

**THE ROLE OF ARCHITECTURE IN THE DEMOCRITISATION OF SOUTH AFICA
IN DISADVANTAGED COMMUNITIES:**

A DESIGN OF A CIVIC CENTRE FOR MPUMALANGA TOWNSHIP.

By

Siphiwe Gumede

A dissertation submitted to the faculty of Humanities, Development and Social Sciences, University of
KwaZulu – Natal, in partial fulfilment of the requirements for the degree of Master of Architecture

Durban 2010

DECLARATION

I hereby declare that this dissertation is my own unaided work. All citations, references and borrowed ideas have been duly acknowledged. It is being submitted for the degree of Master of Architecture by Research, in the Faculty of Humanities, Development and Social Science, University of KwaZulu-Natal, Durban, South Africa. None of the present work has been submitted for any degree or examination in any other University.

Siphiwe L. Gumede

15 Nov 2010

ACKNOWLEDGEMENTS

I would firstly like to thank God almighty, without his blessings this wouldn't have been possible. It is through him that I list the following great people who have played a major role in my life and in the success of my research.

Thanks to Paton Taylor Architects, for the sponsorship throughout my studies and most importantly thank you Mr Ian Bell, for broadening my vision in architecture, for being an amazing mentor and your words of encouragement which saw me through the most challenging times. Your support and guidance will always be appreciated, SIR.

I would like to thank my supervisor Mr Phillippe Yavo for believing in me and giving me the flexibility under your guidance to effectively put my ideas across. Your supervision and patience in me has been greatly appreciated.

Last but not least, I would like to thank all my family and friends: my father Mr Jeffrey Gumede, thank you for being strong to see me through this achievement. To my brother Bongani Masinga, I thank God for your good loving heart and support and to the Masinga family, I thank God for your presence in my life; it has made it so special and meaningful. To Mrs Lidia Gumede, thanks mamkhulu for being there for me throughout my life. To Dr Mlondi Khanyile, your words of encouragement, friendship and support is and will always be greatly appreciated... ONE! I would like to thank my girlfriend Deigh Mothibeli for the love and support and not forgetting Miss B. Ngidi, your care and support has been much appreciated. In closing I pay much respect to Chatu Mangena and Sphesihle Ngubane, your friendship and support has been incredible, want to wish you guys all the best with your careers.

DEDICATION

In loving memory to my mother, Mrs Mantombi Gumede

- may her soul rest in peace -

ABSTRACT

In the field of architecture the socio-cultural factors have been deterministic in the formation of place, conditions within them and consequently, social relations. Sociologists, anthropologists and environmentalist have advocated that buildings are essentially social and cultural products - King (1980), Rapoport (1969; 1976; 1977) and Bartuska & Young (1994). Architecture that addresses the human socio-cultural factors has been advocated to make a significant contribution to human life; it fosters a sense of belonging, well being and involvement.

South Africa has endured years of colonisation and apartheid ruling, this has also reflected on its built environment. It was planned and designed to communicate and reinforce the dominance of the ruling regime which thus transformed the local populace by incorporating them into their political, economic and social value systems. The political shift of 1994 has however (from apartheid to a democratic ruling state) facilitated a renewed interest in acknowledging peoples differences, their unique characteristics and celebrating the diverse nature of a heterogeneous society. The democratisation of South Africa has brought about a major shift in the social and cultural context of the society which in turn has affected the built environment and architecture.

It is in this context that this study explores the nature of the transformation, its ideals and principles so to inform the making of environments that help uplift the populace and to integrate our multicultural society while simultaneously celebrating, facilitating and accommodating the diverse cultures of the groups within it.

Thus as professionals involved in the design of the built environment, there is an urgent need to identify and understand the socio-culture of society due to the political shift in South Africa in order to orientate in the right direction towards playing a role in the democratisation of South Africa. Hence the topic: *The role of architecture in the democratisation of South Africa*

TABLE OF CONTENTS

DECLARATION	II
ACKNOWLEDGEMENTS	III
DEDICATION	IV
ABSTRACT	V
TABLE OF CONTENTS	VI
LIST OF ILLUSTRATIONS	IX

BACKGROUND RESEARCH ON ISSUES

CHAPTER 1	INTRODUCTION
	1.1 INTRODUCTION1
	1.1.1 Backgroundpg 2
	1.1.2 Motivation/Justification of the study pg 4
	1.2 DEFINITION OF THE PROBLEM, AIMS AND OBJECTIVES
	1.2.1 Definition of the Problempg7
	1.2.2 Aimspg 8
	1.2.3 Objectivespg 8
	1.3 SETTING OUT THE SCOPE
	1.3.1 Delimitation of Research Problempg 8
	1.3.2 Definition of termspg 9
	1.3.3 Hypothesis pg 11
	1.3.4 Key Questions pg 11
	1.4 CONCEPTS AND THEORIES pg 11
	1.5 CONCLUSIONpg 16

CHAPTER 2	RESEARCH METHODS	
	2.1 Research Methods	pg 19
	2.2 Research Materials.....	pg 19
CHAPTER 3	LITERRATURE REVIEW	
	3.0 Social culture and the built environment	pg 23
	3.1 Human needs / values and the built environment.....	pg 23
	3.2 Settlement form / space as a manifestation of social culture.....	pg 25
	3.3 Historical and social cultural continuity.....	pg 30
	3.4 Vernacular / contemporary synthesis in architecture.....	pg 32
	3.5 Conclusion.....	pg 36
CHAPTER 4	INTERPRETING THE TOWNSHIP BUILT ENVIERONMENT	
	4.0 The socio-political factors and the context of South African townships...	pg 38
	4.1 Utopian ideals of spatial ordering.....	pg 38
	4.2 Sites of power – The native townships.....	pg 40
	4.3 Conclusion.....	pg 44
	4.4 Encouraging communication and freedom of expression in the urban space.....	pg 45
	4.5 Inclusive structures – An Urbanistic Architecture.....	pg49
	4.6 Conclusion.....	pg 53
CHAPTER 5	TOWARDS AN APPROPRIATE ARCHITECTURAL EXPRESSION	
	5.1 Constitutional Hill – Johannesburg South Africa.....	pg 56
	5.2 Northern Cape Government Complex – Northern Cape South Africa.....	pg 63
	5.3 Federation Square – Melbourne Australia.....	pg 69
CHAPTER 6	MPUMALANGA TOWNSHIP IN CONTEXT (FIELD STUDY)	
	6.1 Location and historical background.....	pg 76
	6.2 The legacies of the political violence in Mpumalanga.....	pg 78
	6.3 Economic realities in Mpumalanga Township.....	pg 81
	6.4 Service and amenities.....	pg 82
	6.4.1 Administration.....	pg 84
	6.4.2 Social and cultural.....	pg 87
	6.4.3 Education.....	pg 90
	6.4.4 Health and Welfare.....	pg 91
	6.4.5 Communications.....	pg 92
	6.4.6 Recreation.....	pg 93
	6.4.7 Infra-structure.....	pg 94
	6.5 Conclusion.....	pg 96

CHAPTER 7 CONCLUSION (AND RECOMMENDATIONS).....pg 98

BIBLIOGRAPHY

APPENDICES **A (Interview Questionnaire)**
 B (The need for a civic centre in Mpumalanga Township)
 C (Thusong service centres)

LIST OF ILLUSTRATIONS

Figure	Page
Fig 2.1 - Mpumalanga township in the greater context of South Africa (Source: Bonnin; 2007:6)	18
Fig 3.1 - Traditional Zulu umuzi with the central community space. (Source: Denyer; 1778:113)	26
Fig 3.2 - The Toguna on an elevated podium to emphasise its importance in the village (Source: www.wikimedia.org)	27
Fig 3.3 - Dogon village, on the steep slope of Bandiagara escarpment, Mali (Source: www.wikimedia.org)	28
Fig 3.4 – The Betsimisaraca tribe of Madagascar settlement near water to support livelihood. The architecture of the dwellings (stilts) is also a response to the context (Source: Gideon; 1975:16)	28
Fig 3.5 – Jaisalmer traditional vernacular dense urban settlement (Source: Ameen; 1997:54)	31
Fig 3.6 – Modern Asian Games village inspired by vernacular architecture. (Source: Ameen; 1997:54)	31
Fig 3.7 - Aerial view of interlocking courtyards (Source: Ameen; 1997:58)	32
Fig 3.8 – Kbaka Traditional house in Uganda & Mityana Pilgrims influenced by traditional forms (Source: Elleh; 1996: 168)	33
Fig 3.9 – Gourounsi homestead (Source: Elleh; 1996:169)	34
Fig 3.10 – Mayor’s office in Sudan inspired by traditional fenestration (Source: Elleh; 1996:169)	34
Fig 3.11 – Traditional ancestral pillar (Source: Elleh 1996:205)	34

Fig 3.12 – Traditional vernacular inspired Central Bank in West Africa (Source - Elleh 1996:205)	34
Fig 4.1 - Desolate mass housing of the Modern movement (Source: http://affordablehousing.org)	39
Fig 4.2 - Typical standard NE 51 township house design (Source: Japha 1998:433 & 438)	42
Fig 4.3 & 4.4 - Township urban sprawl and individual box houses (Source: Japha 1998:433 & 438)	43
Fig 4.5 - Sense of enclosure on urban space (Source: wikipedia.com)	47
Fig 4.6 – Activities define the urban space (Source: www.wikipedia, com)	47
Fig 4.7 - Slight slope of square to enhance visibility (Source: Wikimedia.com)	48
Fig 4.8 – Dishaped urban space (Source: Wikimedia.com)	48
Fig 4.9 - Arcade as transitional space (Source: Wikipedia.com)	48
Fig 4.10 – Urban renewal project for integrating marginalised communities in the urban space (Source: www.urbansolutions.co.za)	49
Fig 4.11 – Urban design knitting together the urban context (Source: www.urbansolutions.co.za)	50
Fig 4.12 – previously marginalised traders now accommodated for in permanent structures (Source: www.urbansolutions.co.za)	51
Fig 4.13 - Facade responding to street edge (Source: Deckler et al; 2006: 74)	51
Fig 4.14 – Plan of service centre opening out to street edge (Source: Deckler et al; 2006: 75)	51
Fig 4.15 – Street commercial edge (Source: www.wikipedia.com)	52

Fig 4.16 – Usasazo in its greater context (Source: www.wikipedia.com)	52
Fig 5.1 – Constitutional court in Braamfontein (Source: Joubert; 2009: 118)	56
Fig 5.2 – Site Plan and surrounding context (Source: Deckler et al; 2006:19)	57
Fig 5.3 – East west axis connecting to Hillbrow (Source: Deckler et al; 2006:18)	58
Fig 5.4 – African steps on North – south axis (Source: Deckler et al; 2006: 18)	59
Fig 5.5 – Ground Floor plan of Constitutional Court (Source: Deckler et al; 2006:19)	59
Fig 5.6 – Section through foyer and chamber showing the change in floor levels. (Source: Ora Joubert; 2009:117)	60
Fig 5.7 – Slanted columns of foyer symbolising indigenous trees (Source: Ora Joubert; 2009:118)	60
Fig 5.8 – Art gallery as a transitional space (Source: Ora Joubert; 2009:118)	60
Fig 5.9 - illustrates the sunscreen on the north-south facade (Source: Ora Joubert; 2009:118)	61
Fig 5.10 - illustrates the local arts and craft (Source: Ora Joubert; 2009: 119)	61
Fig 5.11 – Animated facade allows for multiple reading (Source; 2009: Ora Joubert; 2009:117)	62
Fig 5.12 – illustrates the symbolic expression of the built form (Source: Deckler et al; 2006:10)	63
Fig 5.13 – illustrates visual link from the township (Source: Ora Joubert; 2009:244)	63
Fig 5.14 – illustrates the central plaza as meeting place (Source: Deckler et al.; 2006:11)	64

Fig 5.15 – illustrates the anthropomorphic composition of the layout (Source: Ora Joubert; 2009:243)	65
Fig 5.16 – illustrates landmark tower embellished with art (Source: Ora Joubert; 2006:243)	65
Fig 5.17 – illustrates the diverse architectural expression through the use of organic forms (Source: Deckler et. al; 2006:15 & Ora Joubert; 2009:244)	66
Fig 5.18 – illustrates sculptural and applied artworks evoking myriad interpretations (Source: Deckler et. al; 2006:15 & Ora Joubert; 2009:244)	67
Fig 5.19 – illustrates the use of indigenous vegetation to express local identity (Source: Deckler et al; 2006: 14)	68
Fig 5.20 – Federation square in Melbourne Australia (Source: Phaidon Atlas; 439)	69
Fig 5.21 – Site plan showing rail tracks (Source: Phaidon; ;??)	70
Fig 5.22 – Cross section of Federation on deck spanning over rail tracks (Source: Phaidon ? :??)	70
Fig 5.23 – illustrates public space defined by building massing (Source: fedsquare.com)	70
Fig 5.24 – illustrates auditorium that feeds from atrium (Source: fedsquare.com)	70
Fig 5.25 – illustrates the spatial layout of the floor plan (Source: www.fedsquare.com)	71
Fig 5.26 – illustrates multi functionality of the outdoor spaces (Source: www.fedsquare .com)	71
Fig 5.27- unresolved aesthetic of the facade allows for multiple reading (Source: www.fedsquare.com)	72

Fig 5.28 – Zinc, copper and glass Cladding (Source: www.fedsquare.com)	72
Fig 5.29 – illustrates the texts inscribed on the surface of the sandstone (source: www.fedsquare.com)	73
Fig 6.1 illustrates Mpumalanga Township (red) and Hammarsdale industrial park (purple) (Source: www.ethekwini.gov)	77
Fig 6.2 - illustrates the close proximity of Hammarsdale industrial hub to Mpumalanga township (Source: Author)	77
Fig 6.3 – illustrates all the townships affected by political violence in Kwa-Zulu Natal (Source: Minnaar; 1992:26)	79
Fig 6.4 –illustrates the effects of the political violence which still exist today on the built environment in Mpumalanga (Source: Author)	80
Fig 6.5 – Street vendor in kwaMcoyi commercial hub (Source: Author)	81
Fig 6.6 –public pay phones (Source: Author)	81
Fig 6.7 – illustrates just a few informal businesses housed in shipping containers in Mpumalanga (Source: Author)	82
Fig 6.8 – illustrates Mpumalanga zoning as per Town planning regulations (Source: Hillcrest Municipality)	83
Fig 6.9 – illustrates the existing offices for Local Government in Mpumalanga Township (Source: Author)	85
Fig 6.10 - Lack of space for office equipment (Source: author)	86
Fig 6.11 - Lack of consultation space in the offices (Source: author)	86
Fig 6.12 – Passage also functions as waiting space (Source: author)	86
Fig 6.13 – illustrates the Police services existing in Mpumalanga township (Source: Author)	86

Fig 6.14 – Biggest church in Mpumalanga (Source: Author)	86
Fig 6.15 – illustrates some of the vast number of religious congregations in Mpumalanga (Source: Author)	87
Fig 6.15 – illustrates the highly fenced off community halls (Source: Author)	88
Fig 6.16 – illustrates Mpumalanga community library, it stands isolated from other urban amenities (Source: Author)	89
Fig 6.17 – illustrates a typical school in Mpumalanga lacking supplementary services (Source: Author)	90
Fig 6.18 – illustrates Hlengisizwe clinic at unit six. (Source: hlengisizwe newsletter Oct 2006)	91
Fig 6. 19 – Illustrates overnight facilities at the clinic (Source: Hlengisizwe newsletter Oct 2006)	91
Fig 6.20 – illustrates the postal office housed within the supermarket (Source: Author)	92
Fig 6.21 – illustrates the taxi ranks with no shelter for waiting passengers (Source: Author)	93
Fig 6.22 – Sports precinct in Mpumalanga (Source: www.ethekwini.gov)	93
Fig 6.23 – Children playing soccer on the street (Source: Author)	94
Fig 6.24 - illustrates the original four roomed houses that were result of the apartheid government which still exist in Mpumalanga Township. (Source: Author)	94
Fig 6.25 – illustrates the lack of hierarchy of spaces between pedestrians and vehicles (Source: Author)	95

CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION

1.1.1 Background

The presumption constant in this study of '*architecture's role in the democratisation of South Africa*' stems from the socio-cultural change of 1994 in South Africa and its impact on architecture. It advocates the existence of a '*relationship between society and the built environment*'. Motivation and justification of such a view is based on the vast literature in environmental studies, anthropology and sociology. The works of King (1980), Rapoport (1969; 1976; 1977) and Bartuska & Young (1994) reinforce that buildings are essentially social and cultural products. They result from social needs and accommodate a variety of functions – economic, social, political, and religious. Further elaborated by King (1980), he states that their size, appearance, location and form are governed not simply by physical factors (climate, material or topography) but by a society's ideas, its forms of economic and social organisation, its distribution of resources and authority, its activities, and the beliefs and values which prevail at any period of time (King; 1980:1).

Amos Rapoport's *House Form and Culture* (1969) rejects single-factor deterministic explanations in favour of a multi causal, holistic "cultural" approach towards the formation of the built environment. He further states that built forms are primarily influenced by socio cultural factors modified by architectural responses both to climatic conditions and to limitations of materials and methods. He primarily stresses the importance of cultural over ecological factors. Rapoport argues that group life-style, defined as the integration of all cultural, material, spiritual, and social aspects, best explains variations in form (Rapoport cited in Lawrence; 1990: 458). In the literature of Durkheim & Mauss (1963), it states the built environment in anthropological research can be traced to the earliest endeavours in social and cultural theory and ethnography. The idea that built forms and collective human behaviour accommodate, express, and reinforce each other originated in their early evolutionary and functional theories (Durkheim & Mauss; 1963). This is to point out that studies by anthropologists on the built environment are mainly concerned on the nature of relationship between society, culture and the built environment. In the view of Lawrence (1990) this relationship is said to be interactive; people both create and find their behaviour influenced by the

built environment and this is through: accommodation, adaptation, expression, representation and, most recently production and reproduction.

In a more summarized clarification by King (1980) he states, “Society produces its buildings, and the buildings, although not producing society, help to maintain many of its social forms (King; 1980:1).

In the field of architecture and planning, the socio-cultural factors have been deterministic in the formation of place, conditions within them and consequently, social relations. The built environment of every state and region has been influenced by its social culture, exemplified by countries such as the United Arab Emirates (UAE), during the last two decades an enormous economic and socio-cultural change due to the discovery of oil in the region was reflected on its architecture and the built environment. The economic prosperity allowed rapid change in the social and cultural values of the society thus as a consequence the urban environment was changed to meet the new ambitions. Modern buildings replaced vernacular architecture and the traditional lifestyle of the inhabitants was transformed to a modern one.

In the case of many third world countries which were previously affected by colonisation, such as India, and most African countries, the socio-political shift from being colonized to independence has witnessed a transformation in the built environment to express the new way of life which is characterized by a search for a renewed national identity. In the case of South Africa, which also endured years of colonisation and apartheid ruling, its built environment was planned and designed to communicate and reinforce the dominance of the ruling regime which thus transformed the local populace by incorporating them into their political, economic and social value systems. Based on a modernist and apartheid framework, the socio-cultural institutions of the native African cultures were thus negated through the practice of architecture, urban design and planning.

The political shift of 1994 has however (from apartheid to a democratic ruling state) facilitated a renewed interest in acknowledging peoples differences, their unique characteristics and celebrating the diverse nature of a heterogeneous society. The democratisation of South Africa has brought about a major shift in the social and

cultural context of the society which in turn has affected the built environment and architecture.

It is in this context that this study explores the nature of the transformation, its ideals and principles so to inform the proposed architectural intervention in a democratic society.

1.1.2 Justification of study

The importance of satisfying the socio-cultural institutions of society when designing the built environment has been usually ignored by the professionals of the built environment. Such action in the context of South Africa has led to the soulless, isolated, dysfunctional dormitory townships and an architecture that is not supportive to the people's way of life.

'...what the Zulu experiences as a stimulating work place, a meaningful community gathering-point or even an appropriate living-space are virtually unknown quantities. It is high time we made the effort to understand the aspirations and spatial concepts of the people for whom we design buildings'
(Sommerville cited in Marschall & Kearney; 2000: 158).

The essence of the above quote, serves to acknowledge the urgency of the required transformation to the country's built environment. Due to the democratisation of South Africa the country and the architectural profession has been re-assessing itself in an African context. Local scholars and professionals have ever since debating and exploring interventions towards remolding the landscape in the aim of redressing the colonial and apartheid restraints on the built environment. The response from architects, urban designers and planners has been to prioritize on interventions that promote integration, inclusion, participation and representation of society. When local renowned architect Hans Hallen (1995) was asked what impact the country's changed political landscape might have on architecture, he pointed out that:

" the needs and desires of the eighty-five percent of South Africa's non-white population will take time to be reflected in what is being built" (Hallen; 1995).

A built environment that addresses the human socio-cultural factors has been advocated, by environmentalists and anthropologists (Bartuska & Young; 1994) to make a significant contribution to human life; it fosters a sense of belonging, well being and involvement. Towards a true democracy, it is of vital importance that as professionals in the designing of the built environment we prioritize in understanding the people we design for. It is in the author's view that architecture of a democratic society should aim for the freedom and individuality of all people within the harmonious co-existence of a rich pluralistic society. In the words of Ricardo Legorreta a Mexican architect (cited in Attoe; 1990) he states:

'...an architecture that has direct references to human inhabitation and use is a democratic architecture' (Attoe; 1990:163).

Parallel to this study's concern of the past injustices towards the design of the built environment in South Africa and specifically that of townships which Lalloo (1998) summarizes as:

The black South African people were restricted to places physically designed to obstruct the formation of integrated communities. The imposed physical environments of apartheid constricted the capacity of its inhabitants to engage in meaningful civic activities'. As these were implemented through an approach that was geared towards spatial formation that promoted industrial efficiency and oppression thus not taking into consideration the more intangible phenomena such as social ties, culture, and community identity off society. (Lalloo; 1998)

Informing and motivating the proposed architectural intervention is the apartheid legacy of inequality through the distribution of resources. The townships of South Africa were implemented through policies that physically located them away from the economic opportunities as well as to efficient health, education and social amenities which are considered to play a central role in defining one's membership in society. Today, standing at sixteen years into democracy, the apartheid injustices are still prevalent in some of South Africa's townships. Issues of unemployment, lack of education facilities, meaningful community facilities which are all vital for a democratic society towards equalisation and representation and empowerment.

As part of the democratic government's response to the previous exclusion of the ordinary citizen from resources and services as an initiative to enable democracy, a constitutional mandate has been implemented to provide a democratic and accountable government through a local government system. This system has been conceptually crafted not only to respond to the citizenry which has been previously denied but also play a developmental role in the communities (www.thusong.gov.za). The Constitution of South Africa (Act 108 of 1996: Chapter 7) states that it is the objective of local governments to "encourage the involvement of communities and community organizations in the matter of local government. The enhancement of opportunities for participation is going to be achieved by placing more power and resources at a closer and more easily influenced level of government (Mogale; 2005:136). The White Paper established that the basis for the new developmental local government system is to be committed to working with citizens, groups and communities to create sustainable human settlements which provide for decent quality life and meet the social, economic and material needs of communities in a holistic way" (White Paper on Local government; 9 March 1998).

The main objective is to enhance the decentralisation of government services into previously marginalised areas in order to facilitate public access to information; this is to ensure that the public become active participants in changing their lives for the better. This include socio-economic problems such as high levels of poverty and unemployment, low standards of living, poor access to basic services, remote settlement patterns, lack of access to technology, lack of information, poor health services, lack of education and skills, lack of infrastructure etc. The logic here is that being able to access a number of government services and a range of government information products, as well as to communicate with government at one locality, added value to the experience of citizenship (www.thusong.gov.za).

Through a field research in the area of Mpumalanga Township a black African township that was previously disadvantaged from the injustices of Apartheid, the study proposes a civic center for the community that will:

- Provide the services and resources deemed necessary by the community of Mpumalanga Township as a response to the government's service delivery

initiative in redressing the previous restriction of government / information and public facilities in previously disadvantaged communities.

- As a response to the derelict cityscape, an architectural intervention is proposed that will provide architecture that will take into due consideration the socio-cultural factors of the people thus creating a meaningful place for the community of Mpumalanga.

1.2. DEFINITION OF THE PROBLEM, AIMS AND OBJECTIVES

1.2.1 Definition of the problem

According to Rapoport (1980), environments are culture specific. Designed environments should respond to variable definitions of needs and priorities as expressed in varying schemata. A failure to respond to the culture of a place leads to meaningless environments (Rapoport; 1980:7). The technocratic approach that was employed to the built environment of townships comes as a great concern to this study. According to Scott (2003:104), the aesthetic of Modernism presented a geometric and visual order which appeared logical from 'above or outside' and existed in the abstract representation far removed from the experience of those who's 'lived' space was the subject under scrutiny (Scott; 2003:104). When designing the built environment for communities, architects do not adequately consider the socio-cultural aspects of those whom they are designing for. Such an approach results in environments that alienate and exclude the public.

To a large degree architecture in South Africa has and still does not reflect or respond to the growing concerns of its inhabitants, rather the architects, planners and administrators. As architects in post apartheid South Africa, it is critical to understand the culture of the people who we design for, especially in today's society whereby the country is going through transformation of redressing the issues of equalisation and representation. Each aspect of the built environment is constructed to fulfill human purpose, in the case of the apartheid planning, which was also rooted in the Modernist framework of development; it placed little emphasis on the significant relationship between man and the environment. As argued by Rapoport (1980), in order to understand man-environment interaction one must get beyond material aspects of the

environment, the nature of culture of environments and their relationships must play a central role (Rapoport; 1980:12).

1.2.2 Aims

Throughout the history of African architecture socio-cultural factors have been deterministic in the formation of place. In South Africa due to apartheid planning and colonisation, planning and architecture has not traditionally emphasized the socio-cultural issues pertaining to the built environment. This study thus aims to:

- Explore the relationship between society and the built environment.
- Gain an understanding of the influences and ideologies in shaping the apartheid built environment of South African townships.
- To accumulate design tools to address the urban spatial problems on the environment.

1.2.3 Objectives

The objective of this study is to stress the need to identify and understand the socio-culture of society due to the political shift in South Africa in order to orientate professionals of the built environment in the right direction towards playing a role in the democratisation of South Africa.

1.3 SETTING OUT THE SCOPE

1.3.1 Delimitation of research problem

Although this study is an architectural research study, issues pertaining to planning and urban design are going to be explored since they including architecture are indivisible in South Africa towards redressing the past injustices on the landscape. They are not simply about stylistic revival but about making environments that help to uplift the populace and to integrate our multicultural society while simultaneously celebrating, facilitating and accommodating the diverse cultures of the groups within it.

In the context of culture which is a very broad term/concept. This study adopts the view of Rapoport (1980) which has a centrality in defining humanity. In the view of

Rapoport (1980), it is enough to suggest that all definitions fall into one of three general views of culture.

- A way of life of a group
- A system of symbols, meanings, and cognitive schemata transmitted through symbolic codes
- A set of adaptive strategies for survival related to ecology and resources.

The field research will focus on a specific community that of Mpumalanga Township, a black African community. The goal of the research will be to identify the needs and problems of the community, interpret the way of life of the residing culture as expressed in the built environment thus being informants for the envisioned architectural intervention. Being based upon the theoretical framework of postmodernism in democratic South Africa which stresses the importance of moving towards new levels of understanding diversity, it is hoped that this study will be able to provide an insight into an understanding of addressing the context of black townships in embracing diversity and multi-culturalism. And more importantly being a cultural group that was previously considered marginal.

1.3.2 Definition of terms

Democratisation:

It's a term/concept highly used in politics, it refers to the process of 'making democratic'. In the context of this study it refers to the injustices of the past regime towards the design of the built environment which did not enhance the quality of life for the native cultures. Democratic architecture of South Africa envisioned by this study is to design places that take into consideration the way of life of the people it serves.

Disadvantaged communities (townships):

These areas are basically poor, undeveloped, lacking basic needs and infrastructure, and inhabited predominantly by Blacks. They are characterized by low density sprawl, monotonous housing with no major shopping, degraded open spaces, and generally poor quality, sterile living environments with no visual appeal. Many of them are

dormitory townships that were created as reservoirs of labour to serve the apartheid city. As such, they have peripheral locations, incurring high transport costs. Populations in these areas lack the ability to sustain themselves, with almost all the employment opportunities existing outside their boundaries. (RDP report 1998)

Community:

Relates to creating the spatial qualities of identity and belonging and interaction between individuals.

Environment:

In respect of this study it can be seen as a series of relationships between things and things, things and people, and people and people. These relationships are orderly, i.e. they have a pattern and a structure – the environment is not a random assemblage of things and people any more than culture is a random assemblage of behaviors and beliefs. Both are guided by schemata or templates, as it were, which organize both people's lives and the settings for these. (Rapoport; 1980:11)

Apartheid:

It was first and foremost a systematic legal structure that divided South Africans into racial groups, legitimized the uneven distribution of South African economic, social and political goods according to those racial categories, and systemized White exploitation of those South Africans labeled Black, Indian or Coloured. (Soanes; 2004)

World view:

The term is used to refer to the common concept of reality shared by a particular group of people, usually referred to as a culture, or an ethnic group. Worldview is an individual as well as a group phenomenon.

Socio-cultural factors:

The interplay of social, cultural, ritual, economic, and physical factors (Rapoport, 1969:46)

1.3.3 Hypothesis

Architecture's role in the democratization of South Africa is the product of an approach which embodies the synthesis of architecture and the social cultural factors of the people it serves which thus leads to meaningful places that foster a sense of belonging and well being.

1.3.4 Key questions

The study seeks to question:

- How the built environment can become the embodiment of Democracy by creating environments that reflect the society's needs and aspirations towards a human sensitive environment?
- What community facilities and resources are of need to the community of Mpumalanga?

1.4 CONCEPTS AND THEORIES

The assumption and point of departure that informs the theories and concepts used in this study is the response to the lack of urban qualities and meaningful social spaces within the existing urban environments of South African townships more specific to this study, Mpumalanga Township. The study thus makes an engagement with the post modern cultural theories of 1) the phenomenological approach to place, 2) critical regionalism, 3) and a pragmatic approach to contextualism

1.4.1 Social culture and design

As argued by Rapoport (1980), to acknowledge the socio-cultural variables when designing leads to culture supportive environments. Although it has been an exceedingly difficult goal, activities of the people have been said to provide a very useful starting point and lead fairly easily to lifestyle. Different organizations of space, time, meaning, and communication are needed to support rather than inhibit given life-styles and to achieve a congruence between life-style and built environment, certain general principles that are stressed by Rapoport (1980:32) can be suggested and among them are:

- The nature of the group and its characteristics, life-style, rules for behavior, environmental preferences, images, cognitive schemata, space and time taxonomies, and so on, should be established.
- Communication and privacy needs, the mechanisms and defences used, and the various sensory modalities stressed should be known.
- The symbols of status as expressed in location, dwellings, and artefacts, i.e., environmental meaning, should be understood, as should the principal ways of establishing social identity.
- The nature of the activity systems and their latent aspects need to be understood, as does their distribution in space and time, and how they are related to home range, to territorial behavior, and to the nature of territorial markers.
- Social organization, relations, and networks, and their relation to the organization of the environment, to movement patterns, and to interaction rates and settings, should be traced.

When such aspects are taken into consideration, environments will tend to be supportive rather than inhibiting. The above mentioned principles will be key informants in interpreting the life-style of the residing culture of Mpumalanga township (field-study). An understanding of the socio-cultural variables will assist in proposing a meaningful architectural intervention envisioned by this study.

1.4.2 Phenomenological concerns relating to place and meaning

According to Fred Lukerman (1964:16) the idea of 'place' involves the integration of elements of nature and culture. The definition of 'place' as advocated by Walter (1998) is a geographic entity, rooted in "a portion of space". This portion of space is not an empty stage on which events and activities unfold, but instead one invested with myriad meanings. The notion of a Platonian conception of place as advocated by Walter (1998) can be understood from two senses which are; a place being the concrete setting for human lives, activity and movement: 'place' provides both the real, concrete, settings from which cultures originate to entangle people in webs of activities and meaning and the physical expression of those cultures in the form of landscapes. (Agnew & Duncan; 1989: preface)

A place could also be a socially constructed entity, is necessarily invested with human meaning. Far from being a static and historic form, place may be thought of as, a “process of becoming”. People are active participants in the historically contingent process of the making of place: within the context of their times, they construct places by investing them with human meaning (Agnew & Duncan; 1989: preface). According to Rogers (1992) the second view recognizes that all social life is “regionalised and regionalising” and that place-making is situated in specific time-space contexts (Rogers; 1992:245). Constructed places are not confined to the here and now (that is, concrete settings of the present) but include places of past experiences (memory), those which reside in the imagination or even those which exist in simulations and iconographies. In fact, place is often constituted by a nesting of different but overlapping images and interpretations. Space is thus not uniform and homogeneous as was conceptualised by the modernist / apartheid planning towards townships but it has its own name, sense and experience. The place has to be recognized and considered as a phenomenon of direct experience. Places are thus sources of identity for every single living being and thus the importance of adequate experiencing, creating and maintaining of every single place is obvious, unfortunately this is not much paid attention to by environmental designers. Herein raises the issues of history, community and identity which play a pivotal role in the generating meaningful places.

A phenomenological approach investigates the man-environment relations, the effects which environments have on people i.e. the effects of particular organizations of space, time, meaning, and communication on human behavior, well-being, or mood. A focus on human needs, cultural, historical and natural contexts within a place will serve to contribute to the study in its investigation of how to respond to local context and culture. Place theory gives great emphasis on responding to context, and fitting the new design in existing conditions. The essence of this theory lies in the understanding of the cultural and human characteristics of physical space. Space only becomes place when it is given a contextual meaning derived from cultural or regional meaning.

1.4.3 Critical regionalism

The built environment of townships in South Africa was designed through standardization and industrialization principles in accordance to the modernist framework. Due to the need of mass housing, time in construction had to be optimized which often results in the use of standardized products and the reduction of labour. Additional to this are the building codes traditionally applied to civic buildings in townships such as schools, community halls, clinics which also promotes the monotonous sterile quality of such places. It has been argued that such elements limit the scope of a regionally responsive architecture (Valverde; 2004: 37). It is in this context that this study explores Critical regionalism which places emphasis on local culture. According to Kenneth Frampton (1992), Alexander Tzonis and Liane Lefaivre (cited in Nesbitt; 1996) critical regionalism is a new attitude towards architecture. It is explored in this study due to its consideration of the relationship between architecture and local traditions due to its strong connection with society and culture and the idea of spirit of place. Regionalist architects hence have the very important task of basing their architectural production on the use of local and new traditional materials, local craftsmanship, and intermediate and combined construction technologies

1.4.4 Contextualism

An architecture concerned with addressing the urban qualities of the built environment will draw its principles from the concepts of urban contextualism. Due to the modernism/apartheid planning preferences, the segregated landscape of the township built environment is characterised by low density housing assembled in an endless and repetitious sprawl. The urban configurations does not relate to the human being and to the neighbourhood which they interrupt.

Urban theorists Schumacher (cited in Nesbitt; 1996:296) conceptualises the twentieth-century town as a physical combination of two simple concepts; 'the traditional city of corridor streets, grids, squares, etc., and the city-in- the-park (Schumacher cited in Nesbitt; 1996:296). In his interpretation he defines the traditional city space as clearly defined by continuous volume of the buildings and the city-in-the-park, it is composed by isolated buildings which do not define or emphasize space. An issue of undefined sprawling space has been one of the main urban problems pertaining to the built

environment of the South African townships. As an intervention to provide a solution to the functionalist urban problems of the twentieth century, design principles by urban theorists are based on the notion that, architectural form need not follow function, the building programs and users need not be expressed in the configurations of the building and towns. This allows for flexibility and manipulation of the built form to become an analogue model for the greater context of the urban space. Also the manipulation of form at large scale will relate directly to the organizational patterns of buildings at the smaller context. The urban form is thus seen as possessing a life of its own, irrespective of use, culture, and economic conditions. It is the application of such criteria (either consciously or unconsciously) which give many cities their particular ambiances (Schumacher cited in Nesbitt; 1996:297).

In opposing the modernist attitude towards architectural form and its sitting which entails that; *'a building should exist in the round, isolated from its neighbours, multi-sided and without preferential faces* (Schumacher cited in Nesbitt; 1996: 298). Urban contextualists' advocates that buildings should have a plane of reference and should not be idealized, apart from representing a functional unit or a program, the built form should also relate to the wider context and play a role in merging the built fabric.

Robert Venturi's (1996) approach to contextualism advocates that ideal forms can exist as fragments, "collaged" into an empirical environment or they can withstand elaborate deformations in the process of being adjusted to a context. Such an approach has largely been avoided by the modern architect. Venturi calls for elements which are "...hybrid rather than 'pure', distorted rather than 'straightforward', ambiguous rather than 'articulated'. As reinforced by Schumacher (1996) it is precisely the ways in which idealized forms can be adjusted to a context or used as "collage" that contextualism seeks to explain, and it is the systems of geometric organization which can be abstracted from any given context that contextualism seeks to divine as design tools (Schumacher cited in Nesbitt; 1996:301).

Urban theorists Colin Rowe (1996) advocates of deformations of built form as responding to the site pressures. Elements such as the entrance and the building's orientation can enhance a buildings response to its context. He states; *'Relating of urban pressures to the concept of idealization through programmatic requirements, we arrive at a logically balanced "contextual" building'*. The emphasis is that the

building's symbolic language should not take precedent over the relationship of the building and its site. It should however be noted that although the building complex should respond to its site context, it is by no means a simple catalogue of site pressures. According to the idea of Venturi (1996) buildings can become "Both-And." It is both responsive and assertive, both figure and ground, both introverted and extroverted, and both idealized and deformed (Venturi cited in Nesbitt; 1996:305).

The ideologies of contextualism have been explored by local South African architects in the form of Urbanistic architecture. Redressing the apartheid and colonial restraints on the built environment of the country has been the main priority. A few examples will be analysed within the research towards achieving a greater understanding on the kinds of challenges faced within the South African context the architectural objectives and their execution.

1.5 CONCLUSION

The approach envisioned by this study will tend to be eclectic because it is in the author's view that a study which addresses such a broad topic of socio-culture and urban spatial problems pertaining to apartheid planning and architecture cannot be conclusive but only suggestive as there could be countless methods of addressing such a topic. This research is more primarily focused on addressing issues of local culture in the built environment.

CHAPTER 2: RESEARCH AND METHODOLOGY

2.0 RESEARCH AND METHODOLOGY

This chapter looks at the methods of research used in the study. It sets out the appropriate ways used to carry out the research in order to obtain answers for the research questions.

The study area is Mpumalanga Township, Hammarsdale in the Durban Metropolitan area of Kwa-Zulu Natal, South Africa. The author is a full time resident, member of the community of Mpumalanga. Personal interest has motivated the essential research insights which the study will revise and elaborate. The study will however resort to a standardized procedure for observing/ interviewing so to lead to a more easily comparable description. This is to avoid overlooking differences between people or assumptions based on a personal feel.



Fig2.1 - Mpumalanga township in the greater context of South Africa (Source: Bonnin; 2007:6)

2.1 RESEARCH METHODS

This research has been carried through by the use of both secondary and primary data collection techniques. Secondary data has been employed to find a common ground held by other writers on the subject of the study. Primary data has been important to test the hypothesis of the research.

2.2 RESEARCH MATERIAL

Primary Data

Cross-cultural studies are necessary for the complete development of theories in environmental research since no one culture contains all environmental conditions that can affect human behavior (Brislin cited in Ziesel1998). By cross-cultural specialist, they use culture to refer to the man-made part of the environment, refer to it as “subjective culture” to refer to people’s response to the “man-made part of the environment, or to a group’s characteristic way of perceiving its social environment.” To form a more complete picture for environmental studies, Wohlwill’s (cited in cited in Ziesel1998) position would have to be added: that the environment exists not only “in the head” but also physically, independent of the organism. Then, “subjective culture” would be broadened to include people’s responses to those natural conditions that are present in their environment.

Fortunately, environmental research has attracted interdisciplinary attention. Psychologists, anthropologists, architects, sociologist, educators, and members of other disciplines have made contributions. This variety of disciplines has led to a tolerance for a wide range of methodological approaches. This study adopts the participant observation used by anthropologists. Participant observation can yield insights into what concepts are important within a culture. These concepts can then be quantified and empirically tested, perhaps through experimentation or a sample survey. The time spent in participant observation helps insure that researchers are not imposing concepts from their culture on the one in which they are working. (Brislin cited in Ziesel1998)

“The better information designers have about how the people they design for behave in physical settings and how those people relate to or exclude other

people, the better they can control the behavioral side effects of the design decisions they make.” (Ziesel; 1998:123)

The main focus is on design implications related to social culture and the physical setting. As a full participant in the field research, an environmental behavior study is carried through to investigate how people behave and use space. As recording devices, maps and photos are used primarily because of their illustrative quality in analyzing physical traces on the built environment.

Primary research has been carried through the form of interviews; this is to primarily understand people’s needs and aspirations to inform a meaningful development in the community. Focus- groups and in-depth individual interviews have been used, and the researcher has assumed the role of observer as participant – this is during the group interviews.

- Key respondents:

Mpumalanga township councilor – Mr. Mandla Mgwengwe

Traditional leader of Mpumalanga and Mophela rural area – Ndabezitha Baba uMkhize

- Key groups:

Mpumalanga Concerned Citizens Group

Mpumalanga Treatment Action Campaign

Secondary Data

With the objective of the study to create a new meaningful place in the form of a ‘civic centre’ for the community of Mpumalanga Township, an understanding of the links between man and environment has been explored in depth. A qualitative research approach has been employed on the subject of Phenomenology of place which has been discussed by various scholars from different disciplines from geography, planning, urban design and architecture.

Other relevant subjects like socio-cultural factors in design, critical Regionalism have also been discussed with information sourced from books, journals, reports, by other authors, writers and critics. These ideas, theories and findings have been used as a basis from which primary data collection has been used, and therefore, testing the researcher's hypothesis. This study also includes a review of precedents on how meaningful places have been achieved. This ranges from medieval towns of the western world, African traditional architecture and contemporary south Asian precedents due to the similarity of historical background of colonisation and local South African projects constructed post 1994, a period that has been primarily focusing on representation of the people.

CHAPTER 3: LITERATURE REVIEW

3.0 INTRODUCTION

In exploring the relationship between social forms and built forms, between society and the built environment it produces, the study by King (1980) in *'Buildings and Society'* raises the questions:

“What can we understand about a society by examining its buildings and physical environment?”

“What can we understand about buildings and environments by examining the society in which they exist?”

The built environment of apartheid South Africa was built in the experience of its makers and not of its users; this explains the urgency in redressing the landscape of South Africa. The relationship between man and the environment has been conceptualised in depth by environmentalist in the aim to stress the human purpose and the things we create. This chapter will serve to explore such a relationship in order to understand its nature.

3.1 HUMAN NEEDS / VALUES AND THE BUILT ENVIRONMENT

“... There is a clear “cause and effect” relationship between human purpose and the things we create” Bartuska & Young (1994:8).

As advocated by environmentalist, Bartuska & Young (1994), each aspect of the built environment is constructed to fulfil human purpose, since remote times man has always undertaken the role of consciously manipulating the environment to make it more fitting to his way of life. Such notions have led to the presumption by many environmentalist scholars that a built environment that fulfils human needs and values is a healthy and significant contribution to human life. It increases levels of comfort, fosters a sense of involvement and pride. Studies by psychologists reveals that, to survive all organisms must satisfy certain basic needs ,human beings are no exception, and that the most basic set of needs are physiological – those that are needed for proper functioning of the body and mind. Second, are the security needs once after the physiological needs have been satisfied. If security is assured, then we turn our attention to higher needs, such as that for belonging to a group or the need for self-

actualization. For every need, there must be an adaptive response and an adaptive design strategy. For every want we adopt a response. The need is satisfied (by every organism) through exploitation of the environment. Humans do this collectively and since needs are similar and recur, they are quite predictable through every life span, every culture and in each succeeding generation. In humans, this adaptive response is institutionalized; it is organised, formalized and regularised. Much of that elaboration is expressed in the various created “built environment.” (Maslow; 1971:10)

The built environment also emerges from the reflection of personal and collective values. Human values are a bit more abstract than “needs” but a general understanding of their relationship to human activities can aid our understanding of the many attitudes people have about the built environment. This view is second by Rapoport (1980) he also advocates that activities of the people provide a very useful starting point and lead fairly easily to lifestyle (Rapoport; 1980:32). These value-formed attitudes manifest themselves in the way we relate to the environment, the way people solve problems and consequently are expressed in the intrinsic characteristics of the built environment. (Bartuska & Young; 1994:10)

Human values are subjective, they deal with beliefs, opinions and attitudes e.g. beauty, quality, freedom or equality. These are things of subjective value and affect subjective attitudes and many of these are expressed in the built environment. Human values fundamentally affect one’s perception of the built environment. Values colour our awareness of problems and the way we approach potential solutions. They are like an overriding screen, an invisible determinant that directly affects the character and quality of the built environment (Bartuska & Young; 1994:10). Research by social workers and psychologists finds personal values an effective key to communication. They have come to understand that they must relate to human value systems to fully understand human concerns and problems, to really communicate and find effective solutions (Maslow; 1971:10). In general terms, human values affect philosophy and how we set priorities or solve problems, be it individualistic or based upon a popular style, functional or based upon humanistic and/ or total integration of all concerns.

It can thus be concluded that it is through architecture, the manipulation of the built environment, that important socio-cultural elements are given clearest concrete expression. This could be at personal/individual level or at a more national/public

realm. The conscious manifestation of the socio- cultural factors in the built environment contributes to the creation of human sensitive environments which thus informs meaningful design of space and built-form. The pre-industrial era of African settlement patterns has been advocated by anthropologists to be symbolic of the organizational factors of human activities and the embodiment of all social, cultural, political and religious structures.

3.2 SETTLEMENT FORM/SPACE AS A MANIFESTATION OF SOCIAL CULTURE

The socio-cultural factors have been the primary design informants in traditional architecture of many cultural groups. Clear evidence of this is expressed in the African traditional settlements which have been advocated by anthropologists to be governed by very strong principles, ideas and concepts; this applies to all the different cultural groups in West, North, East and Southern Africa. Their existence was based on regional expressions which brought about the uniqueness in their built form. As supported by Rapoport (1986):

“the environment sought reflects many socio-cultural forces, including religious beliefs, family and clan structure, social organization, way of gaining a livelihood, and social relations between individuals” (Rapoport; 1986:47).

Dubos (cited in Rapoport 1969) explains that even with the most severe physical constraints and limited technology man has built in ways so diverse that they can be attributed only to choice, which involves cultural values.

Within the various economic and geographical constraints, the biological, physical, and psychological makeup of man, and the laws of physics and structural knowledge, there are always numerous choices available, particularly since man has a great “propensity to symbolize everything that happens to him and then react to the symbols as if they were the actual environmental stimuli” (Dubos cited in Rapoport 1969).

Socio-cultural forces, therefore, become of prime importance in relating man's way of life to the environment. The forms of primitive and vernacular buildings were less the result of individual desires than of the aims and desires of the unified group for an ideal environment. They therefore had symbolic values since symbols serve a culture by making concrete its ideas and feelings (Rapoport; 1969:47). The similarity of the forms, as stated by Redfield (cited in Rapoport; 1969:48) is the sharing of a world view and other image and value systems which makes possible the process of vernacular building.

Such a phenomenon of 'public symbol' through built form and space making is evident in the cultural value - 'community before the individual' - amongst the African cultures. As expressed in the Zulu culture, the 'suppression of the individual needs for the common good' was a normal and accepted practice which is still valued today in many other African countries. The importance of meetings and the community was reflected in the traditional Zulu homestead 'umuzi' (fig 3.1) architecture. Universal forms, the circle, hemisphere, cones, or cylinders, were adhered to and there was no need for individual formal expression. The centrally positioned cattle kraal in the homestead was a meeting place for the community. Here Zulu-beer was drunk; pipes smoked and important issues were discussed. Its central location symbolises its importance both as a store for wealth (cattle) and as a meeting place. (Mthulisi; 1993)



Fig 3.1 - Traditional Zulu umuzi with the central community space. (Source: Denyer; 1778:113)

Of a similar nature, the religious values of the Dogon tribe informed the cosmological layout of the homestead whereby each house forms the organs of the body. Situated at the 'head' of the village layout was the Toguna (fig 3.2), this building was the symbol of unity of the village and of political dominion, which is the prerogative of the council of the elders. Its location is on an elevated terrace this is to emphasise the importance of community and the coming together to solve community issues (Guidoni; 1975:154).



Fig 3.2 - The Toguna on an elevated podium to emphasise its importance in the village

(Source – www.wikimedia.org)

Even the site choice for the traditional settlements was determined on the basis of myth, religion and way of life rather than on utilitarian or physical grounds. Rapoport (1969) states that there are two ways in which the effect of the site on buildings can be considered. The first would deal with the physical nature of the site – its slope, type of rock or soil, run-off, vegetative cover, microclimate, and so on; the second would consider the symbolic, religious, or cultural values of the site and their consequences. While the physical nature of the site does affect building form, as in the case of a steeply sloping site, it is the initial choice of site that introduces this variable. In this choice access to food or water, exposure to wind, defensive potential, the sparing of land for agriculture, and transportation all play a role. Defence may lead to the choice

of a high point in the curve of a river, the shore of a lake, or a steep hill. For trade the presence of a ford may be a consideration, and for transportation in a jungle the bank of a river may be important. (Rapoport; 1969:65)



Fig 3.3: Dogon village, on the steep slope of Bandiagara escarpment, Mali (Source www.wikimedia.org)

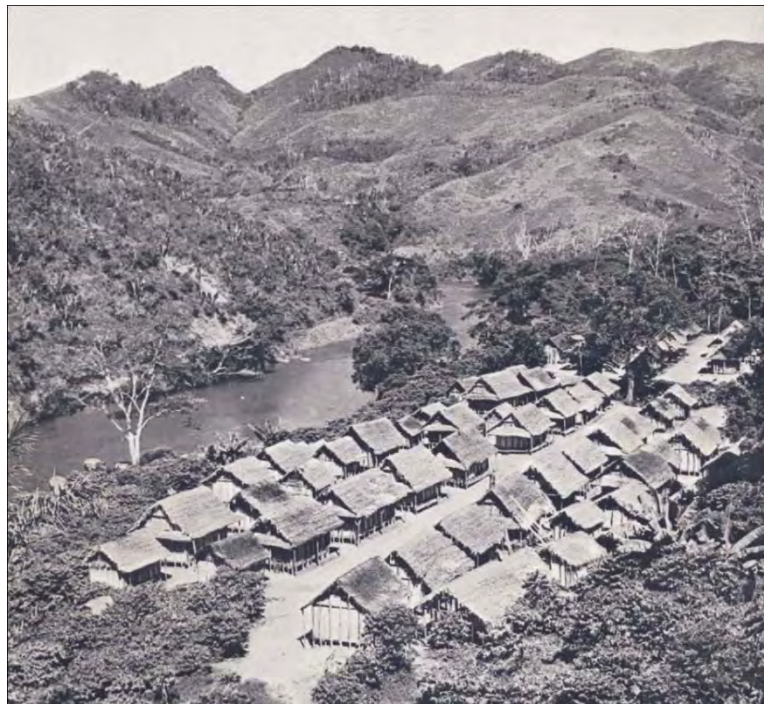


Fig3.4 – The Betsimisaraca tribe of Madagascar settlement near water to support livelihood. The architecture of the dwellings (stilts) is also a response to the context (Source – Gideon; 1975:16)

Even the temporary nature of many of the primitive built structures was based on the way of life of its inhabitants. Built using local materials, hunters and gatherers such as pygmies and bushmen, the migrant pastoralists such as the Fulani and the Masai, or the people who practised land rotation agriculture and moved on every four or five years. To some tribes, the family size and social arrangement determined the composition and orientation of the houses and was changed to suit new needs. People did not move to fit in with the arrangement of the houses. (Denyer; 1978:2)

“ ... once the identity and character of a culture has been grasped, and some insight gained into its values, its choices among possible dwelling responses to both physical and cultural variables become much clearer.” (Rapoport; 1969:47).

In all, but a very few cases, the architecture was created without architects or even specialized builders. The whole neighbourhood afforded their unanimous assistance in building; their architecture was a personal adaptation of a group solution. The houses erected by a particular society were in a style which had been communally worked out over several generations and consequently were closely tailored to the needs of its people. They are what Denyer terms (1978) a society's solution to its habitation problems (Denyer; 1978:4).

Today more and more architects are turning to vernacular architecture for inspiration, not because they wish to repeat the structures they find – the social orders, materials and technology they have to deal with are quite different – but because it is recognised that these structures obviously satisfied their communities' psychological needs far better than most modern suburban settlements do (Denyer; 1978:4). Anthropologists had realized some time ago that indigenous settlements in southern Africa were a reflection of the social hierarchies, inheritance patterns, and political structures of societies concerned (Junod cited in Frescura; 1987:269). It has been argued that the usage of space within the settlement represented a more reliable guideline to cultural pattern than any of the other models derived and tested to date. The traditional /vernacular inspired approach to design has thus proven very effective as informants for contemporary design issues and has intrigued debates amongst scholars worldwide.

Such a response has been favoured by mostly third world countries as a response to issues of independence and freedom to the effects colonisation and industrialisation.

3.3 HISTORICAL AND SOCIAL CULTURAL CONTINUITY

“The pre-industrial architecture of any given region had the strength to serve the physical and spiritual needs of people on every scale, from a single family to the entire community. At the physical level, it embodied centuries of learning with regard to orientation, climate, building materials, and construction techniques. At the spiritual level, the built- form conveyed total harmony with the regional lifestyle in all its daily as well as seasonal rituals, unifying the socio-cultural and religious aspirations of the individual and the community.” Doshi (1997)

The realization that “International” models of architecture and urban planning were not universally suitable, given varying resources, climatic conditions, values, and lifestyles, has led to critical debates by scholars worldwide in recent times. This has encouraged all societies to look into their own heritage to understand the architectural and planning practices which have evolved over centuries of adaptation and, in some cases, even adoption. As stated by Doshi (1997), a south Asian architect from India, the foreign rule in most third world countries led to the destruction of its home-based crafts, which tremendously affected the social pattern of its society. Subsequent emphasis on industrialization, the advent of new building materials, and a desire to “modernize” further boosted socio-culturally unrelated patterns of building and city planning. The models for such development were not conceived on the basis of neither the climatic, nor the social needs and lifestyles (Doshi; 1997:16).

The consequences of such events increased the use of resources and energy, and the subsequent degradation of the environment – especially the built environment of the cities was characterized by the international style which socio-culturally alienated the people. This resulted in a loss of identity with the place and the architecture (Doshi; 1997:16). Due to the drastic changes on account of colonization, industrialization and accelerating growth in population, intellectuals in the Indian subcontinent have searched for the values within their tradition which have relevance today and assimilating aspects of global technology which can solve their problems. Rapid urbanization of most societies in Asia with a rich cultural heritage and poor living

standards were deeply affected by the process of change on account of development. With at least a million people converging in Delhi, low –cost mass housing was a priority and it was within this context a modernist vocabulary of design in terms of their own traditions and cultural heritage was reinvented (Doshi; 1997).

The use of tradition in architecture and urban form is illustrated by the works of Raj Rewal (1997:52). The *Jaisalmer* (fig 3.5), a dense traditional urban development in a hot climate has influenced many works.

' The cool, shady and narrow winding alleyways converge into large enclosures. Each street has a definitive, discernible character, so has the individual dwelling. But the unity of the total is never destroyed. The facade of the street is enlivened with elements of design, carved in stone, comprising parapets, gargoyles, balconies, lattice work, viewing windows and thresholds. The concept of massing around courtyard or several courtyards provides adequate light and ventilation to the surrounding rooms'.



Fig 3.5 – Jaisalmer traditional vernacular dense urban settlement (Source: Ameen; 1997:54)



Fig3.6 – Modern Asian Games village inspired by vernacular architecture. (Source – Ameen; 1997:54)

In the *National Institute of Immunology* (fig 3.7), a campus dedicated to research. The architect was inspired by the traditional *havelis*, he studied the manner in which *havelis* counter the intense heat of the day by building around courtyards, and then incorporated their underlying principles within the framework of current rooms and functional requirements. The design of the institute carries some of the traditional planning principles but in no way has there been any attempt to embellish it with false arches, domes, or carvings. The inspiration from the past is reinterpreted in terms of rational structures, modern techniques, and new building materials, to meet practical realities.



Fig3.7 - Aerial view of interlocking courtyards (Source – Ameen; 1997:58)

3.4 VERNACULAR / CONTEMPORARY SYNTHESIS IN ARCHITECTURE

“... Architecture should be approached through the concept of region. It should however guard itself to mindlessly adopting the narcissistic dogmas in the name of universality, leading to environments that are economically costly and ecologically destructive to the human community. It is an approach to design and the architecture of identity which recognizes the value of the singular and cultural constraints of the particular, aiming at sustaining diversity while benefitting from universality.” (Mumford cited in Tzonies; 2003)

From the ideologies of the critical regionalist, it is essential to develop a process-related, socially constructive architecture that responds to context and culture while working within local vernacular. Such architecture must respect local concerns and respond to local environment, yet not yield to these factors entirely uncritically. Mayet (1995) a South African architect, states that appropriate strategies need to be carefully defined and opposed to largely unsuccessful first world tactics applied out of context coupled with the disasters of indiscriminate borrowing and reductive process of observation (Mayet;1995:48) .It is widely acknowledged today that the uncritical embrace of an international modernism which dominated the architectural practice of most developing countries in the past is ill suited not only in terms of environmental and economic conditions, but also in terms of cultural appropriateness (Boussora; 1990).

Africa due to its history of colonisation, as a movement towards resistance it has seen many of its public buildings synthesise the vernacular with the modern. This is effectively illustrated in the works of Justus Dahinden at the *Mityana Pilgrims* shrine in Uganda (fig3.8). He demonstrates that traditional African architecture has dynamic metaphors and repertoires that can be exploited to create architecture that is uniquely African and to which users can respond. The design adapts to the climate conditions as well as to local culture and in particular to the symbolic consciousness of African people. In this respect, the image of this building is both rational and irrational (Elleh; 1996:169). The response to the design to modern building materials is a vindication of traditional African building design and clear proof that the problem has not been with the architecture but with the hesitation of trained architects to innovate with this form since the Middle Ages.



Fig 3.8– Kbaka Traditional house in Uganda & Mityana Pilgrims influenced by traditional forms (Source: Elleh; 1996: 168)

In Sudan, West of Africa, the *Mayor's office* (fig3.10) in *Ouagadougou* borrows its design precedent from the traditional houses of the Gourounsi (fig3.9). The slanted walls and parapets that characterize the ancient building tradition in the region are all well represented in the mayor's office, and punched windows are used for lighting and cooling.

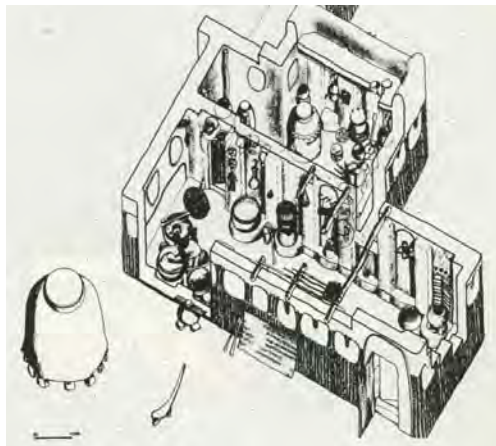


Fig3.9 – Gourounsi homestead (Source - Elleh; 1996:169) & Fig3.10 – Mayor's office in Sudan inspired by traditional fenestration (Source - Elleh; 1996:169)

In a much more ambitious design, the Headquarters of the Central Bank of Economic Community (fig 3.12) of West African States takes its parts from the ancestral pillar (fig 3.11), as one shaft that was broken into multiple vertical segments. The base lined with traditional designs that take after Gourounsi pyramidal housing types with parapets, tapered walls, and little openings at the upper levels.

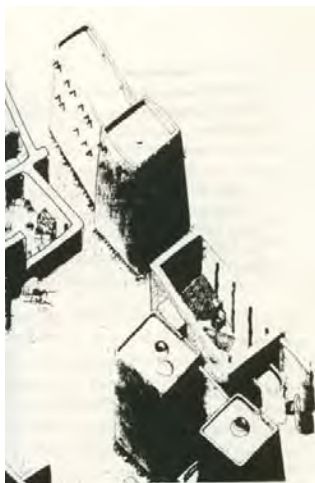


Fig3.11 – Traditional ancestral pillar (Source -Elleh 1996:205) & Fig3.12– Traditional vernacular inspired Central Bank in West Africa (Source - Elleh 1996:205)

Frampton (1985) however stresses that it is important to distinguish between critical regionalism and simple-minded attempts to revive the hypothetical forms of a lost vernacular, he states,

“In contrary to critical regionalism, is Populism – its primary vehicle is the communication or instrumental sign. Such a sign seeks to evoke not a critical perception of reality, but rather the sublimation of a desire for direct experience through the provision of information. Its tactical aim is to attain, as economically as possible, a preconceived level of gratification in behaviouristic terms” (Frampton; 1985:21).

Unless one guards against such a convergence, one will confuse the resistant capacity of a critical practice with the demagogic tendencies of populism. Architecture can only be sustained today as a critical practice if it distances itself equally from the enlightenment myth of progress and from a reactionary, unrealistic impulse to return to the architectonic forms of the preindustrial past. A critical regionalism has to remove itself from both the optimization of advanced technology and the ever-present tendency to regress into nostalgic historicism or the glibly decorative. The fundamental strategy is to mediate the impact of universal civilization with elements derived indirectly from the peculiarities of a particular place (Frampton; 1985:21). This approach is dependent upon a high level of critical self-consciousness. A design may find its governing inspiration in such things as the range and quality of the local light, or in a tectonic derived from a peculiar structural mode, or in the topography of a given site.

Mumford (2003) advocates for an approach in architecture that helps people to come to terms with “the actual conditions of life” and make them “feel at home”. In Mumford’s definition the community’s role is central,

“ we have treated the art (of building) not as a simple means of providing shelter, not a clumsy kind of scene painting, but as effort to reflect and enhance the purposes and ideals which characterise a particular age of people. This effort takes form in meeting the practical demands for an environment modified for human use; but the modifications that are made serve something more than the immediate needs: they testify to the degree of order, of co-operation, of intelligence of sensitiveness that characterizes community” (Mumford; 2003).

Mumford's regionalism opened the way to a multicultural definition of community. Mumford's regionalism aims at superseding the adversarial stance, and at overcoming deeply ingrained, culturally inherited contradictions and conflicts. Critical regionalism is about shaping new realities, of the post-war period involving identity, sustainability, memory, community in a globalizing, post-colonial and fragmented world. This reality was something that the simpler, one dimensional theories developed both by pre-war CIAM a traditional regionalists was no longer able to cope with. Mumford's writings had the vision of a multi-dimensional, multi-functional paradigm of critical regionalism so historically important was the way it freed practice from older, more constraining habits and opened up new possibilities for shaping the world (Mumford; 2003).

3.5 CONCLUSION

Modern architecture and urban design can achieve greater richness, variety, and symbolic content if it is informed by underlying regional historic values rather than superficial quotations. As argued by Marschall (2000) in the context of South Africa, the rich and fast disappearing traditional African vernacular and African approaches to space making can become inspiring informants of present day architectural design in South Africa. The development of a new architectural language based on African traditions is of outmost significance in making the architectural discipline more relevant to the majority of South Africa's population, as well as visually expressing the country's process of transformation (Marschall; 2000:58).

CHAPTER 4: INTERPRETING THE TOWNSHIP BUILT
ENVIRONMENT

4.0 THE SOCIO-POLITICAL FACTORS IN SHAPING THE CONTEXT OF SOUTH AFRICAN TOWNSHIPS

From the previous chapter it has been justified that the built environment / architecture always reflects the society it serves. During the apartheid era, architecture in South Africa in a very material sense sustained and even initiated many of the social economic and political problems associated with township life and the segregation of society that the new South Africa has inherited from the old (Marschall & Kearney; 2000:1). During apartheid South Africa the design of the built environment was grounded in the expression and experience of the ruling regime and it did not taking into consideration the lifestyle of its users. This chapter is to illustrate how space was influenced by functionalist and scientific values of Modernism, how the association of modernism and apartheid in the South African context led to the formulation of townships and how it negated the social and cultural institutions of the native Africans.

4.1 UTOPIAN IDEALS OF SPATIAL ORDERING

In the late nineteenth and early twentieth century, originally arising from the wide-scale and far reaching changes to Western society was the Modern thought, Modernism. It felt the traditional ways of life were outdated in the new economic, social and political conditions of an emerging fully industrialised world. Britain and Europe were one of the first to propose planning concepts of the built environment that promoted functionality to the spatial designs of town and country to promote industrial efficiency. The functional approach regulated the use and development of land. As noted by Scott (2003), the promise of the delivery of material progress and modernization by the modernist ideology of the Western society led to its spreading to all parts of the globe including third world developing countries (Scott; 2003:238).

The capitalist elite had a very strong influence to the colonised and developing countries. Their acceptance of this vision involved a commitment to rational, scientific centralized change through planning and design of the built environment. The public officials, whose domain of training was the physical structure of the built environment, e.g. planners, surveyors, engineers and architects, were thus aligned to adopt the functionalist approach to designing the built environment. The professionals were

channelled to create cities that promoted industrial efficiency and catered for housing (fig 4.1) needs on a mass scale (Goodchild; 1990).



*Fig 4.1: Desolate mass housing of the Modern movement
(Source: <http://affordablehousing.org>)*

As a model of approach to given ‘ends’ of creating social and physical order and achieving economic efficiency, the modernist approach became a form of knowledge and control that required a narrowing of vision. This brings into very sharp focus certain limited aspects of an otherwise far more complex and unwieldy reality. This approach makes the phenomena in the centre of the vision ‘more legible’ and more amenable to ‘measurement, calculation and manipulation’. The ‘narrowing of vision’ in relation to the urban landscape results in a comprehensive blueprint of a future reality (Lefebvre; 1991:124). As argued by Scott (2003) this approach leads to static master plans which are based on crude social theories and sought to engineer society through the technical manipulation of the physical environment. Such an inhumane approach is evoked by the radical break with history and tradition in the modernist planning. This follows from the assumption that all activities, values and patterns of human behaviour that are not based on scientific reasoning would need to be re-designed. Scientifically based economic and social plans that emerged in response to this assumption were considered to be superior (Scott; 2003:239).

The blueprint of the physical landscape served further to order construction to a set of norms or standards stipulating plot sizes, building materials, building densities and other physical characteristics. The architects, planners and engineers responsible for designing the blueprints become what Lefebvre (1991) describes as the ‘doctors of space’ who are creating abstract representations of space. According to Scott (2003), this creative process of spatial ordering of the built environment simultaneously embodies creation and destruction, as the creation of an abstract space ‘asserts’ as well as ‘negates and denies’ (Scott; 2003:240). This disillusionment of the social vision gave rise to Post Modernism. Architects and social critics no longer saw the revolution zeal of the modern movement as productive, but destructive. They cited the desolate mass-housing projects, the wasteland of urban renewal, and the alienation resulting from an architectural language that seemed arcane and mute (McLeod; 1989:26).

In the South African context, there was an association of two Modernisms: modernism of the creation of subjects through science and the modernism of Apartheid social engineering. With the industrialization that followed the discovery of diamonds and gold in the late 1800s, the early settlers in South Africa saw the need to regularize the flow of African labour and keeping African urbanization in check, thus, this led to the implementation of labour reserves in the form of mass housing which is formerly known as urban townships.

4.2 SITES OF POWER – THE NATIVE TOWNSHIPS

The concept of townships in South Africa started in the early 1900s whereby it was the State had the responsibility to supply urban housing for native Africans. The principal source of obtaining a livelihood for the Apartheid regime was land therefore legal right over the land meant that the white minority group was to receive homage and service from those who wish to live on it. In the text by Lalloo (1998) he states:

“Property rights, which are necessary to sustain (at the very least) the prevailing standard of living, were only restricted to the whites, thus giving power to control the lives of the native Africans... Land is a natural and essential resource for social existence and is a fundamental component of property relations” (Lalloo; 1998:441).

Control over land meant the apartheid regime could determine how it is to be utilized and who will benefit from its production. They had power over the native Africans by determining the nature and availability of jobs, the economic security of those employed in them, and the quality and prices to the means of life. Recognizing that property on land is a vital source of power, the architects of apartheid strategically used dispossession and deprivation of land rights to subjugate, exploit, and subordinate the black majority's citizenship status.

According to Scott (1998:441) the apartheid control over land determined:

- The access to place, or good spatial location which is necessary to secure socio economic resources.
- The configuration of place, the physical form of the built environment which can either be conducive to, or militate against, the formation of integrated communities.
- Third, is tenure of an abiding place and
- Fourth, active participation in the process of place making (that is, active involvement in the creation of one's built environment) both engender a sense of belonging, allegiance, and shared community – which is all fundamental in the formation of integrated communities.

As explained by local scholars, the objective of the urban townships was to serve the economic interests of large building companies; that it was required for the reproduction of labour for commerce and industry; that it was the spatial matrix of the 'power of apartheid', creating the physical conditions for surveillance and the preconditions for the implementation of influx control and the Group Areas Act (Japha; 1998:423). Space was reconstructed in townships in this way through a process of abstraction and simplification, where only key elements, relevant to the local political, social and economic goals of the dominant whites, were included (Scott; 2003:240). The physical built environment of townships was the tangible signs of the political will to take control of the national process of housing provision, and they prepared the ground for what was soon to become a massive, state-sponsored building programme. In the words of Japha (1998), he states:

'the projects provided a rigorously theorized planning framework for the 'native township' of the 1950s and 1960s and that did so much to define the form and character of the apartheid city, as well as providing designs for the houses in them and practical demonstrations of the technical methods that had been devised for their realization. (Japha; 1998: 423)

The treatment of the urban spaces was also expressed within individual residential buildings and in the ways domestic spaces were configured by these very same planners. The standard house – the notorious 'matchbox' brand NE 51/ housing series (fig 4.2), originally developed by the CSIR in South Africa provided the template for black township housing throughout South Africa. The houses weren't adapted to their inhabitants' and presumed lesser developed state translating into lower building standards, smaller spaces and lower quality materials and finishes (Friedman; 2008: 35).

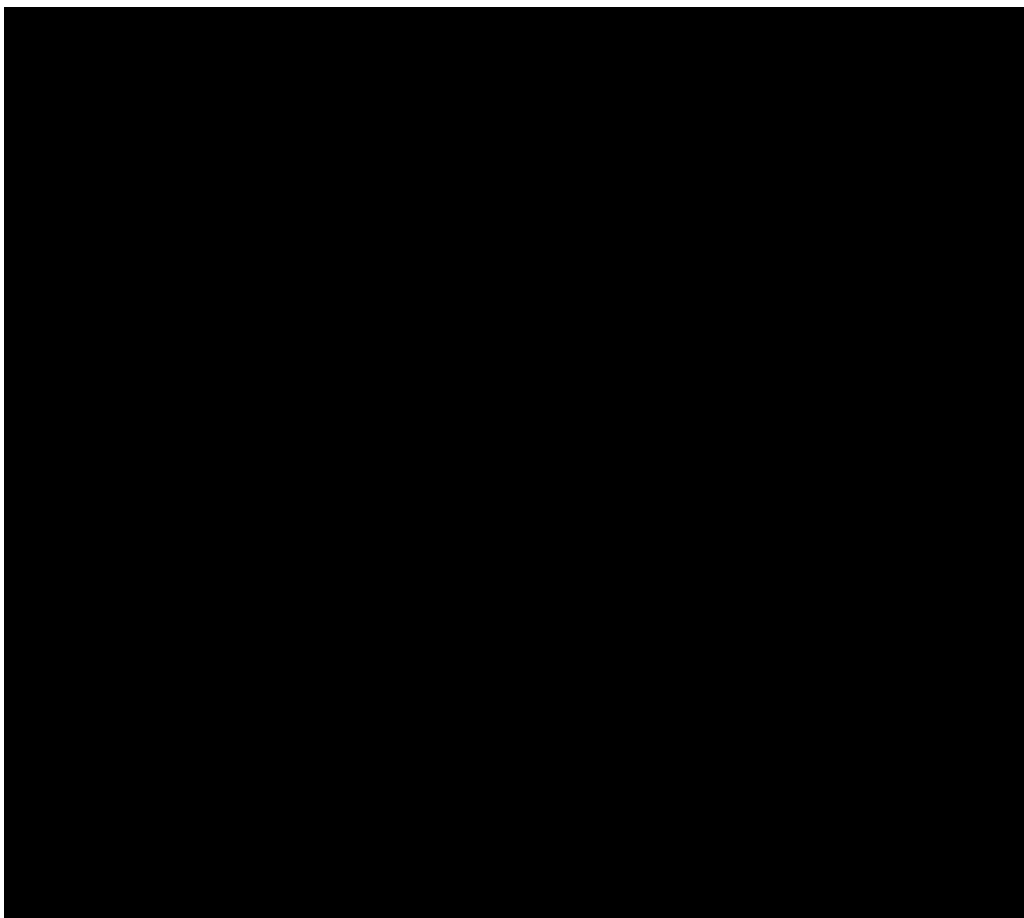


Fig 4.2- Typical standard NE 51 township house design (Source Japha 1998:433 & 438)



Fig 4.3: Township urban sprawl and individual box houses - Source (Japha 1998:433)



Fig 4.4: Township urban sprawl and individual box houses - Source (Japha 1998: 438)

Even the provision of facilities such as schools, clinics, community centres and sports facilities, according to Hans (cited in Marschall & Kearney; 2000:17) was called '*the technocratic caretaker model*'. Local authorities would assess the need of a community; draw up a professional design for the most suitable building to accommodate a clearly defined brief. Such 'government hand-out' was thus always built for the people but never with them, as a result of which communities rarely gained a sense of ownership and responsibility. Facilities were sometimes hardly used because they did not actually suit people's needs, or else buildings became an embodiment of governmental authority and consequently prone to vandalism (Marschall & Kearney; 2000: 17).

4.3 CONCLUSION

The promotion of functionality and material progress led to spaces that did not take into consideration the needs, lifestyle, values, beliefs of the people planned for. Factors such as history, community and identity were negated and space was abstracted. The architects, planners of the modern movement displayed a commitment to social reform. Most architects believed on the power of architectural space as an instrument for societal change (Ghirado; 1996). The idea of transforming society through the medium of space seemed very attractive to the colonial and apartheid regime. They created landscapes that communicated and reinforced their dominance; this transformed the local populace by incorporating them into their political, economic and social value systems. Space was thus viewed as something that could be divided into discrete territorial units, wherein people could be segregated in terms of – primarily – racial characteristics. The ideology of segregation and exclusion was also reflected on the design of public projects with great symbolic value for a society, for example, parliamentary buildings, national museums, libraries and schools. These buildings often serve as powerful and influential urban landmarks.

4.4 ENCOURAGING COMMUNICATION AND FREEDOM OF EXPRESSION IN THE URBAN SPACE

The concept of community relates to creating a sense of identity and belonging – a sense of absorption into urban life. Contained in the concept, however, are several realizations, one is the recognition that social interaction is not only fundamental to human development in a democratic society but it is an essential part of urban development. The motor of urban development is innovation and innovation, in turn, is dependent upon communication and interaction. The primary places where interaction occurs, therefore, are of importance in the making of urban systems. The way in which these places are made affects processes of urban socialization, people's sense of identity and the richness of urban experience. When positively made and celebrated these places provide alternatives to the restriction of home life: they provide experiences and opportunities which no home can provide on its own and they operate as release valves to the pressures and intimacies of the dwelling unit.

In the view of Dewar (1991), human interaction cannot be artificially forced: the intensity of communal interaction will vary with societal conditions. It is, however, vital to create the opportunities for such interaction to occur (Dewar; 1991:21). The promotion of collective activities & contact at precinct level promotes social contact and interaction. The places of greatest interaction in cities are the places of greatest opportunity, social contact is recognition of the importance of social ties and network in urban life – the complex social networks which take root in urban life – the complex social networks which take root in urban areas, many of which have a defined geographic focus; are of profound significance. They provide the first, and frequently the only, form of social security in insurance, they are fundamental in processes of urban socialization; and they radically affect the quality of life of urban dwellers. Also in reinforcing urbanity positively performing urban environments reflect a high degree of integration between different parts and elements of the city. The essence of urbanity is that, with increasing agglomeration, individuals, groups and communities can benefit from a greater range of opportunities and facilities than can be generated by their operating in isolation (Dewar; 1991:21).

The prominent feature in the South African landscape is the total lack of spatial cohesion due to the apartheid segregated planning, the urban space sprawls lacking any meaningful enclosure. The buildings are all isolated events standing in space: they do not contribute to defining streets or public spaces. There is an enormous amount of wasted space in terms of road reserves and that space simply bleeds outwards: it is difficult to know where the street begins or ends. The result is environments that are overtly hostile to pedestrians (Dewar; 1991:4). The lack of a hierarchical system of public spaces in the design of townships negates the local identity of a pedestrian culture; the urban settlement structure is dictated by the vehicular movement and not public spaces as the main organising element. It has been advocated by planners (Dewar; 1991) that the principle structuring elements of urban settlements should be public institutions and facilities, the public spaces then become the main mechanisms for the gathering and ordering of these facilities. Public spaces play a number of central roles in the creation of quality urban environments. Firstly, they are the places where people engage in collective life, and which accommodate the informal activities and events which are the essence of urban life. The social role of public spaces is particularly important in poorer communities where fewer household activities can be conducted satisfactorily in (necessarily limited or inadequate) private space. In a real sense therefore, public spaces operate as extensions to the individual dwelling unit.

A meaningful urban space should cater for cultural needs, as argued by Thomas (2002), urban spaces can prompt socially acceptable or unacceptable behavioural responses. Therefore, designing urban spaces should become the physical manifestation of cultural expectations, of which some are more abstract in character than others. Urban space should also play a role of liberating society; this is through the utilisation of environments as stage sets and props to assist people both in enacting their social roles and escaping from them in their everyday life (Goffman; 1959). Space is not just one element of an urban but is a way of thinking about the whole. All public space should be viewed as social space: that is, as space which accommodates both individual and collective human activities. Accordingly, it should be consciously made in such a way that it enhances and gives dignity to those activities. Effectively, therefore, public space should be seen as the social outdoor 'rooms' of urban settlements. These public spaces constitute the most important form of social infrastructure in urban settlements.

In the medieval cities of the Western world public squares are more than just so many metres of open space. In Italy, for example, the piazza is a truly social space and represents a way of life, a concept of living. 'Place' is made up of concrete things having material substance, shape, texture and colour. Together these elements determine environmental character and atmosphere. The distinctive quality of any manmade place is enclosure, and its character and spatial properties are determined by how it is enclosed. It is the clear legibility of geometric characteristics and aesthetic qualities of these boundaries, which allows us to consciously perceive external space as meaningful urban space. The size, shape, treatment and form of the floor of the open space also contribute to the character of the space. Appropriate functions that jointly generate activities twenty four hours a day are essential to its proper existence.

The elements that form the Piazza and Piazzetta, the relationship with Grand Canal, the distinctive landmarks of the Duomo, Palazzo Ducale and Campanile (fig 4.5 & 4.6), its rich and repetitive rhythm of arcades and window openings that form the boundaries all contribute to provide a memorable architectural experience. The floor of the piazza is very simply treated without the introduction of changes in level or material. The activities are varied and changing and continue throughout the day and night.



Fig4.5- Sense of enclosure on urban space (Source: wikipedia.com)



Fig 4.6– Activities define the urban space (Source: www.wikipedia.com)

Il Campo, in Siena (fig 4.7) which is also a large urban space measuring some 150 metres across has an unusual physical form. The piazza is a dishaped arena where the paving pattern of floor reflects the form of the space and emphasizes the site drainage. Public gatherings places function better if people are able to see each other across the crowd. A slight slope helps tremendously and Siena provides a classic of this device. Again the boundaries to this space are scaled appropriately and provide a continuous and consistent, yet varied series of elevations. This is largely achieved by the use of similar materials and construction techniques.

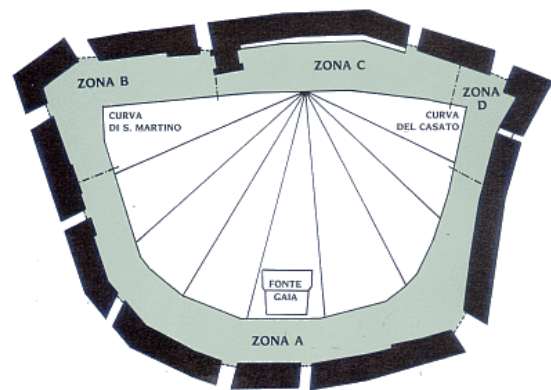


Fig 4.7- Slight slope of square to enhance visibility. & Fig 4.8– dishaped urban space (Source: Wikimedia.com)

Bologna (fig 4.9) is the most wonderful arcaded city. It is one of the earliest university towns and arcades were largely created as the ambulatory system for campus. Today, it is difficult to distinguish where the university ends and the city begins. The cloister shown opposite formed with continuous arched openings gives that rigorous and cohesive pattern to the space. The arcades, although repetitive are rich in architectural detail, they vary sufficiently through town, abut different spaces and routes and accommodate a wide range of urban activities. They provide climatic shelter, protection from vehicular traffic and most importantly give that sense of transitional space between the public and private zones.



Fig4.9- Arcade as transitional space (Source: Wikipedia.com)

Central to place-making is the creation of a number of special public places. Public spaces and public institutions represent the focal points of community life. Hared public spaces (i.e. squares and public markets) and streetscapes in particular, so frequently provide the focal points for social interaction, community events and street trading. They become the places which accommodate symbolic statements, reflecting shared community values and events (e.g. Accommodating statues or other objects of remembrance), and become the ‘memorable’ places which shape lasting perceptions of a settlement.

4.5 INCLUSIVE STRUCTURES - AN URBANISTIC ARCHITECTURE

The congress for the new urbanism (CNU) formed in the United States by six architects, was part of a movement that aimed to propose a shift in the way communities are built. They, the movement seek to restore urban centres, reconfigure the sprawling suburbs, conserve environmental assets, and preserve the built legacy through urban design and planning (Poticha; 2000: preface). New urbanism has been envisioned as a way for citizens to reclaim their communities. New urbanist architecture is architecture of place; it does not rely upon the idle repetition of historical styles instead it strives to evolve by exercising critical design choices across time. Its language and permanence endeavour to express a diverse set of deep values held by those who live in and around it. It is only a fragment of a larger order. Whatever its size, a new urbanist architecture is a mere increment in the process of completing buildings, streets, blocks, neighbourhoods, districts, corridors and natural regions (Polyzoides;2000:127).

South Africa has seen quite a few interventions that have played a role in redressing the segregated city scape, and the broader context. Urban renewal projects have been the main driving tool towards addressing spaces of exclusion that previously dominated South African cities. Johannesburg based firm, *Urban solutions* has been involved with the challenge of integrating marginalised communities, and



Fig 4.10– Urban renewal project for integrating marginalised communities in the urban space (Source: www.urbansolutions.co.za)

more specifically street traders and taxi operators, into the public realm, attempting to provide them with representative architecture that enables their endeavours and brings a sense of ownership, identity, and possibly even pride (Hansen; 2008:44). Urbanistic architecture has seen the formation of new typologies, such as the Metro Mall Transport facility whereby its brief asked for a transport interchange to hold 25 buses, 2000 mini-bus taxi and trading space for 800 informal traders. This would welcome and assist about 200 000 commuters who pass through the facility daily. Formal retailers, community amenities, crèches, recreation halls and transport association offices were also required (Hansen; 2008:46).

The building is also designed primarily around the urban principles (fig 4.11) that informed the original development framework. These were to make connections with the surrounding city fabric; to complete the street grid to enable continuity of movement; to promote mixed-use within the buildings; to observe street boundaries in construction of perimeter buildings with active street edges; and to acknowledge the street as public space, thereby creating the active edges so sorely missing in existing buildings (Hansen; 2008:47) transport interchange and market (fig 4.12) become one, linking the traders and transport operators. ‘The taxi, as reflected in the numbers had replaced the train and bus as the most important transporter, and needed to be housed in buildings reflecting its important standing within the community. The metro mall design indicates a significant shift in approach in dealing with public buildings that ‘provide’ for a sector of our society marginalised in the past.



Fig4.11– Urban design knitting together the urban context (Source: www.urbansolutions.co.za)



Fig 4.12– previously marginalised traders now accommodated for in permanent structures (Source: www.urbansolutions.co.za)

In Khayelitsha a township in Cape Town the design for its service centre, an initiative to respond to the formerly neglected environments, the architects strategically located the building in a larger spatial framework to foster a civic responsibility that is underpinned by both the urban design and architecture.



*Fig4.13 - Facade responding to street edge
(Source: Deckler et al; 2006: 74)*

Instead of creating internalised administrative environments the buildings optimise public opportunities and edge conditions. The street – facing facades are animated by double volume porticoes, podia and seating, introducing public forecourts that encourage congregation. Contextual reconciliation is achieved through an uncomplicated volumetric resolution and a tactile sensibility resonating with the amorphous township fabric. The architectural articulation and spatial generosity exude civic prominence but, without being intimidating. The service centre demonstrates how sensitive design gestures can transform a utilitarian brief to the benefit of an entire community. (Iain Low cited in Joubert; 2009:264)

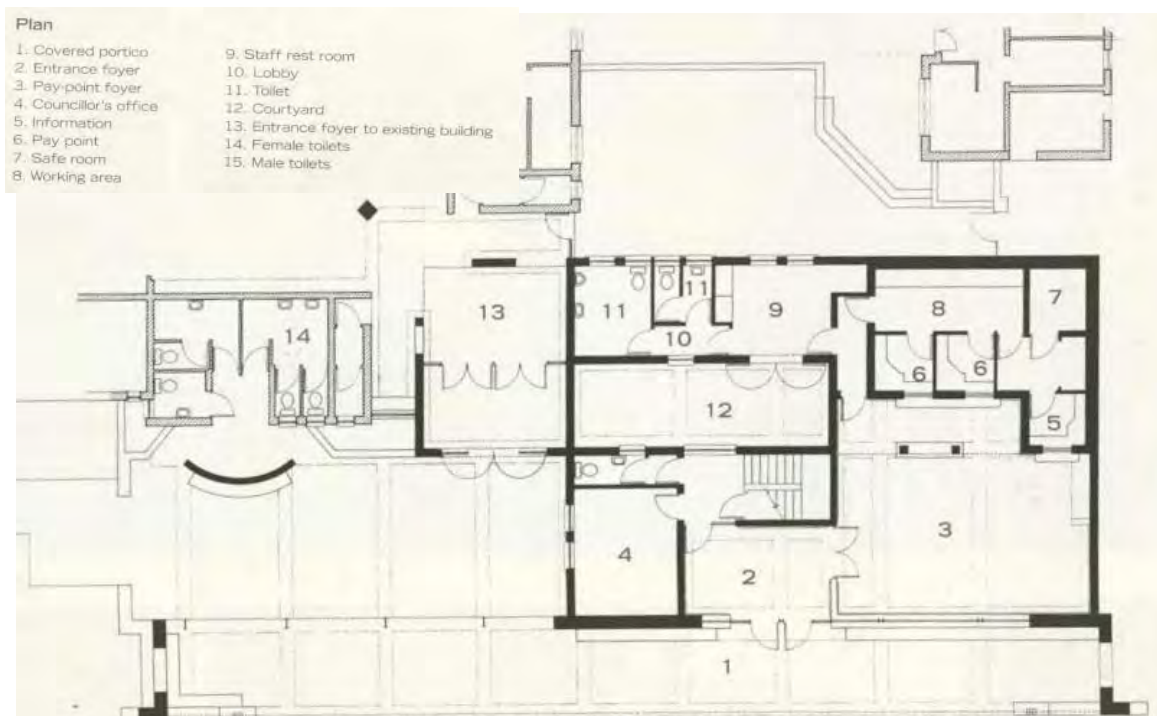


Fig4.14 – Plan of service centre opening out to street edge (Source: Deckler et al; 2006: 75)

Usasazo secondary school in Khayelitsha (fig 4.15) is situated amongst the high density informal dwellings next to four other schools. These, like most South African schools, obey building lines, are set back from the street and hide behind security fencing. Usasazo is located on the boundary creating a continuous street and commercial edge. The commercial street front is indicative of a new approach in education policy which encourages entrepreneurial learning; hence the incorporation of classes of other skills. The sitting of the building (fig 4.16) on the boundary also allows adequate space for future soccer field.



Fig 4.15 – Street commercial edge (Source: www. wikipedia.com)



Fig4.16– Usasazo in its greater context (Source: www.wikipedia.com)

A genuine architectural culture can only exist within the accumulated experience afforded by historical continuity. For architecture and urbanism to prosper as disciplines, they need the wisdom and guidance of enduring values, traditions, methods, and ideas (Unknown; 2000:128). The continuity of place-making is the critical dimension of new urbanist architecture. Continuity emerges through the thoughtful consideration of various scales of design, and then through designs itself as an integrative and transforming act. The pursuit of an incremental, seamless engagement with the physical environment supplants style as the pre-eminent subject of design. Style is replaced by a search for form suited to the harmonious evolution of the city and nature. (Unknown; 2000: 128)

To interpret the context, authentic design choices emerge by relating to the urban and natural order of existing places. To generate a true architecture of place, it is necessary to draw the boundaries of the context of each project, identify the elements of past designs, reveal their physical characteristics, and assess their value and relevance. Designing by reference to precedents the architecture of the new urbanism is more referential than abstract. It depends on historical precedent as guide and inspiration. In each setting for new projects, designers must discover and respect the patterns of buildings, open space, landscape, infrastructure, and transportation networks. These typological precedents are the historical patterns of society have employed to resolve formal challenges in recurring programs and sites.

4.6 CONCLUSION

Style is not an ‘a priori’ dimension of design. Style should emerge from two choices made within a cultural and environmental framework for each region. First, there is the question of adoptions, transforming, or denying and existing order of building, open space, landscape, infrastructure, and transportation networks. Second, a decision must be made on the use of an appropriate language of design and buildings, the available options are traditional, abstract or hybrid. An eclectic architecture; it demands architectural expression in response to different settings. It is based on an evolving common understanding of the structure of places, subject and reinterpretation by each architect. It is incremental rather than revolutionary, respectful rather than avant-garde. By directing designers and builders to the value of what exists, and by encouraging them to operate sensitively and thoughtfully, a new urbanist architecture itself can

ultimately become generative and timeless; as precedent, as invitation to interpretation, and as a point of departure for subsequent design that is both an end and a beginning (Unknown; 2000:132).

CHAPTER 5: KEY PRECEDENT STUDY

5.0 AN APPROPRIATE ARCHITECTURAL EXPRESSION FOR CIVIC ARCHITECTURE IN DEMOCRATIC SOUTH AFRICA

A Civic centre reflects a community's identity and pride. The design builds civic identity and establishes a recognisable focus for the town. Civic buildings are more than just self-referential objects. They have to connect – physically and culturally – to the world around them. The following precedent studies are to explore such qualities in local and international civic architecture. Within the analysis issues to be covered include the projects' background and brief, its contextual response, spatial organisation and the architectural expression.

5.1 CONSTITUTIONAL COURT – Johannesburg South Africa: Omm design workshop & Urban Solutions Architects + Urban designers



Fig 5.1 – Constitutional court in Braamfontein (Source: Ora Joubert; 2009: 118)

5.1.1 Project background: The client for the project was the Johannesburg Development Agency and the architectural team being Omm design workshop / Urban Solutions Architects + Urban designers. Upon its completion in the year 2004 the building was considered as one of the pre-eminent architectural symbols of a democratic South Africa. The brief which was formulated by the combination of local and international architects asked for a building that was to satisfy the functional, symbolic and environmental requirements of a civic building that will represent the human rights of South Africans. The main requirement however was an approach to design that was to exemplify an approach to the question of: what might constitute an appropriate public architecture for the new South African democracy? Parallel to

answering the required question the building had to use regionally appropriate architectural forms that sought to be recognised as a distinctively South African. The building had to acknowledge local human needs, social values and relate well to the natural, cultural and historical South African landscape.

5.1.2 Contextual response

“ it aims to undo the old spatial order and heal parts of the city so as to render them accessible, safe, amendable and dignified environments designed for the benefit of all people” (Deckler et al. 2006:19).

Located between the vibrant city centre of Johannesburg and the high-density urban residential of Hillbrow, the project is conceived as a public precinct establishing direct connections with its surrounding context (Deckler et al. 2006:19). Situated at the Constitutional Hill in Braamfontein (fig 5.2), the site was chosen for its intense symbolism. Previously a military fort that was converted to a prison, the space has a history of confinement and suffering which was during the apartheid years and the Constitutional court is aimed to bring freedom to the site.

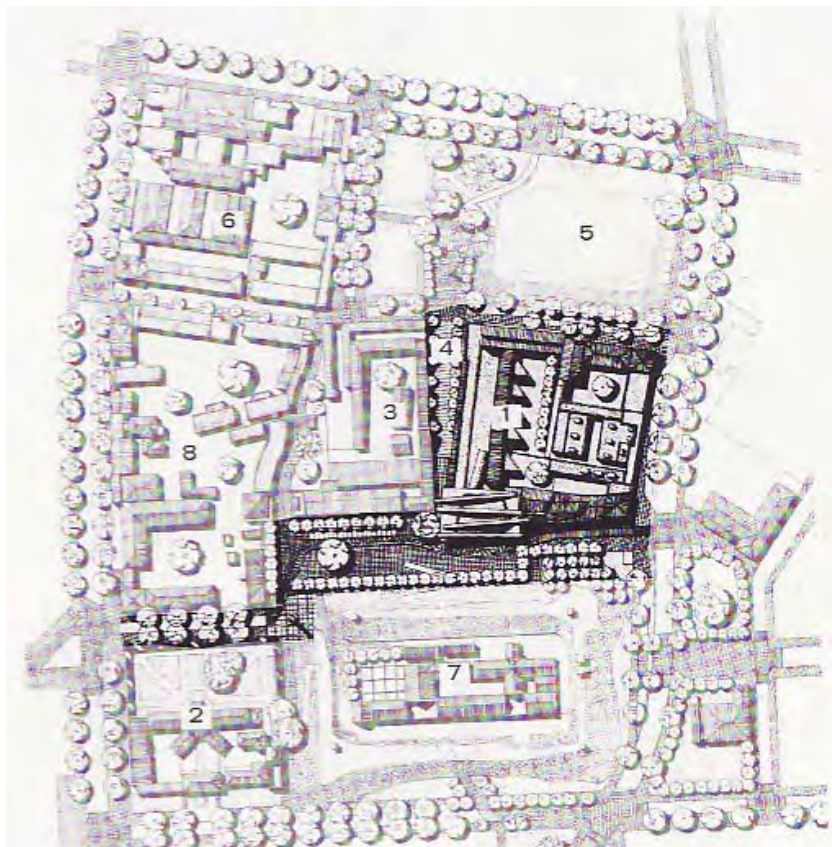


Fig 5.2– Site Plan and surrounding context (Source: Deckler et al; 2006:19)

Due to the site's run down nature which Charles Correa, one of the judges, (cited in Vivienne & Japha; 1998:26) considered it a very 'brave choice' 'the project has the opportunity to revitalise its immediate neighbourhood. The set problem was therefore to provide the urban and landscape design framework that would transform a group of virtually derelict buildings set in tarmac and fields of weeds into an appropriate setting for the new constitutional court and into an amenity for the citizens of Johannesburg. As an urban acupuncture, the building was to be designed to respond to the enduring legacies of apartheid which is the fragmented, dysfunctional and segregated city structure. The guiding architectural objectives as stated by Andrew Makin, one of the project architect, (cited in Anonymous; 1998: 31) were to make a public building of empowering architectural form, representative of an "open and democratic society, expressing the dignity, the freedom and equality which is being built in South Africa". The language was thus a form which is to contradict the singular and inaccessible public buildings of the previous autocratic and dictatorial social structure. The building's language is derived from the physical cultural and historic terrain.

The main urban design objective for the project was to promote accessibility to the precinct and the building and this was successfully achieved through the architect's physical conscious relation to the surrounding context. The urban design intervention moved towards a more integrated planning which ensured a holistic view to the revitalisation of "Constitutional Hill" and its surrounds. Connections to its surrounding are through an east-west pedestrian axis (fig 5.3) which links Braamfontein to neighbouring Hillbrow and bisects the site culminating in a prominent forecourt. A secondary axis, connecting north to south is through terraced stairs (fig 5.4) which run adjacent to the building famously known as the African steps. The strong use of pedestrian axis is to combine the institutional function with a transparent public interface achieving an urban clarity.



Fig5.3 – East west axis connecting to Hillbrow (Source: Deckler et al; 2006:18)



Fig5.4 – African steps on North – south axis (Source: Deckler et al; 2006: 18)

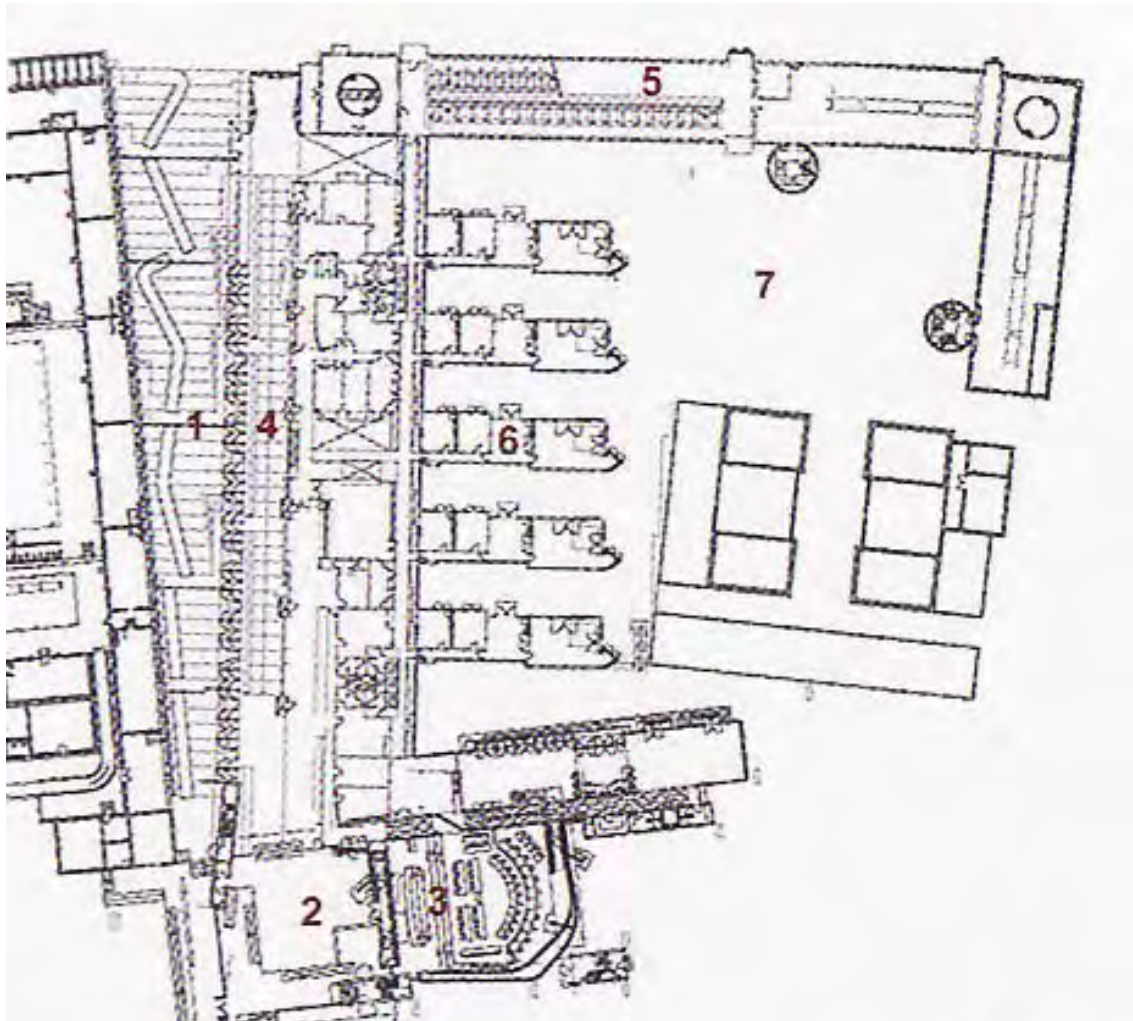


Fig 5.5 – Ground Floor plan of Constitutional Court (Source: Deckler et al; 2006:19)

5.1.3 Spatial organization

Spatial hierarchy is expressed through the change in floor levels rather than having physical barriers which demarcates the change in space use. This is inspired by the modern treatment of free flowing spaces which also promotes the physical and visual indoor and outdoor interaction of space. From the outdoor forecourt, a public space to allow for the accommodation of spontaneous random activities, one has to step up onto the transitional space just immediate of the huge folding doors. Upon entry into the building there are steps which lead you down into the foyer; this was to create the effect of descending into an outdoor space rather the traditional ascending progression into civic buildings of great stature. The outdoor imagery of the foyer is further enhanced by the metaphoric slanted columns and the wire chandeliers in the shape of leaves which symbolise indigenous trees which cast shade from the natural light which

filter from the roof skylight. From the foyer which has become an ‘outdoor room’ one further descends to the chamber or the art gallery.

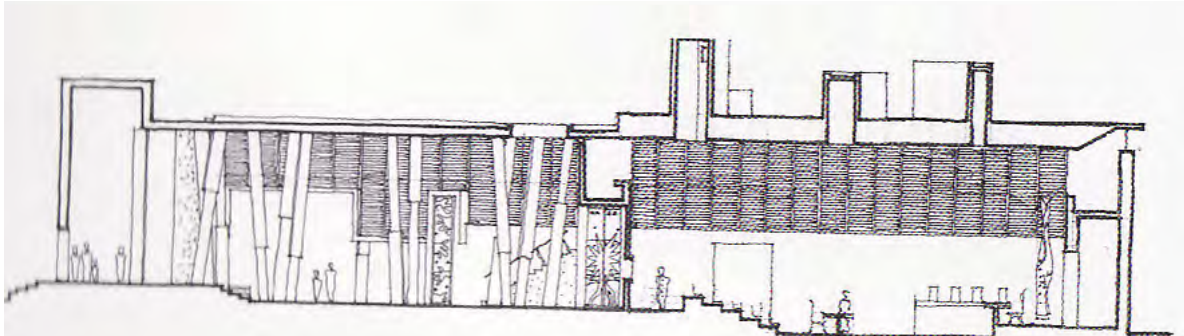


Fig5.6 – Section through foyer and chamber showing the change in floor levels. (Source: Ora Joubert; 2009:117)



Fig5.7 – Slanted columns of foyer symbolising indigenous trees (Source: Ora Joubert; 2009:118)

The art gallery is treated as a transitional space on a slight gradient which connects the library and the judge’s quarter. The change in floor level in this instance is used for privacy, and for as it separates the public circulation which runs parallel to the secluded chambers of the judges. Visually the free flowing spaces allows for the building to traverse a range of time scales from memory to the post modern as it connects with the surrounding historic buildings.

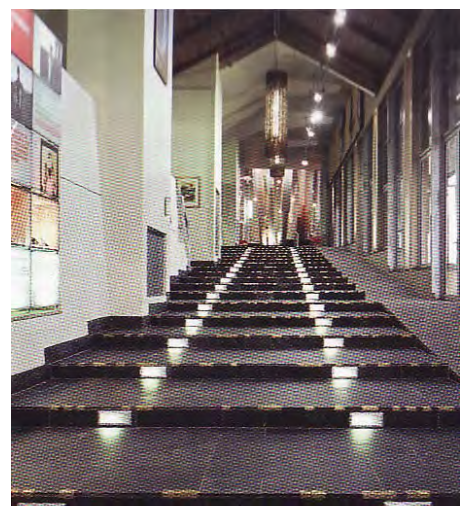


Fig 5.8 – Art gallery as a transitional space (Source: Ora Joubert; 2009:118)

5.1.4 Architectural expression

African metaphors such as the traditional African court of meeting under a tree were the main driving concepts and this is exemplified in the foyer space as earlier illustrated in (fig 5.7). The African theme is further enhanced by the tectonic elements which resonate with local African craft and sculpture traditions. The sunscreens along the north-south edge of the building's facade (fig 5.9) were informed by the serial patterning of African beadwork. The incorporation of local arts and crafts (fig 5.10) promotes an inclusive, humane environment which also allows the building to have prodigious and multiple interpretations. This according to the architects gives a structure and expression which reflects the freedom and quality being built in South Africa (Anonymous; 1998:32). The disaggregated massing of the building was well adjusted to the particularities of the site as a symbol of the multiplicity of the South African society. This is also portrayed through the animated facade, colourful interiors and the legibility of the structure (fig 5.11).



Fig 5.9- illustrates the sunscreen on the north-south facade (Source: Ora Joubert; 2009:118)



Fig 5.10- illustrates the local arts and craft (Source: Ora Joubert; 2009: 119)

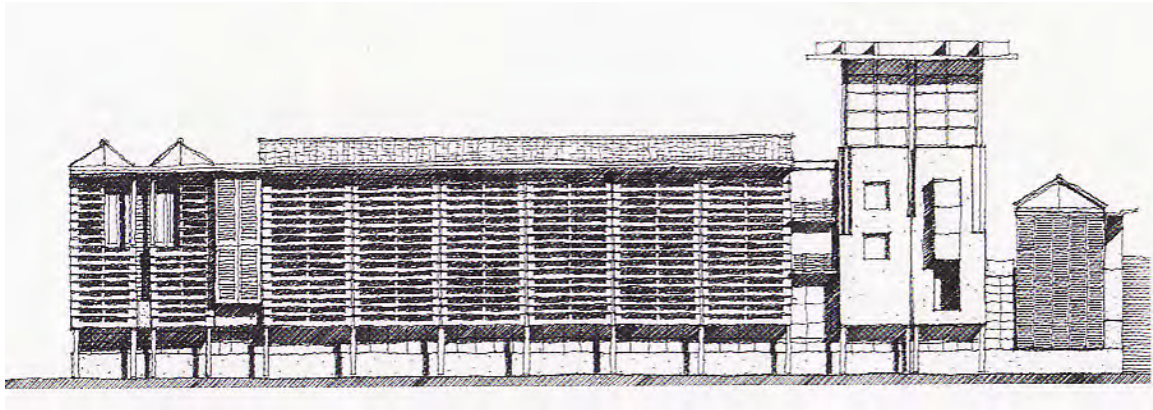


Fig5.11 – Animated facade allows for multiple reading (Source; 2009: Ora Joubert; 2009:117)

The entire construction has been assembled from a very limited basic palette of materials. Concrete works is totally exposed and untreated. The carcass is completed with plastered brickwork and glazed curtain walling. The finishes are honed slate stone, galvanised steel and timber. Range of materials includes both rough work with lenient tolerances and a sleek, sophisticated and refined preciseness. An additional patina of in situ artwork was added by a variety of artists and craftsmen (Deckler et al; 2006: 21).

There is a clear expression of the materials; a visibility of the structural framework, distinct and independent treatment of individual structural elements and transparency of detail. According to Noero such legible treatment in disadvantaged communities can have additional benefit of carrying a pedagogical value, the potential of architecture to provide a learning experiencing for the user or passerby (Noero cited in Marschall; 2000: 136). The building has been however heavily criticised for its lack of coherence but the architects defend it by stating that its deliberate eschewal of a classical dogmatism or modernist univalence is in favour of the post modern fragmentary, pluralist and incomplete. The design narrative is diverse and inclusive for a hybrid society and allegory for unity in diversity. (Noble cited in Ora Joubert; 2009:116)

5.2 NORTHERN CAPE PROVINCIAL GOVERNMENT COMPLEX – Northern Cape South Africa: Luis da Silva Architects



Fig5.12– illustrates the symbolic expression of the built form (Source: Deckler et al; 2006:10)

5.2.1 Project background

Taking advantage of the advent of democratisation in the country the Northern Cape Provincial Government Complex by Luis da Silva Architects is an example of an architectural intervention that reflects the notion of a South African architectural idiom. The Northern Cape Province, with Kimberley as its capital city, was born out of the first democratic elections in 1994. The building beyond its immediate administrative functions is intended to become a symbol of remembrance, healing and as a landscape that connects the city's people to their divided past and shared future (Deckler et al; 2006:11).

5.2.2 Contextual response

The site lies between the original black township of Gelentswe and the established white suburbs of Kimberley. The architect's intention was to connect the two previously separate communities and to use the Legislature as a metaphoric umbilical cord to link diverse interests, cultural experiences and economic statuses. An axis, in the form of a pedestrian route, connects the two communities and a



Fig5.13 – illustrates visual link from the township (Source: Ora Joubert; 2009:244)

central circular plaza and amphitheatre establishes a meeting place.



Fig 5.14 – illustrates the central plaza as meeting place (Source: Deckler et al.; 2006:11)

5.2.3 Spatial organization

The spatial arrangement of the complex was informed by an anthropomorphic composition (fig 5.15). The legislature chamber, the library and ancillary areas, foyer and function halls, make up the body parts of the ensemble and the legislature is the head which flanked by two lungs on either side of an axis leading to the administrative wing. The diverse ensemble is unified by a simple gesture of enclosure, its arms treated as tiered seating, scaled to accommodate large and small crowds equally comfortably (Jooste; 2007: 68). The people's square is designed to be a large, open-air forum for speeches and functions, and creates an impressive approach route for the formal processions that the Legislature demands, all setting the mood for the grandness of the

main building (Deckler; 2006:13). Service spaces, such as executive parking, archives and kitchen facilities are located in a basement along a circular underground road. The basement also provides access to different buildings during inclement weather.

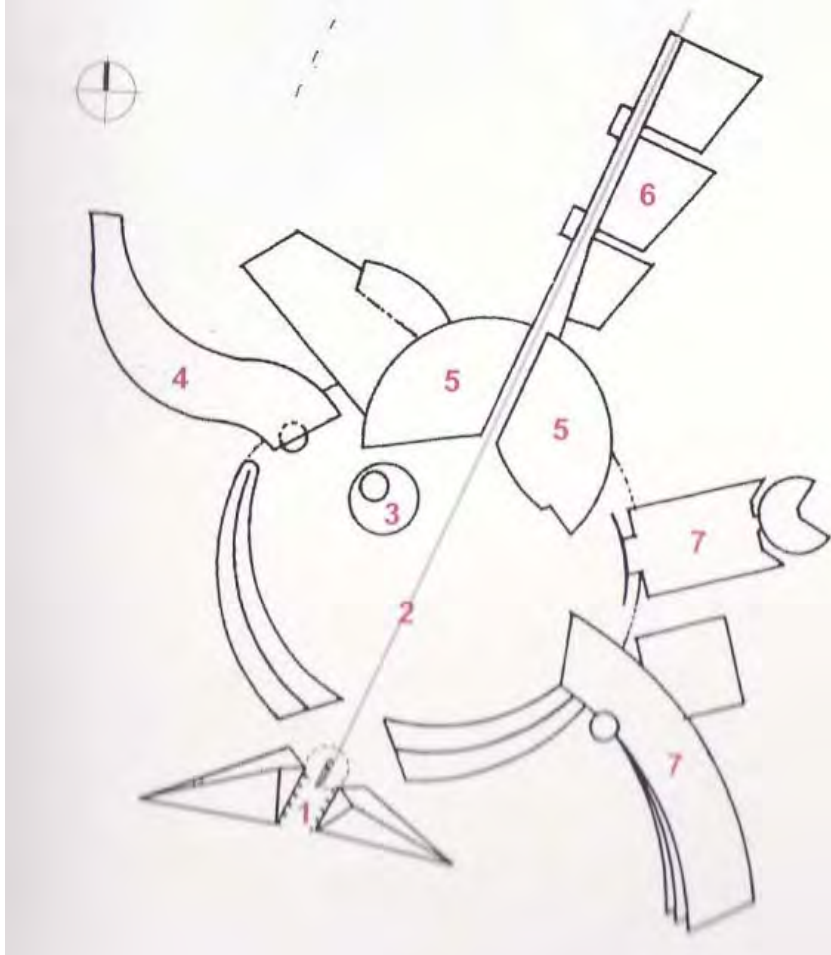


Fig5.15– illustrates the anthropomorphic composition of the layout (Source: Ora Joubert; 2009:243)

The complex is however dominated by a conical tower which acts as a beacon in the flat semi-urban wasteland. The landmark tower draws the eye closer to allow one to look across the landscape to the nearby city of Kimberley. It also has a ‘sundial’ function which marks the passage of time and pays homage to the sun as a defining force in local life. It is embellished by local artists to emphasise its cultural importance, and is a source of pride in the community (Deckler et al.; 2006:12).

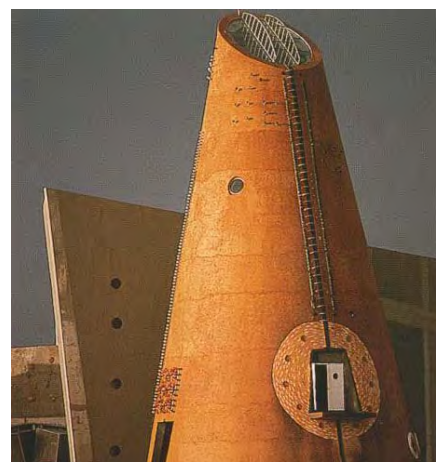


Fig5.16– illustrates landmark tower embellished with art (Source: Ora Joubert; 2006:243)

5.2.4 Architectural expression

In the design of the government complex the architect decided on a diverse architectural expression. This was achieved through the exploration of different organic shapes, forms and imagery. Such conceptualisation breaks with the bureaucratic formal planning which is typical of government buildings. Da Silva's use of organic forms was not derived from past buildings but the many cultures, industries and influences of Kimberley. To achieve a human scale in the development each of the functions within the complex is designed independently as two storey buildings. This also lends each massing its own architectural identity which is enhanced by the use of different materials, finishes and means of detailing. The legislature, office of the premier, executive council and elected members' quarters are each located in different structures. The office accommodation makes up the bulk of the floor area and is treated as manufacturing space.



Fig 5.17– illustrates the diverse architectural expression through the use of organic forms

(Source: Deckler et. al; 2006:15 & Ora Joubert; 2009:244)

The use of art has been extensive in the design of the complex. As advocated by the McInerney (2009) such finishes adds another dimension of meaning to architecture.

The use of murals and mosaics recall memories, record histories and evoke dreams and fantasies – aesthetic transcriptions successfully combining ornamental emphasis and pop ironies. (McInerney cited in Ora Joubert; 2009:242)

The integration of art and architecture creates a rich tapestry of layered meaning and contradictory interpretation. This was vital for this building typology especially being a government complex in a democratic society, to avoid a single interpretation or vision in the architectural design to the exclusion of the many other valid histories. Artwork

created by the people of the province was also integrated as a device to relate the buildings to the context and its people, and to introduce the possibility of multiple readings of the buildings. Local artists took on each building as a project, making it representative of an aspect of the diverse cultures of the province as well as lending an identity to the building for the user and visitor.



*Fig5.18 – illustrates sculptural and applied artworks evoking myriad interpretations
(Source: Deckler et. al; 2006:15 & Ora Joubert; 2009:244)*

Other elements enforcing the expression of a Northern Cape identity is through the use of landscaping design. The landscape architect's intention was to relate the landscape to the socio-cultural history of the Northern Cape. Only plants that occur naturally in the Northern cape were used in the project, this is to echo the surrounding natural plains, groundcover plants are grasses, with flowering plants increasing in density closer to the buildings to add richness and interest (Deckler;2006:11). The natural sensation is further enhanced by the applied finishes the built massing. The exterior finishing

materials and colour template echo the natural environment, the soil, Kimberlite igneous rock and sandstone.



Fig 5.19– illustrates the use of indigenous vegetation to express local identity (Source: Deckler et al; 2006: 14)

While the buildings appear complex and distinctive, each one is designed to be simple to build, enabling small local contracting business to participate in the construction. In this way, the design answers the need for improving the local skill base and contracting to the local economy (Deckler; 2006:12).

5.3 FEDERATION SQUARE – Melbourne Australia: Lab Architecture Studio & Bates Smart



Fig5.20 – Federation square in Melbourne Australia (Source: Phaidon Atlas; 439)

5.3.1 Project background

At the time of colonisation in the mid 1830s, the political and social organisation of the Kulin peoples of central Victoria was a federal one and the Federation Square site and adjacent places on the Yarra were regarded as an extra-territorial space set aside for inter-tribal business, a pre-Federation ‘Canberra’. Federal systems of government are not hierarchical but global, regional and local. Because decision-making processes weave through one another, all individuals involved in negotiation, whatever their relative status, retain their difference and independence. In preparing for the 2001 Federation Anniversary celebrations, the Victorian Government held an international design competition in 1997 to establish Federation Square a civic, cultural and commercial spaces” in Melbourne to be symbolic of the true spirit of federation - independent identities combining to form a larger whole. ([www.fedsquare .com](http://www.fedsquare.com))

5.3.2 Contextual response

One of the highlight features of Federation square is that it is built on a deck that spans over railway tracks which were not only an unsightly scar on the face of central Melbourne, but they were cutting it off from the Yarra River. The construction of the deck beneath the Square is understood to be the largest expanse of railway decking ever

built in Australia. The deck is supported by over 3,000 tonnes of steel beams, 1.4 kilometres of concrete 'crash walls' and over 4,000 vibration-absorbing spring coils and rubber padding. The deck is designed to support some of the most sensitive uses imaginable - galleries, cinemas, and radio and television studios - and it needed to isolate them from vibration and noise.



Fig5.21– Site plan showing rail tracks (Source: Phaidon; ;??)



Fig5.22 – Cross section of Federation on deck spanning over rail tracks (Source: Phaidon;?? :??)

5.3.3 Spatial organization

The centrally large high volume atrium acts as a twenty four hour public thoroughfare and covered meeting space. It is enclosed in glass and paved in sandstone from Kimberley in Western Australia. The lower half of the atrium is designed as an informal amphitheatre (fig 5.22). The other secondary spaces are more open in planning, with views across the Yarra or skyline. They are intended to provide a spatial reference to the orientation of the building, and an opportunity for relaxation while showcasing the main gallery exhibits.



Fig 5.23 – illustrates public space defined by building massing (Source: fedsquare.com)



Fig 5.24 – illustrates auditorium that feeds from atrium (Source: fedsquare.com)

The square is the civic and spatial component for Federation Square, establishing connections with the diverse context of the city and the surrounding urban and riverside landscape. The design allows for a vast array of uses, ranging from sports fans gathering to watch major events; protest groups gathering for demonstrations or public religious services. It basically caters for the largest scale public gathering of up to 15,000 people to intimate areas for relaxation and thoroughfare. The square joins seamlessly to the surrounding streetscape at Swanston Street, and then rises up one level towards the east, providing entry at an upper level to several of the buildings of Federation Square.

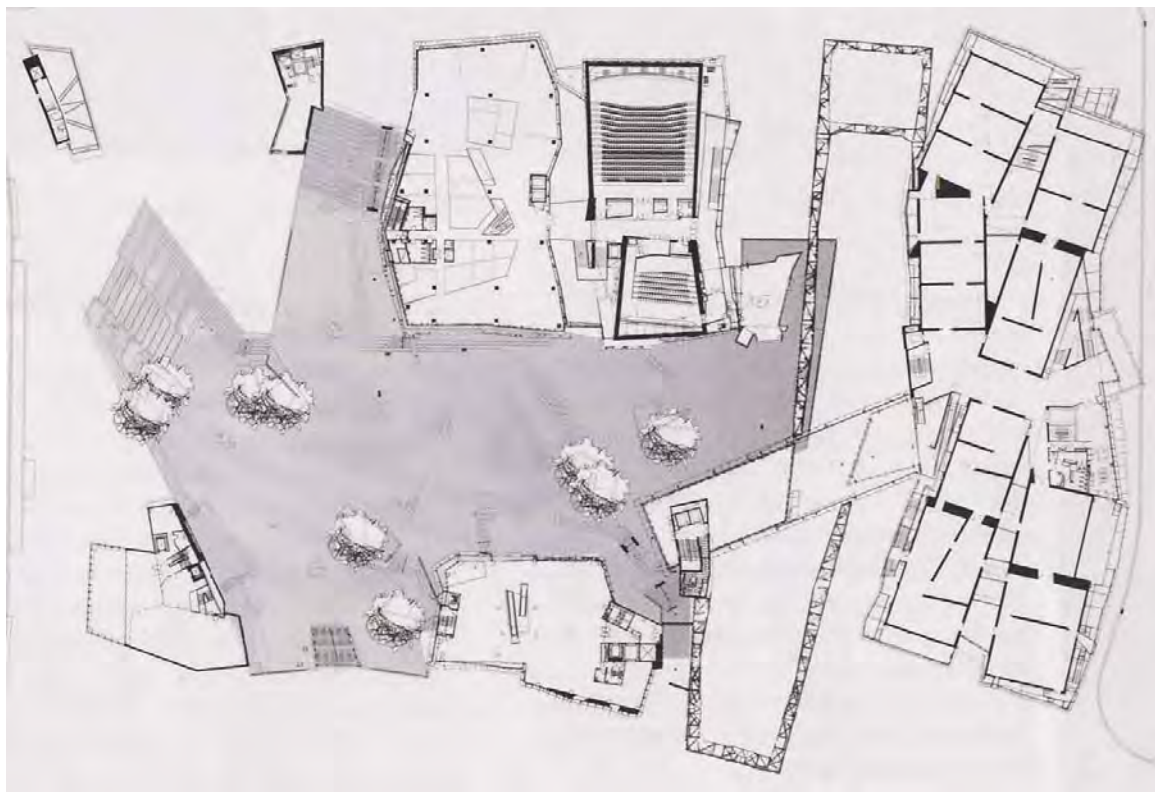


Fig 5.25– illustrates the spatial layout of the floor plan (Source: www.fedsquare.com)



Fig 5.26– illustrates multi functionality of the outdoor spaces (Source: www.fedsquare.com)

5.3.4 Architectural expression

Lab Architecture Studio and Melbourne architecture firm Bates Smart was awarded the design contract which was not only to represent the diverse identities of Melbourne but also to accommodate a diverse range of amenities such as the National Gallery of Australian Art, the Australian Centre for the Moving Image, television studios, cafes, restaurants and an amphitheatre. Completed in October 2002, the proposed theme for Federation square by the architects was “difference and coherence”, which reflects manifesting in union the distinct elements and activities while maintaining a visual and formal coherence. The Lab/Bates Smart design was regarded as a metaphor for Federation – the bringing together of cultures to create something unique. As a result the architectural expression was a visual and formal coherence with a complex and contorted geometry of sandstone, zinc and glass cladding. The end aesthetic result was an intentionally unresolved appearance (fig 5.27) that was either rigid or pure in form. It was rather an emergent form that allows a response from the diverse activities that take place there. According to the architects, the building façade system, utilising new understandings of surface geometries, allows for the individual buildings of Federation Square to be differentiated from each other, whilst simultaneously maintaining an overall coherence. (<http://www.labarchitecture.com>)



Fig 5.27- unresolved aesthetic of the facade allows for multiple reading (Source: www.fedsquare.com)

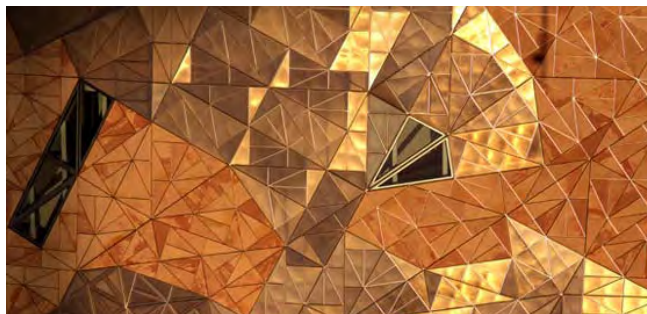


Fig5.28 – Zinc, copper and glass Cladding (Source: www.fedsquare.com)

The use of art and artists to contribute to the creation of Federation Square was also a key input to its design. The Federation Square Arts Program was established in 1998 “to initiate creative collaborations and produce new public artworks and events” specifically for Federation Square. The project involved twenty artists with five permanent commissions. One of the famous artworks of the square is the sandstone paving that has been laid in a patterned design by Paul Carter a writer and artist. This work, known as ‘*nearamnew*’, is sandblasted paving records and voices the site's history through the cultural encounters that have marked it as a site. Consisting of a series of overlapping stone tablets inlaid with layers of typographically scaled and interwoven texts, the artwork reflects different and often conflicting subjects and stories throughout the site's history. This artwork has provided the trademark that Australians feel it critical to the Federation theme.

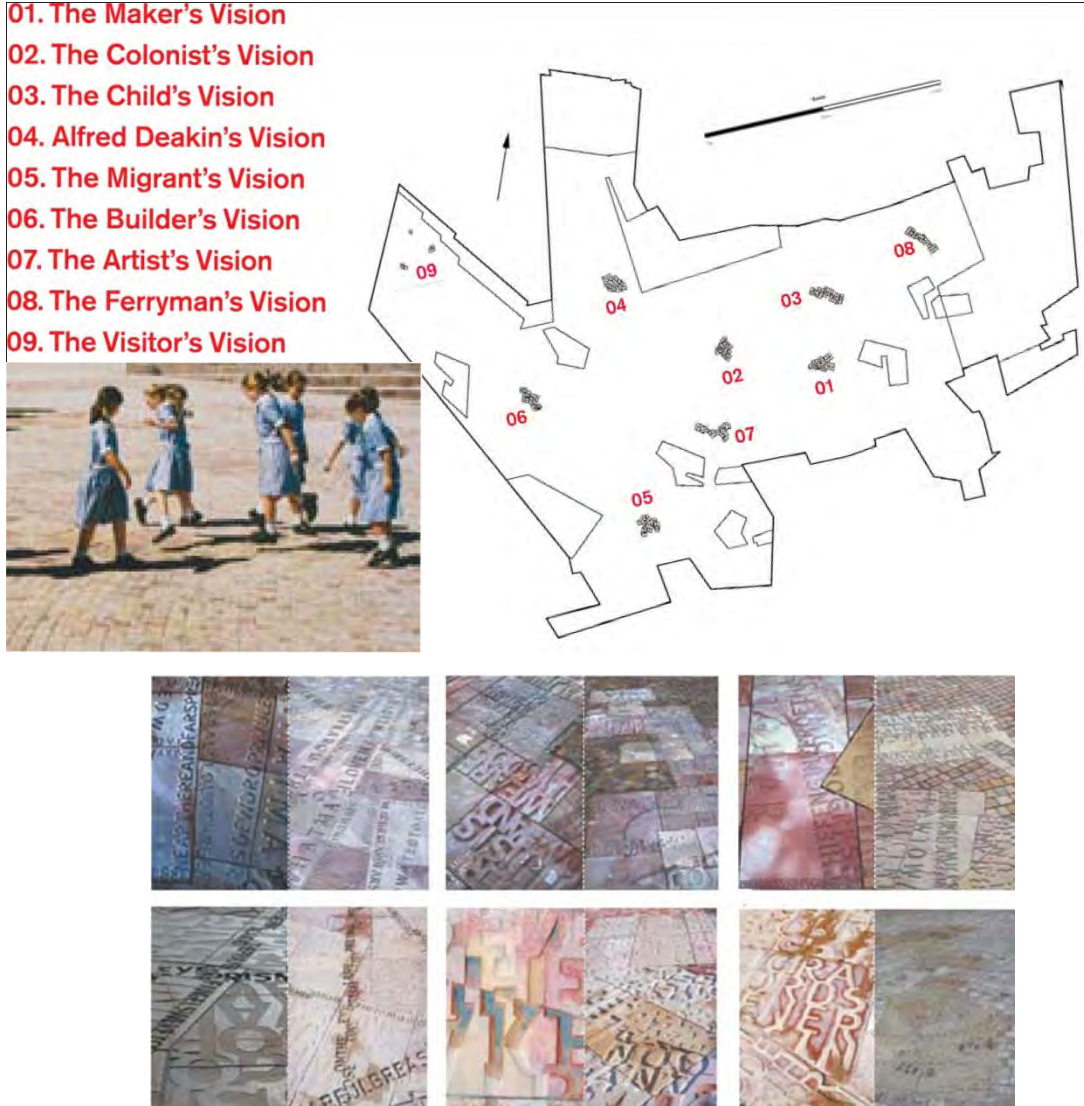


Fig 5.29 – illustrates the texts inscribed on the surface of the sandstone (source: www.fedsquare.com)

CONCLUSION

The contextual approach of the Constitutional Hill, Northern Cape Government complex and Federation Square have been the primary design generators in responding to their respective urban context. The civic buildings all command a spatial order by fostering connections with their surrounding context which thus renders them easily accessible to the public as they don't appear as self-referential isolated objects. The architectural forms expressed by the buildings are not restrained by its function which thus allows for flexibility in the manipulation of form to address the urban context. In both the instance of the Constitutional Hill and the Northern Cape Government complex the designs challenge the traditional bureaucratic self referential civic buildings of the old apartheid regime by relating to the wider context and play a role in merging the urban fabric. The Constitutional Hill and the Federation Square also play a role in revitalising the urban space whereby undesirable urban spaces has been transformed into meaningful urban precincts. Even though civic buildings are to be highly symbolic in expressing a civic identity, the architectural language of the discussed precedents does not take precedent over the relationship of the building and its site.

The spatial organizations of the discussed projects all express a high degree of openness and free flow of spaces. This has been achieved by the promotion of the indoor outdoor interaction and a spatial hierarchy that is not demarcated by physical barriers but in change in floor levels and transitional spaces. The importance of defined gathering spaces is also highly expressed in all three precedents in the aim of promoting social interaction. Robert Venturi's hybrid rather than pure approach to the architectural expression has been favoured as a response to break away from the idealized forms. African inspired metaphoric design elements have been highly used in the design of the Constitutional Hill and the Northern Cape Government Complex. The architectural tectonics is expressed by clear decisive use of material and handcraft detail inspired by African arts and craft.

The design principles that have thus been discussed in the precedents will serve as design informants for the desired architectural intervention which will be responding to the urban problems of Mpumalanga township and aim to promote social interaction in the community.

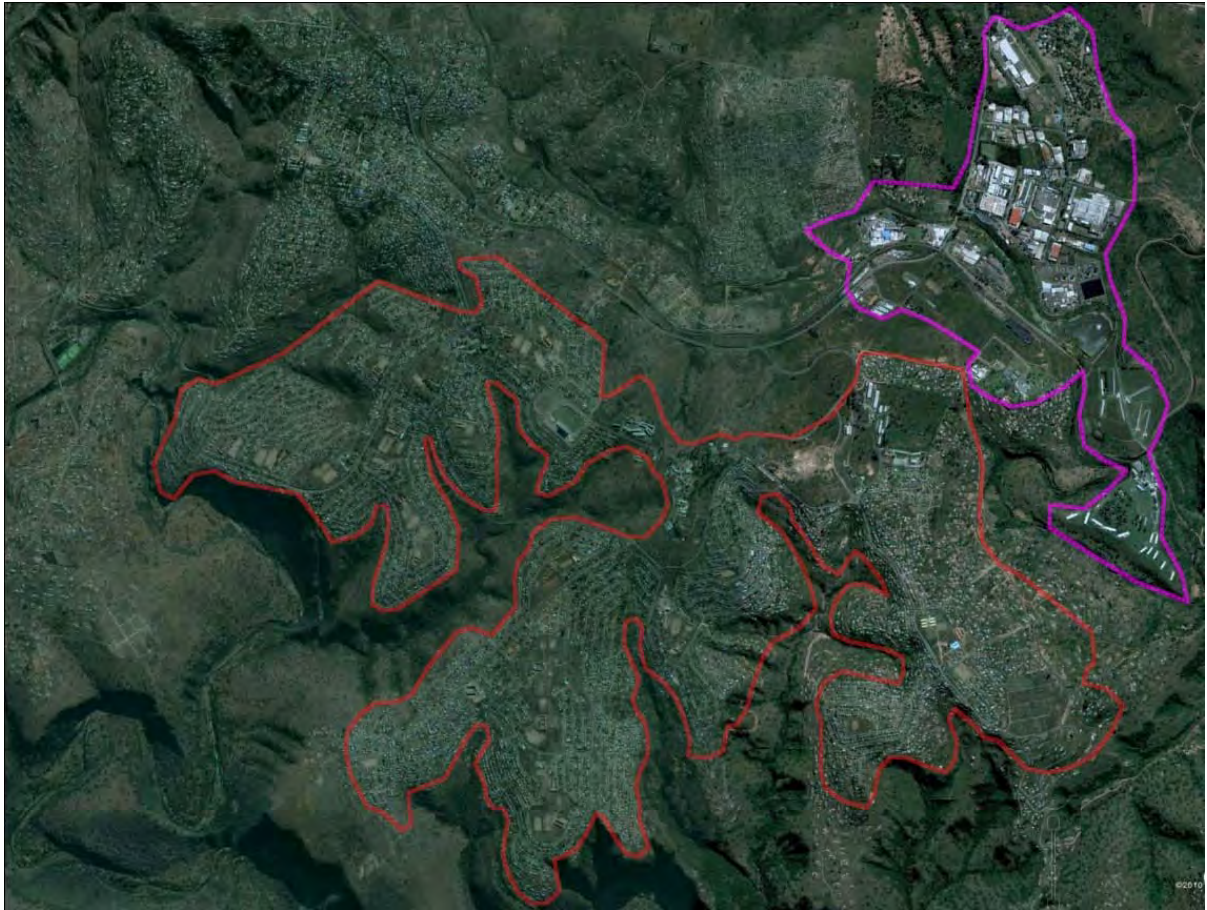
CHAPTER 6: FIELD STUDY

6.0 MPUMALANGA TOWNSHIP IN CONTEXT

The discussion that follows is based on the empirical data carried out in Mpumalanga, the former black township on the outskirts of Durban. The study area was selected firstly because its development was influenced by the apartheid, modernism planning which has been already discussed in chapter four. Mpumalanga Township is also one of the many townships in Kwa-Zulu Natal that was majorly affected by the apartheid injustices and the political shift of the country in multiple ways which has in turn reflected on its built environment. The author's in-depth knowledge of the area, being the connection to birth place, has also motivated the choice primarily due to its need for revitalisation and community meaningful resources. In undertaking the empirical data, to inform the desired architectural intervention this chapter is to serve as knowledge of the workings, resources and limitations of the township and its inhabitants which will serve as essential tools for proposing a meaningful community development programme, both in the social and physical contexts. It is necessary, therefore, to analyse the existing status quo of both the external regional influences and the structure of services and amenities within the township.

6.1 LOCATION AND HISTORICAL BACKGROUND

Mpumalanga Township is a low-income urban community located in the province of KwaZulu-Natal (fig 6.1). It was developed exclusively for black Africans by the apartheid government to serve the Hammarsdale industrial area (fig 6.1). It is situated approximately 30km outside of the Durban city centre. The inception of Mpumalanga Township was through the Protectionist apartheid policies. According to Mosoetsa (2005) the policies facilitated the growth of manufacturing industries such as clothing textiles, which became major employers throughout what is the present-day province of KwaZulu-Natal. Government policies promoting labour-intensive industries through a process of industrial decentralisation led to the development and growth of industrial geographic zones such as Hammarsdale. This apartheid industrial geography gave rise, in turn, to connected "labour reserve" townships such as Mpumalanga. It was established in the late 1960s as typical apartheid labour reserve. It provided labour to subsidised industries in Pietermaritzburg, Pinetown, and Durban, given its proximity to these three centres (Mosoetsa; 2005: 860-861).



*Fig 6.1 illustrates Mpumalanga Township (red) and Hammarsdale industrial park (purple)
(Source:www.ethekwini.gov)*



*Fig 6.2- illustrates the close proximity of Hammarsdale industrial hub to Mpumalanga township
(Source:Author)*

In the research carried by Bonin (2007), she states that the rapid development of the Hammarsdale industrial hub attracted people from as far away as Harrismith and

Ladysmith to the area in the hope of finding employment. As other squatter areas were cleared e.g. Cato Manor, those who were not eligible for formal township housing made their way to Hammarsdale. By late 1966 a police survey estimated that there were 32000 squatters in the area with new shacks being constructed at a rate of ten per week. Housing in the new Mpumalanga Township was only available to those men employed in Hammarsdale. Of 7000 squatters, only 2000 were eligible for township houses. The remainder, once evicted found their way to Fredville where they again constructed shacks only to be removed some years later to Mpumalanga (Bonin; 2007:121).

6.2 THE LEGACIES OF POLITICAL VIOLENCE IN MPUMALANGA

The township of Mpumalanga has a renowned history of political violence. It has been testified by researchers Bonin (2007), Mosoetsa (2005) and the elder community members that Mpumalanga had a strong public ethos in the 1980s; many political and community organisations were formed, and grew in strength. These included local branches of national political organisations, resident associations, trade unions, student organisations, and church organisations. However, towards the end of the end of the decade this vibrant public and political life came under threat from the political unrest and violence that swept across many townships in present-day KwaZulu-Natal (fig 6.3). Mosoetsa (2005) advocates that the township conflict and violence was largely shaped by lack of political tolerance between contesting organisations, and the political violence in the province spread to Mpumalanga Township (Mosoetsa; 2005:860). Many lives were lost and houses destroyed and territorial and political boundaries were formed within Mpumalanga, establishing no go zones. Normal life thus ceased to exist for a number of years. Politically motivated crime and violence increased and along with the loss of life, families lost their homes and school was disrupted (Bonin cited in Mosoetsa; 2005).



Fig 6.3 – illustrates all the townships affected by political violence in Kwa-Zulu Natal
 (Source: Minnaar; 1992:26)

Mosoetsa (2005) further notes that after several years, the violence and killings came to an end and there were signs of peace returning to the township, people started returning to their homes, going back to school and tentatively crossing through former no-go areas (Mosoetsa; 2005:860). Today life in Mpumalanga is no longer the same socially and politically, the old social organisation and community networks that were disrupted have not re-established and the effects of the violence on the built environment is still evident (fig 6.4) which only serves to bring back horrific memories to the community members. Pertaining to the effects of the political violence, Mr Dlamini a community concerned businessman, who had his family shop burnt down during the violence, states:

“ the government hasn’t done anything to compensate those who lost property during the violence, there isn’t even an initiative to pay respect to those who passed away during the violence, something like a remembrance park for the community or a monument that the community will use as a reminder of the turbulent past.”



Fig 6.4 –illustrates the effects of the political violence which still exist today on the built environment in Mpumalanga (Source: Author)

6.3 ECONOMIC REALITIES IN MPUMALANGA TOWNSHIP

South Africa's political transition in 1994 was accompanied by the wake of economic processes set in motion some time earlier; giving rise to jobless growth and mass unemployment at just the time democracy took root. Macro-economic policies adopted in the post – apartheid era, associated with increased trade liberalisation, exacerbated these problems; in 1999 alone 180,000 workers lost their jobs through factory closures, relocations or retrenchments. The most affected sectors have been the public sector, mining and manufacturing. This trend was accompanied by growing in formalisation of work, particularly in the clothing and textile industry in Durban, which began to use subcontracted labour to deliberately downsize formal factory production and evade labour legislation (Fakude ;2002). As a result, the clothing and textile industry was drastically exposed to international competition, which did little to curb unemployment in the sector. Retrenchments, relocations and factory closures became a feature of the industry as factories tried to compete with imports coming mainly from China and Taiwan. The former industrial decentralisation zone of Hammarsdale, and the Mpumalanga Township that served it, were caught up in these trends and were thus very vulnerable to their impact.

The closure of the many factories that provided for labour in the community of Mpumalanga Township led to high unemployment, and poverty that is on the rise in the community today. Most people have turned to small informal businesses for means of making a living; the streets of Mpumalanga have now transformed to places of business. The built environment is characterised by mobile informal trading stalls and more settled shipping containers that can be spotted around commercial nodes, taxi ranks and major road intersections. The community is still however limited in exploring business opportunities towards



Fig 6.5 – Street vendor in kwaMcoyi commercial hub (Source: Author)



Fig 6.6 –public pay phones (Source: Author)

achieving economic security. According to Mr Mgwengwe, the local council. He emphasised that:

“... this is due to the lack of entrepreneurial skills and a platform for more formalised commercial spaces to cater for the entry level businesses. Currently in Mpumalanga there is a very limited availability of rentable spaces for commercial the little that exist are either too expensive for the entry business level sector or they are not properly located, not where the people are.”



Fig 6.7 – illustrates just a few informal businesses housed in shipping containers in Mpumalanga (Source: Author)

6.4 SERVICE AND AMENITIES

Mpumalanga Township is divided into eight suburbs; the town planning proposals designated specific sites within each residential unit for educational, recreational, religious, health and commercial activities, the numbers of each depending on the size of the unit. The intention was to decentralize facilities and sites within each unit for churches, crèches, sports stadiums, clinics, schools and shopping centres. To date, only a small proportion of these sites have been developed as intended and community facilities are desperately lacking in Mpumalanga.

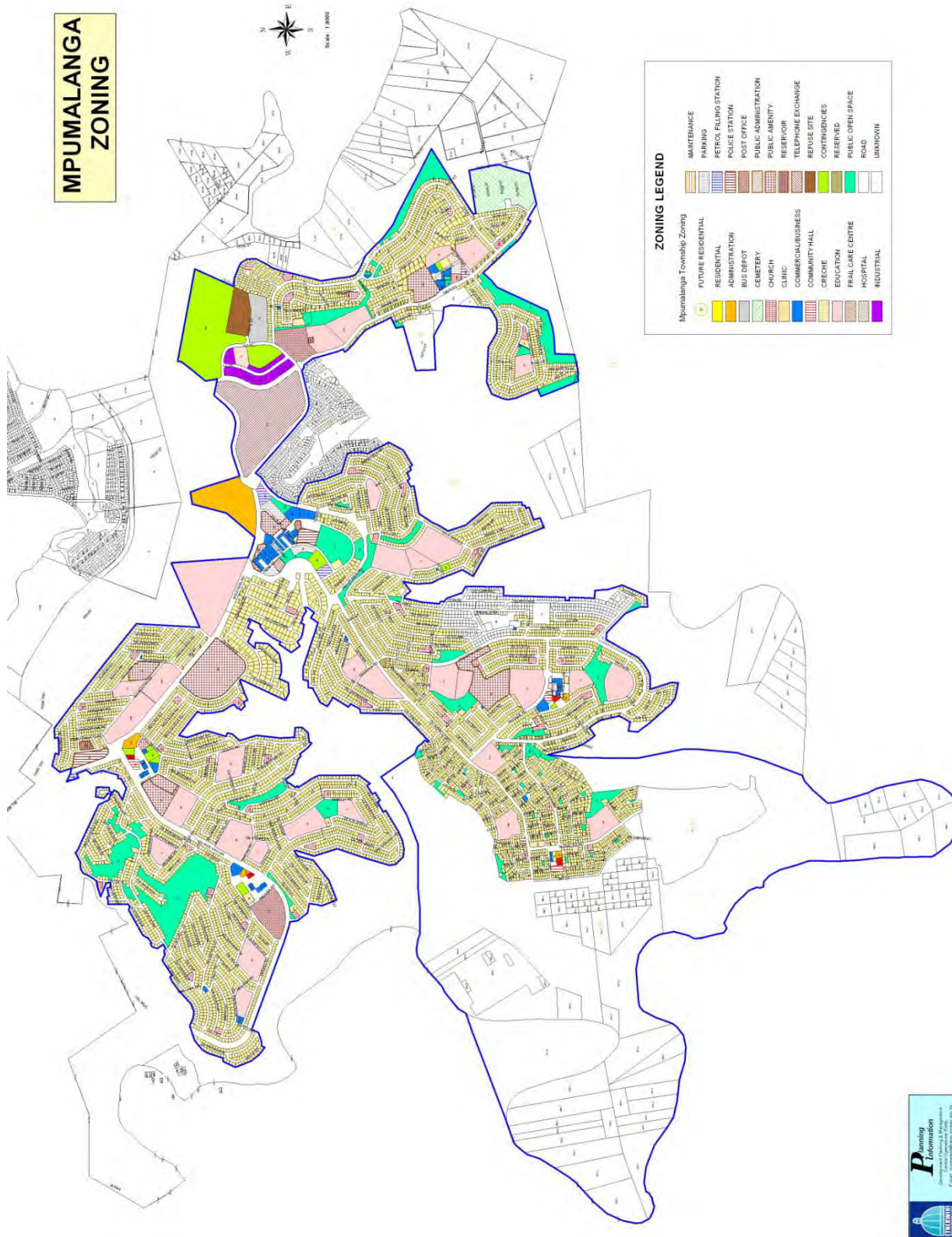


Fig 6.8 – illustrates Mpumalanga zoning as per Town planning regulations (Source: Hillcrest Municipality)

6.4.1 ADMINISTRATION

- Local Government and Community Elected Councils

During the years of apartheid the community administration of most black townships in the country were associated with terms such as inconsiderate and unapproachable by the residents of the community. The chief concern of the community administration was the provision of accommodation for the members of the community thus the residents identified the administration as being the landlord. Such a feeling according to the survey is found common amongst the older generation of the community members of Mpumalanga, the relationship between the community administration and the township residents was said to be a distant one. The manner in which administering was practiced was said to be never fair and through all the hardships, the residents had to put with their corruptive practices in order to keep a roof over their heads. The residents were at all times insecure regarding their urban and residential status. As a summary, the township administration symbolised all the inequalities of the system with which they had to contend in their lives.

According to a research by Moller (1978), she states that in order to qualify for urban rights a certain residential stability was required of Africans. Having gained access to formal housing which guarantees a degree of security of tenure to urban Africans, it was considered foolish to lose it again (Moller et al; 1978:12). The stress for the people was finding money to make payments each month. The rentals were perceived to be high in relation to the people's earnings. People lived with the fear of being evicted for arrears in rent; it was a chief source of insecurity. Parallel to this was also the fear of the 'Black Jacks' knocking on one's door. In order to supervise on the issues of overcrowding in the township homes and control rural-urban influx in general, routine checks were made to township homes to ensure that only registered members of the urban household are residing on the premises. This procedure had a very negative impact on the privacy of the household members (Moller et al; 1978:17).

Today in Mpumalanga Township, the buildings that housed the community administration that brought hardship to the lives of the community members is now the offices for the democratic local government, eThekweni Sizakala service centre and the offices for community elected councils. The council's role in the new local government

structures is to act as agents to source information, especially regarding welfare benefits for the community. Those community members who need to access welfare grants go to their respective political leaders in the community for information. The political shift facilitated a different approach towards servicing the community, the community administration offices have now become a second home for the community of Mpumalanga. Due to its openness and close consultation with the community, the existing infrastructure has been regarded as being inefficient to the new people orientated system of service. During an interview with the manager of the place Mr Nconco, he stated that:

“... The office spaces are not big enough for their equipment, and there is a need for new departments to operate within the premises. The community consulting and waiting spaces are too small, people sometimes line up along the corridors, which end up disturbing the circulation of the staff and the general public. We definitely need new facilities for the local government to improve the efficiency of the service delivery to the people and also reflect such openness to the people.”



Fig 6.9 – illustrates the existing offices for Local Government in Mpumalanga Township (Source: Author)

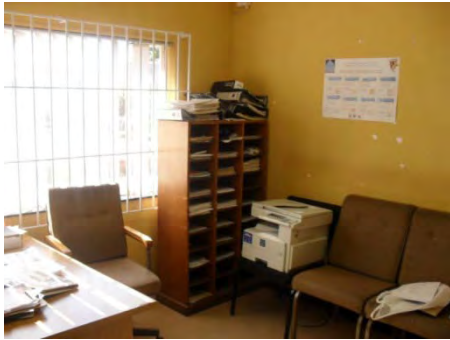


Fig 6.10 - Lack of space for office equipment (Source: author)

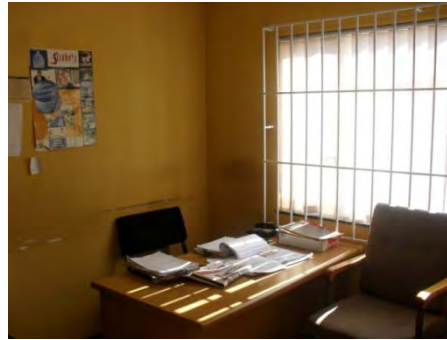


Fig 6.11 - Lack of consultation space in the offices (Source: author)



Fig 6.12 – Passage also functions as waiting space (Source: author)

- Police Services

There are currently two police stations in Mpumalanga; it is serviced by both SAPS and Durban Metro Police services. Crime has always been an a major issue in South African townships and the country at large and Mpumalanga has been no exception. Crime in Mpumalanga has subsided drastically ever since the introductory of the Metro Police Service in the community, however the task of combating crime has not only been left to the authorities but the community itself is also playing a role in community policing. This initiative dates back to during the period of the political violence in Mpumalanga. As advocated by Bonin (2007), the political violence in Mpumalanga led to territorial divisions of the township thus the men in each neighbourhood got together to safeguard their territory from any crime within their areas (Bonin; 2007). This is not to say that Mpumalanga is today a safe place to be, there is always going to be a need for more security at all times as the crime in South Africa is generated by multiple social ills such as poverty, unemployment, drug abuse etc.



Fig 6.13 – illustrates the Police services existing in Mpumalanga township (Source: Author)

6.4.2 SOCIAL AND CULTURAL

- Churches

South Africa is one of the most heterogeneous countries in the world. Throughout its history, people from diverse parts of the world and with very different religious backgrounds have come to live at the southern tip of Africa – white settlers from Europe, Indian contract workers, black tribes from other parts of the continent. There is a wide range of different religious and beliefs amongst the people of South Africa and this is no exception for the community of Mpumalanga. There are well over fifty churches in Mpumalanga and are more to be found distributed within the residential zones.



*Fig 6.14 – Biggest church in Mpumalanga
(Source:Author)*

The biggest religious congregation is the Roman Catholic Church situated at the KwaMcoyi commercial hub, it is one of the oldest church organisations and according to Mr Hlabisa a senior member of the church, he states that it has the largest number of members in the whole of Mpumalanga. The religious aspect in the community is adequately catered for.



*Fig 6.15 – illustrates some of the vast number of religious congregations in Mpumalanga
(Source:Author)*

- Community hall

Within the entire community of Mpumalanga there are only two community halls that are meant to serve the needs of the public, these facilities cater for multiple functions in the community such being a place to house meetings for community organisations, they are also used for cultural functions such as traditional dance activities, weddings, funerals etc. The location of these facilities is isolated thus not supported by any other facility which leads to sterile places especially during weekdays where they can also play the role of becoming multipurpose halls for indoor sport facilities which could be used by the youth after school hours. Because of the high crime rate, these community facilities are highly fenced off from the community, which thus in turn presents itself as inaccessible community facilities.



Fig 6.15 – illustrates the highly fenced off community halls (Source: Author)

- Library

Mpumalanga Township has only one library recently built in 2006; it serves the community and also the surrounding schools. It has brought so much change to the community especially in catering for the schools, primary and high schools. It has however its shortcomings in addressing the community at large especially in catering for the tertiary education and broader public use. There is limited space in the library as it packs up at peak hours; there is a shortage of seating areas, space to add more facilities such as internet services etc. There is a need for a library that will cater for the broader community which will couple up with other facilities such as an internet cafe, study areas for the tertiary students and the community at large. as complained by one of the youth members in the community, she states:

“... the space at home is not adequate for me to do my studying and there is allot of noise from my other siblings, we need a place where we can go a study as a group with my friends, coz sometimes our schools doesn't cater for this especially during weekends.”



*Fig 6.16 – illustrates Mpumalanga community library, it stands isolated from other urban amenities
(Source: Author)*

- Clubs / NGOs

Currently in Mpumalanga there is no infrastructure dedicated for community organisations. Social groups that do exist in the community use the boardroom at the local government offices, community halls and sometimes meetings are held at the respective members' home. There is a great demand for more appropriate spaces for community clubs; this will promote their sustainability and playing a vital role in encouraging social interaction of the people within the community.

6.4.3 EDUCATION

- Formal Education

There are an adequate number of schools in Mpumalanga which are dispersed equally in the different neighbourhoods. They are however not adequately equipped with supplementary services /resources to cater for the new standard of education. None of the schools have facilities such computer rooms, thus children have no access to internet services. None of the schools have efficient libraries; they all use the main Mpumalanga library which also has short comings as earlier discussed in section (6.4.2).



Fig 6.17 – illustrates a typical school in Mpumalanga lacking supplementary services (Source: Author)

- Adult literacy

As part of empowering every citizen in South Africa, there has been extensive programmes that cater for Adult literacy throughout the country. In Mpumalanga there are currently five programmes that cater for adult in improving their literacy. The programmes are presently being held in school buildings after hours and sometimes during the weekends. The use of schools for such comprehensive services has its limitations, especially when there is a need to exercise practical training such as sewing, mechanics, and entrepreneurial skills where an engagement with the public is required. Such facilities need to be supported by other urban amenities and to be easily accessible to the public at large.

6.4.4 HEALTH AND WELFARE

- Clinics

There are currently two major clinics in Mpumalanga; they are Hlengisizwe Healthcare facilities (fig 6.18) at unit six and Mpumalanga Clinic at Kwa-Mcoyi commercial hub. They provide services ranging from family planning, dental, tuberculosis and HIV / AIDS tests and treatments and also accommodate overnight facilities (fig 6.19) for maternity cases. Other medical services in Mpumalanga include private practitioners who operate in either in one of the commercial hubs in Mpumalanga or within the residential zones, working form renovated houses which are turned into a surgery.



Fig 6.18 – illustrates Hlengisizwe clinic at unit six. (Source:hlengisizwe newsletter Oct 2006)



Fig 6. 19 – Illustrates overnight facilities at the clinic (Source: Hlengisizwe newsletter Oct 2006)

The two clinics that exist are overused and prove to be too small to cater for the whole of Mpumalanga. Accommodation is also desperately lacking for private practitioners wishing to offer their services to the community.

6.4.5 COMMUNICATIONS

- Postal services

The only postal facility that exists in Mpumalanga is a satellite counter which is housed within a supermarket (fig 6.20) at kwa-Maghabha commercial precinct. Due to its limited space the postal facility doesn't cater for collection and supply of mail, and all the other supplementary services that come with postal services in a normal independent office. There highlights the urgent need for an efficient postal service centre for



Fig 6.20– illustrates the postal office housed within the supermarket (Source: Author)

Mpumalanga at large.

- Public Transport Services

Like most black residential areas in South Africa, Mpumalanga Township is situated at some distance from the major business and industrial centres where most of the gainfully employed residents work. Taxis and Buses stand the duty of transporting hundreds of workers and students to and from work and school daily. It has been raised by a couple of the members of Mpumalanga that a significant proportion of their earnings are used up for transport alone. The taxis are way more expensive than the bus services but the taxis are more efficient especially during rush hours. The bus service is more favourable for students because it caters especially for student fares and are said to be safer than the taxis. The bus route is along the major roads in Mpumalanga and they operate at thirty minute intervals which makes it loose its popularity amongst many of the community members. Train services are not as commonly used by the residents of Mpumalanga and this primarily due to the fact that there is no train station within the location. The closest is the KwaThandaza Train station which is in Minitown on the outskirts of Mpumalanga Township.

A complaint from the community of Mpumalanga is the fact that there are no bus shelters in any of the bus tops in the area, even at the taxi rank, on rainy days the people soak. Such issues pertaining to transport needs to be discussed with the Mpumalanga taxi association whom they also raised an issue of the need for an customer care office, as they are serving the people and such complaints is of their best interest.



Fig 6.21 – illustrates the taxi ranks with no shelter for waiting passengers (Source: Author)

6.4.6 Recreation

- Stadiums

Mpumalanga has a newly built sports precinct which is located at unit two of Mpumalanga Township. Provision of outdoor sports activities include soccer and cricket. Other spaces are vacant and haven't been yet developed for any other sporting codes. These facilities are meant to serve the whole of Mpumalanga and the surrounding areas thus are highly maintained and secured. There is however a lack of the provision of indoor sporting facilities, which could be multipurpose to cater for, sports such as basketball, netball,



Fig 6.22 – Sports precinct in Mpumalanga (Source:www.ethekwini.gov)

volley ball etc.

- Parks

Due to the very minimised yard spaces within the housing units and the vast un-maintainable lost spaces as a result of the apartheid planning. It is in the author's view that there is a need for a general maintainable green space for recreation and relaxation for the community. Children play on the streets which at times can be very dangerous due to passing vehicles.



*Fig 6.23 – Children playing soccer on the street
(Source:Author)*

6.4.7 INFRA-STRUCTURE

- Housing

The housing of Mpumalanga Township still bares the matchbox houses of the apartheid government. The people of Mpumalanga have always complained about the size of these houses and how they disregard the cultural factors of its inhabitants. One of the main issues raised by the community members who still live in the four roomed houses is that the houses are so small they deprive the individuals in the household some privacy. The design and quality of the materials used in austerity housing is such that visual and noise privacy cannot be achieved.



Fig 6.24- illustrates the original four roomed houses that were result of the apartheid government which still exist in Mpumalanga Township. (Source: Author)

It has always been the reality of South Africa that the provision of township housing will never be able to keep up with the population increase, the housing shortage tends to further aggravate the problem of privacy by issues such as unemployment in the community whereby the older children experience financial difficulty to move out of home to start off on their own. According to Friedman (1975), the crowding in homes tends to intensify already poor relations between members of the household to the point where they may become unbearable. Those household members who can escape from the constant rubbing of shoulders do so by joining the city's formal work force or alternatively roaming the streets or engaging in informal activities (Mitchell 1971 cited in Moller 1978). It said that some young couples prefer to abandon township living completely and join the 'city overspill' migratory movement to the informal settlements of the peri-urban fringe (Moller 1786). In these instances the housing unit fulfils neither its basic function of shelter nor its symbolic one of providing home (Rapoport; 1969). Densified Social housing projects can play a major in providing more affordable housing in the township. Amongst the interviews proposals of a hotel has also been strongly supported. The need stems from the lack of space in most of the houses to cater for distant friends and relatives who have come from far for functions such as weddings or funerals; one of the interviewed guests states that some of the guests end up sleeping in the cars, because preparations for funerals start the night before.

- Street lighting and pedestrian walkways

The road infrastructure in Mpumalanga has been approved drastically, all roads are maintained regularly and there is also street lighting. Provision for pedestrian walkways is however not catered for especially around residential zones. There lacks a hierarchy of spaces between pedestrian and vehicles.



*Fig 6.25 – illustrates the lack of hierarchy of spaces between pedestrians and vehicles
(Source: Author)*

CONCLUSION

Although there has been an improvement in amenities and services in Mpumalanga, since the taking over of the new democratic government there are however existing inadequacies that are prevalent in the community of Mpumalanga which have been exposed by the empirical data. Observation has revealed the following unfavourable conditions:

The political violence has affected the vibrant community life that once existed in Mpumalanga. The effect of the violence has also had a very negative impact on the built environment which calls for an urgent need for urban revitalisation. An opportunity of creating a meaningful urban space also presents itself, a space that can use the horrific, segregating history of Mpumalanga as a tool for unifying the people through the creation of an urban place that will commemorate the people that died during the political violence.

The effect of the political transition on the economy has also affected the community life of Mpumalanga in a very negative way. The high rate of unemployment and poverty can be tackled by the provision of economic empowering resources such as incubators, SMME's, entrepreneurial workshops which must be coupled by supportive rentable spaces for commercial use.

The existing workings of the services and amenities reveal numerous limitations which compromise the efficiency of the urban amenities. The community administration reveals the need for new facilities to be supportive to the people orientated service, and also a new image to the public to express transparency. The increase of the police services has brought a positive change to the community but this also highlights the high crime rate that is of existence in Mpumalanga. Satellite police stations will always be of a necessity especially around urban amenities that will be using valuable equipment.

Due to the monofunctional zoning of apartheid / modernism planning, community facilities such as community halls become isolated and very sterile. Their isolation calls for heavy security which thus ends up excluding them from being freely used by the

community. Although they are multi-use, they are however not supportive for such a function which really limits their effectiveness in the community.

The new public library has brought some hope to the community of Mpumalanga but it has its limitations in serving the broader community. Supplementary services such as auditoriums, a study centres and computer LANs need to be integrated into the urban amenities of the community. These facilities will also provide the platform for social clubs and meaningful community organisations.

The schools of Mpumalanga also prove to be limited in offering more than just classrooms. There is an urgent need for other supportive resources which could be shared be shared with the greater community. Adult literacy also lacks a supportive platform to maximise its effectiveness in the community.

Health in South African townships and the country at large has been at an alarming state, the rise of the AIDS/HIV epidemic and other transmittable diseases such as TB are very threatening to a thriving community life. Health facilities especially in Mpumalanga to support the already over used clinics are of a necessity.

Communication is empowerment in a democratic society; postal services in Mpumalanga are of an urgent need. The public transport has proven to be very efficient to the greater community that uses it, and a more formal image has been proposed by the taxi association to the general public to promote for a better, efficient service to the public.

The new sports precinct in Mpumalanga holds great potential in revitalising the township, although not yet complete, the provision of indoor sports facilities are lacking. There is also a need for a public green space which could provide a place for relaxation and recreation for the community.

This chapter has brought a more in-depth understanding on the way of life of the community of Mpumalanga; it has also highlighted the workings and limitations of existing community urban amenities and resources. These conclusions thus form the basis for the brief of the Civic centre for the community of Mpumalanga.

CONCLUSION AND RECOMMENDATION

Chapter one gives an introduction of the relationship between society and the built environment which is advocated by sociologists, anthropologists and environmentalists. The built environment is the social and cultural products of society and in the South African context; it has primarily accommodated the political functions of the past regime which promoted segregation and exclusion. The physical segregation of the built environment also dictated the segregation of society, hence society producing buildings maintaining the social forms of segregation.

The architecture's role in the democratisation of South Africa has been primarily of re-addressing the built environment of South Africa from the previous restraints of colonialism and apartheid. Chapter three responds to one of the research aims which was to explore the relationship between society and the built environment. As argued by environmentalist and psychologist of the role of human values in shaping the built environment, architecture that has symbolic content which is informed by regional historic values of the traditional African vernacular architecture or an African approach to space making would make the architecture more relevant to the majority and visually expressing the process of transformation envisioned society.

Chapter four draws its conclusion that the sole promotion of functionality in architecture, planning leads to abstracted space, separated from the lived experience which the theories of phenomenologists argue against. During apartheid space was used as an instrument of social change, which reflected itself on the urban isolated urban landmarks. The segregation led to the promotion of urban sprawl and undefined meaningful spaces. The contextualists argue for accessibility and the relation to local context. As a design principle, the built form should allow flexibility and not be dictated by function, the architecture must interpret its context by valuing what exists, thus becoming a generative and timeless architecture. Architecture of a democratic society should not be driven by style but respond to the site pressure and maintain a degree of flexibility

Dewar argues against the isolation of civic buildings and urban amenities. Grouping of public facilities promotes urbanity which counters the urban spatial problems of townships. Also to encourage communication and freedom of expression, urban space which is accessible and legible is pivotal in a democratic practice. Urban space as a place-making intervention becomes a focal point for community life. A meaningful urban space is effectively defined

when enclosed by urban massing with a distinctive quality which is illustrated by the medieval precedents discussed.

This study has attempted to illustrate the power of architecture in reflecting the social forms of society through the manipulation and abstraction of space which has today left the restraints of the deeply manifested colonial and apartheid restraints. One thus can conclude that architecture has the role of eradicating the legacies of apartheid, towards creating human sensitive environments that are informed by the society's needs and aspirations thus fostering a sense of belonging.

The case study has highlighted the impact of the political shift of 1994 at community level and how it has affected the way of life in Mpumalanga. The effects of the political history and economic transition have raised the need for empowering resources and meaningful urban space to promote social interaction. In addressing the above issues it has been appropriated that a civic centre for the community will be a meaningful development.

REFERENCES

Agnew J.A. & Duncan J.S, 1989. **'The Power of Place: Bringing Together Geographical and Sociological Imaginations'**, Boston: Unwin Hyman, 1-8

Attoe, W. & Logan, D. 1990. **'American urban architecture: catalysts in the design of cities.'** Logan University of California press Ltd. USA

Bartuska, T.J & Young, G.L, 1994. **'The Built Environment – a creative inquiry into design and planning.'** Crisp Publications Inc. California

Denyer, S.1978. **'African traditional architecture'**. Heinemann. London

Dewar, D. & Uytendogaardt, R. 1991. **'South African Cities: A Manifesto for Change'**, Cape Town, Mills Litho (Pty) Ltd.

Doshi, B. 1997. **'Social institutions and a sense of place'** Contemporary Architecture and city form- The South Asian Paradigm. Edited by Farooq Ameen. Marg publications. Mumbai

Durkheim & Mauss .1963. **'Primitive Classification.'** Chicago: Univ. Chicago Press.

Elleh, N 1996. **'African architecture – evolution and transformation.'** McGraw-Hill. New York

Frampton K. 1992, **'Critical Regionalism: Modern Architecture and Cultural Identity,' in Modern Architecture: A critical history.'** Thames and Hudson, London.

Frescura, F. 1987, **'Folk Architecture in Transition: A Southern African Case Study.'** SA Journal of Art and Cultural History, Vol 1, No 3, 263-271 (1987).

Friedman, F.M, 2008. **'Toward (post) apartheid architecture A view from Namibia'** Planning Perspectives. Taylor & Francis. London

Ghirado, D. 1996. **'Architecture after Modernism'**. London: Thames and Hudson.

Goodchild. B 1990. **'Planning and the Modern/postmodern Debate'**, Town Planning Review 61, 2 pp. 119-137

Goffman, E. 1959. **'The presentation of self in everyday life'** Double Day New York.

Guidoni, E. 1975. **'Primitive Architecture'** Faber & Faber. Milan.

Japha, D 1998. **'The Social Programme of the South African Modern Movement'**.
'Blank_ Architecture, Apartheid and after.' Edited by Judin, H & Vladislavic, I.
Rotterdam: Nai Publishers. 422-437

King, A.D, 1980. **'Buildings and society – Essays on the social development of the built environment.'** Routledge & Kegan Paul. London

Lawrence, D.L, 1990. **'The built environment and spatial form'**. Annual Reviews of Anthropology, Vol. 19 pp 453-505

Lefebvre, H (translated by Nicholson Smith, D), 1991. **'The Production of Space'**. Blackwell. London

Liane Lefaivre & Alexander Tzonis. 2003; **'Critical Regionalism- Architecture and identity in a Globalized World.'** Prestel, New York

Lukerman, E.F. 1964. **'Geography as a Formal Intellectual Discipline and the Way in which it contributes to Human Knowledge; in: "Canadian Geographer", vol. 8, no. 4, pp. 167-172.**

Moller, V. Schlemmer, L. Khuzwayo, J. Mbanda, B. 1978. **'A black township in Durban: A study of needs and problems.'** Centre for Applied Social Sciences, UKZN Durban.

Marschall, S & Kearney, B. 2000. **'Architecture in the new South Africa – Opportunities for relevance.'** University of South Africa. Pretoria.

Mosoetsa S. 2005 **'Compromised Communities and Re-Emerging Civic Engagement in Mpumalanga Township, Durban, KwaZulu-Natal' – Journal of Southern African Studies, Vol.31, No.4, pp 857-873** Taylor & Francis, Ltd.

Nesbitt, K. 1996. **'Theorizing a new agenda for architecture, an anthology of architectural theory 1965-1995.'** Princeton architectural press, New York.

Ora Joubert. 2009. **10years+100buildings Architecture in a democratic South Africa.** Bell Roberts. Cape Town.

Polyzoides, 2000. '**Charter of the new Urbanism**' edited by Leccese M & McCormick K. McGraw-Hill Companies, Inc. New York

Poticha, 2000. '**Charter of the new Urbanism**' edited by Leccese M & McCormick K. McGraw-Hill Companies, Inc. New York

Rewal. R, 1997(Edited by Farooq Ameen.). '**The use of tradition in architecture and urban form.**' **Contemporary Architecture and city form- The South Asian Paradigm.** Marg publications. Mumbai

Rapoport, A. 1969. '**House form and culture.**' Prentice – Hall Inc. New Jersey

Rapoport, A. 1977. '**Human aspects of Urban form – Towards a man-environment approach to urban form and design.**' Pergamon press. New York

Rapoport, A. 1980. '**Human Behaviour and the Environment: Advances in theory and research.**' Plenum Press, New York

Rogers, A. 1992. '**A Student's Companion to Geography**'. Oxford: Blackwell, 233-52

Scott, D 2003. '**Creative Destruction': Early Modernist Planning in the South Durban Industrial Zone, South Africa.**' Taylor & Francis, Ltd. South Africa

Soanes, C. 2004. '**Concise Oxford English Dictionary: Edition Revised**' Oxford University Press. Cape Town

Thomas, D. 2002. '**Architecture and the Urban Environment – a vision for the New Age.**' **Architectural Press.** Oxford

Walter, E. 1988. '**Placeways: A Theory of Human Environment,** Chapel Hill: University of Northern Carolina Press.

Zeisel, J. 1998. **'Inquiry by Design – Tools for environment – behaviour research.'**
Cambridge University Press. USA

JOURNALS

Boussora, K. 1990. **'Regionalism: lessons from Algeria and the Middle East'**.
MIMAR 36:64-71

Dewar, D. 1991.

Hallen, H 1995. **'Architecture that reflects an African Society' (complexities and contradictions)**'. Architectural Review, March: 48/3.

Jooste J.K. 2007. **'When the rainbow nation builds: The Northern Cape Legislature'**. Architecture South Africa, pg 66-73

Mayet, M. 1995. **'Responding to context and culture (complexities and contradictions)**'. Architectural Review, March: 48-49

Vivienne & Japha, D. 1998. **'A New Court For A New Constitution'**. SA Architect
pg 26-33

UNPUBLISHED BOOKS

Bonin, D.R. 2007. **'Space, Place & Identity: Political Violence in Mpumalanga. KwaZulu-Natal, 1987-1993.'** Thesis from Wits Johannesburg

Lalloo, K. 1998. **'Citizenship and Place: Spatial Definitions of Oppression and Agency in South Africa.'** Africa Today 45.

Mogale, T. 2005. **'Local governance and poverty reduction in South Africa' in Progress in Development studies** (Vol. 5, 2 2005)

Valverde, J.P .2004. **'Towards a contemporary vernacular architecture: The coast region of Ecuador.'** Thesis from Texas Tech University

Local Government Fact Book – 2003 / 2004

The White Paper on Local Government, 9 March 1998.

The Constitution of South Africa (Act 108 1996)

WEBSITES

www.thusong.gov.za

www.architecture.about.com

www.caroun.com

www.fedsquare.com

APPENDIX A

Interview Questionnaire

What recreational/ extra mural activities do you participate in and where do you practice it?

.....
.....
.....

How often do you visit or use community resources / facilities?

.....
.....
.....

What time of day do you use these facilities?

.....
.....
.....

Do you feel the facilities are adequate and appropriate for you?

.....
.....
.....

Do you feel the facilities are easily accessible?

.....
.....
.....

How long have you been living in Mpumalanga township?

.....
.....
.....

What are your perceptions of the place, Mpumalanga township?

.....
.....
.....

Do you know anything about the political violence that took place in Mpumalanga township and what does it mean to you?

.....
.....
.....

APPENDIX B

THE NEED FOR A CIVIC CENTRE IN MPUMALANGA TOWNSHIP

MPUMALANGA NEW TOWN CENTRE DEVELOPMENT UNDERWAY

18 March, 2010 16:24

The eThekweni Municipality has begun construction on a multimillion Rand development project to turn the Mpumalanga area into a vibrant, high amenity regional town centre that would serve the greater Hammarsdale/Mpumalanga areas.

Approximately 120 hectares of land has been identified for the Mpumalanga New Town Centre development. This land currently falls under the ownership of the Ingonyama Trust Board (ITB) and will be jointly developed by the eThekweni Municipality in partnership with Eris Property Group.

Mr Shunnon Tulsiram, Head of the Municipality's Economic Development Unit said, "Phase One consisting of R30m bulk infrastructure to unlock land in the town centre commenced in earnest in January 2010. This will allow for various mixed use developments to follow. The 36 week project, the funding for which comes from the Neighbourhood Development Partnership Grant (NDPG), will lay the foundation for the R200m investment by Eris Property Group towards the provision of a 18000 sqm retail shopping centre, which will be the first facility to be established in the town centre."

"The retail shopping centre is to be provisionally known as the Mpumalanga Mall and will comprise a mix of both national and local retailers," said Mr Lance Meyer, Manager: Property Development at Eris Property Group. "It will substantially increase the much needed retail offering in the Mpumalanga and Hammarsdale communities, who in the past have had to travel to Pietermaritzburg, Pinetown or Durban for their household and retail shopping needs."

Construction of the shopping centre is due to commence in July 2010 with completion and the start of retailer trading to occur in October / November 2011. Eris Property Group is currently in the process of letting the Mpumalanga Mall.

Planning for Phase Two of Mpumalanga New Town Centre has also commenced and will lay the foundation for the development of **government facilities, public transport infrastructure** and new housing units catering for low and middle-income population groups. A further grant allocation of R10 million from the Department of Co-operative Governance and Traditional Affairs has been made available in terms of the KZN Corridor Funding Programme to assist with further infrastructure services. It is anticipated that portions of phase two will commence in 2011.

Economic Development Unit, Project Manager, Mr Peter Gilmore said, “Phase two will see a further investment of R45 million by way of the development of consolidated public and social facilities together with the development of integrated GAP housing over a 3-5 year period. The latter will be undertaken by Eris Property Group in the form of 1500 bondable housing units at various pricing levels together with 256 RDP units.”

It is anticipated that the following public investment will occur subject to completion of negotiations and business plans with respective government departments:

1. New Metro Police Station
2. Municipal Customer Care Centre (Sizakala) which will accommodate various government service departments, including a library
3. Social welfare centre
4. Public park with sport and recreational facilities
5. New railway station integrated with nodal transport interchange
6. Health facilities
7. Small trader facilities

Through the combined efforts and cooperation of National Treasury, the eThekweni Municipality, the Department of Co-operative Governance and Traditional Affairs, the Ingonyama Trust Board and Eris Property Group, the Mpumalanga New Town Centre Project strives to create an environment that is conducive to economic growth and investment, thereby improving the economic and social well being of the greater Mpumalanga communities.

Deputy Mayor, Cllr Logie Naidoo praised the project saying that it falls in line with government’s plan to speed up service delivery and develop rural and underprivileged areas into fully functional, viable economic hubs. “The development will create new energy, stimulate business job creation and economic opportunity for the community in the area,” he said.

He added, “The outstanding feature of such development projects is the sound partnerships that the eThekweni Municipality shares with the private sector and other spheres of government. The Mpumalanga Development follows other successful projects such as Bridge City, KwaMashu Town Centre Development and the Umlazi Mega City.”

ADDITIONAL INFO

The Mpumalanga New Town Centre Project is a project emanating from the Neighbourhood Development and Partnership Grant initiative of the National Treasury which is being funded by this grant. Mpumalanga New Town Centre is located within the Outer West Region of the eThekweni Municipality, approximately 50km from Durban CBD. It will serve the Greater Mpumalanga Area (GMA) which includes the urban residential settlements of Mpumalanga Township, Shongweni, Geordedale, Sankhontshe, Mophela, Malangeni, Mini Town and Hammarsdale industrial hub. The area is home to approximately 130 000 people, most of whom have endured poverty, social-economic neglect and high levels of unemployment.

The Neighbourhood Development Partnership Grant (NDPG) was announced by the Minister of Finance in his budget speech on 15 February 2006. The primary focus of the NDPG is to stimulate and accelerate investment in poor, underserved residential neighbourhoods by providing technical assistance and capital grant financing for municipal projects that have either a distinct private sector element or an intention to achieve this. The central development challenge the NDP seeks to address is the relative lack of (primarily economic) development in including informal settlements and more recent low-income housing estates

ENDS

For more information contact Mr Peter Gilmore, Project Manager, on 083 378 8737.
Email: gilmorep@durban.gov.za

Issued by the eThekweni Municipality, Communications Unit. Telephone Sohana Singh on 031 311 2044 or 083 309 0207. Email singhsohana@durban.gov.za

(www.ethekwini.gov.za)