interviewer) La Rochelle, Johannesburg.

Tiesdell S. & Adams D. (2011), Urban Design in the Real Estate Development Process, Wiley - Blackwell publishing.

Tissington, K. (2013). Minding the Gap: *An Analysis of the Supply of and Demand for Low-Income Rental Accommodation in Inner City Johannesburg*. Johannesburg: Socio - Economic Rights Institute of South Africa.

Turffontein Strategic Area Framework Draft Report for Public Comment

http://issuu.com/cojdocuments/docs/turffontein_draft_saf_report_for_pu (accessed 25/10/2013)

Turffontein Strategic Area Framework Report (2014)

UN Habitat. (2010). State of the World's Cities 2010/2011: Bridging the Urban Divide. London: Earthscan.

UN-Habitat [United Nations Human Settlements Programme]. (2003); Rental Housing: *an Essential Option for the Urban Poor in Developing Countries*. Nairobi: UNHabitat.

van der Leeuw, S., & Aschan-Leygonie, C. (2000). *In* Weakley, D. (2013), *Recognising Vulnerability and Resilience in Informal Settlements*: The Case of Kya Sands, Johannesburg, South Africa, A Dissertation submitted to the Faculty of Architecture, University of the Witwatersrand Johannesburg for the Master of Science in Town and Regional Planning.

Walker, B & Salt, D. (2006), Resilience Thinking: Sustaining Ecosystems and People in a Changing World, Island press, Washington, Covelo, London.

Watson, V. (2003); Conflicting Rationalities: Implications for Planning Theory and Ethics, Planning Theory & Practice, Vol. 4, No. 4, 395–407.

Watson, V. and McCarthy, M. (1998). In Charlton, S. & Shapurjee, Y., (2013); Transforming South Africa's low-income housing projects through backyard dwellings: intersections with households and the state in Alexandra, Johannesburg. Journal of Housing and the Built Environment 28(4), 653 – 666.

Weakley, D. (2013), *Recognising Vulnerability and Resilience in Informal Settlements*: The Case of Kya Sands, Johannesburg, South Africa, A Dissertation submitted to the Faculty of Architecture, University of the Witwatersrand Johannesburg for the Master of Science in Town and Regional Planning.

World Bank (2008). In Msulwa R., and Turok I. (2012); Does density drive development?, South African Research Chair in Development Planning and Modelling, School of Architecture and Planning, University of the Witwatersrand.

Yeoville studios, 2010, School of Architecture and Planning, University of the Witwatersrand.

http://www.wits.ac.za/academic/ebe/archplan/4870/housing.html (accessed 25/10/2013)

Zandile (2014, July 15). Personal Communication. (Nkosilenhle Mavuso, interviewer) La Rochelle, Johannesburg.

Zanele (2014, July 15). Personal Communication. (Nkosilenhle Mavuso, interviewer) La Rochelle, Johannesburg.