Space and Race: South African "Native Townships" as Corruptions of Suburban Ideals for Political Ends

by

Conrad Henry Margoles

Bachelor of Architecture
University of the Witwatersrand
Johannesburg, South Africa
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Submitted to the Department of Architecture in Partial Fulfillment of the Requirements of the Degree of Master of Science in Architecture Studies at the Massachusetts Institute of Technology

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Signature of Author

Conrad Henry Margoles
Department of Architecture
May 12, 1989

Certified by

Lawrence Vale
Lecturer
Thesis Supervisor

Accepted by

Julian Beinart
Chairman
Departmental Committee for Graduate Students

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Prelude
Mongane Serote
from Tsetlo

When i take a pen, my soul bursts to deface the paper
pus spills-
spreads
deforming a line into a figure that violates my love,
when i take a pen,
my crimson heart oozes into the ink,
dilutes it
spreads the gem of my life
makes the word i utter gasp to the world,-
my mother, when i dance your eyes won't keep pace
look into my eyes,
there, the story of my day is told.

In Somehow We Survive, An anthology of South African Writing
Space and Race: South African "Native Townships" as Corruptions of Suburban Ideals for Political Ends

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ABSTRACT

This thesis is about reconciling three main pairs of ideas. First, it is about architecture and apartheid, and the ideological role which architecture plays within a particular political system. Second, it is about the attitudes of individuals involved in designing and building the townships, and the reconciliation of the apparently contradictory ideas of the provision of welfare in the form of housing with the exploitation of labor in the form of separate development. Third, it is about the ideals of the white Anglo-American suburbs (housing the whites) and how townships (housing the blacks) differ from them as a city form. The crux of this thesis is that the white suburban ideal was taken and corrupted to become the black township in South Africa, because of a combination of politics, (post-colonial) philanthropy and fear.

The historical reasons for the formation of the townships are to be found in the relationships between the races beginning with the earliest European settlers in the country. The first conflicts were over the right to the land. With industrialization came urbanization and the formation of the policy of apartheid: legislation requiring the separation of the races. Anglo-American suburban ideals were used by the planners and architects who put the government's policy into practice. They built townships based on these ideals in an effort to transfer their values to the black people. They worked as technocrats, implicitly accepting the policy of apartheid and relying on "science" and middle-class suburban ideals to achieve their goals. The ideologies of apartheid have resulted in the political nature of space in South Africa, and theories of urban ideology can be applied to understand the complex situation. The result can be seen in the townships as corruptions of suburban ideals for political ends.

Thesis Supervisor: Dr. Lawrence Vale
Title: Lecturer
Acknowledgements

I wish to thank all who have made this possible, encouraged and helped me along the way, advised me, taught me, and pointed me in the right direction. I am especially grateful to my parents for their support. Thank you. I must mention and thank the star of the show, Katherine Young, for patience, cutting and pasting, and food (in no particular order, and despite the Marines). My long time friend Tony Harris, for the healthy distractions, the insights and the laser printer (in no particular order), thank you. Many thanks also to my classmates, especially Noel Brady for constant support. Thanks also to Julian Beinart, for the close-up and still objective view, your lessons are well taught. And finally my immense gratitude to Larry Vale, for wading through it all with me, for teaching me American, and encouraging me to chip away at Mount Rushmore, with patience, insight and understanding. I value your help most highly.
"I know. You think I'm making this all up. But I'm not. It's true. Most of it. And no, it's *not* heaven on earth. It's boring as hell in its own way, and I wouldn't want to live there a week. So why do I tell you anyway? It's just this: that there are places we all come from — deep - rooty - common places — that make us who we are. And we disdain them or treat them lightly at our peril. We turn our backs on them at the risk of self-contempt. There is a sense in which we need to go home again - and can go home again. Not to recover home, no. But to sanctify memory. ..."

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South African police cadets in training, with their white officer in charge. This picture reflects the status of power in the hands of the white elite in South Africa over the much larger black population of the country.
CHAPTER ONE

Space and Race

Satan, being thus confined to a vagabond, wandering, unsettled condition, is without any certain abode; for though he has, in consequence of his angelic nature, a kind of empire in the liquid waste or air, yet this is certainly part of his punishment, that he is... without any fixed place, or space, allowed him to rest the sole of his foot upon.1

It's not a black and white issue, and in transforming it into black-and-white you lose the shades of gray, which, as you know, my friend, is the color of intelligence.2

Introduction

This thesis is about reconciling three main pairs of ideas. First, it is about architecture and apartheid, and the ideological role which architecture plays within a particular political system. Second, it is about the attitudes of individuals involved in the designing and building of the townships, and the reconciliation of the apparently contradictory ideas of the provision of welfare in the form of housing with the exploitation of labor in the form of separate development. Third, it is about the ideals of the white Anglo-American suburbs and how townships differ from them as a type of city form. The crux of this thesis is that the white suburban ideal was taken and corrupted to become the black township in South Africa, because of a

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Artist's impression of economic house, Kwa-Thema, Springs township.
Calderwood, Native Housing in South Africa, p137
combination of politics, (post-colonial) philanthropy and fear (*swart gevaar*).³

The work of architects and planners in South Africa has repercussions which go beyond the mere aesthetics of the world in which the people of the country inhabit. Their work legitimates and reinforces the ideologies of the government of the country because both their work and the political ideologies share a spatial component. While the work of all professionals has a bearing on a larger society, I refer particularly to architects and planners involved with government work in the "native townships" and with producing mass housing for the black population of the country living in the urban areas. These professionals design and facilitate the realization of environments in which many thousands of people live according to the ideology of the separation of races, and the protection of the white race of South Africa. They work for clients with diverse agendas, often powerful institutions whose policies are political and have little concern for the art and science of architecture and planning. The ideology of the government client subsumes these technocratic and artistic activities of these professions into its political realm. The built, physical environment of the townships is the result of the government's beliefs about how the urban black population should live.

³The words *swart gevaar* are Afrikaans for "black danger", and this term has been used to describe the election tactics of the Nationalist party for many years in appealing to the fears of the white population about being overwhelmed by the larger black population.
New houses built by the state at Kayalitsha township in the Cape. "Kayalitsha" literally translated from Xhosa means "new house." The residents of this township were residents of a large squatter settlement of the same name adjacent to this new development.
Architecture and planning may be perceived through many lenses. Through the lens of art, it can be seen to touch the emotions and affect the senses; through that of science it can be seen to provide shelter and protection from the elements, efficiently and economically; and through the lens of politics, it can be seen to deny a sense of belonging or control and reinforce alienation and disenfranchisement.

In South Africa, the politics of apartheid are inextricably linked to the practice of architecture and planning. The inclusion of "race" in the principles of zoning, the control over what may be built where and for whom, to conform to the legislation of the ruling Nationalist minority government, requires that the work of these professionals tacitly or explicitly supports these policies, (or opposes them). Politics is a complex collection of beliefs, and in South Africa one is required to adhere to the ideology of the separation of races in spatial terms, as it is legislated by parliament and is enforced as law by the police. In South Africa, one need not necessarily share and accept the political beliefs in order to be in complicity with the government's politics.

Politics and architecture are linked to each other by an umbilical cord of urban policy and legislation. Planning large-scale environments for people to live, their houses, gardens, streets, neighborhoods, and towns, results in the imposition of ideas about how those people should live. When the South African government decided to take on the responsibility of housing its urban black
Aerial view, Kwa-Thema. The barren countryside is built upon to house the black population well away from the city and separated from the white suburbs.
Calderwood, Native Housing in South Africa, p5
population, people whom the government regarded as temporary labor in the urban areas, they believed that their task was to build "suburbs" according to the principles and "culture" of the suburbs as they were known, as well as to build them economically and quickly. The supporters of this ideology of "suburbs" also believed that this environment would inculcate "civilized" and "responsible" western attitudes and standards, and would contribute towards the general "upliftment"\(^4\) of the "natives."

**Method of Inquiry**

This thesis explores various ways of understanding the townships in South Africa. In each chapter I will consider a different way of viewing this form of human habitation, and the many ideas that I have encountered in my research towards trying to make sense of them. It is about the suburban ideal and the mythology around it if one assumes a particular political structure. This thesis is about the possible transformations or corruptions of the ideal and its realizations. I will examine the perceptions of it from different points of view, - that is its different meanings to different people. I will look at: the *genesis* and history of the ideas; their characteristics; the corruption of the ideals; and their realization.

The forces which led to the creation of the townships included political ideology, economic motivations, the planner's dream of the suburban ideal, concern over the "scientific" problem of mass-

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\(^4\)This is a peculiarly South African word made popular by John Vorster - Prime Minister from 1966 to 1978.
Aerial view of Soweto.
Markus Braun, Das Schwarze Johannesburg, Afrikaner im Getto.
housing and the patronizing and philanthropic interests of the "fathers" of the townships. By drawing these ideas together I will show how the townships in South Africa are corruptions of a suburban ideal. I believe that the overriding political philosophy places political content into the work of architects and planners, whether they accept this or not. 5

This thesis is an examination of ideas in an attempt to understand the existence of the townships in South Africa. The structure of the thesis will follow three major lines of inquiry. Firstly I will explore the policies of separate development as they evolved in the past in order to see the forces at work in a larger context. History shows us that apartheid did not only originate when the National Party came to power in South Africa in 1948, but that the separation of races was a policy followed from the times of the earliest settlers on the land. Since the earlier history deals mostly with the rights to the rural areas, I will concentrate on the period from about 1850 onwards, when the question of urban areas first appears. I will follow this history of South African urbanization with a history of some particular townships, in order to show how government policy affected and brought about these places for political and economic reasons.

5 The recent political awareness of all aspects of South African life - particularly for my generation - which graduated from high school in 1977, is due partly to the massive school boycotts and "riots" in Soweto in 1976.
The requirements of a family and what is needed when a housing scheme is considered, the requirements of people and of land.

Calderwood, Principles of Mass Housing, p21
The second theme of this thesis will be a study of the ideas of the Anglo-American suburbs, of the forces that created them and of the values which their advocates held to be important. This will give further insight into the values of the architects and planners of the townships, white people who I understand lived in white Anglo-American styled suburbs in South Africa. I will analyze the work of these people and their attitudes in designing the townships for black people. They worked within the government's policies of segregation and claimed for themselves a measure of technocratic immunity while claiming to be achieving the philanthropic tasks of "civilizing" the "natives." In aiming to provide them with housing which met minimum standards of "western" housing in suburbs, they learned what they could from the British and American architects and planners. I shall also compare the suburbs with the townships, and show how the corruptions of suburban ideals were realized and how politics influenced the form of the townships and the houses built in them.

The third part of this thesis will take a different view of the townships, and will examine the political nature of space through the lenses of philosophers, urban sociologists and political economists. This will give yet another layer of understanding to the nature of the townships, and I will make some attempts to relate these theoretical models about ideology and science with policies of the South African government's decision to build townships and housing for its "labor force" on the peripheries of urban centers. I will also relate, in a more abstract way, what the building of "native housing" and
Draughting for apartheid. The work of an architect occurs in an environment with many social and political forces at work, and is not immune from such forces. The cartoon questions the morality of white architect designing buildings in the "homelands" and thus in support of the ideology of apartheid.

The Weekly Mail, April 25, 1986.
townships might "mean." I will show how the small houses built for the black population can be seen to express the government's policies of the superiority of white middle class Anglo-American values over others, through South Africa's governments attempts to inculcate such values in its urban black population. Finally, I will conclude with some thoughts on the difficulties of writing such a thesis, and with some discussion of the problems of "objectivity" in trying to understand the phenomenon of townships in South Africa, and the politics of that country through this environmental lens.

I believe that the case of the "native townships" and their relationship to both government (advocates of apartheid and group areas legislation) and professional practice (the design and aesthetics of the suburbs) will clarify the links that have existed in the past. I believe that a study of the origin of the townships will help to define the corruptions for political ends which I recognize, which is a first step for assessing the problem.

In order to be able to analyze several bodies of information which I wish to bring together, it becomes necessary to create a data base to which I can refer, in order to derive a means and a method for assessment. I also require a working definition of "political," especially in the light of built environments and architectural and planning commissions. What are the degrees of complicity, and what does it mean to be "in complicity"? What do I mean by politics? What constitutes a political commission? What environments, in the context of South Africa, are not political?
Soweto to Johannesburg work opportunities, 1970 (above).
Africans spent R40 million on shopping in the city center in 1969 (below).
Johannesburg City Center, Forward Planning Report No. FP 86. B. L. Loffell, City engineer.
I shall refer to the writings of two professionals in particular in this thesis, those of D. M. Calderwood, an architect, and T. B. Floyd, a planner. Both of these people were "reflective practitioners" in that they wrote about the work and research which they did in order to teach others. I use their writings to represent government thinking, as both were politically conservative and much of their influential work was done for and implemented by the state. Their ideas about township layouts and the design of "native houses" was spread through the schools of architecture and planning in South Africa, and their vast scale projects were put into practice. Calderwood's attitude towards the provision of housing for black people in urban areas as supportive of government policy will be examined in detail in Chapter Three, but I will introduce him here through his support of capitalist self-interest, with the following quotation.

The provision of good housing is shown as an important factor in the formation of a stable and efficient labor force and the creation of a community capable of shouldering their own responsibilities. Stability and efficiency are traits needed by the white capitalist community and would assist in the exploitation of such labor while reducing the white government's or employer's responsibility for their needs. The stress and the reasons given for the provision of "good housing" are for the improvement of white capital, and not necessarily for that of the people to be housed.

If the urban Native were housed in an environment in which he could be educated, enjoy his free time and develop an individual personality and a good family life, the incidence of crimes of violence and others of a serious nature would be greatly reduced. The children in the urban Native

---

6 Calderwood, D. M. *Native Housing in South Africa*, 1953, p1

25
"New demands of urban living." The westernization of black people was an ideal sought after by Calderwood et al, and the photograph shows what this would mean in the living room of a black person's house. Note that the plans of house designs show beds in the living room, this picture shows a suite of living room furniture, a radio set, and other symbols of "civilized" living. Calderwood, Principles of Mass Housing, p65
residential areas must be afforded the opportunities of some schooling and the chance to play games and attend boys' and girls' clubs where scouts and guides or similar activities can be organized. If the children are given the chance of a full life now, then to-morrow they will accept their responsibilities and become contented and well behaved inhabitants of the urban areas.\(^7\)

Calderwood's attitude to the provision of a larger environment becomes clear. There needs to be provision of schools and other amenities for the chance of a "full life," but the reasons beyond this are also revealed. Calderwood writes of the opportunity for some schooling, which can be read as meaning that it is important to allow some education, but not as much as to become a challenge or threat to, and never the equals of, the white population. Furthermore, the intention of providing an environment which will create a contented and well behaved population is to serve that of the white economy, since such responsible people will not be a threat to the white state and will surely contribute much to the well being of these urban areas.

The government's policy decision to house its population was a politically motivated decision supported by technical data supplied by its technocrats, planners, "specialists" and forecasters.\(^8\) By assuming this task, the government was able to keep from the black population a sense of permanence in the urban areas, and to deny them the rights of citizenship in the country. In apparently contradictory statements, the government believed that "the creation

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\(^7\)Ibid., p13

\(^8\)Urbanization after WWII resulted in overcrowding and squatter camps, which prompted the government to establish the National Building Research Institute (NBRI) and the South African Council for Scientific and Industrial Research (CSIR), to investigate the problem of housing. For more - see Calderwood, D. M. *Principles of Mass Housing*, p113.
### FAMILY NEEDS & INCOME

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Annual income = R166.66 × 12 = R2,000.00 or £1,000

### HOME DEMANDS:
- repayments & interest
- maintenance
- tax
- rates & sanitation
- fuel, water & light
- refuse-removal
- transport
- food
- clothing
- furniture
- medical care
- insurances

### TOWN DEMANDS:
- buses or trains
- roads
- health service - clinic
- schools
- playgrounds & parks
- indoor & outdoor entertainment
- religious buildings
- place of work
- shops
- cultural & intellectual centre
- business centre
- cemetery

The income and demands of a family.
Calderwood, Principles of Mass Housing, p22
of a home is an essential requirement of citizenship,"9 and, at the same time, denied home ownership to the majority of the population on the majority of the land (and also denied citizenship!). This contrasts strongly with the case of the United States where ownership of a home is a psychological and sociological value strongly associated with good citizenship.10 While their presence was tolerated and their labor crucial to the white man's economy, the black people were not accepted as equals in a just and free society. Home ownership was not allowed, and it was intended that people would rent accommodation in the "locations" or "native townships" (hereafter referred to simply as "townships") on a temporary basis, actually retaining their rural roots in land allotted to their particular tribe elsewhere in the country, according to the Land Act of 191311 and later legislation. I will elaborate in Chapter Two on the reasons for the white elite accepting the "temporary" presence of the black people in the urban areas. The European colonists believed that they alone were responsible for the creation and the existence of the wealth of the cities in South Africa, and that they should therefore reap the rewards. The acceptance by the state of the need to house black people in urban areas is important, and this thesis explains the government's intentions, and the corruption of a western suburban ideal, for reasons varying from patronizing philanthropy to the fear

9Calderwood, D. M. Principles of Mass Housing, p13
11The 1913 Act effectively allotted certain lands to the black population of the country, whilst the Group Areas Act of 1950 was to similarly effect and limit the rights to the land for the Indian (Asian) and "Colored" (or mixed race) population.

29
"Proposals for the New Town of Hook, England." Calderwood constantly looks to England for examples of planning to help him in what he has written about as being a unique situation in South Africa. Calderwood, Principles of Mass Housing, p56
of being overwhelmed.

Urbanization in South Africa was exacerbated by the industrial revolution and the enormous growth of secondary industries during World War II. The lack of building during the war years resulted in an enormous increase in the demand for housing at this time, and urbanization resulted in overcrowding of existing housing and the growth of squatter camps. These were among the reasons which prompted the government to become involved in providing housing, particularly for the low-income black families which were now living close to the cities and places of employment in the country. This study will concentrate on the period from 1930 to the mid 1960s, and will focus in on the work of Calderwood and Floyd in the 1950s.

Suburbs, Science and Separation

This thesis is about the intersection of the Anglo-American suburbs (housing the whites); the technocratic conceptions of mass-housing in South Africa (housing the blacks); and the political (non) sense of the synthesis made by the South African government in dealing with urbanization (the "designed" township).

Suburbs may be seen as being very many things and a great many books have been written about them. Authors suggest a variety of interpretations; suburbs can be seen as a social good, a technical achievement, an aesthetic ideal or a political necessity. The ideals of the suburbs have been corrupted to result in many incarnations, including, I shall argue, townships in South Africa. The townships
View of Soweto.
Markus Braun, Das Schwarze Johannesburg, Afrikaner im Getto.
present a contradictory appearance; they are "machined," mass produced and repetitive, yet are also hand built, suburban-like living quarters. They are efficient, economical, and elegant to the people responsible for their conception and realization -- the state and its technocrats, yet these unique places concretize (and legitimate) the disenfranchisement and the racist policies of the South African regime. This is done by housing people in the urban areas on terms and conditions enforced by the government. They are the government's "legal" solution to a modern (industrial and urban) and ideological (political) dilemma. Architects and planners have collaborated in the achievement of apartheid's ends, and have played various roles with respect to the politics of the country, either for or against the status quo. The architects' and planners' ethics are directly related to their (personal) political point of view. Their work in a country which is racially zoned for apartheid will tend to reinforce that system by accepting its premises and continuing them. An architect who supports the policy of separate development may chose to work directly for the government, while one who opposes it may chose to work against it, by consulting to black trade unions on housing issues or upgrading informal squatter settlements, for example.

The Suburbs

The ideals and knowledge or "culture" of the suburbs, held out in Europe and the United States as "state of the art" in providing "places" (more than just "housing") for people, were well known to South African architects and planners, whose education was based on
"High density residential development." Calderwood refers to Hook as "a Radburn plan turned inside out" - and refers to Le Corbusier's town plan as "Villa" Radieuse; enamored with the amount of open space achievable there. Calderwood, Principles of Mass Housing, p35
the British system, if not in Britain. Mumford, Perry, Stein, Parker, Unwin and Wright were all known in South Africa as people who wrote and debated extensively about issues of suburbs, neighborhoods, and the ways to house people in and near cities. These ideas and their suburban offspring were initially developed by the middle classes in order to escape the city slums created by the industrial revolution in London, Manchester, and in the north-eastern United States. The urban population was exacerbated by people escaping rural poverty caused largely by the new industrial efficiency of farming the land, and attracted by the opportunity of work in the cities. One resulting form was that of the Garden City and Garden suburb movement, heralded by Ebenezer Howard, and supported by his many disciples and followers.

Whereas the first "modern" designs of the suburbs in the Anglo-American world provided a refuge from the dense urban industrial cores for an elite class fleeing to the countryside, they also later came to provide a new model of living for an entire middle class. The overwhelming popularity of the suburbs, and the accessibility and affordability of this lifestyle by a larger number of the population, led to the destruction of the ideal which these suburbs primarily represented. To caricature them, the suburbs became a series of mass produced identical houses some distance away from any services or shops, dependent on private transportation, and certainly not the image that the early pioneers of this urban form had hoped to achieve. Issues of class, aesthetics, escape and disillusionment have been dominant in their history. The concepts and ideals of the
Plan of Soweto or high-tech circuit board?
suburbs have undergone many changes and their realizations can be seen to be corruptions of an ideal in many ways: from providing the social benefits of equity and better living conditions, (each family was to own its home, fresh air was to be abundant), to isolating the family and individuals from a sense of community and from the facilities of the urban centers. Another example is provided by the garden suburbs and "green" towns which were corrupted to become an aesthetic available to a privileged few; large houses in large gardens, romantic, winding streets and a sense of the rural countryside, yet with all the benefits of a close association to the city - in a private car easily afforded by this class.

In South Africa, examples of both of the above exist in the suburbs of the white people of the country. The middle class ideal is achieved in the affluent white suburbs surrounding the major cities in South Africa. These contrast with the "suburbs" designed for the black people. Here a new hybrid was developed, whereby the white designers sought to provide the Anglo-America suburban ideal for the black people and on behalf of the white state. Working with a conception of the "natives" as irresponsible and uncivilized, and within the constraints of a politically repressive system and white people's fears of being overrun by a black majority, the state-sponsored township design boasted garden suburb aesthetic benefits for the masses, which were corrupted to become machined and efficient political tools supporting the policies of the white hegemony.
Histograms of the socio-economic survey, Springs. The more information garnered, the better the planners and architects believed they could do their job. Their implicit support of government principles goes unchallenged. Calderwood, Principles of Mass Housing, p72
The Science

Calderwood writes:

The technical approach [to the problem of housing urban Native families] can only indicate the way; it remains for housing policies to be framed in terms of scientific findings to pave the way to a solution.\(^{12}\)

Thus Calderwood understands the role of the professional consultant involved in planning and housing the African population in South Africa to be that of providing the technical and scientific information only. It remains for the state to accept the proposals and officially take responsibility for the implementation of them. In this way, as I understand Calderwood's reasoning, the technocrats operate at a privileged remove from the political arena of decision making, while remaining responsible for the efficiency, economics, planning and form of the resulting townships. (How the separation and absolution of responsibility for the results of the implementation of their work actually takes place in the minds of the technocrats remains, to me, an action of their "facile" minds.)

These technocratic, scientific, and calculated decisions and actions of the planners and designers of the townships are an area for examination and interest, both the attitudes they reveal towards the problem, and the inherent ideologies and beliefs which can be read into their work. The issue here is that the so-called "scientific" planning itself is not removed from the realm of ideology, but is itself a part of the politics that it pretends to evade or ignore.

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### TOWN IN GROUP ATTAINING A EUROPEAN POPULATION OF 25,000

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<thead>
<tr>
<th>Area of site required in morgen</th>
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<tbody>
<tr>
<td>Town Hall, Municipal Offices and Library</td>
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<td>Fire Station</td>
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<td>Workshops and Stores</td>
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<td>Stables, Sanitary Depot and Pound</td>
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<td>Location Site</td>
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<td>and With buffer strips probably</td>
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### TOWN IN GROUP ATTAINING A EUROPEAN POPULATION OF 50,000

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<th>Area of site required in morgen</th>
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<td>Town Hall</td>
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<td>Location Site</td>
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<tr>
<td>and With buffer strips probably</td>
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</tbody>
</table>

Racism even in the "science" of planning. Areas of towns designed according to "European Population".
Floyd, Town Planning in South Africa, p147
The Separation

A further thread of this thesis is the legislation passed by the minority government in order to make distinctions between races of people and insure its continued control of power in the country. In South Africa, residential and suburban class differences are exaggerated by the proliferation of racial legislation which further polarizes the conditions in which people live and work. These political concerns are responsible for the manner and form of the townships as we know them. Architects and planners reproduce politics in practice because of the interrelationships between the choices people have in where and how they live. The form of the townships, designed by professionals, has been forced onto the urban black population in South Africa. The relationships that exist between architectural design and urban policy under apartheid, as witnessed in the design of the townships in particular, illustrates that architecture and planning are inherently linked to politics in that country. Architecture and planning can fulfill political and social responsibilities in several ways. Some technocratically-minded architects claim autonomy from political and social responsibilities, while others are conscious of the power of their profession to legitimize the hegemony.

Place, Pride and Prejudice - Political Environments

I believe that all of space in South Africa has been politicized according to a particular ideology because overriding environmental policy is set by white elected government officials. I refer here to the racial zoning, a cornerstone of apartheid, within which all other
The queue in front of the Bantu Affairs Department in Johannesburg for people seeking permission to work in the urban areas and for this to be noted in their "pass" books.
Markus Braun, Das Schwarze Johannesburg, Afrikaner im Getto.
environmental decisions take place. The environment is thus linked to the government's ideology of apartheid and its basic pillars of the Group Areas Act and the Population Registration Act. One's race determines where one can live and often the form of the environment in which one must live. Although the bridge from these Acts to the practice of architecture is not accepted by all professionals practicing in South Africa, I believe that once "space" per se has been politicized, that working in that space refers more or less directly to those politics. While all space is constructed as a product of political and social relations, space in South Africa has to bear the additional load of legislated racial separation.

There is another, different way of considering the relationship between politics and architecture, and that is in the political allusions and references of "aesthetics" (broadly defined). Nelson Goodman has written about the various ways buildings can "mean" and begin to take on larger interpretive richness. I will expand on these ways in Chapter Four, Part One.

Architecture in its unbuilt form, as an abstract idea, a drawing in an architect's office, has a different sphere of influence to that which is built. As ideas on paper, buildings may affect that intellectual world which has access to them, and may even have strong implications in

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13 This legislation will be discussed in further detail in Chapter Two.
14 I refer here to the forced removal of squatters to state built housing, and to the controls of housing by the state for the African population in general.
Policeman checking "passbooks" of workers in an urban area.
Markus Braun, Das Schwarze Johannesburg, Afrikaner im Getto.
what does and does not get built. A building which is realized in the "public" realm will affect people who live and work in it or near to it, and even those who pass it by. I place "public" within quotation marks here as in South Africa not all space is accessible to everyone; it depends on one's race. When the abstract idea of the work of architecture is physically realized it gathers political layerings in the context of racial space. This is because the whole realm (the gestalt) is infused with the meaning, which the new object then joins. In other words the politics of the country exists in the city as urban design, which becomes the unit of political meaning, rather than just individual buildings.

While in all places politics permeates design decisions, in South Africa there is the added fundamental issue of government mandated racial zoning. The entire country is zoned for occupation or habitation by a particular race, and black people are excluded from living on the majority of the land and in cities, except in particular townships or locations reserved for them. This zoning is done by government departments including the Department of Community Development and Planning. Every person born in South Africa is classified at birth according to racial categories defined by the government. Thus particular people are linked to particular spaces from birth by an act of the government, which by definition is political. Space allocation according to race is the political link between architecture and apartheid. Functional zoning, such as industrial, residential, commercial, etc, occurs within the racial demarcations and at a more local level, within the broader
parameters of racial zoning established by the government. Local use planning also occurs differently depending upon the racial classification of the area. Use planning is in this way secondary to apartheid planning. Thus with racial zoning, architecture and politics are linked by the government’s controls on the interaction between the public and buildings.

Unbuilt environments which are racially zoned are also affected by the politics. The values of such land will vary, depending on the demand created by the particular racial group allowed to live there, and by the proximity of such land to previously developed and zoned land. In this respect all of space gathers a political color, whether built on or not.

The universal issues of the security and dignity afforded by one’s own home, the ability to pay for it and the access to resources to build it, are compounded in South Africa by the racial issue of who is allowed to live in a particular place. Class and racial issues are complexly woven so that while poor white people are "protected" by government legislation and racial zoning, their class counterparts of other races are treated differently with respect to their ability to acquire the security and dignity provided by a home. The planning notion of "zoning" which is used as a control over the use of space in countries around the world is brought into sharp political and cultural focus in South Africa by the racial legislation which blankets all other space use requirements.
House in Soweto.
Markus Braun, Das Schwarze Johannesburg, Afrikaner im Getto.
Some of my initial and more emotional responses to the South African environment were caused by the nature of the politics in the country. Although these factors may not be particular to South Africa, they are uniquely connected to spatial legislation there. South Africa is a land complexly divided along racial lines. It is a country of extremes: both wealth and poverty are skewed in terms of numbers and race; it is both of the "first" and the "third" worlds; and there is a lack of universal franchise and of human rights. In these respects, the politicizing of architecture has little to do with architecture, and everything to do with the physical and social environments within which the architecture is realized. A "matchbox" house in a township is, by its inadequacy, itself tied to politics, independent of its larger environment. Uninhabited architecture may be able to escape politicization, but once its inhabitants are considered together with the form, politics enters in.

This argument may lead in two directions. Some architects use this as an excuse to promote the role of art in architecture in the sense that aesthetic pursuits allow for political non-accountability, or for the right to be disinterested in politics, an accoutrement of white privilege. Others search to understand how architecture supports (or works against) the administration of apartheid. It is this quest which has lead to this thesis of relating the policies of government to architecture and planning.
"Black family in a slum area."
Markus Braun, Das Schwarze Johannesburg, Afrikaner im Getto.
CHAPTER TWO

The Townships

In this chapter I describe the background leading to the creation of the townships in general in South Africa, as well as the history of some particular townships. The townships are the results of many interconnected forces, fears, hopes, and attitudes reflected in government policy. The history of South African urbanization and of legislation dealing with the separation of the races will be part of this description. The laws leading up to the implementation of the Group Areas Act and racial zoning in the country, the reasons for them, and the attitudes of the white people making and practicing according to these laws all lead to a deeper understanding for the creation of the townships. The political history also helps to prove the point that the townships, although clearly suburbs of a sort, are essentially political tools serving the needs of the white minority in South Africa while housing the urban black population.

The Townships Introduced

In the literature on South Africa, "Native townships" are also sometimes referred to as "locations", and I use these terms synonymously. Some authors, however, try to clearly separate the meanings, while others do not. Note that "reserves" refer to the "bantustans" or "homelands".

A location is an urban area set aside for non-European accommodation. The name has come to be associated with the uncontrolled growth of overcrowded, amateur-built shanties, as distinct from the planned non-
"Locations" which existed prior to the government intervention in the provision of housing for black people in the urban areas. It was the poor conditions in places like these to which the government initially responded with assistance in funds to local councils for housing and for health reasons. Calderwood, Principles of Mass Housing, p61 (above). Markus Braun, Das Schwarze Johannesburg, Afrikaner im Getto, (below).
European townships that are taking the place of the locations.¹

There are many different types of townships or locations in South Africa. There are those areas of "uncontrolled growth," described above as "locations," in which black people first settled when coming into the urban areas, also sometimes referred to as "shantytowns," named after a notoriously squalid settlement, "Shantytown," established between Johannesburg and present day Soweto in 1944; or as "black-spots," especially by those supporters of apartheid and the spatial separation of races. These were largely self-built residential areas, and contrast with the early attempts of the government to house the urbanizing black population in concentrated areas of identical and mass produced houses, the forerunners to the more carefully "designed townships" which I will examine. There are more traditional settlements and towns which have been incorporated into the "homelands," in which black people can own land and have greater rights than in "white South Africa." The townships which I will concentrate on are suburbs which were conceived and built as entities to house South Africa's "non-white" population in "white areas;" and whose development represents the "built manifestation of design constructs."² Unlike older white suburbs which generally develop through a process of action or reaction over time and which aim to fulfill middle class Anglo-

¹According to Adolph Schauder, "Generous Housing for South Africa's Natives", in Optima, (a quarterly review published by the Anglo American Corporation of South Africa, Ltd.) December, 1953. p1
American ideals, these townships were built as single entities, instant suburbs, to fulfill government ideologies of the separation of races and to house an urbanizing black population. White citizens have a choice of where they may live with respect to place of work, recreation, other members of their family, etc.; they have the security of ownership of their homes, and relative freedom. In contrast, the townships are government built, the houses bureaucratically allotted and rented or leased, and the choice of living opportunities for the black population is thus severely limited.

Locations and townships existed before those which I will examine in more detail, and it was believed by planners and architects such as T. B. Floyd and D. M. Calderwood that much could be done to improve these areas and to promote better and more "civilized" conditions. Floyd and Calderwood, whose work I will examine in the following chapter, were not working in a vacuum, but were criticizing and reacting to a set of existing conditions which they believed their respective professional skills could improve. They were not only importing suburban ideals but they were also commenting on and reacting to an existing situation of housing conditions for black people in South Africa.

The setting in which the black people live is designed and built by the white elected government or its local devolution, a city council or municipality. These people are allocated houses in locations for which they must pay rent, with little choice or selection in the manner to which the "free-market" of the western world is
accustomed. The "lifestyle" of the township residents is influenced by such things as overcrowded living conditions due to the shortage of accommodation in general, the excess of time lost during the long commute to places of work, the lack of cultural and community facilities, etc. While the personal dignity or morality of the inhabitants of the townships is not controlled, it may certainly be offended by the treatment and relative disrespect paid to them by the patronizing attitudes and racial policies of the white government.

Townships or locations are not towns or cities because, even though their populations may be large, they lack "cohesion and the normal range of urban amenities." Cohesion is not monotony but refers here to a sense of "urbanity" or continuity, especially within the public realm. The townships are dormitory suburbs without many of the facilities such as shops, offices, and work opportunities which white South African people are accustomed to in their living environments. In South Africa the terms "native location" or "native township" refer to the segregated places on the outskirts of the cities and towns where black people are required to live. These townships perform part of the same functions as do the white satellite suburbs, whose populations also work mostly in the big cities. Mandy claims that the vastly superior quality of the white suburbs may be partly explained by the greater prosperity and longer urban traditions of the white people. The complexities of urbanization in South Africa include the difficulties of poverty, ethnic differences and compulsory

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The relationship of Soweto to Johannesburg and the neighborhoods of Soweto.
Markus Braun, Das Schwarze Johannesburg, Afrikaner im Getto.
racial segregation, and are further complicated by the delusion that
the black people are temporary "gastarbeitters" (guest-workers) in
"white South Africa" and who must be denied permanent residential
and civic rights in the towns. This policy diminishes the sense of
stability and security that the black families and communities who
live in the urban areas might have.

The biggest and best known township, or collection of townships, in
South Africa is Soweto, outside the country's largest city,
Johannesburg. Soweto, as an example of townships more generally,
is the result of deliberate government policy to house its black
population outside of the city, yet in close enough proximity to serve
as a "dormitory" for the black labor of the white city. Soweto has
grown over the past forty years as its population has increased. It's
growth has not been "organic" or incremental in a "natural" way, but
sporadic, as the government has developed whole sections at a time.
Such areas, (I hesitate to call them neighborhoods), include, for
example Orlando, Dube, Meadowlands, Moroka, Diepkloof, and so on,
forming independently developed townships within the greater
Soweto region. Figure 56 shows these separately built areas which
work together to make up Soweto. The typical houses in Soweto (and
in other townships) are known by the number naming their type:
51/6 (read fifty one stroke six ) and 51/9 (fifty one stroke nine ),
designed by the National Building Research Institute (NBRI) a
government research department established in the 1950s. The
houses are designed to shelter one family on a plot of land or erf,
separated from their neighbors, as is the case in the white suburbs.
### Table One: Influences on Townships 1930s - 1960s

<table>
<thead>
<tr>
<th>Suburb</th>
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<th>Science</th>
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<tr>
<td><strong>Position in Metropolitan Context</strong></td>
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<tr>
<td>Like Anglo-American (white) suburbs, only further away from the city centre. &quot;Black spots&quot;. Outside &quot;white&quot; cities or places of industry or mining.</td>
<td>Apartheid legislation of group areas act and separation of races. Zoned by race. Access to the city kept secure. City to be kept &quot;white by night&quot;. Surrounding &quot;cordons-salles&quot; or &quot;buffer zone&quot;.</td>
<td>Population maintained as &quot;healthy labor&quot;. Neither complete banishment nor political or economic inclusion. Positioned in growth centres near industry or existing towns. Assumes planning within existing government framework.</td>
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<tr>
<td><strong>Urban Form</strong></td>
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<td>Like white suburbs, with higher density. One house per plot. Developed as an entity and not over time. Residential dormitory only, limited industry and commerce. Local &quot;municipal&quot; govt. controls &quot;community&quot; services.</td>
<td>Government intention to accustom &quot;natives&quot; to &quot;civilized&quot; western ideas. State sets limits of growth and choice of place; forced removals and allocation. &quot;Primitive&quot; patronizing taken attitude towards &quot;natives&quot;.</td>
<td>Government institutions of NBRI and CSIR established to define standards. Technocrats work within set policy for social and economic efficiencies. Considerations of densities, road and service lengths, financing and levies.</td>
</tr>
<tr>
<td><strong>House Form</strong></td>
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<tr>
<td>Like white ideal: smaller houses and plots. Identical, individual houses. External bathrooms, fewer services, pitched roof, verandahs and yards. Fenced properties. Controlled alterations and changes or personalization.</td>
<td>Houses rented not owned. State controlled growth, &quot;home life&quot;. Limited improvements, identity, comforts. Discrepancy between designer's intended use of dwelling and actual use ($ of people, etc)</td>
<td>Government priorities of shelter, economies of scale, western form, and possible future services. &quot;Native&quot; builders taught minimal skills to build their own townships to reduce costs and time to construct. Efficiency of circulation in plan. Minimum standards established on the basis of &quot;Anglo-American&quot; living: light %, circulation etc.</td>
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The densities were "scientifically" calculated for maximum efficiency of services within a framework of a suburban ideal.

The ideal form of the townships was derived from ideas about white suburbs built according to Anglo-American ideals, the differences between them are corruptions for political and economic ends. Table One is a matrix showing the interrelation of some of the aspects of townships. The titles of Suburb, Politics and Science refer to the more important influences on the phenomenon of townships. The other axis of the matrix refers to the various scales at which I have chosen to look at the townships. The townships are like the Anglo-American "white" suburbs in many conceptual respects; they are outside city centers, they have one residential dwelling (ostensibly for one family) per lot, and the houses are of rectilinear Anglo-American design, and assume a "western" way of life. The townships are influenced by politics in all three scales quite differently from that of South Africa's white suburbs. Even though racial zoning applies to all the races in South Africa, including the whites, it is legislated by a white government and works in favor of empowering the white group while disenfranchising the black groups. As a science, the townships are crafted quite differently to the white suburbs for political reasons, which are translated into standards and codes to be realized in practice. Statistics of health, economies and efficiencies are used as the "scientific" tools of the technocrats involved in carrying out government policy on the ground. Each of these aspects will be explored in further detail in this thesis.
Urban Political History and Legislation Introduced

In South Africa, planning is subordinate to racial legislation. The power of a white minority government has become entrenched and embodied in the physical form of the country's cities. The policy of apartheid has led the Nationalist government to legislate separated living areas for people of different races. This has resulted in practice of architecture and planning being infused with the present government's racist policies as they are implicit if one does not break the law.

I use "politics" in this thesis to refer to the policy, structure and affairs of the white government as it implements its laws and rules over the will of the majority of the population, the black people in South Africa. I also use politics more generally to refer to the differences in attitudes and values over how the country should be governed, and to the highly contentious and bitterly resented policies of apartheid as they affect the lives of people in the country because of legislation enforced by the various arms of the law.

In this chapter I shall describe the background of the racial legislation in South Africa. The laws leading up to the implementation of the Group Areas Act and racial zoning in the country, the reasons for them, and the attitudes of the white people making these laws all lead to a fuller understanding for the reasons for the creation of the townships. The political history helps to prove the point that the townships, although clearly suburbs of a sort, are
essentially political tools serving the needs of the white minority in South Africa while housing the black population. I shall not attempt the history of South African land use from the beginning of the first arrivals of settlers, but instead from about 1850, when some towns had already been developed and land ownership related not only to rural farming land, but to towns as well. It is largely the urban and suburban question which I wish to deal with in this thesis, and from the 1850s the interrelationship of urban and rural was sufficiently complex to be relevant.

The History of the Townships
The ownership and occupation of fixed property in the urban areas has materially benefited certain races while it has negatively affected other races. My argument is that the design and form of townships and cities are politicized by a person's right to the land in that place. In the context of South Africa this means that the political mechanisms established to separate the races to the material benefit of the white population has resulted in these cities being perceived as emancipators to the privileged race, and as political exploiters to the disenfranchised people.

The major factors which led to the formation of the townships and which can be seen to have acted in various combinations can be summarized as follows:

1. Poor existing conditions of black housing. The white South African population, generally accustomed to European standards,
balked at what they believed was the inadequacy of the "native-built" house, or "shanty", or hut-forms.

2. The removal and clearance of slums in the urban areas.

3. Health fears. The epidemics of Tuberculosis and Influenza which affected the existing black locations particularly badly were seen as a major reason to undertake the re-housing of the black population. This factor is not unrelated to the first factor mentioned above.

4. The lack of water, sanitation, and refuse collection services to the existing black settlements.

5. The lack of gardens and open fertile space in these areas.

6. Intercultural conflicts and the belief of the white rulers that people should advance separately and within their own culture, rather than mix homogeneously in the urban areas.

7. Conflict of traditional rural ways with western ways of life in the urban areas. This factor refers particularly to keeping of animals and cattle in amongst the houses in an urban environment.

8. Land laws and the lack of tenure of tenancy and occupation in the urban areas. The lack of feeling of permanency due to these laws affecting black people in the urban areas resulted in little inducement to make and invest in a permanent quality home.

9. Political fears. The white electorate has always felt threatened by the presence of vast numbers of black people pouring into their cities and the townships were created to attempt to stem this tide of urbanization, and keep black and white people apart.

10. Attitude of white superiority and black inferiority held by the white government. This was reflected particularly succinctly in
the dogma established by the Stallard Commission of 1922 which claimed that white people had been responsible for the progress made in South Africa's urban areas and should therefore be the recipients of its benefits and should exclude black people from such equal opportunities.

The manner in which the above factors worked to create the townships will become clear as I describe the origins of some particular townships and the history which underpins them.

**The Group Areas Act Introduced**

Racial restrictions on access to land and housing are a cornerstone of apartheid; they are bitterly resented by the vast majority of black South Africans, but are seen by conservative whites as a non-negotiable guarantee of survival. The 1980s have brought a gradual breaking down of these restrictions or interventions, due largely to population pressures on cities and domestic and international pressures on the government to liberalize its policies. These changes suggest that existing racial policies cannot be successful if they go against a "moral majority" or the most prevalent and most powerful behavior, and lack their support. These racial restrictions on the access to land result in being only as effective as the police power which enforces them.

In 1950, two years after coming to power, the National Party (NP) government (which is still in power), introduced the Group Areas Act, which imposed a rigid system of segregated trading and residential property rights throughout South Africa. The Act was
strictly enforced and has had a major impact both on the form of South African cities and on the lives of thousands of people who have been removed from their houses and forced to live in segregated areas.

The earlier measures of segregation in South Africa were only partially effective in achieving their goals, for they attempted to enforce segregation in piecemeal and inconsistent ways. Their limited effects fueled white demands for stricter controls and prompted successive attempts by legislators to meet these, culminating in the 1950 Group Areas Act. This Act affected so called "Colored" people and Indians in particular, as Africans had been subject to a longer history and a harsher body of law, segregating them from whites before the Group Areas Act was imposed.

The Act was enforced rigidly until the 1980's as the government attempted to reshape the cities to conform to its segregationist goals. More recently it has enforced the Act less strictly, and has stopped the removals of black people from white-designated areas, as the government has attempted to stimulate the economy and to foster a black "middle-class", sympathetic to the status quo. The government has even sanctioned the opening of some commercial zones to all races. At present, most of the Group Areas are already in place, and the government is presently concentrating on legitimizing their

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4 Towns have been allowed to apply to the central government for permission to open up their business districts to allow traders of all races to work and have shops in these areas.
... Fourteenth would have achieved fame long ago if we did not have so many bunglers running our affairs. I say that because Vrededorp has been proclaimed a white area. The people of this township must go and live elsewhere, out of Johannesburg, according to the Group Areas Act. For some time, the shops will be allowed to remain in Vrededorp, but they too must go in due course. They must give way to white occupation. That is what I mean by bungling.

The names of the shops in this Oriental quarter alone lend colour to our clearly ugly town. They are as exotic as the African names after which some of our towns (Gingindlovu) and rivers (Umfolozi) are named. It is in Fourteenth Street where you find Surtees Outfitters and Hafajees Bazaar or Habbib Stores.

... The older men say that Vrededorp was given to the Indians and the Malays by Paul Kruger himself. The two Houses of Parliament, the story goes, subsequently sat and reaffirmed Kruger's decision.

"Now", they argue, "if this Government can move us from here, after all these assurances, what guarantee do we have that we won't be asked to move again once we are settled where they want us to go?"

They point out that their investments in the area run into R6 000 000. More than 2000 people depend for their livelihood on working in the shops - about 170 of them. They say that the area is bounded by a white cemetery, two buffer strips and railway lines. There would be nothing to go against the spirit of the Group Areas Act if they were left there.

"We are dying to get into the cemetery nextdoor," one man said, "but we are prepared to stay out if that is against the law. We just want permission to improve our homes and live and die in them."

presence. The physical form of the living areas of the Group Areas Act is the tract housing of the township, encouraged by the values of middle class suburbia, held out to be an achievable ideal.

The government continues to plan urban development on a segregated basis: the proclamation of new Group Areas and the extension of existing ones is thus continuing. Development planning, to be effected through long term regional guide plans, is also taking place within a rigid framework which assumes the continued existence of the Act. The government has been verbally retreating from its policies of rigorous segregation in the major urban areas, yet very substantial changes in both law and policy are required before all South Africans can enjoy equal access to land.

In order to understand how the politics of the country have effected the housing of the black population, it necessary to examine the history of land tenure and privilege. I wish to show how the present situation is one where city planning, because of its relationship to the land, is inherently political and, in the context of South Africa, racist. I argue then that in this political context, the planning of the townships is the embodiment of control over the population, and results in the townships taking on the form of built apartheid.

Some Particular Townships
I shall describe the particular history of some townships, their form, and some of the concerns of the people involved in their realization. The attitudes of Floyd and Calderwood will be examined in further
A general view of Soweto.
Lewis, A City Within a City, The Creation of Soweto, p31
detail in the Chapter 3. Soweto is a collection of townships outside Johannesburg, which although unique in size in South Africa and its name recognition around the world, is still in many respects typical of the townships of that country. There is also more literature available on this township than on any of the others, and so its "story" can be told more thoroughly. Other townships I will briefly describe are those built in Port Elizabeth, at Witbank and at Springs. The reasons I include the histories of some particular townships is to show how the racial and planning legislation are applied in practice in the creation of these places.

Soweto

Patrick Lewis, a councillor of the Johannesburg City Council and its Deputy Chairman of the Management Committee and Chairman of the Non-European Affairs Committee, reveals his attitude towards the people of Soweto for whom he provided much housing and many services, in a speech he made at the University of the Witwatersrand, Johannesburg, in 1966.5 He describes how the development of Soweto was to make a home for the black people who had left the rural areas to work in Johannesburg and surrounding areas. They were a pastoral people whose agricultural methods were "primitive", and as land available to them was restricted, and droughts increased their burden, they found it difficult to provide for their families. (I shall describe some of the laws relating to the restriction of the

5Lewis, Councillor Patrick R. B., A "City" Within a City - The Creation of Soweto, an address delivered at the University of the Witwatersrand, Johannesburg, 6 September, 1966. pp23-25
Seaparankoe
Keorapetse Kgotsile

The need of the land we sing, the flowers
Of manhood, of labor, of spring;
We sing the deaths that we welcome as ours
And the birth from the dust that is green we sing.
-Cosmo Pieterse-

rights of black people to the land below.) These people came to the cities to find employment which would provide them with money to purchase the food they needed. Initially it was the men who left to work in the urban periods for temporary periods, returning home to join their families and only going back to the cities when they needed to earn more money. The system of migratory labor was begun, and was encouraged by the white population who found in these people a cheap and temporary work force.

The History of Ownership and Occupation of the Land

In their book, The Right To The Land, Davenport and Hunt⁶ point out that the history of the ownership and occupation of land in Southern Africa has not always received adequate attention because "it falls on the borderline between social, economic and political history, and yet is of fundamental importance to all of them."

Segregation

Segregation of people on the land is one of the oldest policies of South Africa. Jan Van Riebeeck, one of the first settlers in the Cape of South Africa, planted a hedge to separate "natives" from the Europeans. This gave segregation a symbolic antiquity, but that hedge had hardly been an effective barrier, and throughout South African experience there was often no correlation between theory and practice, basic policies differing from one part of the sub-continent to another and from one time to another.

Here the black people lived their lives in a separate world, in the round grass huts with their small fields of maize and beans and sweet potatoes. Some say it would be better if they stayed there altogether, for then they would be protected against the evils of our civilization; but the truth is they cannot stay there, for their small fields cannot keep them, and they must come out to work for food and clothes. They go in their thousands to Johannesburg and Durban, nearly all the men, and every young man and woman, and there learn many new things, so that some never come back, and some come back with new ideas never before thought of in the low country.

Alan Paton, *Too Late the Phalarope*. Charles Scribner's Sons, New York 1953
page 48
The origins of the imposition of European tenures on the land dates back to the Dutch East India Company asserting its sovereignty over the Cape in 1652. The history of legislated segregation in South Africa dates back to British rule in the Cape during the 1880's, when successive segregationist measures were applied as the clamor for economic protection and social separation grew among whites, which began shaping the cities of today. Before this time, segregation occurred but without the body of law which later was used to enforce such conditions of living.

The Dutch East India Company Government in the late eighteenth century had generally tried to keep the races on the eastern-Cape frontier apart, and so had its British successors in the early nineteenth century, but not consistently. The rigid frontier was crossed both ways by traders, hunters, work-seekers and missionaries, often with direct governmental encouragement— for example, by Ordinance 49 of 1828, which allowed African work seekers into the Colony.

One can trace the fact that the apartheid frontier has continuously been broken as far as trade is concerned: colonists have always been ready to exploit the African people by making them work (as servants) and taking their money in stores and as taxes. The history of land tenures in South Africa clearly show how the colonists attempted to protect and empower themselves while they exploited and controlled the black people of the country.
In 1850, the governor of the Cape, Sir George Grey stated:

...I propose that we should dismiss from our minds the idea of attempting to establish, or maintain, a system of frontier policy, based upon the idea of retaining a vacant tract of territory, intervening between ourselves and a barbarous race beyond it, who are to be left in their existing state, without any systematic efforts being made to reclaim and civilize them...

...we should try to make them (the natives) a part of ourselves, with a common faith and common interests, useful servants, consumers of our goods, contributors to our revenue; in short, a source of strength and wealth for this Colony, such as Providence designed them to be.7

Sir George Grey's policy, which brought some benefits to the Xhosa while ensuring their subordination to the white man, did not prove in the long run to resolve racial conflict. Wars over the settlement of land by white colonists during the 1870s and early 1880s proclaimed the continued strength of African tribal resistance. But a result of those wars in most parts of southern Africa was the break up of tribal power. The black man ceased to be militarily dangerous to the white. It was under these altered circumstances that white men could begin to advocate the territorial separation of black and white without fear. In the 1980s the white men continue to maintain their power by splitting any black unity and efficient leadership, a modern day "divide and rule", encouraging black internal dissent, and thereby, (with never distant guns) maintaining white supremacy.

The Natives Land Act of 1913 was the first legislative attempt to divide the Union of South Africa into areas where Africans could own

7 Sir George Grey's speech opening the Session of the Cape Parliament in March 1855; from Cape of Good Hope Government Gazette No. 2594, 16 March 1855, in Davenport and Hunt, p42.
land and where they could not. This Act defined areas, referred to as
the "Scheduled Areas", outside which natives could not purchase
land. It also made provision for the setting apart of further land for
native acquisition in the future. It did not authorize the actual
eviction of natives from white-owned land, except in so far as this
was already required by law. However many farmers interpreted
the Act to mean that they were obliged to force African farming
partners either to leave the farm with their stock, or to sell their
stock as a condition of remaining on as laborers. The Act made
provision for the release of further land for Africans and a
commission under Sir William Beaumont was duly set up to assess
the extent of African needs and find the land for release. The
Beaumont recommendations, reported in 1916, were scrutinized by
local committees for each of the provinces, which reported their
findings in 1918, and which the Smuts Government adopted in 1921.
This attempted to clarify the restriction to lease or purchase land for
natives to demarcated areas made available for the purpose.

In 1926, General Hertzog introduced three bills to alter the basis of
African political power, and compensate Africans for any loss of
influence by providing them with more land. The released areas in
this bill were open for purchase by black and white alike; there were
restrictions imposed on Africans living in one province and buying
land in another, and above all, there was no provision for the
establishment of a Native Trust. Hertzog's "package deal" was placed
before the Native Conference (comprising African leaders nominated
by the Government in terms of the Native Affairs Act of 1920 under
Somehow we survive
Dennis Brutus
from A Simple Lust

Somehow we survive
and tenderness, frustrated, does not wither.

Investigating searchlights rake
our naked unprotected contours;

over our heads the monolithic decalogue
of fascist prohibition glowers
and teeters for a catastrophic fall;

boots club the peeling door.

But somehow we survive
severance, deprivation, loss

Patrols uncoil along the asphalt dark
hissing their menace to our lives,

most cruel, all our land is scarred with terror,
rendered unlovely and unlovable;
sundered are we and all our passionate surrender

but somehow tenderness survives.

General Smuts), and was rejected by that body. But because Hertzog was unable to obtain the necessary two-thirds majority for his legislation, on which the land legislation was made to depend (land and franchise measures were to stand or fall together), the Government withdrew the measures.

Rev. Mtimkulu of Natal said that "the Bill was something new in the history of South Africa. It proposed to give a man a licence to live upon the earth... The underlying principle was to keep the black man down." 8

A Native Trust and Land Act was eventually carried in 1936, together with a Representation of Natives Act, and the principle of territorial and political segregation thereby extended. This Act made provision for the release of areas for addition to the native areas; described conditions for the acquisition, tenure and disposal of land by the trust and by natives; and prohibited the residence of natives on land outside the Native areas, unless they were the registered owners, or the servants of the owners, or registered labor tenants or squatters, or the wives or children of natives exempted under these headings, or clergy, or teachers, or sick or elderly people, for whom special exemptions could be applied. Labour tenants were limited to five per farm and obliged to serve for six months in any year, any increase in number requiring the payment of a fee. Squatters were to be registered on the payment of a fee.

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The implementation of the Native Trust and Land Act of 1936. The Scheduled Areas in the accompanying map appear as Native Areas in the Schedule to the Natives Land Act of 1913. The "quota" land is land released for addition to the Native Areas under the Native Trust and Land Act of 1936, and corresponds with the land recommended for release in the reports of the local committees presented to Parliament in 1918. These areas form what are today known as the independent "homelands" with the exception of Lesotho and Swaziland which are internationally recognized as being independent.
Davenport and Hunt, The Right to the Land, p47
Refer to figure 78. The Scheduled Areas in the figure appear as Native Areas in the Schedule to the Natives Land Act of 1913. The "Quota" land is land released for addition to the Native Areas under the Native Trust and Land Act of 1936, and corresponds with the land recommended for release in the reports of the local committees presented to Parliament in 1918. The relatively small areas of released land not yet bought by September 1969 are distinctly marked.

Territorial segregation remained a topic for public debate. Professor of Philosophy at the University of the Witwatersrand, Alfred Hoernlé, expressed serious misgivings in 1939, concluding that only total separation of the races would be fair.

...I suggest that...Total Separation should be the liberal's choice. To choose Total Assimilation is to condemn himself to utter impotence in the face of existing race feelings: he can do nothing for the realization of greater liberty for the non-European groups, if he adopts total assimilation as his professed objective. To choose Parallelism is to choose a policy which will not, in practice, abolish racial domination: so long as whites and non-whites are united in the same socio-political structure, the former will not consent to surrender their dominance. Parallelism will remain domination in disguise...

The Protectorate Natives still feel that the land of their ancestors is theirs; that their institutions and their tribal integrity, though diminished, are not in principle destroyed; that they are not wholly disinflicted in their own house... They value, thus, precisely what Total Separation would bring to all Natives. For the Native peoples of the Union, at any rate, it should be

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9 The implementation of the Native Trust and Land Act of 1936, Based on a map drawn by the South African Institute of Race Relations, in Davenport and Hunt. The relationship of the reserves to actual and proposed "Bantu Homelands" is indicated on the map by numbers.
Park Station, Johannesburg, where people arrive in the city and depart from the city. The rural-urban tradition is most clear here.
clear that there is no escape from White domination by way of Parallelism or Assimilation, but only by way of Total Separation.¹⁰

But total separation was not envisaged by the more representative spokesmen for segregation, or its latter-day counterpart, apartheid. A document from the pro-government South African Bureau of Racial Affairs (SABRA), (an ideological counterweight to the South African Institute of Race Relations) argued that the greater the separation between the races the less friction their would be, and warned that the opposition policy of "integration" would lead to black domination of the white areas through sheer weight of numbers. It stressed that the economies of the white and "Bantu" areas should be regarded as a single unit, with black migrant labour serving the white areas, even though Africans in the white areas were to have no possessory or political rights. The SABRA document states:

...territorial separation is a prerequisite for a policy of separate development. Indeed, it is unthinkable to speak of development, unless it includes development in the national or political sense; such development is only possible if the Bantu community possess their own territory or territories....

A true apartheid policy can therefore be outlined as follows: By a policy of free and separate development, we must understand the territorial separation of European and Bantu, and the provision of areas which must serve as national and political homes for the different Bantu communities and as permanent residential areas for the Bantu population or the major portion of it.¹¹

To Whom It May Concern

Sidney Sepamla
from Hurry Up To It!

Bearer
Bare of everything but particulars
Is a Bantu
The language of a people in southern Africa
He seeks to proceed from here to there
Please pass him on
Subject to these particulars
He lives
Subject to provisions
Of the Urban Natives Act of 1925
Amended often
To update it to his sophistication
Subject to the provisions of the said Act
He may roam freely within a prescribed area
Free only from the anxiety of conscription
In terms of the Abolition of Passes Act
A latter-day amendment
In keeping with moon-age naming
Bearer’s designation is Reference number 417181
And (he) acquires a niche in the said area
As a temporary sojourner
To which he must betake himself
At all times
When his services are dispensed with for the day
As a permanent measure of law and order
Please note
The remains of R/N 417181
Will be laid to rest in peace
On a plot
Set aside for Methodist Xhosas
A measure also adopted
At the express request of the Bantu
In anticipation of any faction fight
Before the Day of Judgement.

Even Dr H. F. Verwoerd, Minister of Native Affairs in D. F. Malan's Cabinet (1950-4) and in J. G. Stridom's Cabinet (1954-8), and Prime Minister of South Africa (1958-66), did not envision total separation as being practicable. I quote him speaking from Senate and House of Assembly Debates.

...If we could succeed just to this extent in keeping the Native population in the reserves - and getting them to live there, even if they do work in the white area in industries which are scattered about near to their areas - if we could achieve that measure of separation, then even if the two million or so who are now there remain behind in our towns, and the three million approximately who are in the rural areas remain there, then white South Africa will be saved. [Senate, 1 May, 1951]12

The unresolved debate over African land tenure
The segregation policy materially influenced the making of policy with regard to African land tenure. In the early stages of the post-Union (1910) debate, the main question at issue was the African's ability to understand the complexities of individual tenure and to profit from it. The evidence points both ways.

The emergence of a prosperous African peasantry in South Africa during the third quarter of the nineteenth century has been recorded by Colin Bundy13 who stresses the decline of peasant prosperity under the combined influences of land shortage, external competition, unequal bargaining power, and lack of capital. On the other hand, the report of a one-man Commission on Native Location Surveys in 1922 gave grounds for serious doubts as to whether the

12 Davenport and Hunt, p49.
Africans could generally benefit from individual tenure. The Commissioner, M. C. Vos, had a close look at the working of individual tenure among Cape Africans in several districts, including the Glen Grey district just twenty-five years after the introduction of quitrent tenure there under the 1894 Act. While the statistics he quoted indicated a fair measure of success as well as of failure in the Glen Grey district itself, he found much evidence of a lack of desire to make individual ownership work, and considerable confusion over the legal aspects of registration and transfer. Vos himself favoured a simplified form of title, in line with the recommendations of the Barry Commission and in opposition to the ideas of Shepstone. When a conference of Cabinet ministers and officials met to consider his proposals in November 1922, the balance of opinion favoured Vos' s recommendation regarding simplified surveys, but tended to go further than Vos by condemning Glen Grey tenure in principle. Thereafter, the idea of giving title to Africans began to loose official support. The newly recognized attractions of Trust tenure helped to drive it out.

The revival of support for trust tenure
The Lagden Commission of 1903-5 rejected Trust tenure as a means for extending land areas for African use, preferring the issue of individual title. General Hertzog's original Native Lands (Further Release and Acquisition) Bill of 1926 proposed to set up a "Native Land Purchase and Advances Fund", under the control of the Minister of Native Affairs, to purchase land "for disposal or lease to
natives"\textsuperscript{14} and for helping African farmers generally. No mention was made of Trust tenure until it became the central feature of Hertzog's Native Trust and Land Act of 1936. This Act made provision that areas released for sale to Africans in terms of the 1913 Land Act would be bought and administered by a Union-wide South African Native Trust, which would receive a regular parliamentary grant for this purpose. The Trust actually purchased nearly all of the 3 781 064 morgen acquired for African occupation between 1936 and 1969, only 451 490 morgen being bought directly by Africans - which was less than half the amount bought by Africans between 1913 and 1936. Trust tenure involved a reversal of the trend towards individualization; it was a variant of the communal system, a form of tenancy-at-will, with control removed now from the hands of the chief and placed in those of departmental officials. This was a very important step in maintaining the disenfranchisement of the Africans, as they now became tenants at the mercy of their landlord, the government.

This marked a significant new stage in the history of African landholding. The Union's Reserves, which were in the course of being defined "with a view to finality" in the Lagden Commission's phrase, were not producing enough food by the 1930s to feed the people living in them; they were being overgrazed, and soil erosion was increasing. The main emphasis of policy now had to be on efficient land utilization. The Native Economic Commission of 1932 saw

\textsuperscript{14} Native Trust and Land Act No 18 of 1936.
New houses for migrant workers in Diepkloof.
Markus Braun, Das Schwarze Johannesburg, Afrikaner im Getto.
individual tenure, in the context in which it had been established, as irrelevant to the issue of good farming. A noteworthy feature of the Report of this Commission was its insistence that the key to racial harmony lay in the rehabilitation of the "Reserves," so that they could provide a home for the bulk of the African population. This conclusion was also reached by Professor Monica Wilson and Mr M. E. Elton Mills from their survey of African rural tenures in Keiskammahoek, Ciskei.

...the desire for land is primarily the desire for security, and a reduction in the number of people on the land will only be achieved if alternative forms of security are developed - the possibility of earning a wage on which a family can live, of owning a home and providing for sickness and old age. The whole weight of white authority has been directed towards sub-dividing and further sub-dividing land already occupied by Africans and establishing as many people on it as possible; for thus is segregation thought to be achieved and the obligation of employers to pay a wage on which a family can live, and of the whole community to provide for the old, the sick, and the unemployed, avoided.\(^\text{15}\)

The whole emphasis of policy creating the "Reserves" in the 1950s and 1960s changed, to the combating of erosion, the building of dams, the introduction of new market crops and the diversification of the economy through the establishment of "homeland" and border industries and the creation of new commercial and professional opportunities for Africans. The idea that the correct basis for African agriculture under these difficult conditions was the traditional one-man-one-lot principle, with communal grazing, now went largely unassailed. It was not economic, indeed, but it tended to fit in with the system of migrant labor: migrant workers were needed in white

\(^{15}\) M. E. Elton Mills and M. Wilson, Land Tenure, 1949, 128-36, in Davenport and Hunt, pp52-53.
Staffrider

Matile Papane
from Staffrider

I sleep
In my box
Away from pass-men
But a knock
Comes at my window
Seeking my soul
For a permit
For a pass

Guns and bullets
They barrel
And brim
On my side
Of the cities
I've built:
They want my soul,
My trespass.
Right here
I've laboured,
Right here
I'll be shot
I am black

towns, and inefficient farmers depended on outside earnings. The Tomlinson Commission attacked the rigid system of one-man-one-lot in 1955, arguing that the future of homeland farming depended on the encouragement of the African entrepreneur.

The principle of "one-man-one-lot"...reduces every Bantu to a low level of uniformity with no prospects of expanding his activities nor of exercising his initiative. It is essential to make opportunities for the creation of a class of contented full-time Bantu farmers with holdings of sufficient size to enable them to farm profitably and to exercise their initiative and to develop according to their individual ability and resources. The abolition of the "one-man-one-lot" policy is accordingly recommended...16

But the Government, in its White Paper on the Tomlinson Report, reiterated the one-man-one-lot peasant principle in 1956, (preferring "...the proper settlement of many" and avoiding "the possible development of ownership of large tracts of land by some..." 17), even though the Reserves were not apparently large enough, or the peasant farmers skillful enough, to feed the population by traditional farming methods. In May 1971 the Minister of Bantu Administration and Development, M. C. Botha, again re-affirmed the one-man-one-lot principle.

The limitation of land imposed by the segregation policy had destroyed the efficiency of peasant farming by depriving it of the extent of land which it needed and might otherwise have acquired;

17 Government Decisions on the Recommendations of the Commission for the Socio-Economic Development of the Bantu Areas within the Union of South Africa (W. P. F. - 1956), 4-5, in Davenport and Hunt.
Children and the Crossroads squattercamp, 1978. Where no provision for housing black people in the urban areas was provided in recent years in an effort to stem the tide of black migration to the cities, squatter camps like this were built by the people for themselves. The outward appearance of such places belies the care the residents take with their interiors.

Desmond Tutu, Hope and Suffering. Photograph: Steve Bloom, IDAF.
but for another set of reasons which had more to do with the African political structure and the white man's urban economy than with the real interests of the black man's countryside, the capitalist had not been allowed to supersede the peasant.

Squatting - Urbanization.
Landlessness increased among the "Bantu"-speaking peoples in southern Africa from the middle years of the nineteenth century onwards. There were many more squatters on (mainly) white-owned land than there were inhabitants of the Reserves in Natal, the Orange Free State and the Transvaal at the beginning of the twentieth century, as the Lagden Report made known. Characteristically, legislation was enacted in all territories to control squatting. The Cape, which had relatively fewer African squatters, passed a Vagrancy and Squatting Act in 1879. This prohibited idle and disorderly people of any race from squatting on Crown land, on mission land, or in "native locations." In 1889, the law was extended to include locations which farmers maintained on private farms to ensure adequate labour. Other farmers objected to these private locations, alleging that they harbored stock thieves, though in 1884 and 1899 strict rules for the control of such locations were laid down. Natal took action against African squatting under Ordinance 2 of 1855, which empowered magistrates to remove African squatters from public and private lands, and laid down that landowners could not house more than three families of Africans on their farms. The Orange Free State Squatters' Law of 1895 drew on the precedent Natal and limited African squatters to five families per farm, save
The whole town was dark and silent, except for the barking of some dog, and the sound of ten o'clock striking from the tower of the church. The mist had gone and the stars shone down on the grass country, on the farms of his nation and people, Buitenverwagting and Nooitgedacht, Weltevreden and Dankbaarheid, on the whole countryside that they had bought with years of blood and sacrifice; for they had trekked from the British Government with its officials and its missionaries and its laws that made a black man as good as his master, and had trekked into a continent, dangerous and trackless, where wild beasts and savage men, and grim and waterless plains, had given way before their fierce will to be separate and survive. Then out of the harsh world of rock and stone they had come to the grass country, all green and smiling, and had given to it the names of peace and thankfulness. They had built their houses and their churches; and as God had chosen them for a people, so did they choose him for their God, cherishing their separateness that was now His Will. They set their conquered enemies apart, ruling them with unsmiling justice, declaring "no equality in CHurch or State", and making the iron law that no white man might touch a black woman, nor might any white woman be touched by a black man.

And to go against this law, of a people of rock and stone, was to be broken and destroyed.

Alan Paton, Too Late the Phalarope. Charles Scribner's Sons, New York 1953
page 16-17
with special permission. The Transvaal Squatters' Law of 1887, amended in 1895, laid down the five-family rule but permitted five "Colored" (that is, in this case, other than white) families for every white head of household, including white squatter (bywoner) heads of households if the owner of the land agreed.

The assault on African squatting.
Squatters proved exceedingly difficult to eject. General Hertzog protested that the 1913 Natives Land Act should have had an embargo on squatting.

...a Bill should be introduced ..., providing for the effective restriction of the purchase and leasing of land by natives within certain areas and by Europeans within certain other areas within the Union, and, further, regulating the squatting of natives on farms...18

The 1913 Natives Land Act did not prohibit squatting, but its text was sufficiently obscure to encourage many landowners in the Orange Free State to think that it did, with the result that many evictions took place and much distress was caused to African squatters, sometimes by landlords who had no desire to evict their tenants but thought that the law compelled them to do so. Solomon T. Plaatje quotes E.E. Dower, the Secretary for Native Affairs:

(He) would advise them to make the best temporary arrangements within the four corners of the law. It might be by adopting one of three alternatives: (1) Become servants (in which case it would be legal for a master to give them pieces of land to plough and graze a number of stock); or (2) move into the Reserve (Voices: "here is the reserve?"); or (3) dispose of the stock for cash (sensation ). The arrangement would only be

18 General Hertzog, House of Assembly Debate, 28 February, 1913; in Davenport and Hunt, p57.
Forced removals under the provisions of the Group areas act.

Markus Braun, Das Schwarze Johannesburg, Afrikaner im Getto.
The 1936 Native Trust and Land Act illegalized squatting, but in view of the difficulty of finding alternative accommodation for squatters, this provision was not enforced. It was only with the enactment of the Provision of Illegal Squatting Act of 1951 that the machinery was created enabling the South African Government to remove squatters from white owned land. This Act provided the basis for the establishment of resettlement camps and towns in the "Bantu Homelands." The policy was implemented through instructions given to magistrates in 1967. Three categories of African people could be removed from white areas into the "Homelands": First, the elderly, the unfit, the widows, the women with dependent children, and the families which did not qualify for residential rights in urban areas; second, "surplus Bantu" on white owned farms, on mission stations and on "black spots" (as enclaves of black settlement in white areas were known); and third, doctors, lawyers and businessmen, who were to be considered as of more value to their own people in the "Homelands" than in the white areas.

Resettlement: "Bantu towns".

With regard to resettlement provisions, a distinction was drawn between four categories of settlement: first, there were to be "Bantu towns", situated near the borders of the "Homelands" and developed

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19 Solomon T. Plaatje, Native Life in South Africa, 1915, quoting E. E. Dower, Secretary for Native Affairs; in Davenport and Hunt, p57. Plaatje was editor of Abantu ea Batho, and a leading member of the South African Native National Congress.
Aerial photograph of "Western Native Township" or Western areas of Johannesburg. These were the "suburbs" from which people were moved to Soweto, as they were declared as slums, and their proximity to white Johannesburg was desired by members of the white electorate for themselves.

Calderwood, Principles of Mass Housing, p77
with the aid of funds from the South African Bantu [Native] Trust, under conditions laid down under Proclamation 293 of 1962. One of the underlying reasons for encouraging this development close to white South Africa was so that the black man's labor would still be accessible without the need to house him. This proclamation originally allowed for the purchase of plots and the building of private homes by the "Bantu" themselves. There were extensive regulations administering and controlling the conditions under which residential property could be owned. Owners required the permission of the "township" manager to let or sublet their "ownership units," and the permission of the Secretary for Bantu Administration to transfer ownership. The housing of lodgers required special permission. Overcrowding of premises was prohibited. The extent to which one's private life was intruded upon and required "permission" is well beyond that of a "free" society, even in the areas designated "Bantu areas" where "ownership" of land by Africans was ostensibly allowed. Deeds of grant could be cancelled, after two weeks' notice, by the manager for any number of reasons: defaulting over payments, giving false information, failing to occupy, "ceasing to be in the opinion of the manager a fit and proper person to reside in the township", being sentenced after conviction to six months' imprisonment, or being sentenced to thrice breaking township regulations, or becoming the occupier of other residential premises in the township. The Minister was empowered to cancel a deed of grant without giving reasons and without giving notice. Cancelled grants were to revert to the Trust. Such places thus proclaimed included Umlazi near Durban, Mdantsane near East
Some of the ruins that remain at Oukasie. Photograph: Alf Kumalo.

Oukasie stands firm against removals

By Sol Makgabutlane

Remaining residents of Oukasie, a black township outside Brits, say they are determined to hold out in their area until the last minute.

They were reacting to this week's announcement by Constitutional and Planning Minister Mr Chris Heunis that the township officially ceased to exist as from yesterday.

Remaining families would have to move to Lethlabile, 25 km away on the Bophuthatswana border.

A total of 1 505 families have moved to Lethlabile in the past few years after negotiations with the community council, said Mr Heunis.

There are presently about 1 400 families remaining, or about 10 000 people.

Mr Sipho Sithole, a representative of the Brits Youth Organisation, said many Oukasie residents feared that once they had been resettled in Lethlabile, the new township would be incorporated into Bophuthatswana.

He added: "Many people here also feel that they won't afford the daily taxi fare — R3 — in Lethlabile, as against the R1 they pay now. It will also take longer to travel from home to work."

Mr Thomas Massela (46), another resident, said: "I have been here since 1959 and I would not want to move. This is my home."

Mr Albert Nchaupa (43), who has made Oukasie his home for the last 27 years, said the people did not have much choice if the authorities want them to go.

Another resident, who wished to remain anonymous, said he foresaw violence in Lethlabile should the remaining Oukasie people join them there as there was tension between the two groups.

"When those families left for Lethlabile, many people were not happy and some labelled them sellouts. So, if we go to Lethlabile ourselves, our past disagreements with them may spill into violence," he said.

In Lethlabile, row upon row of gleaming one-roomed tin shacks stand patiently awaiting the occupants from Oukasie. Hundreds of tiny lofts have also been erected.

In his statement Mr Heunis said Oukasie had been abolished because of poor hygienic conditions and the astronomical costs involved in upgrading it.

Spokesman for the Legal Resources Centre, the Black Sash and the Transvaal Rural Action Committee have all slammed the proposed removal.

Forced removals still continue, despite opposition and the fact that most of the Group Areas are already in place.

The Star, October 18, 1986.
London, and Ga Rankuwa near Pretoria.

The second category comprised more modest "Homeland" villages such as Sada near Queenstown and Boekenhoutfontein near Pretoria, where housing and services were more rudimentary, but in which homes could be bought as well as rented. Thirdly, there were to be more densely populated settlements, where homes could be rented but not bought, under the terms of proclamation 92 of 1949, for the sum of R1 per month. Fourthly, organized squatting was to be allowed on Trust land, for the same fee. Immense efforts were made to "place" people in these various types of settlements during the late 1960s and through the 1970s. Removals to the homelands still occur. See Press clipping, figure 98.20

**Share-cropping and labour tenancy.**

Although squatting by blacks drew the condemnation of the white legislators, the nature of the objections changed over the years. At the time of the 1913 Natives Land Act, the major criticism of it by white farmers in the Orange Free State was that the practice of share cropping, "farming on shares", sowing "on shares" or "on the halves" - whichever expression was used - created a scarcity of labour and destroyed the "right relationship" between master and servant. Evidence given to the Beaumont Commission of 1916 indicates that whites were not uniform in their attitudes to share-cropping. Some were concerned with the questions of status and the availability of

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20 The Star (Newspaper), October 18, 1986.

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Exploration

Arthur Nortje
from Oxford Journals

in the barren mornings of winter i try
to shake out the cobwebs of nightmares,
to belch that room's miasma. i
try to laugh and my lips feel dry
above the heart that thumps regardless. Try

employment agencies, departments, bureaus;
standing long in the rag-&-bottle queue
on leaner lean days. Going back
it fails, my face is wrong. i try
to visit the lush park of the city council
with squirrels & fine young whites

under the Board of Executioners sign
a blond policeman with his leather holster
in the grounds of their houses of parliament

in the barren mornings of winter i try

K.1964

in Somehow We Survive, An Anthology of South African Writing,
black labour. Some had no share-croppers, but relied on labour tenants whom were reluctantly allowed to keep stock. Others engaged in share-cropping had no desire to change the system, and showed concerns over the fate of evicted blacks. Other farmers saw the African share-cropper as the competitor of the poor white, who typically wanted "locations" or "townships" established for blacks. The typical critic of share-cropping believed that its abolition would benefit the poor-whites but that well-to-do farmers would suffer.

The issue appeared to be utterly different to Africans in the Orange Free State. They had no security on the land on which they worked, they found themselves forced to sell their stock, at reduced prices since there was so much stock and since they had no land. They could not even buy the land where they lived if they converted their stock into money.

Labour-tenancy was at first seen by the Government as an acceptable system; but official opposition to labour-tenancy developed during the 1930s, especially after the Native Economic Commission had reported in 1932. In 1959, the Du Toit Commission found that in parts of South Africa the squatter laws had been evaded on a grand scale, in particular by owners of "labor farms."

The Commission was appointed to investigate the drift of white people away from the rural areas into the towns, which fact the Commission took a very grave view of, seeing the continued presence of white men in the rural areas as symbolic of white security in South Africa as a whole. It was particularly sharp in its criticism of white men who made a living from the sale of the labour of their
A view of Soweto.
Desmond Tutu, Hope and Suffering, photograph: Abisag Tullman.
own black squatters, and failed at the same time to farm their own land. The Commissions fear was that if the trend (of "Bantu" share-cropping, and thus "Bantu" farmers and entrepreneurs on white farms) continued, it "doubted whether the white platteland will be able to fulfil its indispensable demographic and social functions".

Opportunities for the black entrepreneur, which it had been the intention of the Lagden Commission of 1905 to encourage, diminished owing to pressure on the land and the exigencies of the segregation policy. With the return of Trust tenure to favour in 1936, African agriculture came increasingly under departmental supervision, and the system one-man-one-lot became the rule.

City Life in Soweto
Those people who left the rural areas and came to the cities found that everything about life in the city was different. The food was different, dress and medicine were different, and instead of a barter economy ready cash was necessary. The migratory worker, away from his family and tribal sanctions and restraints had to change his way of life and the structure of so the structure of traditional society was changed. Illegitimate children were born, and the lobolo system of the transfer of cattle from the family of a groom to that of the bride lost its meaning. Where women had tilled the fields and harvested the crop in the rural communities, they had to work for cash in the city. As a result many children grew up without sufficient supervision and learnt to live by their wits on the street.
Maintenance of houses in Orlando West.
Lewis, A City Within a City, The Creation of Soweto, p29
The role of women in the urban society also had to undergo tremendous changes from its traditional tribal role.

With the passing of time, the men in the city acquired more skills and tended to return to their tribal homes at less frequent intervals. The women started to come to the city, and by 1927 the ratio of men to women in Johannesburg was six to one. The newly created Native Affairs Department built houses until the outbreak of war in 1939 at which time the ratio of men to women was three to one. Presently the black population of Johannesburg and Soweto is approximately one third each of men, women and children. Many of the children have lost contact with the rural areas, having been born and lived in an urban environment all their lives.

This city of E-Goli is the melting pot into which people of varying tribal backgrounds, various stages of education and civilization have been thrown, and what are the results? I can only marvel at the resilience, at the good humor, the philosophical attitude and extreme good sense of the people. Their houses are well-kept, their gardens are neat, they dress tidily and often well. Who would have thought thirty - twenty - even ten years ago, that so many skills would have been acquired by these country people. . . . They have done well for themselves, these Bantu people of ours, in a comparatively short time.

Lewis is proud, pleased and patronizing in his attitude towards the black people in the urban areas. He does not seem to see the real difficulties that face newly urbanized people, and briefly remarks upon the difficulties in making ends meet, and of taking on new value systems such as western medicine.

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21 Lewis, op cit., p24
22 Ibid., p24
Lewis writes about a class structure emerging in Soweto based upon education, occupation, wealth and way of life. A class for whom material goods is a symbol of success and status, who tend to be better educated and professional people, teachers, shop keepers, nurses, or administrators, and who form the elite of society. Thus even amongst the black people in South Africa, the issue of class can be seen to be layered over the issue of race. The complexity of the situation is not revealed in black and white in South Africa, as their are complex shades of grey between.

Lewis' sentiment about "these Bantu people of ours" is condescending, and the tone of his writing appear to say "look how generous we (concerned Europeans) are towards them" and how much good it is doing. Lewis pats his own back in commenting on the progress towards "western" materialism that has been made by the inhabitants of Soweto, and his simplified history of their progress while not untrue is also not the whole truth. The reasons for black urbanization in South Africa are complex, and not always out of choice. The viewpoint which Lewis epitomizes is that of a government official, his attitude being patronizing and condescending, providing much technical and material assistance within the frameworks of apartheid to solve what may otherwise be seen as political problems.

The Evolution of Soweto
Soweto is a collection of townships for Johannesburg. Its name was adopted in 1963 as an acronym for the South Western Bantu
Townships. Lewis describes how the history of Soweto can be broken down into six phases which reveal changing attitudes and growing action in implementing the townships policy.

Phase one: From the proclamation of the Goldfields in 1886 to 1917 there appears to have been little or no endeavor on the part of the civic authorities to accept responsibility for the welfare of the Bantu population. At this stage the population of the urbanizing black population did not provide any threat to the white people in the city, and they labor was usually housed by employers on the mines and early industry and business.

Phase two: The high mortality rates of the Bantu during the 'flu epidemic in 1918 aroused the civic conscience, and the first housing scheme was started at Western Native Township. At that time "Native Locations" were part of the duties of the parks department. Fears that the health hazard would spread were amongst the first and most powerful motivations to the white population to house the black people in a more formal manner, and at some distance from white areas as well.

Phase three: Commenced in 1927 with the appointment of Mr. Graham Ballenden as manager of the newly created Native Affairs Department. It was during this phase that the start was made on the building of what was to become Soweto. By this time white Johannesburg had begun to grow and areas which where occupied by poorer whites were close to those occupied by black people. Since
the government felt it had an obligation to protect its electorate it made a start at rehousing and controlling the accommodation of its black population even further from the city center for reasons of political fears and competition for living accommodation.

Phase four: This phase was said to begin in 1939 at the start of World War II when the black people converged on the cities in their thousands to undertake the tasks demanded by the expansion of commerce and industry as a result of the war effort. This period was marked by the emergence of squatter camps and shantytowns. Materials and manpower were concentrated on the war effort, and housing had to take a poor second place. Although no building of houses or townships occurred in this period, the growth in the black urban population was to cause much concern for the white people after the war, and the fact that no accommodation was available led to the deterioration of existing conditions which became overcrowded and totally inadequate.

Phase five: This phase began at the end of the war when attempts were made to catch up on the backlog of housing, but the sheer immensity of the task, the reluctance to place further burdens on the taxpayers, and, after 1948, the change of attitude of the government regarding the sharing of losses on housing schemes, and the doubts in some minds regarding the permanency of the urban Bantu population combined to prevent any large-scale or concerted effort to resolve accommodation difficulties. The reasons for the provision of some housing during this phase were the need to prevent the
growth of both slums and squatter settlements, as well as the desire of the new 1948 government to clearly separate the races according to its policy of apartheid.

Phase six: This phase commenced in 1954, and is the period of the experimental and model townships, when much building was done and most of Soweto created. It marked the disappearance of the shantytowns, and the acceptance by the local authority of its responsibilities. Throughout South Africa the provision of housing now received attention from the State and local authorities such as never before. The reasons for this activity included all of those listed above, and were as much to prevent alternative and uncontrolled, undesirable conditions, as they were to benefit the population to be housed.

The story of the townships is thus one of no government involvement in housing urbanizing populations, to that of total government co-option of the problem and its further devolution to become the responsibility of local city and town councils to implement the law by themselves.

Gold was discovered in Johannesburg in 1886 and the settlement was initially that of a temporary mining camp. The first forms of government were the election of the Diggers' Committee in 1886 and the formation of the Sanitary Board in 1887, whose powers and funds were limited, with most profitable services granted to concessionaires by the government of the Republic.
Partial plan of Johannesburg in 1907, showing the position of the "Kafir" and "Coolie" locations to the west of the city center.
Lewis, A City Within a City, The Creation of Soweto, p27
Johannesburg's first census taken in 1895 revealed a population of 80,000\textsuperscript{23} people, rising to 102,000 by 1896\textsuperscript{24} of which approximately half were "Europeans" and half black African people. The black people were mostly unskilled, illiterate laborers from the rural areas attracted by work in the gold mines. The mines accommodated their employees in compounds or primitive lodgings, but generally the others had to find their own quarters. A map of Johannesburg dated 1897 (see diagram 110) shows a "Kafir Location" and a "Coolie Location" south and south-west of the then Johannesburg station, and a "Native Location" where the suburbs of Pageview and Vrededorp classified as "white" now stand. Black, "colored" and white people lived in these then-squalid areas on the Western side of town.

At the outbreak of the Boer War in 1899 the mines stopped operating and most of the labor force returned to their rural homes. After the war in 1903 only half of the black people returned to work on the mines, being 55,507 people as compared to the 111,697\textsuperscript{25} people employed on the Witwatersrand mines in 1899. Thus in 1904 Chinese labor was indentured to work on the mines, but this had serious repercussions in British politics and by 1909 the majority of the Chinese people were repatriated to China and replaced with black "Native" labour. In 1904 the 5,000 inhabitants of the areas then known as "Coolie Town" and the old brickfields lived in terrible

\textsuperscript{23}Mandy, op cit, p174  
\textsuperscript{24}Lewis, op cit, p2  
\textsuperscript{25}Ibid., p2
Street scenes in Sophiatown.
Sophiatown, program to the play, Junction Avenue Theatre Company.

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conditions and the Johannesburg Insanitary Area Improvement Scheme Commission recommended that the area be expropriated and re-planned. There was initially no place to move these inhabitants because of the opposition of the white electorate adjacent to the areas proposed for the new settlement of these people. However in 1904 bubonic plague broke out and the Johannesburg council acted immediately, clearing the inhabitants and burning the slum that same night. The council found what was meant to be temporary accommodation for these "refugees" in an emergency camp at Klipspruit, municipal land adjoining the sewage disposal works, twelve miles from the center of town, near the future Soweto. The council provided temporary corrugated tin shelters, which were to be occupied for over thirty years. "Neither the remoteness from Johannesburg, nor the closeness of the sewage farm, endeared the location to its inhabitants."26 This was almost the only attempt that the Municipality made until 1918 to deal with the question of housing the "non-white" population of the town.27

The high mortality rates of black people in the influenza epidemic of 1918 influenced the Council to establish the Western Native Township on a site which had earlier been a brickfield and had since been levelled by the dumping of garbage. By 1921 over 200 houses had been built there. By the early 1930s most black people were living there or in unsatisfactory conditions in places such as Newclare, Prospect Township, the "Malay Location," or Sophiatown, a

26Ibid., p3
Father Trevor Huddleston at St Peter's, Sophiatown.
Bailey's African Photo Archives, photographer: Peter Magubane.
Sophiatown, program to the play, Junction Avenue Theatre Company.
freehold township without racially restrictive clauses in its deed, and other parts of the town. Occupancy of property could only be prevented by a restrictive clause in the Conditions of Title of the Township, and thus black people could live in various parts of the town. Living conditions were crowded and insanitary, and in 1923 the Council's health inspector condemned many premises as unfit for human habitation. The population of these crowded areas was almost exclusively black or "Colored" and since no accommodation was available for these people elsewhere, the Medical Officer of Health was not prepared to certify them for closure unless definitely instructed to do so.28 (See diagram 168

Establishment of Townships as an Answer to Social and Health Problems

Urbanization of all race groups proceeded at a rapid pace during the second half of the nineteenth century, and many who went to town were poor. The adjustment of country people to the new experience of city life was sometimes difficult because it involved them not only in a new way of life, but in contact with members of other races and cultures. An early example is that of Grahamstown, where in 1843 the Municipal Commissioners requested the Lieutenant-Governor to establish one ward or more for the location of "colored" (all non-white people at this time) people, in order to regulate and confer civic rights upon them. This led in 1856 to the establishment of the Fingo and Hottentot "Locations" in Grahamstown, where freehold

28Lewis, op cit., p4

Sophiatown, program to the play, Junction Avenue Theatre Company.
deeds were granted to African people after this date. An implicit assumption at this stage was that the different races, though segregated in their own areas, would jointly participate in the running of local government as it was possible in terms of the Cape Municipal Ordinance of 1836.

The combination of racial and class tension with real poverty aggravated conditions in the early twentieth century, as slums began to develop in the larger centers. Pressure to clear the slums arose, and was precipitated to a marked degree by the outbreak of epidemics. The outbreaks of Bubonic plague at the beginning of the twentieth century, and of Spanish influenza in 1918 were given as reasons for the establishment of segregated locations at the main centers - in particular Ndabeni in Cape Town, Korsten in Port Elizabeth, and Klipspruit (Pimville) outside Johannesburg.29 Thus the work of slum clearance came also to be seen as an opportunity to bring in racial segregation, leading to the establishment of urban "locations". Provision was made in the Cape in 1902 for the Government itself to set up urban locations, whereas in Natal, Parliament passed legislation in 1904 enabling the local authorities and municipalities to establish locations.30 Ironically, however, the locations, though established for health reasons, generally became a health hazard, and that slum conditions, rather than being the

29 Report of the Department of Native Affairs for the Years 1913 to 1918, U. G. 7 - 1919, in Davenport and Hunt, pp69-70
Then I went off to the kitchen, where old Izak and Lena, who for all their blackness were good Christian souls, were working their heads off for the old master's party. It was a good thing I went, for the two extra girls from the location had put all the dirty glasses in the sink, and were going to pour hot water on them. For I tell you, these great parties may look smooth and fine, but what happens in the kitchen is what counts.

Alan Paton, Too Late the Phalarope. Charles Scribner's Sons, New York 1953
pages 98-99
exception, came to be found in most locations throughout South Africa. The Tuberculosis Commission of 1914\textsuperscript{31} described the conditions it found in the "town native locations" throughout South Africa.

In 1922 the Government's Native Affairs Commission stated its belief that black people were not by nature town dwellers, and that their presence in towns created hygienic, economic and social problems of a considerable magnitude.\textsuperscript{32} The Stallard Commission of 1922 recommended that black people should only be allowed to enter urban areas "which are essentially the White man's creation" as labour for the white people, and that he should depart these areas upon cessation of such work.\textsuperscript{33}

**Background and aims of the Natives (Urban Areas) Act of 1923.**

The focal point of South African urban policy was the Natives (Urban Areas) Act of 1923 and its amendments. The Department of Native Affairs described its standpoint in a document in 1919:\textsuperscript{34}

Assuming that the ideal to be arrived at is the territorial separation of the races there must and will remain many points at which race contact will be

\textsuperscript{31} Report of the Tuberculosis Commission, U. G. 34 - 1914, ch.XII, in Davenport and Hunt, p69. The striking feature of this document is the emphasis placed on the fact that the slum conditions described were not exceptional, but to be found in most locations throughout South Africa.


\textsuperscript{34} Department of Native Affairs, U. G. 7 - 1919, 16-17, in Davenport and Hunt, p70
For Smith, while his wife was with child, made also with child the black servant girl in the house. When she told him she was with child, he was filled with terror, and could think of nothing else by night or day, nor did he touch her any more. So great was his fear, that either he told his wife or she read it in his face, or the girl told her. And so great was her own fear, or so did he impart his own to her, that they agreed to add to the terror, and planned the girl's death. By night they took her to a river, and having drowned her, cut off her head, and buried it so that no one should know who it was, and the body they sank in the river with weights. Then they gave it out that the girl was run away, and got another.

Alan Paton, *Too Late the Phalarope*. Charles Scribner's Sons, New York 1953

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maintained, and it is in the towns and industrial centers, if the economic advantage of cheap labour is not to be foregone, that the contact will continue to present its most important and most disquieting features. ... The number of natives in the towns...has increased and will increase to an ever greater extent as the industrial future of the country develops. It is in the towns that the native question of the future will in an ever-increasing complexity have to be faced.

The Union Government moved gradually towards the Urban Areas Act, looking for an urban measure to balance the Natives Land Act of 1913. The original Urban Areas Act therefore carried segregationist overtones, and the policies relating to segregation were later developed out of all proportion to its welfare aspects in the numerous amendments which followed - in 1930, 1937, 1945, 1952, 1957 and 1964, to mention only the important ones. Successive governments would see this growing body of law as a major vehicle of policy, and as the main instrument for controlling African movement into, and settlement in, the "white" areas.

Towns as White "Reserves": The "Stallard Doctrine"
The idea became popular, and quickly came to be taken for granted among white South Africans, that the urban areas were a kind of white "Reserve" into which blacks need only be admitted as servants of the white man - the so called "Stallard doctrine." The Stallard (Transvaal Local Government) Commission of 1922 enunciated a firm dogma that the towns had been built by and for white people, who alone could therefore claim rights there. The assumptions underlying Stallard's argument, though constantly and seriously questioned by critics, were usually taken for granted by the government in power. This was especially so with Hertzog's
As I sat there my mind went back suddenly, ten, no eleven years, to Stellenbosch. I could see the very room where we were sitting, five or six of us students. Moffie de Bruyn's room with the old Vierkleur on the wall and the picture of President Kruger. We were talking of South Africa, as we always talked when it was not football or Psychology or religion. We were talking of colour and race, and whether such feelings were born in us or made; and Moffie told us the story of the accident in Cape Town, how the car crashed into the telephone box, and how he had gone rushing to help, and just when he got there the door of the car opened and a woman fell backwards into his arms. It nearly knocked him over, but he was able to hold her, and let her gently to the ground. And all the time the light was going off and on in the telephone box. And just when the light went on, he saw it was a Malay woman that he had in his arms, full of jewels and rings and blood. And he could not hold her anymore; he let her go in horror, not even gently, he said, and even though a crowd was there. And without a word he pushed through the crowd and went on his way. For the touch of such a person was abhorrent to him, he said, and he did not think it was learned; he thought it was deep down in him, a part of his very nature. And many Afrikaners are the same.

Alan Paton, *Too Late the Phalarope*. Charles Scribner's Sons, New York 1953
pages 125-126
Government between 1936 and 1939, and with all governments since 1948. The essence of the dogma becomes clear from the following quote from the Stallard Commission, 1922:35

If the native is to be regarded as a permanent element in municipal areas, and if he is to have equal opportunity of establishing himself there permanently, there can be no justification for basing his exclusion from the franchise on the simple ground of color.

Some colored persons and natives are possessed of property and of brains, and have educational qualifications not inferior to some enfranchised Europeans; and many carry on trades and are their own employers, and it cannot be denied that they have special and peculiar needs not at present being met.

We consider that the history of the races, especially having regard to South African history, shows that the commingling of black and white is undesirable. The native should only be allowed to enter urban areas, which are essentially the white man’s creation, when he is willing to enter and to minister to the needs of the white man, and should depart therefrom when he ceases so to minister.

There was much African opposition to the doctrine, including that of the Native Conference of 1922, and of the African National Congress who, in a deputation to Prime Minister Smuts in 1923, rejected an underlying assumption of the Stallard doctrine, and expressed disapproval of the final form of the Natives (Urban Areas) Bill. R. V. Selope Thema of Johannesburg, a leader of this delegation, stated:36

We feel that if we are not so civilized as members of the white race, still we have a share and a claim to this country. Not only is it the land of our ancestors, but we have contributed to the progress and advancement of this country. We have sacrificed many lives in the mines, we have built this city, we have built the railways, and we claim that we should have a place in South Africa.

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35 Report of the Stallard Commission, T. P. 1 - 1922, para. 42, in Davenport and Hunt, p70-71
36 Cape Times, 2 June, 1923, in Davenport and Hunt, p71.
Despite opposition, Parliament accepted the bill and acted upon its conclusions. The assumption was made that if an African behaves anti-socially in an urban area, including townspeople who were "idle, dissolute and disorderly"\(^{37}\), or, at a later stage, who made political trouble, it was a wise policy to send him out of town. Restrictions were placed on the influx of black women into urban areas by the Amendment of 1930. Whether they were wives and mothers or potential prostitutes and purveyors of illicit liquor, the urban local authority could refuse their entry on the basis that there was no accommodation for them. The exclusion of African women was done both in an attempt to control illicit brewing, and also in an attempt to prevent home-building in urban areas. There were no influx control provisions in the Urban Areas Act of 1923, though African workers whose contracts of service had ended might be required to leave town if they had subsequently failed to find employment. In the 1937 Native Laws Amendment Act, the influx of black men was adjusted to relate precisely to the availability of unskilled work and labor requirements of each center. One purpose of this Act was to make the removal of unemployed Africans from the urban areas possible. Local authorities were required to carry out censuses to reveal how many unemployed Africans could be removed from the cities and freed for other forms of employment such as in agriculture. It was found on inquiry, however, in 1939, that the number of unemployed Africans in urban areas was smaller than the legislators of 1937 had imagined. Legislation affecting where and

\(^{37}\) Natives (Urban Areas) Act, No. 21 of 1923, section 17 (1), in Davenport and Hunt, p71
how people could live was being passed on the basis of political fears, and the prevention of "undesirable commingling" was to be a major influence in the government's provision of separate housing in the townships for black people.

The process was reversed in 1952 by an amendment to Section 10 of the Urban Areas Act wherein the rights of the urban African to remain in the cities were defined. A time limit of seventy-two hours was imposed on Africans seeking work in urban areas, and statutory rights to remain in urban areas were granted to Africans who had either been born there or had qualified by long employment or long residence. Such people had only enjoyed common law rights before. As these Section 10 rights could be made to depend on the availability of accommodation, they ceased by the 1970s to provide the same security as they had given to qualified Africans in the early years.

In 1923 the South African Parliament passed the first Natives (Urban Areas) Act. This Act placed the responsibility on municipalities and local authorities to provide housing for the black residents in its area in locations, villages or hostels. This was a very important act in the history of the townships, as it was now legislated that the government would take it upon themselves to house the black population. Employers could still provide their own accommodation for black workers, but these premises were now subject to inspection by the local authority. The Act resulted in the extension by the Johannesburg Municipality, of the Western Native Township, and
between 1924 and 1927 a further one thousand houses were built, and by 1930 2,500 houses had been built. A new location, Eastern Native Township, was also developed and four hundred houses were built there. By 1927 the Johannesburg Council provided accommodation for 15,000 people, at a time when the black population, excluding people employed and housed by the mines, was estimated at 96,000. Lewis also states that until 1927 the administration of "native affairs" was the responsibility of the Parks and Estates Committee, and that the nett expenditure on parks, estates and cemeteries for the year was R249,960: while that on "locations" was R33,620.

Township Rights
Besides keeping to a minimum the number of Africans with the right to be in the urban areas, and removing the anti-social element, the policy of segregation prevented effective African investment in urban areas. Economic strength could lead to demands for political privileges. It was for this reason that the debate over African land and housing rights in urban areas assumed such importance in the early years of Union.

When the Natives (Urban Areas) Bill was first drafted in 1918, it was proposed to allow any local authority to "set aside any location or portion of a location for the purpose of sub-division into building lots

38 Lewis, op cit., p4
39 Ibid., p4. "Estates" in this respect refers not to the isolated homes of the landed gentry, but refers to large grounds which belongs to local councils and which are not necessarily open to the public for their use.
for sale or lease to natives" on terms to be prescribed. A similar provision was included in the 1923 Bill, which proposed to allow any local authority, "subject to the approval of the Minister after reference to the administrator," to set aside "native villages" in which "natives shall be permitted to acquire for residential purposes the ownership or lease of lots." The need to make it possible for Africans to buy land in white areas was stressed by General Smuts in introducing the Urban Areas Bill of 1923, but drew strong criticism from General Hertzog, based on African purchase of land being repugnant to the principles of the 1913 Natives Land Act. A Select Committee on Native Affairs was appointed in 1923 to examine the Native (Urban Areas) Bill and the question of urban African freehold. African witnesses generally supported the principle of African Freehold rights, but most white witnesses objected. The Select Committee recommended not to grant freehold rights, which decision the Government carried and which has proved to be of immense significance for subsequent direction of urban areas policy. The Urban Areas Act of 1923 did not stop Africans from buying property in white areas outside the "locations", provided they did not live there; but this right was removed under the Native Laws Amendment Act of 1937. (The 1923 Urban Areas Act had limited African rights of purchase within locations only.) The aim of this legislation was to prevent the growth of African vested interests in the white controlled towns, (and in this respect is comparable with the legislation that was designed to restrict Asians as well).
Type plan built in Orlando Native Housing Scheme, Johannesburg. Calderwood, Native Housing in South Africa, p18
The social separation of black and white underlay the decision of the Union Government to establish urban locations. In its most extreme form, this could be seen in attempts to exclude African churches, schools and places of entertainment from white areas. This was developed in the Native Laws Amendment legislation of 1937 and 1957.

Amendments to the Native (Urban Areas) Act after 1923 attempted to limit and control the entry of black people to urban areas under a nationwide centrally supervised system. Local authorities were allowed to exclude black women from municipal areas unless they could prove accommodation was available to them. By discouraging black family life it was hoped that the system of migratory labor could be perpetuated without exacerbating the urban problem. Other Acts empowered local authorities to expel "surplus labor" and to prohibit the acquisition of land by black people from white people. The situation was aggravated by government actions, as the municipalities claimed that insufficient land, lack of opportunity, and taxation of black people in the rural areas were forces encouraging urbanization and creating a housing problem for the local authorities. 40

**Orlando, Soweto**

Graham Ballenden was appointed as the first Manager of Native Affairs, and in 1928 a Committee on Native Affairs was established.

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Moroka emergency camp with new Orlando West houses in background. Lewis, A City Within a City, The Creation of Soweto, p29
Extensions to Western Native Township were carried out under Ballenden and this Committee. Many Councillors on Johannesburg's city council opposed the improvements for the black, "Colored" and Asian populations on the grounds that the financial burden should be avoided. Since neither the Western nor the Eastern Native Townships had space for expansion and the conditions of many of the existing locations closer to town were in appalling condition, the Council acquired 1,300 morgen of land on the farm Klipspruit No. 8, some ten miles from Johannesburg for resettlement purposes and to provide for future increases in the black population. The site was close to a railwayline, a sewage works and a new power station, and thought ideal for a township. An architectural competition was held for the design of the township requiring layout plans for the accommodation of 80,000 people. Provision was to be made for administrative offices, a public hall, a cottage hospital with dispensary and clinic, police station, fire station, post offices, school and church sites, a shopping center, market and a community store. The township was called Orlando after the then serving Chairman of the Native Affairs Committee, Councillor Edwin Orlando Leake. In the depression years of the early 1930s little construction took place but much of the planning was done. By 1935, 3,000 houses had been built in Orlando to house 18,000 people, and by 1939 a total of 8,700 houses had been erected in the south-western "townships", 5,800 of which were at Orlando. The houses were built by white artisans and cost between R504 and R1,328. At the time the black population was estimated to be 244,000, of whom 179,000 were males and
Examples of properties erected by African owner-builders in Dube Township, Soweto, in 1951, after being given the security of thirty year leasehold title, with the expectation of renewal.
Davenport and Hunt, The Right to the Land, p78
65,000 females. While provision for many public urban amenities was made, not all of them were built.

**Dube, Soweto**

Dube township was established in 1945 to be an upmarket area for home ownership. The council wished to sell freehold stands here but this was not allowed in terms of legislation regarding urban black people. As an alternative 99-year leaseholds were granted. Although the ownership of fixed property was denied to Africans under the Urban Areas Act, in some centers during the 1940s leasehold rights were permitted, usually on municipally owned ground. Dube Township is a notable example of what could be done under this form of tenure, for there were substantial properties built, often on sites almost too small for the houses erected upon them, on the security of a thirty year lease. An illustration of such properties is given in figure 132. In December 1967, the Government sent to local authorities an injunction not to renew long-term leases when they expired, but to buy them in as often as they could. This decision had a crippling effect on the investment potential of "Bantu" capital in the white areas.

The logic of apartheid, as developed after the Second World War, required that equivalent property rights (to white rights in white areas) should be granted to Africans in the "Bantu areas," and this became possible with the establishment of the first "Bantu towns" in the early 1960s. Thus although the South African Government
A Soweto man running his muffler repair business from the side of the road, without the benefit of more elaborate premises other than his make-shift shelter.
severely limited the opportunities for Africans to acquire or develop properties in urban locations, a start was made at this time to establish towns in which Africans were entitled to have full property rights in the "Homelands". There were, in fact, no "Bantu" towns in the "Reserves" before that date, for all urban centers were essentially nuclei of white residential business activity. An early example of this new type of "Bantu Town" was Ga-Rankuwa, near Pretoria.

...Furthermore, as Ga-Rankuwa is situated in a Bantu homeland, its future residents will be entitled to purchase stands and houses and will thus have permanence of tenure and the feeling of security that this will bring in its train...43

African Commercial Enterprise in the Locations
The same kind of anxiety was felt by whites over African ownership of commercial enterprises, as they felt about investment in urban property by Africans, even without occupation, which had come to be regarded as a danger to white security. The 1923 Act made it lawful for Africans to run shops in their locations, but this was made conditional on the approval of the urban local authority. Some local authorities would not extend the privilege. The law was accordingly stiffened in the African's favour in 1930, but it was not until about 1945, and after much public debate, that African trading rights in "locations" became virtually uncontested. The case against the granting of trading rights to Africans in their own "locations" represented a literal interpretation of the Stallard doctrine that, in the white area, including "native townships" in the white area, the white man's rights should prevail over those of the black. Fears that

43 Bantu, December 1961, in Davenport and Hunt, p79.
"Problems of slum clearance." Calderwood's sketches reveal that there are many aspects in analysis in his analysis which are left out - including for example, tenure in such areas as Sophiatown which was called a "slum," and proximity to place of work. Calderwood proposes the alternatives of township housing shown in the lower right.

Calderwood, Principles of Mass Housing, p79
black commercial enterprises would attract a larger black population from the rural areas to the white urban centers, and that such trading rights would soon become demands for the right to the franchise, led the government to place greater controls and restrictions on such businesses. The ground gained by African traders in the 1940s was then mostly lost again in the 1950s and 1960s. African trading was made dependent on departmental permission in 1957, and was severely restricted in scope in 1963 and again in 1968.

**African urban poverty and housing shortages; the Squatter Crises of the 1940s and the Housing Revolution**

The Public Health Department did not develop as efficiently or work as effectively after 1927 as did the Native Affairs Department. The Murray Thornton Commission of 1935 set up to study these departments criticized the Health Department for the awful conditions which existed at Prospect Township, The Malay Location, Sophiatown, Martindale and Newclare. It criticized the insanitary conditions and the lack of water supplies. Newclare had no municipal water until 1933, being dependent upon suspect wells. In 1935 the council established 27 taps in Sophiatown where people could purchase water by the bucket. There was no sewage system in these areas which depended upon the collection of sanitary pails three times per week. The Commission resulted in the establishment of minimum standards of housing, but the Medical Officer of Health was faced with condemning properties as slums knowing that no alternative accommodation was available.
Arrest of an illegal occupant.
Markus Braun, Das Schwarze Johannesburg, Afrikaner im Getto.
The rehousing at Orlando could only help a small number of those people, usually those living under the worst conditions in the city. Property owners often exploited their tenants charging high rents to families living in single rooms. A property of 50' x 100' accommodated as many as 300 people in 60 back to back rooms in Sophiatown (16.66 square feet per person, not even enough room to lie down in), and R4: per room was charged. In an extreme case in Prospect Township, 121 rooms were crowded on a similar sized stand with only one tap for water and two lavatories.\textsuperscript{44}

In 1939 with the outbreak of World War II South Africa concentrated its manpower and materials on the war effort. Factories and industries grew quickly and the influx controls of black people to the cities were suspended to fill the demand for their labor. By 1946 the Johannesburg's black population had grown by nearly 70 percent to 395,231 people, with twice as many men than women, and 84,000 children. The white population had increased by 29 percent.

The resources of the local authority were over-extended, and because of the war effort house building and infrastructural services came to a standstill. Tremendous overcrowding and squatting problems developed, and police pass raids arrested thousands of unauthorized lodgers on white premises. See diagram 138

\textsuperscript{44}Lewis, op cit., p5.
tenants would share their limited accommodation with other families, but as space was insufficient, illegal and uncontrolled squatter camps developed over time. Leaders in these camps ruled by force and preyed on ignorance, setting up illegal courts to keep an order, and extracting levies to maintain their power. Municipal lands in Orlando, Pimville, Dube, Newclare and Alexandra(north of Johannesburg), were forcibly possessed and temporary shelters, or what Lewis refers to as "wretched shanties" were erected.

An inhibiting factor which prevented the development of African locations into flourishing communities was the poverty of the Africans themselves. Prior to the extension of sub-economic facilities to African Housing programs during the World War II, it was virtually impossible to build houses cheaply enough for Africans to be able to afford to live in them. Consequently municipal housing schemes tended to lag behind needs. During the Second World War conditions grew dramatically worse: the rate of urbanization increased, as Africans from the rural areas found their way into new jobs, but house-building programs virtually stopped. The squatter movements of Johannesburg were the black people's answer to homelessness.

In the years after World War II, the squatter leader, or poblador as he was known in Latin America, became a new kind of culture hero whose self-appointed task it became to organize and establish a

\[\text{Ibid.}, \ p6\]
squatter settlement, in defiance of the law and often of the police. The phenomenon of urban over-population, with its accompanying squatter settlements, was in fact widespread in Asia and Africa as well as in Latin America. Under war conditions, a backlog in the housing program for the Johannesburg locations produced a popular movement of remarkable intensity, which, by risking direct action, persuaded the Johannesburg Municipality to take effective relief action for the solution of its housing problems. The first of the squatting movements was led by James Sofasonke Mpanza, a South African poblador, who, in 1944, led a number of sub-tenants and lodgers in an overcrowded Orlando to stage what purported to be a protest against the overcrowding there. Mpanza's position was explained to a Commission in 1947:

The segregation provisions of the Urban Areas Act prevent the Natives from acquiring land and from buying, building or hiring houses except in the locations, where, in the case of Johannesburg, no land or houses are made available for us except houses built and owned by the Municipality. By applying the segregation provisions and not setting aside any land on which we may build ourselves, the Municipality has taken on itself the duty of providing us with houses. But it has not carried out that duty; there are no houses for us. Very well, then we shall go and sit down on municipal land and wait for the Municipality to come and put a roof over our heads.\(^4\)\(^6\)

In March 1944, Mpanza and his followers took possession of a piece of vacant ground in Orlando Location, on the East side of Soweto, and erected shanties for themselves. The number of squatters eventually reached about 20 000. After much negotiation, the City Council provided water by the way of seven standpipes, pail closets were

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A house in Shantytown, 1945.
Lewis, A City Within a City, The Creation of Soweto, p28
constructed, and a daily pail and rubbish service was instituted. Health inspectors and constables to maintain order were provided.

In 1944 the local council urgently erected 4,042 concrete block shelters on vacant land near Orlando (in an area which gained the first unofficial title of "Shantytown"). Ballenden's successor at the Non-European Affairs Department (NEAD) as it became known, was L. I. Venables. He arranged for the manufacture of clinker blocks on site by unemployed black people, and these were used without mortar to erect the short-term emergency shelters. Roofs were of unfastened asbestos sheeting, intended for re-use at a later date. However the need for housing was so great that these shanties were used for many years to come. A contradictory report claims that the last shanties were demolished by October of 1945. In 1946 Venables arranged for the layout of the Moroka emergency camp, with 11,000 sites of 20' x 20' and elementary services for 60,000 black people. Here black people could build their own self-help temporary shelters, and these were to be demolished when the council houses were finally built. The sites were arranged so that ten years later they could be consolidated into "normal" street blocks. The police were finally given an "effective" law to combat squatting in 1951 with the Prevention of Illegal Squatting Act, whereby they could prevent these powerful movements from re-occurring.

In general, the housing emergency led not only to the provision of crude shelters by the municipality, on a large scale, but also to the extension of training facilities to African builders who had not
JOHANNESBURG, JOHANNESBURG
Nat Nakasa

Wits (The University of the Witwatersrand) has never been as "open" as its Public Relations Office may suggest. It is predominantly white, taking a limited number of black students. Nevertheless, its non-racial character has facilitated a profound social intercourse between black and white men, people who might otherwise not have met except as master and servant or deadly enemies.

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previously been allowed to practice their trade in white areas, so that they might use these skills in the locations, thus accelerating building and reducing costs. The city did not pay the African workers the same wages as white workers, so not only were they exploited as labor, but they were building the very environments by which their exploitation would be continued, the apartheid towns.

Commitment to Apartheid
In 1948 the National Party of D. F. Malan defeated the United Party of General Smuts in the white general election, and committed itself to the policy of apartheid, or separation. The United Party had been moving towards the acceptance of black people living permanently in the urban areas, but the new government adhered to the view the black people were only temporarily in the city to administer to the needs of white people.

The new government quickly revoked the 99-year leaseholds which had been granted in Soweto. These were consequently shortened to 30 years, and in the 1960s the period was reduced to monthly tenancy. Only in the late 1970s did the government revert to the offer of 99-year leaseholds which was the Johannesburg City Council's policy in the 1940s. This followed massive and successful rent boycotts, and was an attempt to create a responsible class of property owners and a middle class black community, and has not been entirely successful.
"Native building workers at Kwa-Thema, Springs." Calderwood writes enthusiastically about the change in law allowing black people to become builders, and of how they were trained according to their aptitude to be skilled in particular building tasks for efficiency and economy. Calderwood, Native Housing in South Africa, p104
The new 1948 government did however recognize the need to provide housing for black people in the city until such time as they could be repatriated to their "homelands," leaving South Africa "white" according to the ideology of grand apartheid. All council housing had thus far been built by relatively highly paid white artisans protected by legislation in jobs reserved for them. The Bantu Building Workers Act of 1951 allowed black people to be trained as construction artisans to build houses for their "own people" in the townships. See diagram 146. The council established and expanded its vocational training center and the city Engineer's department established a special branch to handle the design and installation of all essential services for township development. The use of black builders was to decrease the costs of the houses tremendously as they were not paid at the same rates as the white builders were. Costs were decreased to as low as 61 cents per square foot at a time when construction costs were generally increasing, which was half the cost (R1.22) in 194647, by the exploitation of this labor. These newly trained building workers, "under close white supervision"48 were able to carry out all the essential tasks. Specialized crews set up corners, did ordinary walling, set up doors and windows, put on roofs, etc. Their skills were tested by aptitude tests which will be discussed in connection with Calderwood's views on the subject. The black labor quickly learned new skills and were also capable of an output which made this project possible.

47Ibid., p10
48Mandy, op cit., p183
SNATCHING AT THE GOOD LIFE

At a glance, Soweto looks dull and lifeless. Almost all the houses are built to the same pattern - thousands upon thousands of small match-box cottages separated from each other by wire fencing. In some parts the fence even looks like an emergency camp.

Yet there are few places I know which are as lively as this complex of multiple townships where 500 000 Africans have been housed by Government decree.

There are people, no doubt, who grumble that Soweto is too far from town and the factories where everybody works; that many of the homes are still without electricity although Africa's biggest power station lies next door.

One man complained to me that neighbours tend to keep to themselves in Soweto because their homes are fenced in and each has its private toilet. It's not like Sophiatown, where you used to meet your neighbours for a chat as you went to the communal lavatories.

Some people resent Soweto because it is not a place of their choice. They would prefer to find their own homes according to their own tastes and means. Some Africans even stretch their hair and acquire Coloured names in order to qualify for houses in places other than Soweto.

Yet, in spite of all this, Soweto lives. It lives precariously, sometimes dangerously, but with relentless will to survive and make the best of what I think is an impossible job. Soweto lives fitfully, mainly at the weekend, but it also lives for a few hours during the week.

Not many people earn much money here. There are people, thousands of them, who don't eat three meals a day. There are homes where husbands give instructions that visitors are not to be served with tea, however long they may stay. That is the bleaker, more depressing face of this place. But then Soweto has many faces.

For instance, the number of large American cars never fails to amaze outsiders. There are streets in which every other house has a car in the yard. Admittedly, some of them don't go, but are there all the same. The man of the house is able to say, "You can't miss my place,
there's a black Chev in the yard," even if the poor thing has been on bricks for a decade.

As long as that car remains there, the world will know that the "man of the house" once had his spell of gracious living. For this is the way of things in Soweto; a pattern of uneventful, austere living occasionally interrupted by "great moments." It may be one hectic night, one roaring weekend, or the good living may last for a whole year.

You see this in the drinking sessions. A man will take his whole week's pay and buy drinks for half a dozen of his friends. "Fill the table and count the empties," he will say to the shebeen queen. The idea seems to be to live well while you can and face the troubles of tomorrow when they come.

There are other people whose "moments of life" come in a different way. The girls, for example, who begin to live when they get into their Sunday best and go to a wedding. Others will spend much of their pay on black shawls to be worn at a celebrity's funeral at the weekend.

All the time the pattern is the same. People live haphazardly, in snatches of a life they can never afford to lead for long, let alone for ever.

Three-roomed house, NE 51/6. Also known as the "matchbox", this is the most commonly built house in the townships of the 1950s. Note that even the living room is regarded as a bedroom. There are no internal doors, although Calderwood's writings stress the need for privacy. Note also that there is no bathroom, although the idea of "civilized" and "western" living is stressed. The realization is a long way from the theory.

Calderwood, Native Housing in South Africa, p29
In 1951 the National Building Research Institute (NBRI) and the National Housing and Planning Commission introduced prototypes of houses deemed suitable for black people in the townships, and which have been built ever since. See diagram 150 and "Snatching at the Good Life" by Nat Nakasa. The 51/6 type fits two bedrooms, a living room and a kitchen-dining room into 40 square meters. Most of the population in Soweto live in these "matchboxes," as they are referred to by the local residents. There is an external tap and toilet connected to the sewerage system. Roofing is asbestos sheeting. The 51/9 type has an additional four square meters of bathroom space for an internal toilet. In the 1950s these houses cost about R500, but in 1982 the replacement cost was about R6,000.

1951 also saw the introduction of the Native Services Levy Act which required employers (other than those who themselves provided accommodation for their employees) to pay monthly contributions towards the financing of infrastructural services in the townships. At the same time the Bantu Transport Services Levy was established to subsidize rail and bus transport services for workers. The services and transport levies have existed since 1953 and have generated many millions of rand to finance essential activities in the townships.

After 1951 the government encouraged "home ownership" schemes whereby qualified black people could purchase or build houses in the locations. The site would be rented, and payment for the house, to recover costs, would be over thirty years. This was intended to encourage black people to take pride in their houses and to create a
1 November

When Lindiwe was born I was so happy.
I thought this time
I can be a mother to my child.
My madam said I can keep her with me.
But it is not enough
that my madam says I can keep my child.
If the inspectors come,
she can do nothing.

I am thinking,
next time I walk to the station,
maybe, I will take Lindiwe home.

My heart will be breaking.
Every day it hurts me to think
of the day I must send Lindiwe home.
But the greatest worry I have,
is that she will get sick.
I worry that she will die
in the homelands.

At night I get scared.
I think they are coming.
I can't sleep. And when I do sleep,
I have bad dreams.
I dream they find Lindiwe in the room.

Ntombi, Thula Baba, Ravan Press, Johannesburg, 1987
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stable middle class society. The government did not regard such leases as being contradictory to the policy of apartheid because they did not confer security of tenure. This represented just one of the stages through which government policy with respect to urban blacks moved through in the government's attempts to satisfy the white electorates desire for racial separation and yet still accommodate black labor in the urban areas.

Site-and-Service Schemes

In 1953 the Minister of Native Affairs, Dr. H. F. Verwoerd, introduced the state policy of Site and Service schemes. The government would provide housing loans to local authorities for the provision of sites measuring 40' x 70', with sanitary facilities and stand water pipes every 500 yards, and access roads built and refuse removal provided. Tenants were to erect their own temporary shelter at the back of the site, and this was to be removed when the municipality or the tenants themselves had built a "proper", permanent home in front. Funds for "conventional" housing schemes would be withheld unless municipalities provided an appropriate number of such sites. Johannesburg surveyed and provided services for 35,000 such sites and the temporary shelters soon followed. Lewis describes this as a period of "creative activity" which had a "beneficial social effect".49

The housing emergency had led to this introduction of the "Site-and-Service" scheme, which was largely responsible during the early

49Lewis, op cit., p8
Daveyton Township, a site-and-service township built in the Transvaal in the 1950s. The picture shows a portion of Daveyton Township with the officially built houses nearing completion. The "site-and-service policy required that, when the houses were completed the shacks would have to be demolished.

J. E. Mathewson, The Establishment of an Urban Bantu Township, in Davenport and Hunt, The Right to the Land, p83
1950s for a revolution in the building of African homes and the planning of African townships. W. C. Mocke of the Department of Native Affairs made a major contribution towards the site and service schemes, which he described:

By site and service are meant such planned areas in which rudimentary services are provided. Rudimentary services include - (a) Communal water supply at convenient points....(b) Untarred road...sufficient to permit of a night -soil and/or rubbish removal service to operate effectively [and] essential drainage works....(c) Street lighting...say, every third street in addition to the bus route....(d) Sanitation. - There has to be one convenience for each plot... Sewerage will not be permitted if by resorting thereto the implementation of the site-and-service schemes is delayed....(e) As it is essential for workers to get to work it is permissible also to construct high-standard tarred bus routes....

These "Rudimentary Services" are not regarded as fully meeting standard requirements but they are sufficient to make the schemes habitable until it is possible to augment them by commencing on approved housing schemes...

Until housing schemes are started by the local authorities, the Bantu should be permitted and persuaded to erect temporary homes on a corner of their plots. Such a home should be impervious to rain and afford privacy....

The housing shortage in the large centers was being solved during the 1950s - in a rough and ready basis - by such efforts as the planning of Daveyton, outside Benoni, a white suburb east of Johannesburg. See figure 51, from which shows a portion of Daveyton "Bantu Village" or "Township", a site-and-service scheme, with the city built houses nearing completion. Policy required that when the houses were completed the shacks would have to be

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51 J. E. Mathewson, The Establishment of an Urban Bantu Township, 1957, 64, is the source of the photograph of the houses nearing completion. The plan of Daveyton Township is from Bantu, April, 1955. Both in Davenport and Hunt, p83.
Plan of Daveyton Bantu Village, Benoni, showing how even within the township for black people separated from the white town by wide buffer zones, a further division takes place amongst the various tribes within the township. This was government policy to encourage ethnicity and to keep alive the idea that all people here would some day reside in the "homeland" of their race or tribe.

Davenport and Hunt, The Right to the Land, p83
demolished. The plan of Daveyton Township shows the attempt, characteristic of Government policy at the time, to house Africans according to their ethnic background - a policy which was disliked by many on the ground that it seemed to over-emphasize tribal affiliations, but which was intended to make the provision of primary schooling "a more straightforward process" because of language differences and because of the government's intention to encourage an eventual return of black people to their "homelands." Divide-and-rule, or so it seems in retrospect.

During the 1960s it became Government policy to switch the homebuilding efforts to the towns and settlements of the "Homelands". The result was that serious African housing shortages began to reappear in the white areas because local authorities could not obtain permission to raise sub-economic loans for building purposes. The number of applicants for houses who were still on the waiting-list in Johannesburg for housing in the Soweto townships in 1944, the year of the first squatter movement, was 8 425, though the figure rose to 16 195 in 1947. The number on the waiting-list in Johannesburg in 1972 was 11 624, the resident African population increasing at the rate of about 2 000 families a year.52

While such waiting lists quote official statistics, in 1948 it was estimated that approximately 50,000 black families in the Johannesburg area actually required housing. From 1945 to 1953

52 Davenport and Hunt, p63.
the council built 8,292 houses at Orlando East and West, and at Jabavu. The total number of houses built by the end of 1953 was now 17,765, and hostel accommodation had been provided for 10,537 men.\textsuperscript{53} Lewis writes that the financial burden was now limiting the further building of housing, and that the deficit on the Native Revenue Account was R655,513: for 1951, with each new scheme adding to the loss.\textsuperscript{54} Houses and infrastructure were paid for by the council receiving low interest (3.1/4\%) loans from the states National Housing Commission. Losses which were to be borne in a ratio of three to one by the state were never fully recovered. Some municipal councillors and taxpayers believed that council funds should not be spent on housing temporary workers, as it was thought that they might leave the city before paying back the thirty year loans. Organizations such as the Johannesburg Chamber of Commerce, the South African Institute of Race Relations, and many churches urged the council to give priority to the housing of homeless black people who were living in terrible conditions.

While the possibility of some form of shelter was being provided by the government in areas it declared suitable, it was also determined to remove black people from the white and multiracial areas for resettlement in the South-Western Townships.

\textbf{Segregation of South African Indians (Asians)}

\textsuperscript{53}Lewis, op cit., p6.
\textsuperscript{54}Ibid., p6
I am concerned with the history of the housing of the black people in South Africa's townships, but the law there has dealt similarly with its Indian and so-called "Colored" population by segregating them to live in their own areas. It was attempts to segregate Indians from white areas which led directly to the Group Areas Act of 1950. Initially restricted to certain areas "for purposes of sanitation" by Law 3 of 1885, Indians were later also restricted in their residential and trading rights by laws passed in 1893 and 1908. Between 1890 and 1914, the period of Gandhi's sojourn in South Africa, the Indians resisted attempts by the colonial governments to restrict their liberties, and in general held their ground, gaining minor concessions through the Indian Relief Act of 1914. After Gandhi's departure, however, agitation by white people to restrict Indian trading activities began again in the Transvaal, and this led to the appointment of the Asiatic Inquiry Commission of 1921. Attempts to restrict Indian residential rights were made in the Class Areas Bill of General Smuts's Government in 1924, but this was superseded by the Areas Reservation Bill of the Hertzog Government in 1925. Intervention by the Government of India, however, resulting in the Cape Town Agreement of 1927, rendered this legislation obsolete; but the policy of repatriating Indians to India under an incentive scheme, to which both governments were committed, failed in practice.

During the 1930s, white fear of Indian penetration into white areas led to the appointment of a series of commissions in Natal under Judge Broome. The findings of these commissions led the Smuts
Government to pass a Trading and Occupation of Land (Transvaal and Natal) Restriction Bill in 1943, better known as the "Pegging Act", which froze property deals between Europeans and Indians for ten years, and applied similar restrictions to the occupation of land. It aroused intense opposition from the Natal Indian Congress; but the more conservative Natal Indian Organization under Dr A. I. Kajee gained some concessions in negotiations with the Government in Pretoria. They set up machinery to control and regulate future residential occupation by Europeans and Indians. Such negotiations of a political nature establishing the control of who lives where served to politicize space. However the negotiations between the Indian leaders and the Smuts Government broke down, and the Government passed the Asiatic Land Tenure and Indian Representation Act in 1946. This Act established controls on the acquisition and occupation of fixed property by Indians, and set up a Land Tenure Advisory Board which granted permits and inspected residences to ensure that people of a particular race were living in the correct areas.

Group Areas
The Asiatic Land Tenure Act proved to be merely a stage in the history of restrictive measures aimed at the Indian community. It was followed in 1950 by the passage of the Group Areas Act, which cast a wider net to take in all races.

The Minister of the Interior, Dr T. E. Donges described the Group Areas Bill in the House of Assembly in 1950:
The overriding principle of this Bill is to make provision for the establishment of group areas, that is, separate areas for the different racial groups, by compulsion if necessary... The immediate effect of the passage of the Bill will be to make every part of the country a controlled area... Then the further part is the gradual proclamation of group areas within this wide controlled area; that is, the declaration of certain areas to be group areas, either for occupation or ownership, or for both. The various groups for which areas may be assigned are three, three main groups, the whites, the Coloreds, and the Natives. The latter two groups may, however, as in the case of the population register, be subdivided into further groups....55

The ramifications of this law, which became increasingly complex, led to the establishment of two new departments of state: Community Development, and Planning, - to cope with the work of implementing the group areas policy. These departments, under the various names and guises they have adopted to improve their public image, are presently responsible for the planning of South Africa's cities, and they operate under the assumption that the present broad policy of racial segregation will remain essentially unchanged.56 This act also works to politicize all space in South Africa because it racially segregates the country and allots space to race by government legislation.

56 Racial zoning is done by government departments (whose names change frequently without any change in policy, due to opposition pressures, lack of the particular department's success in achieving its policies, and for government image) including the Department of the Interior, the Department of Native Affairs, the Department of Community Development and Planning, the Department of Constitutional Development and Planning (1984), the Land Tenure Advisory Board (1946), the Group Areas Board (1955), the Community Development Board, and the Demarcation Board (1983).
Group areas in Johannesburg and Soweto. The map shows the relationship of Soweto, twelve miles south-west of the city center, to the two areas of Meadowlands and Diepkloof, settlements established by the central Government to receive African residents of the Western Native Township during the late 1950s. Nancefield is a "colored" group area, and Lenasia was established for the Indian group.

Davenport and Hunt, The Right to the Land, p86
For a listing of regulations related to racial zoning and apartheid, having impact over the social experience and participation in the form of South Africa's cities, refer to Appendix.

Group Areas in Johannesburg

The implementation of the Group Areas Act had extended to nearly every urban area in South Africa by the early 1970s. Many studies have been done on the effects of the Group Areas Act in a variety of cities in South Africa, notably by M. Horrel\(^57\) and Kuper, Watts and Davies\(^58\).

Figure 162 shows the group areas of Johannesburg and Soweto.\(^59\) The map shows the relationship of Soweto, twelve miles south-west of the city center, to the two areas of Meadowlands and Diepkloof, settlements established by the central Government to receive African residents of the Western Native Township during the late 1950s. Families in Alexandra Township (off the map to the north-east) were also moved gradually to Diepkloof. "Colored" group areas were set up in Coronation and Newclare (part of the Western Native Township), at Riverlea, and at Nancefield. An Indian group area was established at Lenasia, for residential and business purposes; but Indian businesses to the immediate west of the Johannesburg city center (at an "Oriental Plaza") were allowed to continue.


\(^{59}\) Map based on that supplied by the Clerk of the Council, Johannesburg, in Davenport and Hunt, p86.
Houses in Sophiatown.

(above) A Sophiatown "minor slum" - a row of semi-detached houses which might have been renovated at reasonable cost under a program of slum clearance.

(below) Upper-crust Sophiatown. This house in Toby Street was once the home and property of the black community leader Dr A. B. Xuma. One of the few buildings that escaped demolition, it is now occupied by a white family as part of the new suburb of Triomf (Triumph).

Arnold Benjamin, Lost Johannesburg, p20
The map also shows (1) Pimville, originally Klipspruit, Johannesburg's first African township; (2) Moroka, now a township in Soweto, and once the site of the largest of the squatter camps; (3) Dube township, where the heaviest African investment in fixed property was made, and which is currently becoming the "downtown" of Soweto, with the construction of the first office buildings and supermarkets in this area; and (4) Orlando, where the Johannesburg City Council's first housing schemes were started in the 1930s.

Sophiatown to Meadowlands
Sophiatown, Martindale and Newclare were freehold suburbs whose title deeds did not restrict the race of owners or occupants. They comprised almost 3,000 small stands, and the poor conditions reported there in the 1920s had deteriorated further due to population pressures and lack of alternative accommodation. See illustration: 164. The influx and settlement of poor white people to the city and their settlement around Sophiatown and Newclare in the white only townships of Brixton, Newlands and Westdene brought competition and tension to the area. These people competed economically, but the white people had a higher social status and the franchise in municipal and Parliamentary elections. These white neighbors soon called for the "black-spots" to be removed, claiming the area to be a slum and in a generally white area. Life in Sophiatown flourished, with journalists, jazz musicians,
"A '50's gangster."
Bailey's African Photo Archives, photographer: Peter Magubane.
Sophiatown, program to the play, Junction Avenue Theatre Company.
Living it up Kofifi-style!
Sophiatown, program to the play, Junction Avenue Theatre Company.
Official surveys categorized two-thirds of Sophiatown as either "major slums" or "minor slums". This collection of backyard shanties was an example of the major kind, with 78 people living in 15 rooms averaging 4 meters by 3 meters, many of them separated by cardboard walls. The picture was taken during an inspection by Johannesburg's Slums Court during the mid-1950s. Arnold Benjamin, Lost Johannesburg, p18
artists, businessmen and gangsters, as well as a number of community oriented facilities such as churches, halls and cinemas.

In response to political pressures, the Johannesburg City Council resolved in principle in 1944 to remove all black and mixed race people from Sophiatown. However the Second World War and more urgent priorities intervened with carrying out this resolution. The new 1948 government demanded that the municipality implement the removal decision. The council objected on practical and humanitarian grounds. Sophiatown's population in 1950 was recorded as being 60,000 people, living at an average density of 23 people per stand. The Department of Health classified two-thirds of the properties as slums, but alternative housing was not available. See diagram 168

In 1952 the government appointed a Resettlement Board whose function was to remove and rehouse the residents of Sophiatown and Newclare (the "western areas"). They were to be forced to go to Meadowlands in the south west, adjacent to Orlando, Soweto. The Johannesburg City Council requested that freehold rights be available in Meadowlands, that the worst housed people should be rehoused first, and that the initial moves should be voluntary. All of these requests were rejected by the government. The council was forced to accept the removal plan prepared by the government's Native Affairs Department under Verwoerd. His attitude was that the removal scheme would be in the interests of the "slum dwelling" black people as they would be moved to less crowded
Sophiatown, defiance and removals.
Sophiatown, program to the play, Junction Avenue Theatre Company.
accommodation where there would be open space and recreational facilities. Such social facilities were never provided. The government took over land which the municipality held under option at Meadowlands. The black people affected by the scheme protested against the total lack of consultation with them. They resented leaving their established suburb and the existing social infrastructure to be moved five miles further out of town to an area without facilities. Despite protest the government's decision proved to be final.

Verwoerd made the Native Resettlement Board a separate local authority reporting directly to his Department of Native Affairs. It was to commence immediately with resettlement by demolishing Sophiatown's houses and creating a new township at Meadowlands. The standards of these houses were lower than those built by the council, having no internal finishes, and providing no recreational or cultural facilities or halls, and no landscaping or trees were planted.

On 10 February 1955, the removals began with army trucks and a strong military escort removing families and their possessions to new houses in Meadowlands. As a contemporary observer noted, "It was a case of first taken, first served, with no organized attempt made to preserve the community by encouraging friends and neighbors to settle near to each other." See illustrations 170 172

Sophiatown removals.
Sophiatown, program to the play, Junction Avenue Theatre Company.
The city council soon assisted the government by undertaking the civil engineering design work. The Meadowlands site was not large enough to accommodate all the removals from the "western areas" and the council also made available land which it held under option at Diepkloof, also adjacent to Orlando. People were moved from Martindale and Newclare to Diepkloof. By 1968 the Resettlement Board had removed and relocated some 22,500 families and 6,500 single people at Meadowlands and Diepkloof. The government not only wanted to remove people for the sake of a political ideology, but it also wanted the Board responsible for the removals to be self-financing, and thus these areas never obtained the municipal subsidies applicable to the rest of Soweto.

Sophiatown was redeveloped as a suburb for lower-income white people and was arrogantly renamed Triomf (Triumph).

Johannesburg Municipal Housing Division
In 1954 the Johannesburg City Council created a separate Housing Division to undertake the building of houses for black people. Its first director was A. J. Archibald. Its staff and labor were largely those people trained by the council's Vocational Training Center. This team was to build many Soweto houses at an incredible rate.

The council was dependent government housing loans to finance housing schemes. The government was spending money on rehousing people who already had accommodation, as well as apportioning the funds available amongst all the local authorities.
applying for loans. Consequently Johannesburg was allocated insufficient amounts to deal with the housing backlog, while conditions remained very poor in the Moroka emergency camp and Shantytown. In 1956 Sir Ernest Oppenheimer, the mining magnate and chairman of the Anglo-American Corporation, was invited to visit Moroka, and was so shocked at conditions there that he arranged with the Chamber of Mines to loan the city R6 million repayable over thirty years at an interest rate of 4.7/8 percent for the construction of housing. With the proceeds of this loan the council swiftly moved ahead with much construction. This loan enabled 14,000 houses to be built and the final removal of the families from Moroka and of those from Shantytown. At the peak of activity in the 1958 financial year more than 11,000 new homes were built at the rate of 40 houses completed per day.\(^6^1\) The pace then slowed down to the construction of 730 houses per year by 1969 as the government announced that it would only provide further sub-economic loans for the building of hostels for migrant people. Between 1954 and 1969 the municipal Housing Division had built nearly 50,000 houses, 88 schools, 3 hostels accommodating 14,000 people and many other facilities at a capital cost of R26 million.\(^6^2\)

**Responsibility for Policy**

In South Africa there are three tiers of government: Central, Provincial and Municipal. Political pressures sometimes caused

\[^6^1\]Mandy, op cit., p183
\[^6^2\]Ibid., p183
clashes between these levels, and this is so in the relations between the Johannesburg City Council and the central government. In 1958 Dr. Verwoerd appointed an interdepartmental committee under the chairmanship of F. E. Mentz to ensure that the council acted in accordance with government policy, especially after it had been slow to implement the Sophiatown removals to Meadowlands three years earlier. This committee was promptly labelled the "Watchdog Committee" and its inspectors were stationed inside the municipalities offices to investigate the council's actions. The council was forced to acknowledge that it would execute government policy in so far as it was enshrined in law. The direct administrative links provided for government legislation to be realized in practice according to the policy of apartheid.

Dr. Verwoerd became Prime Minister in September of 1958 and was determined to continue to enforce and establish the system of apartheid, and that of the "homelands." The Sharpeville massacre on 21 March 1960 was a shock to South Africa and the world. The peaceful demonstration at Sharpeville, near Vereeneging, resulted in the police shooting and killing 67 black people and wounding 186 more. They were protesting against the restrictions and controls of the movement of black people in the urban areas. On 9 April an attempt was made to assassinate Dr. Verwoerd by a white man, but this failed and he quickly recovered to restate his opinions of events. He believed that peace, good order and friendly relations between the races could best be achieved through the policy of apartheid. He stated that one of the benefits of the pass law system was that it
7 January

I started work today.
Lindiwe is three days old.
I work in a big six roomed house.
I work very hard. I must cook, clean, wash and iron.

And the madam has two children.
I look after Daniel all day.
He is two years old.
Amanda goes to school.
She is seven years old.
I must collect her from school every day. At seven years she is already a little madam.
She changes her clothes three times a day.

The worst thing about my work is that everything is white.
The walls are white.
The two bathrooms are white.
The beds are white.
Even the stoep is white.
Only people who never clean a house will have everything white.

I stay in the backroom in the garden.
It is always dark. Even in the day I use a candle. Like all the back rooms, it is too hot in the summer, and it is too cold in the winter.
I have got an outside toilet. I fetch water from the cold tap in the yard.
I cook on the primus stove.

Ntombi, Thula Baba, Ravan Press, Johannesburg, 1987 pages 18-19
25 January

My troubles, they are like small troubles
when I think of my sister Matshepo.
She came to my room tonight.
She came because Tshidiso was crying.

She is caretaker of a block of flats.
Her room is at the top of the flats.
When Tshidiso cries all the white people
in the flats can hear him. He is good.
He doesn't cry often. But last night
he started to cry.

One of the white people
called Matshepo to his flat.
He said he was giving her a warning.
Next time Tshidiso cries
he is going to phone her master.

Life is very hard for my sister Matshepo.
Her firstborn Tebeho died.
He died in the homelands.

She is struggling to keep Tshidiso
with her.
She is scared if Tshidiso goes
to the homelands
he will die like his brother.

But it is too hard to keep a baby
if you are a caretaker.
I have one house to clean.
She has twelve flats.
She must clean six flats each day.
But on Friday she must clean
all twelve flats.

And the people in the flats,
they worry her
at any time of the day or night.
They bang on her door
at two o'clock in the morning.
They have lost their keys.
She must get up out of bed
and let them in.

And she must carry Tshidiso
on her back all day long.
He is walking already.
But he doesn't know anything.
He wants to touch everything
in the flats.
So she carries him on her back.
Even when she cleans the windows
she carries him on her back.

No, it is too much to keep a baby
when you are a caretaker.
You have too many problems.
You must keep the child quiet all the time.
He has no place to play.
You are scared
he might break something
and then you must pay.

If one of the white people don't like you
they can phone the Inspectors.
It happened with my Sipho.
I didn't even know which one of them did it.

I told Matshepo she must come
to my room each evening.
She can wash Tshidiso
and get him ready for bed.
When he is sleeping
she can go back to the flats.

Ntombi, Thula Baba, Ravan Press, Johannesburg, 1987
pages 25-28
would give urban blacks protection against the influx of rural black people who would otherwise compete for work and housing. The central government would increase its surveillance of municipal authorities to ensure that they were informed of and carried out its policies. New Urban Bantu Councils were to be established to facilitate liaison with the emerging governments of the various ethnic "homelands." The government believed that it would be wasteful and counterproductive to expend scarce resources on housing and services for black people in the cities, as it was government policy to send them all back to their "homelands" where they were expected to enjoy the full rights of citizenship in the future. It was felt that they should not make it attractive for black people to live in Johannesburg or Soweto as they would then have no incentive to move to the "homelands."

**Additional Legal Restrictions**

Much restrictive legislation was to follow in the 1960s in the attempt to make apartheid work. In 1963 the Bantu Laws Amendment Act stated that only one black domestic servant could be accommodated per white household. A special permit was required for additional employees. The Minister also acquired the power to prohibit the living in of all servants in any urban area he desired. This amendment even prohibited the husband or wife or child of a servant to share his or her quarters. (See quote from Thula Baba.) An amendment in 1965 to the Natives (Urban Areas) Act prohibited

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the accommodation of more than five black people in a white area without the consent of the Minister. This was to eliminate the "locations in the sky", servants' quarters on top of blocks of flats and offices.

The laws provided extensive control regarding the housing and the influx of black people in the urban areas. In 1967 regulations ordered that black women not be allowed family housing in urban areas, even if they were widowed heads of households. In 1968 regulations provided that housing permits were only to be allocated to males over 21 years of age who had the necessary passes and special permits allowing any dependants to live with them. The township superintendent could cancel a housing permit (and the right to occupy a house) if the holder was unemployed for more than thirty days, or if he was convicted of an offence and sentenced to more than sixty days' imprisonment, or if in the superintendent's opinion he was not a "fit and proper" person to reside there.

Since the National Party government came to power in the 1948 it has discouraged the settlement of "non-productive" black people in the urban areas. This was reaffirmed in 1967 when a government circular stated the policy that the aged, the handicapped, and the widowed had to be resettled in the "homelands." The townships were still viewed only as dormitories for urban labor, yet as I shall show, the form of them as suburbs creates a facade of permanence to the rest of the world, suggesting that black people are well housed. The dichotomy between establishing a black middle-class urban
population and the repatriation of all black people to the homelands has resulted in some heartless laws and regulations. These tend to deprive any sense of security from the black township inhabitants, and yet ease the consciences of "concerned" white people in taking care of this urban population in "civilized" housing.

The 30-year home "ownership" scheme introduced in 1949 had produced many settled families. Johannesburg's NEAD had pioneered this scheme, selling 12,000 houses to blacks in the Dube, Mofolo, and Moroka townships in Soweto. Some people built for themselves some fine houses under this scheme. However, this form of tenure provided too much security for the aims of the government, which desired permanent family accommodation for the black people only in the "homelands." The home ownership scheme was terminated in 1968, and whereas current contracts were honored, purchasers would not be allowed to bequeath their rights, and could only sell them to the council.

Education plays a vital role in the building of a community. Before 1955 most African schooling was in the hands of missionaries. In 1953, the Bantu Education Act was passed, transferring all control of education to the state. This meant that all schools had to be registered, all teachers government trained, and official syllabuses had to be followed. Government policy was that black education should stress the differences between ethnic groups, work opportunities within their station of life and the needs of the homelands, and promoted the concept of apartheid through syllabi
"Bantu education".
Markus Braun, Das Schwarze Johannesburg, Afrikaner im Getto.
and textbooks. Schooling opportunities in the urban areas were restricted. Verwoerd, who was Minister of Native Affairs in this period stated:

It is the policy of my department that education would have its roots entirely in the Native areas and the Native environment and the Native community. ... There is no place for him the Native in the European community above the level of certain forms of labour.66

From 1954 onwards the government pegged the amount to be spent on black education at a set level, which remained constant for many years. The attempt at tribal or ethnic grouping in education also lasted many years, but is no longer enforced in modern Soweto today. Bantu Education, or "gutter education" as it came to be called, was vigorously opposed by many teachers, parent and the church. It became a source of protest for the students too, culminating in the riots against this education in Soweto in 1976, in which the police killed and wounded many of the protestors.

Financing the Townships

Soweto had limited sources for financing its services. There were no assessment rates because all fixed property was owned either by the council or by the government.

The law, since 1923, had allowed local authorities to exercise a monopoly on the brewing and sale of the traditional sorghum beer, or "Kaffir beer" as it was derogatorily referred to by whites. In 1937, Johannesburg's council decided to exercise this right. Two-

Aerial view of Soweto.
thirds of the profits, which were substantial, were to be used for making up losses on housing and municipal services, and the other third applied towards improving social and recreational facilities for the residents. The law prohibiting the sale of "white" liquor to black people was repealed in 1962, and local authorities were given the monopoly of liquor store sales in the townships. The profits from these sales were also substantial, and were used to assist the development of housing and other services. Lewis comments that this source of income was, however, unreliable, as a boycott of the beer halls could cause a fluctuation in the income. Further, he adds, "there are moral issues involved."67

Many taxpayers and councillors argued for the revenue account for the black townships to be self-balancing. It was argued that only those services for which the black population could pay should be provided. However, the Johannesburg City Council's majority view was that subsidies would be essential until the black people earned an economic wage, and that it was a principle of government that the poorer should be assisted by the community as a whole.68

Management

The municipal management of the townships was largely controlled and directed by the legislation of the central government. The city council had discretion within the boundaries of the law. Authority and responsibility were in the hands of the white council, and they

67 Lewis, op cit., p15.
68 Mandy, op cit., p187
made attempts to consult with emerging leaders of the black communities. The Natives (Urban Areas) Act of 1923 provided for the establishment of Advisory Boards in the townships. These were to meet once a month with municipal officials to report and respond to questions. The legislation aimed for an independent advisory board for each township, and Johannesburg even established a joint board for all the townships. The government was unhappy with this possibility of organization of township leaders, and in 1968 the Urban Bantu Councils replaced the advisory boards. The intention was to achieve a closer link between urban black administration and the black "homelands." Members were elected by vote of Soweto residents in ethnically-grouped constituencies, while others were appointed by the representatives of the chiefs in the homelands. These councils had no power, and were meant to liaise with the homeland governments, where, it was assumed, all urban black people would eventually live. The black members of these boards or councils were despised and disrespected by large sections of the black population for their collaboration with the apartheid system. Turnouts at "elections" were very poor, and the authenticity of leadership, while accepted by the white government, was not acknowledged by the majority of the black population. Black people who attempt to work with the white government are seen by black opposition to the government as "sell-outs." Similarly, black people who manage to raise their economic status to that equivalent to white middle class society are also seen as no longer "of the people" according to more radical movements in the country.
Forward Planning

A city council report of 1967 observed that whereas in 1946 the city's black population had consisted predominantly of migrant males, by 1967 it had evolved into a settled urban community. Employment in commerce and industry had grown considerably despite the obstacles of influx control and job reservation created by the government. The council reported that the black urban population was expected to increase by 50 percent by 1980, and that there would need to be an increased provision of land, housing, services and transportation for commuters. These projections were fairly realistic, but the government Department of Bantu Administration and Development (very quickly referred to by the black population by the acronym BAD) reacted with disdain. All their plans were based on the delusion that by 1978 the urban black population would be returning to the "homelands". After the publication of this report it became increasingly difficult for councils to obtain approval of government housing loans. It is clear that the philosophy of the government clashed with that of the council, and whereas the local authorities tried to provide houses within some form of separate development, (black townships and white suburbs), the government preferred to attempt to obstruct the presence of black people in the urban areas all together, and would rather see them moving away from the white areas.

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69 Ibid., p188
More recently, the Cillie Commission of Enquiry into the 1976 riots reported that the planning of unlimited housing for black people in the urban areas could not continue as it was against government policy. However since Johannesburg regarded the black townships as *de facto* Black "homelands," the government’s desire to pressurize industrialists to decentralize to the "homelands" had been broken. The Johannesburg council had also failed to propagate migratory labor because it had provided housing in Soweto. Johannesburg was regarded as "integrationist" and willfully obstructive to government policy in trying to help its black residents to live "normal lives" in the urban areas.\(^70\) In order to impose its will the government passed the Bantu Affairs Administration Act in 1971 to create administration boards which would take over the management of the influx control laws and the black urban areas. Thus central government boards would take over the responsibility from the local councils in administering the townships to ensure that the intentions of government policy would be carried out. Thus in 1973 the West Rand Administration Board (WRAB) took over the control of Soweto from the Johannesburg City Council. This board was to rigidly enforce all government policies in the urban areas in order to attempt to make apartheid work, and in the process became a much hated body.

**Port Elizabeth Township**

\(^{70}\text{Ibid.}, \text{p190}\)
In 1953 Adolph Schauder wrote about the model "non-European housing scheme" at Port Elizabeth.\(^7\)\(^{1}\) His intention was to show that the problems and the growth of "shanty towns" which were often quoted as typical of South Africa's exploitation of the "native" are in fact not typical, and that many model townships have been built by the "European authorities" in South Africa to house large communities of the "non-European" population. Schauder claimed that South Africa has spent, *per capita*, proportionately more on housing for its "non-European" population than any other country has spent on State aided housing for the low-income groups.\(^7\)\(^{2}\) Schauder also states that model housing schemes and the provision of "civilized standards of housing" will help to extend the policy of building "adequate non-European housing on a national scale" which in turn "is something which can unite us all, irrespective of political out-look or other so-called differences".\(^7\)\(^{3}\)

Schauder describes the history of the provision of government housing in Port Elizabeth as typical of other South African cities, and that it will provide a deeper understanding of the problems of all of South Africa. In 1900 there were five locations (uncontrolled, overcrowded, amateur built "shantytowns", in Schauder's adjectives) in Port Elizabeth near the center of the city. Houses in these


\(^{7\text{2}}\) *Ibid.*, p5

\(^{7\text{3}}\) *Ibid.*, p1
Aerial photograph of Port Elizabeth's "Native township". The model township is seen in the foreground, and between the township and the industrial area near the seashore can be seen the old "native location". Adolph Schauder, Generous Housing for South Africa's Natives, p7
locations were "of a most primitive type," mostly being self-built crude structures using found materials, from corrugated iron to paraffin tins. The terrible conditions of overcrowding, poverty and filth resulted in the plague spreading rapidly among the population. With similar living conditions in several parts of the city the disease spread, and a Plague Board was formed to deal with the situation. At the time there were between 7,000 and 8,000 inhabitants in these locations, and the spread of disease forced the city to become "interested" in housing conditions. The Plague Board ordered the ruthless destruction of the locations, and all the dwellings were burnt or demolished. The residents were given 24 hours to vacate their "shacks", and the plague was halted. Health fears were the primary reasons given for the enforced removals of people from the original locations in which they had established themselves. A further reason was that the standards of black housing were very much lower than the white people were used to, and the white people therefore attempted to simply remove them (out of sight (site) out of mind).

No other accommodation was provided or available for these dispossessed people, and they were required to move beyond the city boundaries. Many settled in Korsten, outside the city boundaries, and there built for themselves shelters similar to those from which they had been evicted. The population at Korsten increased to more than 30,000 people by 1918. Nothing was done until after the world influenza epidemic in 1918, as a result of which parliament passed a new Housing Act, and for the first time the Port
Elizabeth City Council built and rented "economic"74 houses for white and "Colored" (here referring to mixed race) people. However, no solution was provided for the housing of the black population. Korsten continued to grow as a "shantytown" or slum. Overcrowding and rising rentals spiraled upon each other, and the crime rates soared. Since there was no drainage, proper water supply, or supervision, disease was rampant. Illicit liquor traffic became firmly established in an age when "white man's alcohol" was prohibited to black people. The Port Elizabeth Council felt helpless, and the Village Management Board was unable to accomplish anything.

Port Elizabeth also shared South Africa's problems of rapid industrialization and the consequent urbanization and pressure on housing and social services in the larger cities. The industrial revolution in South Africa took place in the space of about two generations, and in this time the country was transformed from a largely agricultural society to an industrialized state. In South Africa, the process affected mostly the poorer white people and the urbanized black people. The black rural population was forced to come to the cities and become part of the cash economy because of the many laws and policies which affected the rights to the land.

In 1931 the government forced Port Elizabeth to take Korsten into its Municipal boundaries. The city council believed that only the force

74 An economic housing scheme is one where the cost of the houses can be recovered over a suitable period by the payment of normal rent. A sub-economic scheme is one in which a subsidy makes lower rents possible. Ibid., p2
of "guns and bayonets" could move the people from the "slums," and that only a miracle could change the conditions of "degradation" that had accumulated. Schauder notes the irony in the fact that the opposition to the city's program of housing and "social reform" came from an "unholy alliance," that of the "slum lords" on the one side, and the "agitators" on the other.\textsuperscript{75} The slum lords wished to protect their investments and the incredible return they were making through the exploitation of the housing shortage, while the agitators felt that improved conditions would deprive them of the "fertile ground in which their work flourished." Schauder writes that, despite the opposition and the practical difficulties, rehousing was accomplished through council work and government help.

We have built a great Native township that gives pleasure and hope to all who visit it. There we have built houses that enable the inhabitants to enjoy a civilized home life; rents are low and general conditions are excellent; modern sanitation, electric light, roads, playgrounds and free medical attention are provided.\textsuperscript{76}

Schauder write of giving pleasure to those who visit the township, but what of those who live in it, I wonder? Schauder is correct in saying that the white conscience was appeased by the provision of the housing and it certainly did fulfill many of their aims. Schauder is revealing more than he realizes in explaining that the townships look like they might be fine places to live in, with each family attaining the dream of its own house. What he fails to show are the policies regulating the right to live there, the lack of choices given to the residents, and the ways in which the houses are inhabited - often with many more people than was ever intended - due to the

\textsuperscript{75}Ibid., p2
\textsuperscript{76}Ibid., p2
Port Elizabeth "Native township". "Native building workers building houses at Elundini".
Adolph Schauder, Generous Housing for South Africa's Natives, p7
continual shortage of accommodation. Accommodation is not provided as in a free-market according to supply and demand, as the government does not wish to encourage black people to migrate to live in the urban areas. Thus the policy of building model townships can be seen to be done more for the rest of the world - the white population - than out of philanthropy by the white government for the black population.

Government policy was to separate the races in the dormitories in which they lived in the urban areas. In Port Elizabeth, a separate township was built for the so-called "Colored" people, and here too the city council provided the modern services of electric light and drainage. Both the townships provided sites for playing fields and schools, and some schools were built in the areas provided. Schauder claims that rather than having to force the "natives" to move from their "slums," that they "clamored to be removed". "They have become excellent tenants of these new houses, taking pride in their gardens and homes." 77

Schauder believes that in the provision of these "townships" the white council had given to the black and "colored" people "a combination of civilized home life and a fair degree of freedom." He believes that this policy was in the best interests of both white and black people alike. More than 12,000 houses were built, and the

77 Ibid., p2
A Native's impression of the model Native township at Port Elizabeth is shown in the water-color painting reproduced. Painted by Pemba, a self-taught Native artist who lives in the village, it is a spontaneous tribute to the European authorities who have provided comfortable and attractive housing for Natives as a substitute for their former primitive accommodation.

Adolph Schauder, Generous Housing for South Africa’s Natives, p3
reasons claimed that the project was successful include the following:

1. Despite opposition there was goodwill and determination to carry the schemes through.
2. There were no wasted expenses. The council built on its own land and used its own civic officials in consultation with the government rather than hire consultants to assist in the task.
3. The races were separated in their respective townships, "and all concerned are happier as a result".78
4. Building contracts were allotted in batches of about 100 houses so that smaller builders could take part and maintain competitive prices.
5. The Port Elizabeth City Council worked in co-operation with the Housing Department and the Native Affairs Department of the government, and thus overcame all obstacles.

Schauder, in reflecting on the provision of housing in Port Elizabeth, believes that this type of township housing is:

fundamental to the supply and efficiency of industrial labour, and in fact to the healthy continuance of life itself. Only when it is provided can we create the basis for building the remainder of the structure of workable racial relationships.79

In conclusion, Schauder writes that where suitable housing has been provided for the "Natives" in South Africa, the nation has benefited in terms of reduced crime, reduced expenditure on hospitalization and other social services, and increased industrial efficiency. He claims that the provision of housing can help to unite all the people in South Africa, and that the races can live peacefully together.80

This is typical of the view in South Africa that white control over the

78Ibid., p3
79Ibid., p4
80Ibid., p7. The races in South Africa can live peacefully together by being made to live apart, is what Schauder is claiming, in line with the ideology of apartheid.
View of detached houses, Witbank.
Calderwood, Native Housing in South Africa, p194
black population is the equivalent of an harmonious existence. The
townships and the housing in them are a vital component of that
control and of government policy as such policy dictates where
people are to be housed, and at what standards. Political legislation,
health fears and the prevention of intercultural mixing can be seen
to be the causes of the creation of the townships.

Witbank Native Township
Calderwood explains the brief and the "problem" set for his first
township design, an experimental town in Witbank, as part of a
density research project for South Africa. The aim of this
"experiment" was to attain a gross density of at least five dwellings
per acre, providing for all "necessary" amenities, using only single
story dwelling units, and keeping service costs to a minimum, and
housing costs in line with other "present day Native housing."

Calderwood believes that part of the reason for increasing densities
was to prevent "rapid suburban sprawl" which he saw taking place in
the larger urban areas of South Africa, and to study "unseen service
costs in estate layouts." In order to find a balance between
amenities provided and density, "experimental" towns were built.
The process of experimental layouts was one whereby density was
increased gradually, stage by stage, until the maximum, at minimum
development costs, was obtained.

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81 Calderwood, D. M., Native Housing in South Africa, Cape Times Limited,
Final layout of Witbank's new "Native Township." Note: buffer zones; centralized recreation area; and the small market and shopping area not expected to provide for all the residents' needs.

Calderwood, Native Housing in South Africa, p123
The Witbank experiment was the first of these experimental layouts for townships. In 1949 the Witbank council asked the NBRI to assist in increasing the densities in a proposed township within the municipal area. It was not seen as solving a social or health problem or including black people in the city itself, but as a "scientific" experiment. An area of 290 acres had been planned by the Witbank Municipality according to the established National Minimum Standards of Accommodation. This plan submitted to the National Housing and Planning Commission for approval was rejected on the basis that the initially proposed density of 3.9 dwellings per acre was too low. The NBRI was asked to assist in increasing the density, and yet to maintain the building of single storey buildings, as little was known about buildings of two storeys or more "both as regards the costs of such buildings and the attitudes towards them of the persons to be housed". All surveying and design of services such as sewerage, stormwater drainage, water, roads and electricity were to be carried out by the Witbank Municipality working in co-operation with the NBRI. Calderwood explains that the solution was to be the work of a team consisting of the town engineer and his staff, the Location Superintendent, the Director of Parks and Estates, the technical staff of the National Planning and Housing Commission and the architectural staff of the NBRI. The NBRI would lead the design stage, whereas the Town Engineer would assume control during construction.

82 Ibid., p114

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Administrative block, designed by Town Engineer's Department, Witbank township. It is from such simple offices that the government or local council runs the townships. However, The policies of the South African government are felt throughout township life, rents are paid to them, and houses designed and built by them. The entire phenomenon of the township is due to government policy.

Calderwood, Native Housing in South Africa, p131
Calderwood quotes Frederick J. Adams, then the head of the Department of Town and Regional Planning at the Massachusetts Institute of Technology in support of the method of teamwork. However Calderwood appears to miss Adams's point, because whereas Adams calls for "effective citizen participation" with the planner as "only one of many technicians" in an "essentially collaborative effort," Calderwood sees teamwork as a team of professionals alone solving the "problem" for a public at large.\textsuperscript{83} Calderwood's attitude is typical of the patronizing attitude of the white people to provide a place to live for the black population which would be acceptable to white standards. This was the reason for choosing a suburban form (which I shall describe) based upon Anglo-American suburban ideals: it appealed to the European sensibilities, rather than to serve the needs as requested by the black population thus housed. The provision of the townships was politically motivated in that they represented the imposition of the will of the white man over that of the black person; the townships were not based upon selection or choice of the black people themselves.

The procedure of establishing and implementing a model township is described by Calderwood as consisting of specific stages: from site survey to social survey, the plan from zoning, house types and construction methods, layout, aesthetic considerations which includes landscaping, and services, to site organization. Of interest is the social survey, which was a sample survey in the existing township to

\textsuperscript{83}Ibid., p115
Details of a family of five persons indicating incomes necessary to afford rents.
Calderwood, Principles of Mass Housing, p73

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ascertain what was required in terms of house sizes, population to be housed, and average income per family. Since the existing location already provided certain services such as a hospital, beer hall and cemetery, these were not to be duplicated, even though the inhabitants were to be moved to the new experimental township. Calderwood admits that this survey was inadequate, particularly as average incomes and family sizes from a partial survey result in the provision of suitable housing only for the average family in the sample taken. Future surveys were to be more fully undertaken.

The building of the Witbank township commenced in 1951, and 1,100 houses were completed by mid 1953. Reasons for the success of the project, in the eyes of Calderwood and as defined by white policy makers may be summarized as follows:

1. There was a will to solve the "problem" and the Town Councillors realized that action was necessary.
2. Team work was established between town planner, architect, engineers, building contractors and administrators. This extended to the officials of the National Housing and Planning Commission and the Department of Native Affairs. (What about the community to be housed?)
3. Each phase of the work was best undertaken by a trained specialist. The National Housing and Planning Commission was willing to assist local authorities requiring assistance in this respect.
4. The enthusiasm and energy of the town engineer and his staff ensured success.
5. Careful ordering of stores and costing of labour and materials kept the costs of the works below estimates.

Shortcomings of this experiment are summed up by Calderwood in three points. He claims that the social survey was not sufficiently extensive and answered only very general questions. Second, the
Ablution block, Witbank township. More like an army camp than like "home". Claims of "western" and "civilized" housing collapse when it becomes clear that some distanced designer decides about how people should live.

Calderwood, Native Housing in South Africa, p126
Layout of "terraced houses" at Witbank township.
Calderwood, Native Housing in South Africa, p122
community was not consulted in the planning of their town, and Calderwood claims that this is why they did not necessarily share in the feeling of achievement in the work. Thirdly, Calderwood laments the lack of landscaping and the late planting of trees which were to provide the "aesthetic considerations" in relieving the monotony of small single story identical buildings. Calderwood ends his description of this township in Witbank by writing that if the plan demands the faith of the public and gives them the hope of living a full and happy life, then the planner has achieved his goal.\textsuperscript{84}

The lack of consultation with the community and the lack of choice provided to the black inhabitants suggests that Calderwood's planner has achieved the goal as established by the white government; and that control over where and how this population is housed is beneficial to the white people and not necessarily to the black population.

**Kwa-Thema Native Township, Springs**

Calderwood, using his newly acquired technical knowledge and experience from the Witbank Native Township, explains the aims and the approach followed in this second experimental town. Towards the end of 1950 the municipality of Springs requested the NBRI for assistance in the planning of a new "native township" to be located about one and a half miles south-west of the town's new industrial site of New Era. The town's existing location of Payneville was

\textsuperscript{84}Ibid., p133.
Layout of neighborhood in Kwa-Thema, designed by Calderwood. Calderwood, Native Housing in South Africa, p152
overcrowded and Calderwood estimated that "at least 15,000 persons required immediate housing". Calderwood's lessons from the Witbank experiment led him to decide to follow "certain definite lines" in the work for this second experiment. First, "a complete social survey" was to be carried out to obtain all the necessary planning information, and second, the work would be controlled and guided by a team. The Springs Town Council accepted the approach and the social survey began in January 1951. The township planning process was to proceed as follows:

1. The sociologist, town planner and architect were to frame a list of questions which required definite answers in respect of planning problems.
2. The sociologist would then frame questionnaires and organize a field team of social workers responsible for filling in the questionnaires and for personal interviews.
3. The sociologist would then extract the information from the questionnaires and present the planning team with the necessary information for detailed planning.
4. The town planner and the engineer would inspect the site and discuss the technical aspect of the planning, including the cost of the land, the extent of land to be developed immediately, road, water, electricity and sewer connections in relation to the site, densities, and a development program.
5. The engineer would then survey the site and include contours, vegetation and existing buildings. The soil conditions were to be tested as well.
6. Following a detailed land survey the town planner and engineer would accustom themselves to the site and carry out any special investigations necessary.
7. The town planner would prepare a zoning diagram of the area.
8. The engineer would investigate the position of materials: their supply, bulk-buying, storage, delivery and costs, as well as the labor situation.

85Ibid., p135.
Histogram showing distribution of family sizes and family incomes in Payneville Native Township. This was made in order to establish the ability of families to pay rent.

Calderwood, Native Housing in South Africa, p142
9. The town planner, having received information from the sociologist, would prepare preliminary layout plans which would be inspected by the roads, drainage, etc. engineers (all specialists), and after refinements a final layout plan would be prepared.
10. The final layout plan would be studied with the aid of models, from which the architect could best position and design the buildings.
11. Approvals would be sought from the Springs Municipality, the National Housing and Planning Commission, and the Department of Native Affairs.
12. The architect, working together with the "Manager of non-European Affairs", Springs and the National Housing and Planning Commission, would prepare plans for houses and certain other buildings.
13. The engineer would organize the work on site and supervise building operations.
14. The "Manager of non-European Affairs" would be responsible for moving families and for supervision and administration of the families once they were housed in the new township.

In addition, Calderwood exclaims, many further details were actually attended to by the planning team. Once again Calderwood stresses team work, and yet the total collaboration and consultation with the community to be housed is that undertaken in the initial social survey. He claims that the council's Advisory Board and the "Manager of non-European Affairs" were to keep in contact with the inhabitants of Payneville. They published a weekly news sheet which was distributed, and they supplied copies of plans while the work was in progress to keep the community informed. Consultation thus consisted of the provision of information and was not necessarily a two-way communication. Plans are not necessarily legible by everyone, and when they are able to be read they are always open to misinterpretation unless they are carefully explained.

86Ibid., p158-159.
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<th>INDICATION</th>
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The Key to Calderwood's designs for Kwa-Thema gives a clear indication of what is included in the township.
Calderwood, Native Housing in South Africa, p185
A total of 8,777 family houses and 1,700 single quarters were built in Kwa-Thema by the end of 1953.

The social survey of Payneville was broken down into several parts to be of use to the planners. The place of work of the families to be housed was established, (they were required to work in Springs). The demography was studied in order to determine whether the population would remain static or would grow or decline in the future. It was decided that the urban population could be expected to be fairly static. Town planning and housing data from the survey included the distribution of family sizes in relation to dwelling sizes, and the classification of population according to rent-paying ability of the families to be housed. From this latter information, Calderwood established poverty datum lines, from which economic rents could be calculated, and in turn the size of subsidies required and the minimum standards of building (related to their cost) established. Thus Calderwood turns the building of a new township into a "socially meaningful" technical exercise. Policy is taken for granted in carrying out the task, the work in hand is done in sound technocratic fashion.

Calderwood then goes on to describe the site survey, the zoning diagram (the final layout after 1954 housed between 45,000 and 50,000 people), the planning of the neighborhoods, the development of the row house layout, and the planning of the civic center. This was to include office accommodation for the black administrators who would eventually run the town, and was to be able to grow to
Aerial views of row housing in Kwa-Thema, Springs, after two years of building. Particularly visible in the upper photographs is the ring road and the buffer zone separating the township from neighboring land.

Calderwood, Native Housing in South Africa, p183 (above), and 109 (below).
beyond the year 2000. The work on site was well organized and managed, so as to proceed efficiently. Black labor was used as this reduced costs, since black people were paid less than white labor with the same skills. Community and "special buildings were also built, including a church, a community hall, shops and schools. Trees and landscaping were once again deemed to be most important to the aesthetics, and in the buffer strip the trees were even fenced off "to prevent animals form damaging them".87

Calderwood's concern with the aesthetics of the buffer zones epitomizes the role of architects and planners under apartheid politics. The policies and legislation regarding separate development are totally accepted by the technocrats and override aesthetic or form decisions that these people might make. The townships are firstly politically created entities, and only then are they allowed to become living areas aesthetically satisfactory to the white designers and population who provide them.

Calderwood lists the successes of this second experiment as including an increase in density to 8.48 dwellings per acre while retaining a satisfactory environment and a reduction in development costs; encouraging and attractive aesthetic qualities particularly due to the landscape design; the efficient costing of the scheme; the friendliness and the happiness of the inhabitants of the township; the linking of the open spaces through to the city center; and the team approach of

87Ibid., p179
Street scene, Kwa-Thema "Native" township. This picture showing trees in the township is an exception rather than the rule, and was desired by Calderwood to provide the "aesthetics" necessary to relieve the monotony of repeated identical units.

Calderwood, Principles of Mass Housing, p. ii
selected specialists working together. Calderwood admits that there are still aspects which require further investigation, but he believes that through co-operation:

Faith will overcome confusion,
Hope will overcome fear.
Love will banish hate.\textsuperscript{88}

If the plan engenders the faith of the public and gives them the hope to live a full and happy life, to-day and in the future, then Calderwood believes, the planners will have achieved their goal. My comments with regard to the Port Elizabeth and Witbank townships would apply equally here. Calderwood's conclusion should read that the plans success can be seen in its fulfillment of the health, security and labor requirements of the white urban population, and in providing them (and not the black residents) with "a full and happy life, today and in the future."

Conclusion
It is the relationship between government policy, the white electorates fears of being swamped by the black population, and economic forces which have resulted in the creation of the townships. The most stringent and wide reaching government policy affecting land use and the formation of the townships is the Group Areas Act, and in conclusion to this chapter I will reveal some of the effects of Group Areas legislation.

The Effects of Group Areas Legislation

\textsuperscript{88}ibid., p188
Semi-detached houses, Kwa-Thema.
Calderwood, Native Housing in South Africa, p143
The Group Areas Act substantially reshaped South Africa's urban landscape. In its attempt to unscramble racially mixed residential patterns completely, it had effected the creation of 918 group areas by December 1985. While it has been defended by its supporters as a means of ensuring orderly urban development, racial harmony, and economic justice; its effect has often been precisely the opposite. About 630 000 "Colored" and Indian people had been relocated in terms of the Act by August 1984.89 However, the total number of people moved from one place to another under the policy of apartheid has been best estimated in 1983 by a team of researchers known as the Surplus People Project (SSP), who claim that between 1960 and 1983 a total of 3,522,900 removals had taken place, excluding removals within the "homelands," those resulting from agricultural improvement planning, and pass law enforcements. Thus the vast majority of people affected by apartheid planning have been black people. According to SSP, another 1.8 million people are under threat of removal, and this figure will rise to two million through farm evictions, influx control and "infrastructural development".90 The removals policy has not affected blacks and whites equally. Three quarters of those moved under the Group Areas Act were Africans and most of the rest were "Colored" and Indian people. A total of 2,262 white families were moved under the Group Areas Act from 1951 to 1981 according to the Minister of Community Development in 1983.

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89 South African Institute of Race Relations Survey (SAIRR), 1985.
A view of Soweto from the main road leading to Johannesburg. Note the tall lights which have been installed for security reasons rather than for the benefit of the residents to see at night.
Psychological and Social Costs
The importance of the Group Areas Act is that it has made apartheid politics a part of every South African's life. The work of planners and architects has been politicized by it, for they can only work within its confines, or break the law. One of the major consequences of the Act has been psychological, and, as such, it is difficult to assess its full effect. Its harshness is difficult to measure and the ugliness of the politics involved difficult to describe. The stress of being relocated as part of a normal (non-segregationist) town-planning process is traumatic enough. In the case of Group Areas, the fact that the relocations have been carried out for racial reasons has intensified the trauma. It undermines morale and gives those disadvantaged affected communities a sense of "rooflessness." Living with the fear of being relocated and in uncertainty has had a detrimental effect on the upkeep of property. Property deteriorated in defined areas where permits to build, extend, or alter existing buildings were withheld from people on the grounds of racial zoning. Often, this created the very slum conditions that the act was purportedly designed to prevent. The Group Areas Act has been a strategy where the knowledge of possible regulation and the freeze on change led to a deterioration of the built environment.

Relocations severely disrupted the communities involved. The binding social forces provided by community facilities and churches broke down, schools were not built for long periods and infrastructure was non-existent. Crime rates soared in those areas to which thousands of people were relocated. Poverty and social
Model of a neighborhood of Kwa-Thema township. The architects built models to help them in the positioning of buildings on the site. The only variety achieved appears to be in the orientation of the houses and direction of the sites.
Calderwood, Native Housing in South Africa, p182
disintegration in these communities increased. There are numerous examples recording the destruction of communal family relationships and of the decrease in potential family earnings. Several surveys carried out in 1981 revealed that a high proportion of children on the Cape Flats, (the far flung townships to which people were removed), received no parental care during the day, in contrast with the high level of child care exercised by the communal family in the inner city. Amenities were few on the Cape Flats and unsupervised teenagers often joined gangs to make friends, obtain income, and survive.91 Thus while some of the Act's supporters stress its role in keeping crime out of city areas, it may well have played an important role in creating the conditions which have produced lawlessness in segregated areas on the periphery.

Group Areas segregation has also reinforced other forms of discrimination by preventing normal contacts through which race prejudice might be overcome. Despite the official view that contact between the races breeds friction, Schoombee maintains that the Act has contributed to racial ill-feeling by preventing the daily contact which would allow the breaking down of stereotypes.92

The fact that the Act has barely affected white people while it has

Benoni Township after two years of building activity. The aerial photograph shows the circuit board like layout which appears infinitely expandable in all directions.

Floyd, Town Planning in South Africa, p74
largely changed the lives of "non-white" race groups has engendered deep resentment in these communities. The Theron Commission has concluded that the Group Areas Act has evoked more "bitterness, mistrust, and hostility" on the part of the "Colored" people than any other statutory measure. 93

In 1950, members of the ruling National Party argued that the Act was necessary because the races were at different stages of cultural and political development. However, by restricting the commercial, educational, and professional opportunities of black groups, it has reinforced and created racial inequality. The unpublished President's Council report on the Act is said to have concluded that "separate but equal" access to property cannot be achieved within the framework of the Act because whites already have all the best grounds and facilities. 94 Segregation has also cut black groups off from cultural facilities that they had enjoyed in the city centers. For example, "Colored" people in the Western Cape had to obtain permits to attend traditional multiracial occasions such as concerts, public meetings, and receptions in Cape Town after the city center was proclaimed a white area in 1965. 95

Group areas planning has altered the pattern of South African cities in such a way that the development of urban areas is in sharp contrast to the pattern in other countries. Elsewhere residential land

93 Theron Commission in Festenstein and Pickard-Cambridge, p22
use patterns are usually such that the low-income groups live closest to their place of work, whereas in South African cities they have been relocated to townships generally far from their work. This has led to increased transport costs which have not been compensated for by wage increases, thereby putting additional pressure on the poor. The unemployed cannot afford the costs of traveling to the commercial and industrial centers to seek work. Consequently, black public transport has become uneconomical, and a highly politicized source of black discontent and mobilization.

Housing

The Government claims that the Group Areas Act has played an enormous role in slum clearance and the provision of housing in new townships. However, there have been many heated debates as to whether many of the demolished areas were slums by the standards of a developing country. Maasdorp and Pillay found that East Rand Indian townships which were removed had a generally adequate standard of housing and that many of the dwellings which were demolished were superior to public housing in new townships. In fact the lack of improvements in many areas were due to the Act, preventing home improvements by black people living in areas earmarked for white, or because residents would not risk

96 Since the mid 1980s private mini-van pools have become the most used form of transport, particularly from Soweto to Johannesburg. The Southern Africa Bus and Taxi Association (SABTA) to which 45,000 black taxi operators belong now has a capital investment replacement value estimated at R2.5 billion. Source SAIRR Survey, 1987-1988.

improvements while their future was uncertain. Schoombee argues that the need for adequate housing could have been met through enlightened non-segregationist planning and urban renewal.\textsuperscript{98}

South Africa's housing crises has been growing over the past four decades, only worsened by the implementation of the Act, leading as it did to the demolition of entire areas, such as Cape Town's District Six, Johannesburg's Vrededorp and Western Native Township, and Durban's Cato Manor as the housing shortage grew. A large percentage of new dwellings have been allocated to families who were compelled by the Act to resettle. Housing funds have consequently been totally inadequate. Of the R261 million spent by the state on "Colored" and Indian housing between 1960 and 1975, over R200 million of this was spent on rehousing disqualified families\textsuperscript{99}, families who had places to live but were moved for reasons of racial zoning and city planning.

Far from ensuring "separate but equal" access to accommodation and land, the Act has benefitted whites and harmed blacks. Former "Colored" and Indian residential areas, particularly near city and town centers, have been allocated to whites. "Colored" and Indian people comprise 40% of the three groups affected by the Act, but have been allocated only 14% of segregated land.\textsuperscript{100} This has inevitably produced overcrowding and inflated rents and property

\textsuperscript{98} Schoombee, cited in Festenstein and Pickard-Cambridge, p23
\textsuperscript{99} Schoombee, p 100. Cited in Festenstein and Pickard-Cambridge, p23.
\textsuperscript{100} Festenstein and Pickard-Cambridge, p23
prices in "desirable" and legal group areas. For example, the demand and prices for residential sites for Indian people in Durban far exceeds the market prices in similar white areas. The Act has thus created market distortions caused by accommodation shortages in black areas and surpluses in white ones. This inequitable allocation in resources has enabled some landlords to profit through race discrimination while others suffer, a trend which has been heightened by the emergence of unofficial "grey" areas. In these so-called "grey areas" (where black people live in white group areas alongside whites), the illegal black tenants have no recourse to the law, and landlords in these areas have been charging rents on rent-controlled apartments which are up to three times more than the law allows. Thus, not only are black people forced to break the law in order to live within reasonable proximity to where they sell their labor, but they are exploited in doing so as well.

Horrell cites cases in which white groups have attempted to use the Act to further their own race group's interests. Thus, in Ermelo, white residents requested the Group Areas Board to recommend the removal of Africans from a township where they enjoyed freehold rights and Indians from their businesses and homes within the town's borders so that their areas could be used for white development.

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101 Finance Week, 24 October 1985
Wasted Public Resources

Despite the claims for technocratic efficiency in the attempt to solve the problem of mass housing in South Africa, it is political ideology which guides the solutions dealing with where and in what type of housing people are to live. This becomes clear when it is seen that the cost of relocation is exorbitant. Not only are a considerable amount of public funds used, but traders are often forced to move from financially viable locations to those where they struggled for years to exist. An example is the relocation in the mid 1970s of Indian traders in Johannesburg's city center to the "Oriental Plaza", a shopping center on the city's outskirts, at an estimated relocation cost of R16.5 million.¹⁰⁴

The Group Areas Act also ensured that valuable land in some formerly mixed areas which was allocated to whites, such as Cape Town's District Six, lay unused for years. It is still largely unused and there is much stigma attached to whites of the traditionally more "liberal" Cape moving there. Only recently have various government sponsored buildings appeared on this land, including a Technical College for white students, and barracks for police housing. Taxes are not payable on government-owned land, resulting in revenue losses to local authorities.¹⁰⁵ The Community Development Board has

often been criticized for "freezing" its land instead of making it available for redevelopment.\textsuperscript{106}

Substantial administrative resources have also been devoted to implementing the Act; particularly in the fields of administration, surveying, land acquisition, demolition, removals, compensation and new construction. Racially segregating previously mixed race areas in Cape Town took enormous resources in manpower and taxpayer's money, and it upset many people, but the authorities proceeded despite these obstacles. The total cost of enforcing the Group Areas Act is either unknown or the government regards this as sensitive information which it will not disclose. When asked in Parliament what the total cost of implementing group areas had been, the Minister of Community Development, Pen Kotze, replied that the information was not available.\textsuperscript{107}

The law does not guarantee full financial compensation for people who are moved and the socio-economic position of most of the Act's victims has made it difficult for them to enforce even the limited rights which the law grants them. The Community Development Board is obliged to compensate the owners of expropriated property, while compensation of tenants for inconvenience is entirely at its discretion. As new accommodation in segregated areas is generally more expensive, those who are relocated often suffer even greater

\textsuperscript{106} Maasdorp and Pillay, p189-190. Cited in Festenstein and Pickard-Cambridge, p24.
financial loss. Similarly, where businesses are closed by the board, compensation for goodwill is entirely at its discretion. 108

Political Resistance
The enforced spatial separation of people according to race in South Africa and the provision of separate and unequal living opportunities has resulted in an increase of political resistance to the governments policies. Segregation, resulting in separate standards of education, separate but unequal political authorities, and denial of access to superior white facilities, residential areas, and trading zones, has played a major role in the growth of black resistance to the present government. The Group Areas Act was a focus of action in the defiance campaign of 1952, when the African National Congress (ANC) and its allies mobilized passive resistance against segregationist laws, breaking Group Areas Act regulations in such places as railway stations and post offices. According to Lodge the main achievement of the defiance campaign lay in the widespread popular support it garnered for the ANC, which claimed a following of 100 000 at the end of the campaign. 109

The Report of the Commission of Inquiry into the 1976 riots at Soweto and elsewhere (the Cillie Commission) found that the Group Areas Act was among the fundamental separate-development policies which had caused the resentment triggering the unrest. The

A MESSAGE FROM THE HON. P.W. BOTHA, A LEADING REPRESENTATIVE OF S.A.'S RULING GROUP:

"I call on all Blacks earning a decent salary, who have permanent resident rights in white areas and who have been granted a 99 year leasehold for home-ownership to contact me immediately.

The ruling group offers all decent and law-abiding citizens a stake in the South African system. Total National Strategy is a recipe for peace – join the white man in order to maintain the present climate of prosperity and order.

Plans have been made by two commissions led by Messrs Riekert and Wiehahn to limit the undesirable influx of rural blacks and the unemployed into your areas and to control subversive elements in Trade Unions in order to ensure industrial peace and increased profits for you, the entrepreneur.

In order that your prosperity may be financed we have embarked on the massive scheme of resettling thousands of less skilled and less intelligent people into remote rural homelands. This will mean that all the less productive appendages in society, such as women, children and unemployed will not disrupt the efficient functioning in your area.

Remember 1980 is your year. Come into one of our government or big business branches and ask for a helpful "HOW YOU CAN JOIN THE RULING GROUP BROCHURE."

"Exposing Total Strategy," a NUSAS (National Union of South African Students) publication, 1980 - "... an attempt to explain the current political plans in order that we may evaluate them and act on our evaluation."
commission found that it was the dissatisfaction arising from the application of Group Areas policy which had contributed to a "state of mind" which was conducive to the outbreak of unrest.\textsuperscript{110}

The United Democratic Front (UDF) was launched in 1983 to coordinate resistance by more than 600 organizations to the introduction of the new constitution which retained apartheid provisions such as the Group Areas Act to underpin the new tricameral parliament. The new constitution was an attempt to bring Indian and "Colored" people into Parliamentary politics in South Africa, although each with their own separate Parliaments and voting roles. It meant to legitimize separate development in the country for whites, Indians and "Coloreds" and omitted the inclusion of South Africa's black population as they were to have their own Parliaments in the "homelands." The new constitution was an attempt, as was township housing in the urban areas, to create a middle class and sympathetic buffer against the majority of the country's population, and to further entrench apartheid policies. It may also be significant that, among black political intellectuals, resistance to negotiation and compromise was strongest among "Colored" people in the western Cape whose communities were particular victims of the government's attempts to impose residential segregation.\textsuperscript{111} The UDF was banned in 1988 as part of the government's "emergency regulations," being

\textsuperscript{111} Festenstein and Pickard-Cambridge, p25-6
16 September

I have walked to the station
twice times to send a child away.
It doesn't matter if it is my own child
or a sister's child.
I feel the same sickness
and sadness in my heart.

Ntombi, Thula Baba, Ravan Press, Johannesburg, 1987
page 70
regarded as a threat to "state security," or in other words, to the security of the present government.

Summary
The townships can be seen to be the results of economic and political forces which respectively drive black people from the rural areas towards the cities and attempt to keep them out of the cities. The political factors at work in the creation of the townships include the government's desire to have labor nearby, but not as a permanent population who live in the city. The apartheid ideology has been the force driving most of the decisions about where to house these people, while health issues have both prompted immediate action at times, as well as played a role in dealing with how they are housed. Furthermore, the idea of accepting a certain class of black people in the urban areas resulted in attempts to foster the rise of a black middle class through the provision of westernized housing and limited cultural facilities in certain townships. In general, however, the question of the permanence of these people in the urban areas in the minds of the members of the government has remained inconclusive, and policy changes which affect the lives of the majority of the countries population are made with the swings in the tide of the mood of the white electorate.
Illustrations by Dumile Feni, in Somehow We Survive, an Anthology of South African writing edited by Sterling Plumpp.
CHAPTER THREE
Anglo-American Suburbs, Attitudes, and Analysis

The theme of this chapter is to look at the ideas and intellectual ways of dealing with the township. While in the second chapter I relied on history to explain what the townships are, here I will look at suburban ideals and at the attitudes of individuals in corrupting these ideals to suit the South African condition. By comparing suburbs to townships I will also clarify the differences between them.

This chapter will be divided into three parts, each of which deals more particularly with the form of both the suburb and township. The first part will examine the ideals and the forms of the Anglo-American suburbs, as they were of considerable influence on Calderwood, Floyd, and others when they began to design and build the townships in South Africa. The second part of this chapter will examine the attitudes of Calderwood and Floyd in greater detail, in order to begin to understand the manner in which their attitudes corrupted the above ideals to suit the South African political situation. Here the role of these people as technocrats working for a client, the South African government, whose political bias had much influence on the resulting architecture and planning, will be examined. Calderwood and Floyd did not consciously acknowledge the political content of their work, but implicitly held and shared in the government's view of apartheid. In the third part of this chapter I will analyze and compare the suburbs to the townships. On the one
"Prefabricated models begging for mass construction." Although these American houses are intended for mass-construction they display more variety than in the repeated units used in the South African townships. Perry, Housing for the Machine Age, p189
hand, I will show what the precedents to the townships were, and how they differ and are corruptions of the Anglo-American suburb. On the other hand I will compare the differences in environmental quality between suburbs which have tended to grow over time in a "natural" way providing a diversity of conditions, while the townships have been conceived and constructed in their entirety resulting in sterile and boring environments.
Houses in Medway, Hampstead Garden Suburb, designed by M. H. Baillie Scott. The social implications upon which the Garden Cities were based were soon corrupted to become an aesthetic movement of picturesque suburbs -- with architect designed houses of middle-class status, intended for a very different situation to the South African townships which used certain aspects of such suburban planning while corrupting others. Garden Suburbs, Town Planning and Modern Architecture, Adshead, Wilson, Culpin and Thompson (eds).
PART ONE

Anglo-American Suburbs

The sons of civilization, drawn by the fascinations of a fresher and bolder life, thronged to the western wilds in multitudes which blighted the charm that had lured them.¹

The suburbs of eighteenth century London, and those that followed, were the practical work of speculative builders and of land developers, responding to a powerful cultural ideal. The power of suburbia as a utopia, in general terms, derived from the ability of suburban design to express the "vision of the modern family freed from the corruption of the city, restored to harmony with nature, endowed with wealth and independence yet protected by a close-knit, stable community."² Suburbia was not the design of any single individual genius, rather it was the collective creation of the Anglo-American middle class, created for the Anglo-American middle class; what Fishman calls the "bourgeois utopia". To live the suburban life one also became part of the middle class, in which respect the suburbs were also the creation of this class.

The ideal of the suburban community was based upon the ownership of property and the primacy of the individual family. Community stability was based upon the exclusion of the urban world of work, and on the ideal of country living. The paradox of the importation of

"Planning commences." The zoning sketch above shows the idea of a central park, zoned areas around it, and the surrounding buffer zone. The details include a sketch of Welwyn Garden City which Calderwood greatly admired for its "imagination."
Calderwood, Principles of Mass Housing, p101
this for use in designing South African townships was that in the
townships, property ownership was not allowed, and the retention of
these "suburbs" on the periphery of the towns and cities was forced,
not an escape. Herein, too, lie the reasons of the townships'
corruption of the suburban ideal. Lewis Mumford, in The Culture of
Cities, describes the paradox of the middle class suburbia as "a
collective effort to live a private life."

Initially a form suited to an eighteenth century London elite,
suburbia flourished to become the preferred choice for the homes of
the Anglo-American middle class, and an urban form (as contrasted
to a rural form) which would change cities around the world.

Popular suburbia was an archetypal middle-class invention, and
what Fishman describes as a radical rethinking of the relation
between residence and the city with respect to domestic
architecture. Suburbia embodied a new ideal of family life in which
the home became the bourgeoisie's most sacred place, the house
became the center of their society. More than a collection of
residential buildings, suburban values included a refuge from the
city, a world of leisure, family life, and union with nature, and it was
based on a principle of exclusion. Work was excluded from the
home, and the working-class were segregated from the middle-class.
Nature was included while the city was excluded. Middle-class
women gained a new role in the family, and were excluded from the

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3 Fishman, op cit., p3

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Barry Parker and Raymond Unwin, "Cottages near a town." An example of an early suburban layout with a ring road and railway, and various types of block subdivision including some with shared internal open space. This idea was used in some designs by Calderwood and Floyd for townships in South Africa.
The Garden City, Unit 23, The Open University, p29
world of power and production in the city. Suburbia was the building of middle-class values in the landscape and their distancing from the cities they helped to create.

The word "suburb" means "beyond the city" or "beneath the city," and thus refers to any settlement on the periphery of an urban core. The particular form to which I refer is, however, the residential community beyond the city core. There are very many kinds of suburbs; they are not all homogeneous or "pure" in form. There are working class suburbs and some with a fairly wide income and occupational mix. Suburban reality in recent years has also corrupted the suburban ideal into forms which go by names of "exurbia" and "slurbia," etc. Suburbs along Boston's Routes 495 and 128 no longer resemble the traditional ideal of the suburb which I wish to caricature. I am writing about the suburban ideal rather than about the more complex suburban reality which has resulted, as it was the ideal which has been the starting point for many corruptions, including the forms of the townships in South Africa.

Though physically distanced from the core, the (ideal) suburb depends upon the city for economic life and for the major commercial and cultural institutions which only the core can support, as it is able to supply the necessary critical density for such activities. The suburb is more than the edge of the city, it is a large, homogeneous low density environment with single family houses set in a parklike landscape. (This could easily be a description of much of Soweto, without the green!) The suburb in history is not
Estate layout with plantings in Sweden, and township layout without plantings in South Africa. Calderwood relied on natural vegetation to provide many of the aesthetic benefits for his model townships, at least in his writings. Calderwood, Principles of Mass Housing, p108
necessarily an independent political unit, as they were initially
developed around issues of topography and transportation to the city
center. Twentieth century suburbs were the first to gain political
independence, usually so as to maintain a separate social or design
identity.

Thus suburbia includes middle-class residences, and excludes
industry, most commerce (except those specifically serving the
residential area), and all lower-class residents (except for servants).
The suburban tradition of residential and landscape architecture,
derived from the English concept of the picturesque, expresses these
economic and social characteristics and creates that aesthetic
"marriage of town and country" which is the mark of the true
suburb.4

The form of cities preceding the modern and suburban city was
based on the principle that the city core was the setting for the elite,
and that the urban peripheries were the disreputable zones or
"shantytowns" of the poor and the noisy industries. A curious
juxtaposition can be seen in the case of the South African townships,
which are based upon the middle class suburban ideal, and yet to
which the black (mostly poor) people are relegated, often alongside
industrial areas. The townships contain a combination of the pre-
modern city form and the suburban form.

4Ibid., p6
"Historical development of housing." The examples which Calderwood chooses to show here are not necessarily comparable, and favor the suburban form.

Calderwood, Principles of Mass Housing, p28
The pre-modern city, like London before 1750, consisted of "mixed use" houses in the city. Residence and work were combined within each house, the family and the employees were housed and fed together. The most successful location for traders was at the most crowded district of the urban core. These were typically mixed-class neighborhoods as well, with the poor living in the backyards of the rich. Fishman explains that the emergence of suburbia thus required a total transformation of urban values: a reversal in the meanings of core and periphery, a separation of work and family life, and the creation of new forms of urban space which would be both class segregated and wholly residential. Thus suburbia was a cultural creation based on the economic structure and the cultural values of the Anglo-American bourgeoisie.

Suburbia was not designed, it was improvised, and the wealthy Londoners experimented with forms of housing available to them. This paralleled the industrial revolution then taking place in Manchester, and both suburbia and this revolution were the results of a powerful class attempting to reorder the material world to suit its needs. A powerful motive for these inventors of this new urban form was the new form of family that they were experiencing, the "closed domesticated nuclear family." These families sought to separate themselves from the intrusions of the work place and the city, creating the impetus to split middle-class work and residence.

5 Ibid., p8
Forest Hills Gardens. Note the combination of grid and of curved roads as used particularly by Floyd. This residential development "was motivated by a social, as well as a commercial, purpose."

Perry, Housing for the Machine Age, p210
The bourgeois residence could now be designed as a wholly domestic environment, the home of a family behaving as an emotional rather than as an economic unit. This home was no longer tied to a location for principles of good business, but was free to establish itself in the picturesque landscape within commuting distance from the core, where a life of leisure, neighborliness, prosperity and family-life could be lived, or at least sought.7

If the new form of the family was the cultural logic behind suburbanization, then the economic motivation lay in the possibility of transforming relatively cheap agricultural land on the periphery into highly profitable building plots. The Anglo-American builders adapted easily to the needs of suburban development, and proved more successful than "re-development" of middle-class districts within the core. As Fishman notes, "Suburbia proved to be a good investment as well as a good home."8

As metropolitan regions and the cities grew, so did suburbia. Urbanization and the draining of rural populations led to the "whirlpool cities"9 and vast numbers of the English and American populations flocked to the cities between 1800 and 1900. Large shifts from the rural areas to the cities in these countries also occurred in the periods following both World Wars in the twentieth century. Suburbanization was the outer edge of this metropolitan

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7Ibid., p10
8Ibid., p10
Urbanization in various countries in the world and of South African "Europeans" and "Natives". This is intended to show the rapid pace of urbanization in the South Africa.

Calderwood, Native Housing in South Africa, pp2, 3
growth. The great whirlpool cities could expand in two ways: they could grow in the traditional manner with the middle class at the core and the poor pushed farther into the periphery, or the middle-class could create their "bourgeois utopia" suburbs on the unspoilt land at the urban fringes and force the working-class into an intermediate zone between the core and the suburbs. Continental and Latin American cities (Paris) tended to follow the model of the former, traditional structure, while Anglo-American cities (London, New York) followed the pattern of middle-class suburbanization. In both cases the "key actor" was the bourgeoisie, the wealthy middle-class whose life-styles and income relied on daily work in urban offices. Their resources and wealth allowed them to create new patterns of living, while the values they shared with the rest of the middle class makes them the model for emulation by the less prosperous. The ideal of the middle-class home is now part of the structure of the twentieth century city.

Suburbs were often built rapidly in periods of growth and prosperity, their design a creative response to contemporary changes in the structure and economy of modern cities. These communities were responding to social and cultural forces in the relative freedom of the unbuilt periphery. The new "style" which resulted from the often uncoordinated decisions of developers, builders and individuals, was then copied in hundreds of other suburbs. Thus an image defining the suburban tradition was created. The first models were those suburbs built on the periphery of London in the second half of the eighteenth century. They defined a suburban image for
Development suggested for Greenway Park, Dallas, Texas. The large sized block makes possible: (a) a community park strip and a small child's playground without expensive street improvements, and (b) a separation of pedestrian and motor traffic. The townships in South Africa have aspects similar in concept but very different house forms and the lack of choice in South Africa creates a very different environment.

Perry, Neighborhood and Community Planning, p68
subsequent development, and they also implied a new structure for modern society based upon strict segregation of class and function. This image of segregation has been maintained in the townships in South Africa, yet not on the basis of a class segregation, but rather on the basis of race. The suburbs of Manchester provided the model of the first wholly suburbanized middle-class, and its complement of an uninhabited central business district and an overpopulated industrial zone between the core and suburbia. By the 1840s, Manchester had established a model for middle class suburbanization which was to last relatively unchanged for a century. By the 1860s this model established itself outside the rapidly growing cities of the United States, but was rejected in France where the bourgeoisie maintained their hold on the urban core. The American middle class adopted the English model of bourgeois suburbanization quite decisively, and after 1870 the American suburbs became the models for future imitation. This was because the British economy was slowing towards the end of the nineteenth century, while American industrial cities were booming, and forced to innovate.

The suburbs of the American industrial city embodied the whole history of suburbia. These suburbs were separate from the city and accessible to it by the streetcar and the railroad. Socially, they housed both the old elite and the new middle-class, who were anxious to establish their separateness from the new immigrants to the cities. The form was typically that of large houses set in open, landscaped lots, representing the values of property, union with nature, and family life, as defining the suburban tradition. Typical
"A subdivision for modest dwellings planned as a neighborhood unit." An obvious example for South African planners to use when designing "modest black townships."

Perry, Neighborhood and Community Planning, p36
American examples exist in the suburbs of Philadelphia, Boston, New York, Baltimore, St. Louis and Chicago.

Twentieth century suburbia differs from its antecedents in its attempts to secure for the whole middle class, and the working class as well, the benefits of suburbia previously restricted to the bourgeois elite. This was to change the nature of suburbia and the city as it was an attempt to include everyone in a form based on the principle of exclusion. Fishman cites Los Angeles as an example of this paradox, a twentieth century suburban metropolis shaped by the promise of a suburban home for all. The automobile and the highway were tools to achieve a suburban vision with origins in the streetcar era. As the population spread along these transportation routes, the suburbs began to lose contact with the urban core. Industries, shops and offices spread out over the region and, by the 1930s, Los Angeles, as an extreme example, was a sprawling metropolitan region, a massive decentralized suburb. A new relationship between the urban core and its periphery was established. By the 1920s the technologies of communications and transportation loosened the ties between urban functions and the well defined cores. Urban institutions spread out over the landscape, and the suburb provided both places of work and of residence. Note that the private transportation that made the popular decentralization of the Anglo-American suburbs possible, does not generally exist in the South African townships. Here people are

10Ibid., p15
Neighborhood unit principles (above), demonstrating the centralized collection of community facilities which the township planning in South Africa by Calderwood and Floyd closely follows. Sunnyside Gardens (below), the plan of one-third of a block with an internal court -- which reappeared in corrupted form in some of the townships in South Africa.
Perry, Neighborhood and Community Planning, p88 (above), 68 (below)
pushed to the periphery and required to be reliant to a large extent on an exploitative public transport system. However, the residents of the townships are still largely reliant on the core for their means of economic support, since development of industry and commerce have not been encouraged in these "locations."

As the suburbs became increasingly independent of the urban core, they lost some of their traditional meaning and function as a satellite of the central city. The late twentieth century economy has expanded its industries and commerce to the peripheral communities, and the concept of the suburb as a privileged zone between city and country no longer holds true. Both core and periphery are swallowed up in seemingly endless, multi centered regions. Fishman uses the neologism "technoburb" to distinguish the new perimeter cities from the traditional suburban bedroom communities.11 These perimeter cities made possible by highways and advanced communications technology allow for urban diversity without urban concentration. Whereas Kenneth Jackson12 has interpreted post World War II peripheral development as "the suburbanization of the United States," and the culmination of nineteenth and early twentieth century tradition, Fishman regards this peripheral development as the end of suburbia in its traditional sense and the creation of a new kind of decentralized city. Fishman coins another neologism by referring to the multi-centered region of

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11 Ibid., p17
Zoning diagram, Kwa-Thema. Note that the town center is located in the approximate geographical center of the township. Calderwood, Native Housing in South Africa, p148
the techno-burbs as "techno-cities", which he claims means the end of the great cities and their suburbs and an end to the history of suburbia.

It is interesting to note that Jackson and Fishman differ on several other points as well. Jackson asserts that suburbanization is the product of two essential causes - racial prejudice and economic factors, whereas Fishman emphasizes the impact of bourgeois domestic ideology on suburban form - which does not necessarily exclude the former causes. The case of the South African townships can be seen in the light of both of these authors' assertions. It is true that the townships are a product of racial prejudice and are a direct product of the government's will to keep the races apart. The townships are also created as dormitories of black labor for the white cities, in which respect they serve the economic needs of the ruling elite. Fishman's view that the suburbs are the product of bourgeois domestic ideology can equally be seen to be true in the townships. The white South African's attitudes towards separate development and the need to "civilize" the "native" by patronizingly providing housing in the western middle-class tradition are strong motivations in the selection of the particular form of the townships.

Wythenshawe, Manchester, England. A town for 100,000. A permanent agricultural belt of 1,000 acres. Scattered open spaces comprise another 1,000 acres. A total open space of 1 acre to 50 people. Space for outdoor recreation including a 100-acre golf course. The park contains 250 acres. Two parkways with an average right-of-way of 300 feet. Sites are reserved for a civic center, schools, churches, shopping, and industry. The shopping districts are placed at the juncture of four "neighborhood units."

Reproduced from "What is a City?" by Lewis Mumford, in Architectural Record, November, 1937

Wythenshawe, Manchester, England. This plan reproduced by Perry illustrates the use of the neighborhood unit in a town design. Calderwood's plans for Kwa-Thema township in Springs use a similar concept of dividing up the township into neighborhoods, and maintaining a small town center in the geographical center of the whole.
Perry, Housing for the Machine Age, p81
The "Culture" of Suburbs

I now wish to compare and contrast the ideals of the Anglo-American suburbs, particularly as evidenced in the writings of Lewis Mumford in *The City in History*,\(^{14}\) with the townships in South Africa as suburbs which have grown out of that ideal, and which have been corrupted for political ends.

Both the ideal of the Anglo-American suburbs and the townships in South Africa, were created as places to house people according to particular ideologies. Whereas the suburbs provide their population with a choice in living possibilities, as do the suburbs for white people in South Africa; the townships provide a limited choice and the black population housed there has barely any alternative but to live where they are told. There are, however, many levels at which suburbs (as an ideal) and the townships share ideas about the housing of people outside the urban core. Mumford's broader based discussions on the subject help to define the "culture" of the field, and give some sense of its breadth and depth, allowing the South African townships to be seen as corruptions of otherwise socially "legitimate" ideals. An important consideration is that Calderwood, protagonist of much of the "rational", "scientific", and "modern Native housing" in South Africa frequently quotes from Mumford's books, particularly *The Culture of Cities* (1938), *The Condition of Man* (1944), and *The City in History* (1961), to reinforce his own ideas, or to stress a point or qualify a theory - however (in)appropriate. I


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A detailed plan of the western neighborhood of Kwa-Thema. Variety is not necessarily achieved by merely orienting the blocks in different directions, and in fact the benefits of a north aspect are lost.

Calderwood, Native Housing in South Africa, p184
believe that the juxtaposition of Mumford and Calderwood provides many insights into the phenomenon and production of suburbs and townships.

Townships in South Africa, as I have described in chapter two, were newly created suburbs designed to house black, poor, "Natives", in a way that would approximate a middle-class Anglo-American ideal. To explore what this ideal is, I have briefly described the history of suburbs and the field of knowledge in which Calderwood, Floyd, et al. were working. This will allow me to show that the South African planners were in part idealists, philanthropists and racist ideologues, but most of all, they were technocrats working in the best of their "modernist" tradition abilities to build a solution to the South African ideology of the separation of races, (an issue around which political mobilization and repression takes place). The results of their work do not always accomplish their aims, as opposition has often been mobilized against housing issues rather than been satiated by the provision of housing. One might suspect that the white technocrats really have only their own interests at heart. Township housing for a massive poor population is not done only for philanthropic reasons; it is housing for black people out of fear and economic necessity, an investment by white authorities wishing to establish a healthy labor force and to encourage the development of a black middle class, as a bulwark against any possible challenge to their authority.

Suburbs: Escape or Entrapment?
Examples of planning details. Calderwood draws upon the Anglo-American tradition of suburban planning by copying from "Town and Country Planning" by Brown and Sherrard. The lessons learned on street layout etc. are implemented by Calderwood in the townships he designed. Calderwood, Principles of Mass Housing, p102
Initially suburban life was a luxury afforded only by the wealthy. It was a city form conceived of, by, and for the middle and upper classes of society. The suburbs might almost be described as "the collective urban form of the country house." The suburbs were a healthy escape from the city, physically and psychologically. They satisfied man's need to return to the country and gave him a sense of freedom to do as he pleases. Mumford writes that even Alberti observed the satisfaction, convenience and freedom of a country retreat, which suggests important roots of suburbia in the emulation of the country houses of the very wealthy.

More than an escape, the suburb allowed the individual to control the extent and the content of his community. This can be inverted to explain how those with "the necessary means" could also begin to exert control over other people's lives - in the form of the townships - just as separated and just as safe for those with power - as one's own suburb. The suburb as township is used to assert institutional (government) control over the extent and content of the community of others. In South Africa, the oligarchy has created both their own suburban enclaves as well as the townships to separate themselves with a double insurance from the perceived physical and psychological dangers of mixing cultures and colors. To have life on one's own terms, liberated from the city, requires the financial means to pursue such a life. White South Africans in general have both a well filled purse and a supportive white government which

\[15\text{Ibid., p484}\]
\[16\text{Ibid., p485}\]
"Imagination in Planning" based upon designs by English designer Frederick Gibberd, and adapted by Calderwood to be used not with terraces or picturesque English cottages - but with 51/6s and 51/9s in South African townships, resulting in corrupted Anglo-American suburban ideals. Calderwood, Principles of Mass Housing, p103
allows them to pursue the suburban ideal. Black South Africans in general do not have the financial means nor do they have representation in the government, and they thus provided by the ideology and actions of the white elite with a (corrupt) version of the suburban dream.

The utopian ideal of the suburb as an asylum for the individual inherently contained its own downfall in its unforeseen popularity, which turned the dream of escape into the rush of mass-exodus. While the Anglo-American suburbs were inhabited by people trying to escape the urban cores, the South African townships were occupied both by people already living in urban "slums" and forced to move, and by people who were leaving the countryside in the wake of urbanization and the industrial revolution in the country. In South Africa the escape from the country and rural poverty for many black people and the allure of prospects in the city: wealth, and "diamonds on the soles of his shoes", is mirrored by the relative loss of freedom and regimentation of "life-style" in the monotonous townships. In the townships the ideal of each family in its individual house is carried to absurd and machine-like ends, so that individuality (and freedom) is lost to the mass-production of suburbia, and yet it remains an ideal: the suburban dream. The fact that Levittown in the United States is also a mass-produced suburb

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17Paul Simon, Graceland, Record album, song entitled "Diamonds on the soles of his shoes." This song title seems to capture the essence of the dream of South Africa's cities to a rural population.
Abstract pattern or real life? Housing layout in McNamee Village Township, Port Elizabeth.
Calderwood, Native Housing in South Africa, p20
does not mitigate the political and social climate in which housing was accomplished in South Africa. As Mumford puts it:

This utopia (the suburban escape) proved to be, up to a point, a realizable one: so enchanting that those who contrived it failed to see the fatal penalty attached to it - the penalty of popularity, the fatal inundation of a mass movement whose very numbers would wipe out the goods each individual sought for his own domestic circle, and, worse, replace them with a life that was not even a cheap counterfeit, but rather the grim antithesis.\textsuperscript{18}

The mass movement into the suburban areas resulted in a new kind of community in which uniform, unidentifiable houses, in rows on uniform roads are inhabited by people of the same socio-economic group and the same cultural taste, and consume the same products so that they conform to a common mould. Thus the ultimate effect of the suburban escape ironically becomes a low-grade uniform environment which provides no escape at all.

The entrapment in the sameness of a low-grade uniform environment is precisely what the ideal of "Native housing" in the townships of South Africa has come to be. The government has taken on the task of providing housing for the "natives" - to allow them to live in "comfort, health, security", and to "civilize" them. This oligarchy's utopia, this white-man's ideal imposed on the black-man (to ease his conscience?), becomes the fulfillment of the suburban ideal's "grim antithesis": low grade, uniform, conforming.

\textbf{Suburban Form}

\textsuperscript{18}Mumford, op cit., p486
Density study, neighborhood in Soweto.
At first the "formality" of the city was taken to the country, and spread out so as to avoid any memory of city slums. Then the romantic notion of the picturesque, of the landscape, and of "natural" and "organic" gained strength, and the formality (grid) of the city was forsaken for the informality (serendipitous qualities) of the suburbs. In planning South African townships, mass suburbs on an enormous scale for the disenfranchised, planners reverted to geometries combining both the control and formality of the grid with the picturesque notion of the informal. Plans appear more like the circuits of a computer chip board than a place for living. They appear infinitely extendable, controlled, and thus "rationally scientific." Whatever the South African planners may claim, it is clear that their form is derived from socio-political and economic concerns, in addition to notions of the picturesque or the romantic. Yet these aesthetic considerations are important as the "culture" of the suburb grew out of such notions, and were certainly dwelled upon even by the technocratic South African planners. Mumford describes suburban form as follows:

Romantic order was a revolt against order: a relief from the implacable necessities of a monotonous and over regimented daily routine. . . Following romantic principles, the suburban house and plot and garden were deliberately de-formalized. The street avoided straight lines, even when no curves were given by nature: it might swerve to save a tree, or even to preserve the robust contours of a hillside.19

It is interesting to contrast the "willful wantonness" and "studied accident" with the rationality of streets radiating in straight lines

19Ibid., p489
Road pattern, Kwa-Thema. The gentle curves are an attempt to relieve the monotony of repetitive units in the township.
Calderwood, Native Housing in South Africa, p78
from a single point in townships such as Soweto. Ideas of community or romantic landscape are certainly far away in such thoughts of planning priorities. However, if Floyd's plans for townships are examined, it is clear that there is an attempt to follow contours for reasons of efficient supply of services, and Calderwood illustrates the conscious retention of existing trees in the "model townships" he designed.

In the twentieth century Anglo-American suburbs, new economies, new densities and new building types led to a new way of life: each family could have its own house, its own garden, and now needed its own car to get to it. A dream which was achievable and even desirable for the more affluent and middle-class people, those who could afford a house of their own stylistic preference and design and who owned a car. However, for the poorer people and in particular the disenfranchised black people in South Africa, "removal" to the "suburbs" was neither their dream, nor necessarily their desire. The new way of life for these people may have freed them from the horrors of the city slums or from a life in rural poverty, but it also incorporated them into the political ideals of apartheid planning. The new mass housing built by the government, or a decentralized arm of the government, was certainly not a slum, but it represented both

\[20\] It has been claimed (in working papers I have heard about but not been able to locate) that this was done for the reason of allowing the police or military to control many routes of possible rioting from a single strategic defensible point. Although I have no proof of this, it is not an unlikely possibility, and would certainly remain in the realm of "classified" information in the South African context.
Railway station at Mofolo North, Soweto. The billboards advertise western middle-class values.
Markus Braun, Das Schwarze Johannesburg, Afrikaner im Getto.
the patronizing and authoritarian attitude of the government towards the urbanizing people of its country.

Living in the suburbs meant that some form of transport was imperative. The South African townships as suburbs - or dormitories for the working classes - were further and further removed from the cities and more obvious places of employment, for reasons of white security and the national economy. The transportation issue was one of exploitation by the state's mass transport companies (Public Utilities Transport Corporation (PUTCO), South African Railways, etc) over the population, as they held a monopoly over routes and costs. Transportation then provided a basis for mass mobilization, an issue against which many people could share their anger. More recently the transportation issue has provided the basis for a form of empowerment. The mini-bus and private taxi fleets owned and run by small entrepreneurs now form an enormous and powerful business, and they are "unionized" and organized under the umbrella body of SABTA.21

The suburb at its best escapes the overcrowding of the city and gives the benefits of the country. But, Mumford claims, the suburbanite has become the prisoner of the transportation engineer, and if relying on mass-transport, the individual loses control and freedom over his or her own life.

The English picturesque "Estate." Land is subdivided and houses built. The houses are individually architect designed and vary from each other. The townships are similar in the broad concept of dividing land for individual houses, however the English example is intended for middle-class suburbanites, and not really applicable as an appropriate model to have been used by South African designers for mass reproduction. Garden Suburbs, Town Planning and Modern Architecture, Adshead, Wilson, Culpin and Thompson (eds).
In South Africa the township is the place to which the working class is removed, ten or fifteen miles from the city, in public transportation designed for maximum efficiency - it never travels empty, people have to wait until the coach or bus is full before returning to their "homes," or to their place of employment in the mornings. A clear example of the use of power and the exploitation of a disenfranchised class - aided and abetted by the relationship of distant suburban dormitories from places of employment. The conception of racial zoning and apartheid are embedded in the location and separation of the suburbs from the city. Thus to return to Mumford's metaphor: the city was a prison from which the middle class escaped by fleeing to the suburbs. As the suburbs became more popular their value as a place of escape diminished. The absurd extreme is to look at the townships in South Africa, where the suburb itself (in the form of the township) has turned into another sort of prison - no longer an escape from the city, but its social and economic reflection. Just as the black residents are exploited by the white elite in the city, so too are they exploited in their depersonalized and distant living dormitories.

In South Africa, the suburban ideal of distance (and hence escape) from the city, as a positive aspect of the suburban concept, can be seen to be inverted (to become a negative aspect) in the context of the townships, where distance from the city is both a safeguard and a tool to keep the city "white by night."
FOR PARTICULARS AND PRICES OF HOUSES APPLY TO:

THE ARCHITECT: Martin S. Briggs, A.R.I.B.A., 10 Davies St., Berkeley Square, W.
or to THE BUILDERS: Messrs. Wm. Moss and Sons, Meadway, Hendon, and on the Estate.
The initial value of the suburb as an escape from the city, (as the city's antithesis), was ruined as suburban life became ever more popular and the masses thronged to have a taste of it for themselves. The suburb (at least all the more affordable suburbs) lost its rural charm and virtues of health, without gaining any advantage as the city may have offered. A redeeming feature of the suburb was the fact that individuals here had a chance to express their own personalities: whether in the choice of an architectural style or in the landscaping. Variety was, in suburbia, the spice of life.

White South African suburbs are the direct heirs of the Anglo-American suburban ideal. They often have all the benefits and niceties of the suburban dream, including lush vegetation to remind them of a pastoral and picturesque environment, varied architecture, including garden follies - or at least garden gnomes, and a middle class homogeneity in which they can feel secure without ever having to meet their neighbors. In contrast, I would like to recall the efforts of mass housing in the South African townships, where mass production and standardization were the key concepts. Minimum standards for poor people meant that there was no budget to personalize one's home. Furthermore, township houses were typically rented by the state, not owned by the people, and to personalize them required much trouble with unwelcome bureaucratic procedures for permission. Often the only obvious differentiation between houses from the outside (without being overly intimate or detailed with them), was the number stencilled onto the front door.

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Calderwood's landscaping design for living, suitable for low-cost row-houses. Calderwood has degrees in architecture as well as in landscape architecture and believed himself well qualified to discuss aspects of landscaping in township layouts.

Calderwood, Principles of Mass Housing, p112
Fantasy and Segregation

The Anglo-American suburbs and the white suburbs in South Africa provided an escape for their residents in yet another way. The fantasy and dream of living in another world, or at least a foreign country, were quite achievable through the importation of a foreign architectural style or form of landscaping. For those who could afford it, for the middle class, "something that had been lost in the city was here coming back in an innocent form - the power to live an imagined life, closer to one's inner grain than what the daily routine imposes." 22

In the South African context, suburbs as townships have become the black working-class suburban nightmare while, for the white middle class, suburbs allow the living out of fantasy, a bourgeois utopia. The townships of South Africa are the suburbs of the working classes. The differences are compounded in the case of South Africa because not only is the wealthy minority in power over a poorer majority, but also because of the compulsion to categorize people by race, and a minority "white tribe" holds power over a majority of black peoples (of many different cultures). The South African townships have none of the romantic, escapist, or fantastic allusions to any foreign places. The monotonous repetition of "matchbox" houses is a corruption of the suburban ideal, linked if only by the mental gymnastics of the townships designers' minds. The ideal is not the aspiration of the

22 Mumford, op cit., p491
PLOT SIZE STUDY & RELATION TO GROSS DENSITY.

Graph showing the relationship of plot size to gross density. Note Calderwood’s careful positioning of the outhouse for houses without waterborne sewerage, which was the situation even in some new townships. Calderwood, Native Housing in South Africa, p62
black people but that of the white government. The government provides housing in "suburbs" for black people; the inhabitants do not chose these places themselves. They are kept there by the laws which enforce apartheid and ensure the separate development of the white man and the black man in South Africa.

The suburb is a mechanism to segregate communities socially, spatially, by class stratification and in South Africa, by racial classification. The South African situation is not totally different from that of the Anglo-American suburb in the sense that it segregates people; and following Kenneth Jackson's argument -- that suburbanization is a result of racial prejudice and economic factors -- the township in South Africa can be seen to be more of an extreme example in its racism rather than an aberration. While the suburb separates, it is also dependent upon the city for the necessary association, economic and cultural exchange, and as a center of control, in order to keep either functioning. The architects of racial zoning may well have been aware of the arguments that Mumford presents; Calderwood certainly read and respected Mumford.

The suburb was intended to cleanse and purify. It separated areas according to function and according to class (and race). Yet the escape to this innocent world was only one of illusion. The existence of the suburb in its particularities could never be separated from the larger picture of which it is a part - the social world, the economic world, and the political world. The suburbanite relies on the city for esthetic and intellectual stimulus; the theater, the orchestra, the
### Types of Houses Showing Dimensions

<table>
<thead>
<tr>
<th>Area of House</th>
<th>Detached</th>
<th>Semi-Detached</th>
<th>Single Storey Row</th>
<th>Double Storey Row</th>
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**Table 1:** Dimensions of Houses

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<th>Area of House</th>
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<th>Semi-Detached</th>
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</tbody>
</table>

**Distances**

This side of line control by distances between houses.

This side of line control by max. coverage of 30% of stand.

**Table 2:** Area and Dimensions of Stands Showing Limits of Coverage and Spacing Controls

**Note:** Control as Follows.

Minimum distance between dwellings, front to front, rear to rear or front to rear side to side 20'-0", and side to side 30'-0", and no site coverage to exceed 30% coverage.

Table 1 gives dimensions of houses used in Table 2. Table 2 shows how minimum spacing controls stand sizes for detached and some semi-detached dwellings whereas coverage controls the remainder.

Design by numbers. Calderwood's kit of parts with alternative house sizes, the distances between houses, and the coverage and spacing controls. The variations indicated in such tables did not result in a varied and creative environment in most cases.

Calderwood, Native Housing in South Africa, p59

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museum and the university are all supported in the city. The suburb as an isolation ward only acts to make one more aware of the disease. The exodus to the suburbs was an escape from the world of the city.

... In the suburb one might live and die without marred the image of an innocent world, except when some shadow of its evil fell over a column in the newspaper. Thus the suburb served as an asylum for the preservation of illusion.2 3

In the Anglo-American suburbs (and until very recently, in white South African suburbs) it is still very possible to live out whole lives clinging to this illusion of an innocent world. This would suggest that the illusion had (or has) an important grounding in the contact of, and even the news of "reality."

With respect to South African townships and suburbs this isolation from the "real" world can be interpreted in two ways. Firstly, it is true that the white middle class people living in their suburban enclaves can prosper protected from the demons of the racial conflicts, the economic conditions and the rough real world; their dreams are pretty much realizable. The second interpretation requires turning the argument inside out: the black suburbs, the townships, are certainly not preserving the illusion of an "innocent world", but rather are the asylum containing the essence of the exploitation on which the white illusion depends. To discover why and how this is so would require an examination of the political forces at work keeping apartheid in place and minority rule in power.

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23 Ibid., p494

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Sun Valley, aerial photograph. The area is spatially separated from the rest of the city by roads and open space, and it is therefore inwardly oriented. This problem is compounded in Sun Valley because the size of the population contained in the area is not sufficient even to support a reasonable provision of convenience facilities.

Dewar, Uytenbogaardt, Hutton-Squire, Levy, Menidis; Housing, A Comparative Evaluation of Urbanism in Capetown, UPRU, UCT, p164
Initially an escape, the Anglo-American suburbs become a substitute for a whole pattern of living. Their separation from the "rest of the world" isolates the suburbs from the city, keeps wealth away from poverty and black away from white. Issues need not be confronted when all appears well, however irresponsibly so. To some, isolation or separation, is relished, (the supporters of apartheid, the middle-upper classes in the United States...), where as on others it is imposed. Suburban isolation enforces the loneliness and surreality of a real world by creating the separation between the "haves" and the "have-nots", between the "wardens" and the "prisoners". In the context of South Africa, the "separation" aspect of suburbs is used to support larger principles of apartheid. What many say might happen as a matter of natural course - that is the self-selection and separation of strata in society to different suburbs - is enforced by legislation on racial grounds in South Africa. The isolation of the townships is not an escape or a direct outcome of market forces, but an enforced separation.

Education
Another most sensitive issue, in the South African context, is that of education. Education, or the deprivation of an "equal" education, has become a major political factor in the mobilization of people in opposition to the government in South Africa. The fact that children are educated in their separate schools, according to their race and group area, is part of the same philosophy which isolates people in the various different townships and suburbs. Learning is limited, not
"Solutions to problems of housing layouts." Calderwood approves and borrows from all of these planning ideas: the cul-de-sac with central open space; the centralized parks of the neighborhood, and the separation of pedestrians and cars in Radburn.

Calderwood, Principles of Mass Housing, p30
only in the schools, but the learning about the lives of others. One wonders what percentage of white people in South Africa have ever been into a township? The answer is sure to be a very small number. The inequalities are so large and so obvious that black school children have chosen to rebel against their unequal education. Their protests against unequal education are understood to represent protests against the whole gamut of apartheid enforcing, repressive measures, of which the Group Areas Act and the development of "native townships" is a pillar.

The Garden City and the Garden Suburb
As the Anglo-American suburb gained in popularity and simultaneously lost the qualities which had made it so attractive, their was born the idea of a Garden City which was to provide the best of both worlds. A combination of aspects from both the city and the country were to provide an improved environment, greater than either of its individual constituents. This was an innovation which occurred spontaneously at more than one place and brought with it many inventions: the suburban superblock, the cul-de-sac or narrow U and L shaped roadways, the large gardens and minimal through traffic, and the park like character of the whole environment. The City part of the Garden city was to provide easily accessible places of employment, and the whole city was not to grow beyond a certain size. While several attempts were made to build Garden cities there were also many suburbs built without the "City" part of the Garden City. Well aware of the notions of limited growth and of the
Hampstead Garden Suburb: "A successful development near London in which neighborhood institutions have been happily grouped, shops conveniently and yet unobtrusively located, and the beauties of the original landscape have been carefully preserved." A model used by the planners of the townships in South Africa. Perry, Neighborhood and Community Planning, p26
problems with sprawling suburbs, these places were designed to overcome the problems and regain the benefits of suburban living.

Some of the nineteenth century planning claimed by Mumford as being "the best of the suburbs" include Olmsted's Riverside, near Chicago, to his Roland Park near Baltimore, from Llewellyn Park in New Jersey to Unwin and Parker's Hampstead Garden Suburb. The success of these suburbs is, however, I suspect, largely an aesthetic success, and not necessarily one which overcomes any of the problems of suburban living, in any profound manner. In dealing with what he refers to as "general conclusions to be drawn from the best suburban practice," Mumford describes the "so charming" physical environment which for long "drew attention away from their social deficiencies and oversights." If taken quite literally, this means that those townships in South Africa, which have little to call "charming" about themselves in a physical sense, will have no distraction from the inherent "social deficiencies," and thus no redeeming features at all.

Unwin
Raymond Unwin, in a pamphlet entitled "Nothing Gained by Overcrowding," examined the typical English bye-law street. He discovered that the minimum regulations provided superfluous provisions for traffic, and that such provisions had been carried over into the designs of suburban neighborhoods. He also discovered that economies could be made by lowering the development costs. By cutting back on the services provided, the suburban model could be
(1-4): Examples of different streets at Earswich, Letchworth and Hampstead.
(6, 7): Hampstead Garden Suburb, views of the street. Both from Raymond Unwin, "Town Planning in Practice" (1909).
Simon Pepper, "Suburb, Townscape and the Picturesque;" in Casabella 487, 1983, p65
adapted to provide housing for a larger and a poorer population. In order to provide this, firm, centralized control was needed to maintain minimum standards and orderly, controlled growth. The production of large scale suburban form required the establishment and control of a mandated body, a political authority, or similar. This could lead to both better environments for all, where the planning really benefits its "users"; or worse environments - where planning is used as a tool for political exploitation and the maintenance of power, as in the townships in South Africa.

Unwin realized that even modest (as opposed to upper-class) housing schemes could afford pleasant open spaces and parks by saving on needless utilities and streets. Effective public control over the exploitation of land by either national or municipal ownership was to prevent private building that lacks adequate open areas and result in a better environment.

In South Africa, "municipal statesmanship" is advanced through the filter of nationalist rhetoric and the white rulers' political ideologies. Politics comes first; suburban and township design is secondary to it. In South Africa, the ideal of "new communities" (to their protagonists at any rate), is towards a more controlled, regimented and white controlled order. This might be evidenced in the siting of the townships, the functional and social zoning that takes place: the strict government (or its duly appointed representative body or person) control over what gets built, who may build it, who may occupy it, whether it might be rented, leased or owned, etc.
Calderwood's sketches showing that reduced road widths will not detract from the suburban ideal of one dwelling per plot.
Calderwood, Native Housing in South Africa, p75
Suburbs were originally small and close communities, with a strong neighborhood and community spirit. The great metropolises had neither clear boundaries or strong centers, providing negligible stability for a family's life. The residents often assumed active responsibilities in their own local community so as to assure themselves of such benefits as a good water supply or well managed schools. In South Africa, it is against the provision of the highly politicized housing and services and township amenities that communities unite and rally. Their common cause is the battle against the patronizing politics of the (neo) colonial conscience of the ruling minority.

Middle-class suburbs provided many benefits to their inhabitants: the escape from the "evils" of the city, and the gaining of democratic ideals within an homogeneous and "knowable" community. Suburbanization empowered its middle-class to participate in the "good-life" and the politics of the community. The "forced suburbanization" of black people into townships in South Africa was a form of "divide and rule" administered by the oligarchy over the masses. By expressing the differences of race in suburban form - each "tribe" was allocated and made to live in a particular area even within a larger "suburb" such as Soweto - the occupants of the community were "disempowered".

Perry, Wright and Stein
Radburn, New Jersey, architects Clarence Stein and Henry Wright. Preliminary study of two super-blocks showing the generous allowance of park and play spaces. Calderwood's and Floyd's designs of neighborhoods resemble those of Stein and Wright, particularly in the super-block concept and the central location of open space.

Perry, Neighborhood and Community Planning, p63
Clarence Perry's ideas and concept about the neighborhood unit grew out of his experiences as a resident of Forest Hills Gardens - a model suburban development on Long Island - and he gave political structure to the neighborhood principle. The organizing social nucleus had been anticipated by the Settlement House movement, which gave to cities like London, Chicago and Pittsburgh the necessary facilities for co-operating in neighborly activities. Their aim was "to restore through community centers some of the vitality of American political life." For the disenfranchised in South Africa, the concept of community centers could be a powerful rallying tool for the communities, but the local councils and "community centers" are government created or selected, or - if not puppets - then certainly seen as working in cahoots with the oligarchy and thus without credibility. However, if they were to work as Perry intended: as a place for discussion and debate and co-operative action on all public issues, as well as a center for the spiritual and cultural life of the neighborhood; and result in the suburban forms as he desired: where all facilities were within walking distance, then they might well go a long way towards the restructuring of the physical manifestation of political rights in South Africa.

Henry Wright and Clarence Stein demonstrated the value of Perry's ideas in three different communities. Two important planning lessons from these communities were firstly, the separation of transportation routes, from through avenues to local roads and from vehicular to pedestrian traffic; and the second idea was the neighborhood park - or greenbelt around the neighborhood. Both
Radburn, New Jersey, a typical street designed by Clarence Stein and Henry Wright. The plan shows the separation of pedestrians and main vehicular roads; a concept used by Calderwood and by Floyd in their designs of townships in South Africa.

Perry, Neighborhood and Community Planning, p32
these ideas were clearly visible in a positive sense, (that is as good things) in Radburn, as in many English New Towns. The planners of the South African townships have paid much attention to these concepts of planning; local roads and through roads are separated, and the idea of neighborhood parks certainly attempted, however most often without facilities and in the form of barren "open space".

Horrific stories about the townships in South Africa, ("stories" because there is no official admission) include the idea that important streets are strong enough (thickness and reinforcement of concrete support) and wide enough for armored vehicles of the police and army, and that they are designed in order to be able to be controlled and patrolled efficiently. Sidewalks are typically wide, unpaved and dusty, and separate pedestrian paths are made by members of the community themselves, in breaking through the superblocks, and even going through other people's houses. The notion of privacy in one's "own" house is rendered a fallacy, and during times of rioting and emergency (notably in Soweto since 1976) it was an unwritten rule that front and back doors of houses would be left open to allow people to run through them when "escaping" from the police or military. Sometimes a bucket of water was provided, necessary to help remove the effects of tear gas, especially for the children involved. Thus pedestrian paths take on a whole new dimension, as routes of escape, where heavy vehicles can't follow.
Perry demonstrate the development of a neighborhood unit subdivision. Note the similarity of Calderwood's and Floyd's plans to these of Perry. Although Perry's sites are within a grid and enclosed by surrounding roads, they do not perform the same functions as buffer zones. Perry also makes use of many curved roads within the larger grid, bringing interest and variety which Calderwood's and Floyd's plans do not necessarily demonstrate. Perry, Housing for the Machine Age, p96-7
The neighborhood park or greenbelt in the South African context becomes transformed into being a cleared zone of "no-mans-land," a cordon-sanitaire surrounding the township or neighborhood, or, as blatantly named on many plans of townships, a "buffer zone." This could either be between the various tribes or races to be kept apart within one township - the neighborhood park, or as a cordon-sanitaire around the township separating white and black neighborhoods - a greenbelt in Perry's terms, a dustbelt in reality.

Perry's intentions and the realities of the South African township couldn't be further apart, yet the resultant separation of pedestrian and vehicular access, and of the surrounding "open-space" are realities in both these worlds.

The suburbanite is separated from the political association and activity possible in the city. From Perry's dreams of the suburb empowering its occupants, with its rising popularity for reasons of wishing to escape the responsibilities of the city, the suburb becomes a distancing mechanism from political obligations. Community association is negligible, reduced by the fact that the sprawl now expands across the landscape, identity is lost, and with it, cohesion, responsibility and obligations. The political weakening of people living in the suburbs, and their dependency for leadership from the city may be seen in South Africa, where the black population is forced to live in particular "suburbs" (read "townships") and their obligations of citizenship removed. Township residents have no say or influence on the sorts of suburban issues that Anglo-American
Buildings set back after Unwin, and T-junction -- showing row-houses for reasons of architectural suburban aesthetics rather than for the amenity and basic needs of the residents.
Calderwood, Native Housing in South Africa, p107, 108
suburban residents chose to get involved with. The "safe distance" and the political weaknesses of suburban sprawl are used to advantage by the white oligarchy in ruling over the majority; a far cry from the intentions of Perry et al; and yet the concept is the same, only corrupted for non-democratic purposes.

**Railroad Suburbs and the Motor Car**

The early suburbs (1850 - 1920) which grew along the newly developed railroad and trolley car lines, were naturally limited in size. They were spaced at efficient station stops - three to five miles apart - and houses had to be sited "within easy walking distance of the railroad station" for the suburb to succeed. The distances between these railroad suburbs allowed for the continued cultivation of land and greenbelts between them.

The popularity of the motor car has changed the relationship of the suburb to the city. Limited suburban size today is achieved through zoning and land-use legislation, if at all. Control over land-use has become a political tool in South Africa, where zoning includes the use of racial separation. Generally, land-use regulators require power, a constituency, and ideally a mandate, but not necessarily, as in the case in South Africa.

With a lack of controls the resultant Anglo-American suburban development, or "formless urban exudation" - as Mumford angrily calls it - results in sprawl. With excessive control, political domination can rear its ugly head, and the suburb manifest itself in
"Right-angle planning" - recommended by Calderwood as it saves on service lengths under roads, but has problems of its own as he points out.
Calderwood, Native Housing in South Africa, p108
the form of a Soweto or worse. Modern transport can remove the suburb a "safe distance" from the city for political reasons, and still make claims of economies, health and hygiene etc. as validations of suburban delights.

Motor sprawl and the death of the neighborhood unit were the result of the popularity of the motor car. Buildings set in a park became buildings set in a parking lot. While the car and the road developed in relationship to the suburbs under the pretext of "increasing the range of speed and communication," and under the fallacy that "power and speed are desirable for their own sake," what the car produced was wasteful spacing, sprawl, and a denial of "the possibility of easy meetings and encounters."

Far flung suburbs forced a reliance upon a form of transport which was only to exacerbate the exploitation of the poor. If power and freedom reside in choice and control, then what the South African state can be seen to have done is to limit choice and control in where the major portion of the population can live, their means of access to and from the city from these locations, and the exploitation of them in their use of "public" transport. In this way, the townships directly work in limiting the power and freedom of these people.

**Suburban Isolation**

Suburbanization has isolated the individual household, and its mass reproduction has impersonalized it. To make a value judgment: this is bad for residents of suburbia; but from the point of view of the
Calderwood explains the pros and cons of these road and street designs to create interest in the layout of townships. However, his plans for Witbank and Kwa-Thema townships seldom made use of the lessons demonstrated here. Calderwood, Native Housing in South Africa, p107
South African state it is serving their means of divide and rule, of keeping races apart, quite admirably.

Mumford writes vehemently against mass suburbanization, and he overstates the case against the Anglo-American suburbs given the element of free choice that exists in those places. He claims that suburbia is the modern citadel. It is a prison which inhibits community and turns the initial desire for privacy in the landscape into solitary confinement by way of mass replication. He claims that the Anglo-American suburban ideal has been corrupted in England and America, while I am claiming that this ideal has been corrupted, albeit differently, in South Africa. Mumford's case works better to describe the South African township problems than it does to explain American suburbia. It is not Mumford's attitudes that I am concerned with, but the ideas he brings to bear upon suburbia, which are of interest in trying to understand the townships in South Africa. Mumford uses the metaphor of suburbia as a prison, which seems overstated in the American context. I argue that the townships in South Africa are also the prisons of their occupants, but with additional force. The townships do isolate, the "native housing" does de-personalize, the sprawl does de-mobilize, and the state does control this aspect of the lives of millions of people. I would say, too, that unlike in the United States, the imprisonment in suburbia in South Africa is very much a "conscious conspiracy by a cunning minority." By limiting access to resources and only a narrow connection to the city, the state successfully separates and controls the spontaneity and autonomy of this disenfranchised population.
These photographs show Witbank Township and the principles learnt by Calderwood about suburban layout. Curved street (upper), stopped street (center), and buildings set back (lower).

Calderwood, Native Housing in South Africa, p169
Communities remain disorganized and the effective range of leaders (who are not imprisoned) is narrowed enormously.

It is clear why the schools became the places of political mobilization and organization in South Africa - they brought people together in a community - and became the focus of their bitterness and protest in 1976 and onwards.

Suburbia feeds despotism outside suburbia (in the country in which it exists). Mumford claims that with the complacency and apathy developed by citizens of suburbia, even democratic nations will submit to totalitarian compulsion and corruption. De Tocqueville, in Democracy in America, written in the nineteenth century, sought to "trace the novel features under which despotism may appear in the world." He writes:

The first thing that strikes observation is an uncountable number of men, all equal and alike, incessantly endeavoring to produce the petty and paltry pleasures with which they glut their lives. Each of them living apart, is a stranger to the fate of all the rest - his children and his private friends constitute to him the whole of mankind; as for the rest of his fellow-citizens, he is close to them but he sees them not; he touches them but he feels them not; he exists but in himself and for himself alone; and if his kindred still remain to him, he may be said at any rate to have lost his country.24

The state in South Africa paints a picture of the black population not being citizens of the country in which they live. Their rights as citizens have been removed - such as the right to participate in the "democratic" process of government, etc., and this is embodied in the

24Cited in Ibid., p513

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The Neighborhood Unit Formula. The plans of Calderwood and Floyd bear a remarkable resemblance to this plan by Clarence Arthur Perry. The differences between the townships in South Africa and the design of this suburb lie not so much in what one can see, but in what one knows about the place; including the lack of tenure, security and choice given to the residents of the townships. In addition, this Anglo-American garden suburb ideal is imposed onto the government built townships for the values it is intended to develop in the residents of the townships.

Perry, Housing for the Machine Age, p58
landscape into which they are removed in order to live out these lives as non-citizens. The planning of the townships reinforces their disenfranchisement.

Ebenezer Howard

The work of Peter Kropotkin - Fields, Factories and Workshops, and Ebenezer Howard - Garden Cities of Tomorrow, was towards a more responsive civilization based on community, human contact enjoying both urban and rural advantages, and a natural limit to growth of an organism - such as either a suburb or a city. Howard proposed to decentralize the city and to reject the suburb, and find a "stable marriage between city and country." The natural biological advantages of the country were to be combined with the economic and social facilities of the city in a fully equipped community. Howard believed in the self-containment limited size of the garden city in order to maintain an ecological, organic balance between city and country and in order to retain a sense of community in the "city."

The original concept of the South African townships was that they were to act as dormitories for those black people who came to work in the white cities. Over time these townships have come to provide more permanent homes to this urbanizing population. The white government felt that it could control the number of people flocking to the urban areas in the country by limiting the size of the townships where they could legally find accommodation. The concept of limited size and self-containment takes on a very different meaning to that intended by Howard. The township seeks to control
Pretoria township designed by N. T. Cooper of the Pretoria City Engineer's Department in collaboration with the Witwatersrand and Pretoria Regional Planning office. Notice how roads in two particular instances converge on a circle or opening (or radiate from them). Was this to enable police or the military to control crowds should they gather to protest, demonstrate or march? Notice also that there are only two roads entering (or leaving) this township; also for the possible control of the residents by the security forces of the white government.
Floyd, Township Layout, p29
people and remove from them their freedom and benefits; while the

garden city notion empowers its community, granting them the

freedom and benefits of a community in control of its destiny. I
don't intend to suggest that the township is comparable to the garden
city, the differences are obvious, but the notions of form such as
containment are comparable, and it is important to see that a concept
can have such radically opposed realities in different circumstances.

... he (Howard) nevertheless brought to the city the essential biological
criteria of dynamic equilibrium and organic balance: balance as between
city and country in a larger ecological pattern, and balance between the
varied functions of the city: above all, balance through the positive control
of growth in the limitation in area, number, and density of occupation, and
the practice of reproduction (colonization) when the community was
threatened by such an undue increase in size as would lead only to lapse of
function. If the city was to maintain its life-maintaining functions for its
inhabitants, it must in its own right exhibit the organic self control and
self containment of any other organism. 25

Howard proposed to test the viability of his urban forms by building
an experimental model. Planners in South Africa proposed to test
their township designs by building an experimental model. Howard's
model was to be superior in its social organization and its physical
layout that it would set a new pattern for future city building. The
townships in South Africa were to suit the purposes of the ruling
minority so as to become a form of city or suburb common in that
country.

Instead of agglomeration, Howard planned dispersal. Townships
were to be dispersed as well, according to race, color, tribal
affiliation. Instead of disorganization, Howard planned a higher type

25Ibid., p516
Worcester township designed by Bowling and Floyd. Note the use of road bays; the use of a larger ring road and much smaller inner roads for lighter traffic - after Unwin. Further, notice that open space and parks are used to take up the odd geometries. The police station is at the entrance/exit road of the township, and their presence is thus felt every time a resident enters or leaves the township.

Floyd, Township Layout, p29
of unity. Instead of disorganization, the South African state planned stricter control and legislation over urban settlement, taking control itself before the communities could empower themselves through organization and unity.

Howard conceived that the land on which the garden city was to be established would be in corporate or municipal ownership, which would be necessary in the establishment of a new community. The profits of the new community would go not to the individual landlord but to the improvement of the community, either through reduced taxes or added services.

The intention of holding the land in public trust was so that all its residents would benefit from savings and that equitable distribution would result. The South African townships are held in public trust and may not be owned, merely rented or leased by its occupants. Instead of resulting in equity and a sharing of the benefits amongst the community, the result, in fact the rhyme and reason, has been an exploitation of the residents, receiving neither community improvements nor added services from this "civic" ownership.

Urban expansion can be controlled by decentralization and the building of separate autonomous cities. Howard's garden cities were to be totally "self-contained" and the orderly decentralization was to halt the continued congestion and expansion of London. South African townships were to be "self-contained" dormitories, the economic vitality of the existing cities was to remain unchallenged by
Welwyn Garden City as used by Calderwood to support the idea of the neighborhood unit.
Calderwood, Principles of Mass Housing, p27
their establishment. They were to be autonomous only in as much as they were to be racially segregated, they are not economically autonomous at all. The influx of people to the cities, the urbanization, was to be controlled by not allowing any "permanent settlement" in or near the cities. The townships were dormitories, not homes, and were intended as labor camps for the cities and towns, owned by the state, and created for the control of urban expansion.

The application of new ideas needs to be tested as in an experiment. Both the garden city and the township are experiments, in a sense, in human social conditioning, in politics, and in city form engineering. Howard created small models and tested them out. He persuaded other people with faith in his ideas and sufficient capital to support him to join him on his experiments, and together they built the first Garden City of Letchworth in 1904, and later Welwyn was built.

Howard required consent, support and backing from others to implement his experiment from which the future occupants were to benefit, and not necessarily himself. The South African government did not require a consensus (except that of the minority white electorate) before implementing its experiments, and the state might argue that the occupants were to benefit from its results, but it was the state itself, the status quo which was to benefit the most overtly from the township implementation.
"The Radburn Idea," as used by Calderwood in support of dividing up a township into neighborhoods, each with their own open space and parks. Calderwood, Principles of Mass Housing, p31
Letchworth and Welwyn were to be the start of the integration of the city and the country, embodying Howard's theoretical organic principles in built form. The townships were the physical manifestations of the political theories of apartheid in South Africa, (although the history of separation might be traced back to colonial attitudes in the eighteenth century, etc.), and the equivalent of Howard's movement towards urban integration was, in South Africa, a movement towards urban segregation.

Putting theory into practice is more effective than "the kind of exhaustive "urban research" that is so popular today." Institutional and psychological obstacles are cleared, and for some, a utopia (as in "ideal socio-political state") strived towards, even if only fulfilling the ideals of a minority of people. The townships in South Africa satisfy those who support the ideology of apartheid, that is: of class and racial segregation, and who will benefit from it.

Neither Howard's garden city proposition, nor that of "native" townships in South Africa, are solutions to the existing problems of the cities about which they were proposed. They are both new programs confronting essential issues "for the balanced organization and contained growth of cities, in a general process that could take care of an indefinite increase in the national population." They both had a very different notion of "balance," however. For the garden cities, balance referred to reaping the benefits of both the country and the city, whereas in South African townships, balance can be seen to refer to the maintenance of power in the hands of a white
Planning of cul-de-sacs and pedestrian ways. The lush vegetation shown on the sketch does not exist in the built form. In reality these are large unkept, littered spaces between the extruded boxes which are the row houses shown here.
Calderwood, Principles of Mass Housing, p104
minority; not really balance at all. They both deal with the growth of population about cities, and neither was overly concerned with a particular form. It was the principles which were of importance, the achievement of particular efficiencies and their resulting equity.

(Howard's) ideal city was a combination of the possible and the practical, ideal enough to be desirable, close enough to contemporary practice to be realizable. His genius was to combine the existing organs of the city into a more orderly composition based on the principle of organic limitation and controlled growth. . . . . . what was radically new was a rational and orderly method for dealing with complexity, through an organization capable of establishing balance and autonomy, and of maintaining order despite differentiation, and coherence and unity despite the need for growth. 26

The same may well be written on the subject of the townships: - a combination of the practical (housing, controlling, and separating many) and the ideal (to the oligarchy); controlling growth and limiting slums, (squatter and informal settlements, that is uncontrolled settlements, earlier "locations"); and by organizing a new way of dealing with what was perceived to be a problem.

The garden city should not be confused or called a suburb, or the suburban open plan a garden city type of plan. Perhaps even the township should not be called a suburb, but rather a mass segregated housing scheme or a labor camp.

The garden city was a new kind of unit whose organic pattern was intended to spread from the individual model to a whole constellation of similar cities. The township, if "successful", was to

26 Ibid., p518
Ebenezer Howard and the Garden City. His diagram of the three magnets explains the benefits to be gained in the Garden City; while his "plans" are merely diagrams not intended to be taken literally, but to be used as concept drawings illustrating the idea of the Garden City. Howard was to rely on technocrats to realize the detailed planning of this idea.

The Garden City, Unit 23, The Open University, pp26-27.
be spread from an individual model to a constellation of strategically placed similar townships. The ideal result, the apartheid ideologue's utopian desire, would be a country in which each race kept to itself, autonomously housed, and yet serving as the economic slaves of the neo-colonial, minority government.

Howard expressed the ideal elements of his city as abstractions, leaving the particulars to the technocrats. Howard refused to be tied down to a particular physical image of the city or a particular method of planning or a particular building type. Similarly, the designers of apartheid proposed the racially segregated townships as an ideal, and left the particulars such as form, economies, etc. up to the technocrats.

Howard's clarifying diagrams showing the physical arrangement of the garden city were carefully titled "A Diagram Only." They were very abstract and almost mathematical. South African townships such as Soweto, when viewed from the air, have the look of being layouts on computer chip boards. They are mathematical abstractions to both allow and to control growth, to impersonalize, and to remove the human being from his or her position of prime importance in the environment and place the abstraction of segregated mass economic housing in this position.

Howard believed that the garden cities would prevent the further overburdening and congestion of London. The fathers of the townships believed that they could control urbanization and the stem
Section, economic house, Witbank.
Calderwood, Native Housing in South Africa, p120
influx of people to the big cities. The garden cities did not
discriminate on the grounds of race and neither did they forcefully
require people to live in them. They were places where people could
chose to live if they so wished. The townships are not places which
their inhabitants chose to live in, the black people who stay there are
not given any choice. However, both the garden city and the
township undermined the attractions of the bright lights and the
chance of a shot at the "pot of gold." The city has a status value that
neither the Garden City nor the township have.

Both Howard's garden city and South Africa's townships required
that the process of city development be examined, and that control
be invested with a "representative" authority, whose constituency
and mandate was presumably to justly, equitably and economically
realize the respective ideal plans. The authorities in South Africa
certainly claimed the power to head the process of township
development. They grasped the political authority with colonial
conviction and police protection, and retained the resources of that
earth's bounty for themselves. They then proceeded to do what they
believed was best for them "the natives" and the "urban problem,"
which translated into doing what they believed would be best for
themselves. The idea that the public authority was representative or
need even consult with the people for whom the new "towns" were
to be built was not an issue. That the state would benefit and
therefore all the citizens would benefit - was the assumed process.
This was the way in which Howard's garden cities were to function,
and in fact the residents did benefit from the built in "equities". In
Section, economic house, Springs.
Calderwood, Native Housing in South Africa, p161
South Africa, unfortunately, those deprived of citizenship do not necessarily benefit, and it was precisely for these people whom the townships were created.

The success or failure of building new towns, be they garden cities or segregated townships, depends on the political imagination of the time, on the willingness of the population to comply, on the administrative authorities set up by the state, and the facilities for construction and administration which it empowers. The overwhelming power of politics in shaping our built environment must not be underestimated. The building of the townships was never intended as a utopian experiment in the same sense that the garden cities were. The townships are indeed a product of the South African political imagination, and their success or failure, I suggest, is certainly a reflection upon the premises upon which they were built.

The idea of progress, the processes of urbanization, the desire for change, assimilation, a piece of the material pie which is so effectively sold... are all reasons for the failure of garden cities and townships to keep people out of the "big cities," and in these alternative nice, neat, controlled, utopian environments. Forced containment of large populations cannot succeed. The ideas need to be "bought into" and "owned" by the people who are to live these other lives! Alternatively, a kind of "spiritual revolution" is needed, whereby the issues of control and power are no longer concerns over those of environmental equities, humanity, morality, integrity, etc. My own version of utopia - no doubt!
Section, sub-sub-economic house, Springs. Note how the exterior of this house will appear to be very similar to that of the economic house in the same township, and yet it will provide quite different levels of comfort performance due to its lack of finishes.

Calderwood, Native Housing in South Africa, p154
As the unworkability of the townships and of the apartheid system becomes apparent, its rules will be more frequently broken. Already, in 1989, there are several examples of "grey" areas in which people of all colors live in the South African cities. If all limits on influx control and racial segregation were to be lifted in South Africa, then the population in the cities would certainly boom, and as Mumford states of the garden cities, the limits of physical growth will have to be re-examined and a very different kind of city form will surely replace the model townships of the recent past.
Layout of minimum garden, area of plot 3,150 square feet. This is Calderwood's abstracted ideal, and was not achieved, especially as thousands of plots were developed in monotonous rows and often on unfertile land. Calderwood, Native Housing in South Africa, p58
PART TWO

Individual Attitudes, the Corruption of the Ideal

In South Africa the word native is not used in its proper meaning in the English language but is used to denote the Bantu or Kaffirs only, other natives of the country such as the White people or Colored people are not natives in terms of legislation dealing with Bantu people.27

The proper housing of a family will allow that family to live a good life.28

Introduction
The Complexity of the Case in South Africa

In my analysis of the attitudes of Calderwood and Floyd I will show their implicit support for the racist policies of the South African Nationalist government. It must be remembered, however, that the reasons they give for the work they do are no less important than are their discriminatory assumptions. Their work does concern economics, a healthy labor force, massive urbanization, "education" for a new "lifestyle", etc. These concerns acting within the ideology of grand apartheid add to the complexity of the situation. I do not wish to merely portray the townships as products of racism, (which undoubtedly is a factor), but wish also to stress the numerous other factors which play a part in their realization. It must also be remembered that the attitudes which are represented by the people whose views I examine are generalizations; not all white people

27 Floyd, T. B., Town Planning in South Africa, Shuter and Shooter, Pietermaritzburg, 1960, p44.
The above diagram: "Requirements of a plot" shows what Calderwood believes possible on a white suburban site, including the servant's quarters (3), and garage (2). The subdivisions shown in the sketches indicate that houses should not face back yards, and the outbuildings shown indicate that he means that they should not face the servant's quarters of adjacent houses. The subdivisions are otherwise not unique or particular to housing in South Africa, and derive from Anglo-American suburban layouts. Calderwood, Principles of Mass Housing, p97
support them and neither do all black people oppose them. There are members from each race on each side.

I quote much from the writings of Calderwood and Floyd because they provide the evidence for my ideas in this thesis. I will demonstrate how the architecture and planning of the townships is inherently political, how the motivations for the designers are both to create suburbs for people to live in, and to assist the government to control them and remove these inhabitants from the white cities by using force (maintaining inequality), and denying freedom (choice). I find it essential to expose these writings as they illuminate the complexity of the situation usefully.

My investigation into the attitudes of Calderwood and Floyd will follow the two scales of investigation in which these men worked. Floyd, a town planner in South Africa, has written about planning at the larger and more general scale of town layouts. He practiced professionally and was responsible for the design of many new towns for white people and their appended locations for black people. Calderwood was an architect involved in the more detailed work of laying out townships for black people, and for designing the housing in which they lived. He was both an academic affiliated with the School of Architecture at the University of the Witwatersrand in Johannesburg, as well as a consultant to the National Building Research Institute (NBRI), which was responsible for several "model townships" and for the particular design of mass housing to be built in those townships. I will firstly examine the work of Floyd, at the
## WHITE PERSONS IN TOWN AREA ONLY

<table>
<thead>
<tr>
<th>Type of Business or shop</th>
<th>Pretoria Suburbs 1946</th>
<th>Johannesburg Small towns 1933</th>
<th>Average 18 1933</th>
<th>Average 7 American cities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cafe</td>
<td>585</td>
<td>400</td>
<td>3,500</td>
<td>Restaurant 1,400</td>
</tr>
<tr>
<td>Butcher</td>
<td>1,393</td>
<td>2,000</td>
<td>1,850</td>
<td>1,000</td>
</tr>
<tr>
<td>Milk Depot</td>
<td>1,850</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green Grocer</td>
<td>1,945</td>
<td>2,000</td>
<td>5,000</td>
<td>3,700</td>
</tr>
<tr>
<td>Bottle Store</td>
<td>3,525</td>
<td></td>
<td>4,000</td>
<td></td>
</tr>
<tr>
<td>Baker</td>
<td>4,904</td>
<td>4,000</td>
<td>3,500</td>
<td>2,800</td>
</tr>
<tr>
<td>Fishmonger</td>
<td>4,904</td>
<td>8,000</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>Fish &amp; Chips</td>
<td>4,904</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food &amp; Drink generally</td>
<td>215</td>
<td></td>
<td></td>
<td>Delicat. only 7,600</td>
</tr>
<tr>
<td>Clothing</td>
<td>790</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drycleaning Depot</td>
<td>1,762</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boot repair</td>
<td>2,088</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Womens Outfitter</td>
<td>2,892</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tailor &amp; Dressmaker</td>
<td>2,968</td>
<td>Tailor only 2,500</td>
<td>Tailor only 2,200</td>
<td></td>
</tr>
<tr>
<td>Footwear</td>
<td>3,890</td>
<td></td>
<td>5,600</td>
<td></td>
</tr>
<tr>
<td>Mens Outfitter</td>
<td>4,904</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Draper</td>
<td>7,520</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Draper &amp; Clothing</td>
<td>1,000</td>
<td>1,300</td>
<td></td>
<td>Clothier only 5,700</td>
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<tr>
<td>Clothing generally</td>
<td>274</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemist</td>
<td>1,545</td>
<td>2,000</td>
<td>2,800</td>
<td>1,700</td>
</tr>
<tr>
<td>Hairdresser and Beauty Parlour</td>
<td>1,545</td>
<td>2,000</td>
<td>2,400</td>
<td></td>
</tr>
<tr>
<td>Sports goods</td>
<td>14,100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cycle Radio &amp; Electric</td>
<td>1,393</td>
<td>4,000</td>
<td>4,500</td>
<td></td>
</tr>
<tr>
<td>Building requisites and Hardware</td>
<td>2,732</td>
<td>6,000</td>
<td>7,000</td>
<td>6,700</td>
</tr>
<tr>
<td>Furniture</td>
<td>3,220</td>
<td>5,000</td>
<td>5,000</td>
<td>4,500</td>
</tr>
<tr>
<td>Household goods</td>
<td>4,350</td>
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<td></td>
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<tr>
<td>Other equipment</td>
<td>9,400</td>
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<td></td>
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<tr>
<td>Jewellers</td>
<td>3,890</td>
<td>3,200</td>
<td></td>
<td>6,400</td>
</tr>
<tr>
<td>Florists</td>
<td>7,050</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other cultural shops including</td>
<td>5,371</td>
<td></td>
<td></td>
<td>Mus. instr. 9,800</td>
</tr>
<tr>
<td>Opticians</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Books &amp; Stationery</td>
<td>8,056</td>
<td>6,000</td>
<td>2,800</td>
<td></td>
</tr>
<tr>
<td>Bazaars &amp; General dealer</td>
<td></td>
<td>5,000</td>
<td>7,000</td>
<td></td>
</tr>
<tr>
<td>Grocery shops</td>
<td>290</td>
<td>500</td>
<td>400</td>
<td>640</td>
</tr>
<tr>
<td>Service Stations and garages</td>
<td>1,720</td>
<td>3,000</td>
<td>2,000</td>
<td>2,200</td>
</tr>
<tr>
<td>House agents</td>
<td>1,880</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cinema</td>
<td>10,900</td>
<td>4,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auctioneer Department Store</td>
<td>12,000</td>
<td>3,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average of all shops suburban and central</td>
<td>66</td>
<td>150</td>
<td>100 *</td>
<td></td>
</tr>
<tr>
<td>Miscellaneous shops and offices</td>
<td>2,000</td>
<td>1,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* If the country population is added this figure will be greater.

**Note:** The suburban centres of Pretoria average 12 shops per centre.

Country shops often combine many trades and include hardware, implements, groceries, clothing and footwear.

Cities like Pretoria serve a wide area including many smaller towns. The Pretoria Studies of uses were carried out by N. T. Cooper and the Johannesburg ones by T. B. Floyd.

Businesses or shops and the racially segregated populations which they serve. The reason for comparison with American cities is curious as the situations, populations, and cultural differences are not taken into account. Floyd, Town Planning in South Africa, p122

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larger scale of town planning, and then proceed with my analysis of the more specific architectural and mass housing efforts of Calderwood. I shall consistently reveal the attitudes and assumptions which lay behind the work they did in revealing the townships as corruptions of suburban ideals for political ends. It will be seen that the form of town plans in South Africa reinforce the fact that the black people are to serve the white people. Townships or locations are secondary in every respect to the white towns they serve, reflecting the social relationship between the black and white populations of the country.

T. B. Floyd - Town Planning in South Africa
T. B. Floyd has written two books on planning in South Africa, Township Layout, in 1951, and Town Planning in South Africa in 1960. By townships, Floyd refers to all newly proclaimed and designed developments on previously rural or undeveloped land. He also refers to township development as that for the towns of white people, and deals with the layout of "native locations" as secondary appendages to the white towns.

Floyd claims that the fundamental principles of site-planning remain the same for all countries around the world, but that these principles must be adapted to national conditions.

The system of registration of the ownership of land, the custom of erection of single storey houses with servants' quarters in the back yard, the individualistic and rural or semi-rural character of the majority of South
And that was true, that to the black people in the location he was like a god. He was like a god to the black children on the farm where he was born, his father's farm, Buitenverwagting, which means Beyond Expectation. It lies on the edge of the grass country, and slopes down through a dozen kloofs into the country of Maduna, the reserve our forefathers gave to the black people when they subjugated them a hundred years gone by. There was for the black children nothing that he could not do. He could write and read, not one book, not a dozen books, but any book he lifted up, which was a wonder to them all. He could read even the books they had in their own language, and the Bible translated by the English missionaries, and it was a wonder to hear their own tongue coming out of these black marks on white paper. It was custom to allow our boys to play with the black boys, but not our girls with their girls. But after a certain age it stopped, not by law but by custom, and the growing white boy became the master.

Alan Paton, Too Late the Phalarope. Charles Scribner's Sons, New York 1953
page 21
African people, the variety of races and climatic conditions are all factors which render much of what is done in other countries inapplicable here.²⁹ As a town planner Floyd simply accepts the "custom" of the way white people live in South Africa and regards his task as one which should facilitate this as best as possible. Thus questions of servant's quarters or the "variety" and hence separation (according to apartheid principles) of the races are not called into question when considering the planning of a town. Such issues, Floyd and other like-minded technocrats believe, are best left in the hands of the government and its politicians.

Site Selection
In discussion on the considerations for selecting a site, Floyd claims that this is similar to the case of selecting a site for engineering works such as dams, main roads and railways, and that "long technical experience is required before a good selection is possible."³⁰ Floyd and Calderwood will be seen to be in agreement about the role of "science" in planning. Floyd believes that "native townships" should be located beyond the industrial area of a new town and should be on slightly sloping land suitable for "small erven." This assumption is indicative of the attitude of planners in South Africa towards the housing of black people. First, it assumes that town planning will follow the principles of apartheid in that the races will be separated; and second it shows that the separation will be spatial, that the "native" township will be located on the far side of the

³⁰Ibid., p1
Examples of bad block design taken from existing townships and good solutions to the problem.
Floyd, Township Layout, p36
industrial area of the town, which serves as a barrier between the races.

In writing about the financial implications of a new township, Floyd claims that the development of a town is different to that of a suburb in that:

... land should also be provided for cemeteries, native location, municipal activities, large open spaces, recreation grounds and commonage, as well as disposal sites for refuse, nightsoil or sewage.\(^3\)

Floyd's attitude towards the housing of black people is that they be considered in the same category as, and dealt with like cemeteries, refuse and sewage. These items on his planning checklist were legislated for by the government, often by laws arising out of health requirements, as well as political conveniences.

**Township Layout**

When discussing the layout of towns and suburbs, Floyd maintains that the more important considerations are traffic, street widths, drainage, road grades, aspect, direction of streets, arrangement of open spaces, location of local centers, various uses, sizes of erven, parking, survey difficulties and grouping of buildings. He criticizes idealist or utopian plans, claiming that it is fatal to allow an obsession to result in achieving perfection in one direction only. This may be seen as a criticism on the works of Frank Lloyd Wright and Le Corbusier, whose plans for cities were well known in South Africa. Floyd's criticism is that the groupings of buildings are not the prime

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\(^{3}\) *Ibid.*, p6
Potchefstroom township designed by Bowling and Floyd. Note how the township is hemmed in by hills and ridges; how there are very few roads leading into and out of the township; and how a hierarchy of roads is established. Note too, the use of road bays and the positioning of schools so as to form neighborhoods within the larger township.
Floyd, Township Layout, p28
purpose of townships layout, but that sites for buildings and good access to and from these sites are paramount. Floyd's attitude is largely one of technocratic pragmatism.

Floyd claims that planning is largely about good access to and from the sites in a township, and that under "modern conditions" the means of access has also become the means for the provision of essential services. He recognizes five main forms of layout for townships: gridiron pattern, hexagonal forms, geometric types, radiating patterns, and contour layouts. He recommends that no particular form of layout should be rigidly adhered to or habitually adopted, but that topography of the site and the surroundings should be the dominant factor in determining any layout. This is because while vistas and views are important, the access roads and traffic considerations are also vital, with services running beneath them, the costs of such are determined by the topography. His attitude is one of technical rational planning.

Floyd claims that the gridiron has the advantage of creating a large number of rectangular blocks which is particularly useful in townships with small plots. The gridiron pattern will also produce better results than more complex patterns when handled by an inexperienced designer. However, he warns that the gridiron used at a large scale will result in monotony, with row upon row of similar streets in a barrack like effect.
Map of Soweto showing abstract grid like patterns, seemingly extendable forever. Whole parts built at once are barely discernable from others, and the lack of natural change over time is evident in the simple geometries which persist.
Concerns for planning at this scale seem somewhat removed and abstracted from the lives of the people who will live in these places, and more to do with their soundness on achieving a suitable pattern for building sites and efficiently running services. He does admit to "boredom" and "barrack" like results in some cases, yet this criticism was not accompanied by alternative suggestions to improve the situation in black townships and he clearly is aware of the outcome.

Floyd writes that radiating patterns, or the "spider web form," gives the easiest and most direct access from any part of town to its center. If used indiscriminately, however, it may result in concentrations of traffic and people at places where they do not wish to be, and Floyd cites Orlando, Soweto, as the wrong use of the spiderweb form.\textsuperscript{32}

As a student of architecture in Johannesburg it was pointed out to me that the street pattern in such townships as Orlando, Soweto, were actually designed with security measures in mind. The streets radiate from particular key intersections so that police or military can control a large number of streets from a single intersection, and in this way ensure the security of any organized protests or possible rioting.

In writing about layouts for various uses and different types of townships, Floyd states that "the crude all-purpose layout must give way to specialized townships to suit all particular needs."\textsuperscript{33}

\begin{itemize}
  \item \textsuperscript{32}Ibid., p14
  \item \textsuperscript{33}Ibid., p17
\end{itemize}
"Conventional and Neighborhood street systems." Floyd's township designs resemble the "neighborhood" pattern rather than the "conventional" pattern; he copied these ideas as they were supposed to create better places in which to live.
Perry, Neighborhood and Community Planning, p88
However, he believes that "municipal engineering problems" are paramount, and that "it is best to confine all efforts to a simple design such as an adapted gridiron pattern." Floyd discusses in much detail the preferred dimensions and proportions of erven for white residential townships, their relationship to the length of the blocks and the blocks to the whole. Floyd is supportive of the "super-block idea" for large townships, in that it keeps heavy traffic on the larger roads and yet allows all residents to be in easy walking distance of such routes - to catch buses for example.

The street pattern of the superblock should be so designed as to encourage the canalization of traffic into main routes and to discourage through traffic from passing along residential streets.

One must not be caught by the catch phrases of persons who have adopted the methods of patent medicine vendors to advertise badly thought out notions and ideas. Much of this may be found among designers of townships of the so-called greenbelt towns in which weird things are done to eliminate traffic.

These designers often display ignorance of traffic movement and usually increase it in their attempts to reduce same.

The above quote indicates Floyd's conservatism and pragmatism. He is extremely cautious of garden suburb ideas because he believes that they do not adequately solve the traffic problems which are at the heart of his discussion on town planning. Floyd does not write about the neighborhood unit ideas of the garden suburb and misses the point or does not agree with the reasons for the highly differentiated road widths in these designs. Floyd's entire townships are conceived of as a single unit and in this way differ from garden suburbs which have many smaller neighborhood units within them.

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34 Ibid., p18
35 Ibid., p20
Examples of bad sub-division of blocks into plots. Floyd recommends that such layouts should be avoided. A difference between these layouts and those he recommends is the positioning of the outbuildings on the sites, and the division of the corner sites.
Floyd, Township Layout, p38
Floyd's attitudes to open space in white residential areas and their positioning are illuminated by his attitudes towards "native servants."

... public open space at backs of erven, unless such spaces are very large, become rubbish heaps, latrines for native servants at night and places where burglars may hide from police patrols. They are in fact totally unsuited to our conditions and are rightly frowned upon by the Transvaal Townships Board.36

When Floyd refers to "our conditions" he is referring to the racial tensions and inequalities that exist in South Africa, and the fears that white people, in general, have of the black people. His description of their behavior, whether myth or fact, certainly has no justification or proof, and is typical of the conservative white view of the "uncivilized native." It is also this racial opinion which becomes part of the reasoning process for town planning and design. The political ideology becomes buried in the technocrats mind, whose job it is to solve "given" problems, the "natives" being one of them. Floyd does, however, advocate erven (plots) fronting on to open space, which would increase the value of surrounding erven to sufficiently offset the additional road lengths and services required. Such open space, being visible from the road, could be easily policed and would, we assume, not attract the "native servants" as open spaces at the back of erven are feared to do.

Open space statistics are detailed by Floyd for white residential suburbs, and he recommends at least 10 acres per 1,000 persons37.

36 Ibid., p20
37 Ibid., p21
Township of Linton Grange, Port Elizabeth, designed by Bowling and Floyd. The plan of this township closely resembles that of the plan by Perry in his work on the Neighborhood Unit.
Floyd, Township Layout, p25
and with erven sizes from 10,000 square feet to one acre in size. Floyd does not compare this directly to the density and plot sizes he recommends for the black townships. The standards he suggests for the townships are much lower than for the white suburbs as I shall show. An example of a suburb laid out on the super-block principle and designed by Floyd's firm of Bowling and Floyd is Linton Grange at Port Elizabeth. See figures 352. The main roads enclosing the super-blocks follow the topography of the site. Each super-block is planned with its own local center and school. Liberal park and open space have been provided, and the erven follow the sizes indicated above. Compare this with his design for a proposed new location at Worcester, where the average sized plot is 50 x 95 feet, and there is relatively little open space.

Floyd's discussion of Industrial townships revolves mostly around the provision of railway sidings and topography, because "railway facilities are essential for most large industries" and the fact that railway tracks are limited to certain inflexible grades and curves. Floyd brings in the discussion of the provision of facilities in industrial areas for the "natives", which is once again indicative of his attitude.

Provision should be made in industrial townships for parks and public open spaces where workers may rest during lunch hours. Adjoining such open spaces, which should be provided for Non-Europeans as well as Europeans (separately?), business erven for tearooms and Native eating houses should be planned. . . . Ample space ought to be provided for Native

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38 Ibid., p22
recreation. Industrial zones offer the opportunity to plan Native recreation grounds well away from any European residential areas.\textsuperscript{39}

The first attitude towards black people which becomes clear is that dealing with the duplication of amenities and services as required under apartheid legislation. Even though Floyd tends to be pragmatic, he does not regard the doubling up of parks or of shops and recreation grounds for racial reasons as anything but natural and acceptable. The second attitude in line with apartheid principles is that of spatial separation of the races, except on the factory floor, where the black people provide the white man's labor. Floyd, here, maintains that the vast sizes of industrial zones provides an opportunity to distance the amenities for the black people from those of the whites. The industrial township for Lenz Station near Johannesburg, designed by Bowling and Floyd, indicates the attention to topography and railway tracks, as well as the duplication of facilities for "Natives" well away from those for the "Europeans."

Floyd devotes a section in his book on township layout to "Native Locations" which he describes as an area set aside for occupation by "Natives." Floyd's description of the history of "municipal locations" is worth quoting as it contains and sheds light on many of the values that he holds as given or true.

Municipal locations came into being as areas where Hottentots or Kaffirs resided when they left their tribal kraals to seek work as domestic servants or unskilled laborers among Europeans in towns. They provided temporary abode for such Natives. Stray Natives from tribes broken up by pestilence or war, also drifted to these locations, but their residence was more of a permanent nature.

At first locations grew as a collection of huts built by these Natives without

\textsuperscript{39}Ibid., p23-24
any order or control. As they grew it became necessary for local authorities to provide sanitation and other essential services. In order to make this possible some order was essential and this led to the layout of locations. A gridiron pattern with streets 20 - 40 feet wide and stands of roughly 50 x 50 feet was usual.40

Floyd believes that the urbanizing black population is largely responsible for its own fate, having chosen to leave the countryside for the urban areas developed by the white people. The hierarchies and social structures developed within the early urban settlements are disregarded or not recognized by Floyd, appearing to him "without order or control." The fact that they did not correspond to the "European," or what I have previously called Anglo-American, suburban form meant that they would be unacceptable to the South African whites. The "order" which Floyd describes which was imposed on these locations contrasts with what he previously had shown to be true for white suburbs. Here the erven are far smaller and he criticizes the outcome suitably.

The general appearance of these old locations is bad. From a disorderly mass of huts locations were changed to monotonous rows of shacks or rooms either built by the Natives, Europeans or the local authority. No centers or parks were planned or developed to break the barrack-like monotony of rows of small dwellings.41

It is the appearance of these "locations" which troubles Floyd above all. He might have mentioned what life may be like in such a place, or criticized the necessity to separate races at all. Instead he makes some proposals within the existing system which he believes could change the "appearance" of such "native locations." I suggest that Floyd's preoccupation with the appearance of the townships has to do with the essence of the white patronizing the black people in South

40 Ibid., p26
41 Ibid., p26
Floyd demonstrates the set-back of houses from street fronts in locations. This was derived from Anglo-American suburban planning, and even so does little to relieve the monotony of township layout in South Africa. The scale and form of the houses is identical and repeated "endlessly." Much more than a small setback from the street is required for variety and interest.

Floyd, Township Layout, p27
Africa. The townships must "appear" to be nice places to live in, especially to those who are providing them, so that they might be pleased with their own good-deeds. Whether such places are of benefit to the population which lives in them appears besides the point in Floyd's study if these places. "Attractiveness" in Floyd's town planning terms often refers to the planting of vegetation, but even this is not a cure-all, as Floyd recognizes. He points out that locations are often in areas with poor rainfall and which lack water and therefore trees and plant growth, resulting in the drab appearance of locations.

What Floyd omits to say is that this criticism is not equally valid for white suburbs, the reason being that the selection of sites for white suburbs and black townships are not equitably done. The "native locations" are most often situated beyond the white towns which have for themselves the prime sites and resources. The black areas are often far enough away to be quite dry and lacking in resources and services, as the white suburbs are rich. The distinction and selection of sites for black townships is made by people in various government departments, rather than by the forces of entrepreneurial spirit or even objective technocrats. It is for this reason that the white people in power select the best for themselves, and give suitably small and unwanted pieces of land over for black occupation. The social relations between master and servant, white man and black man, are continued over to the selection and occupation of the land.
Raymond Unwin, Hampstead Garden Suburb. The plan shows cottages facing one another pulled back from the street front creating little squares - from "Town Planning in Practice" (1909). This itself is a corruption of the suburban ideal. The social benefits of the suburbs are here forgotten in favor of creating a picturesque and aesthetic studied formality. This is again corrupted by Calderwood and Floyd in the planning of the townships in South Africa.
Simon Pepper, "Suburb, Townscape and the Picturesque:" in Casabella 487, 1983, p66
As Floyd is disappointed with the appearance of the locations, he suggests three ways to "control" and make these places more interesting. First, he believes that the keeping of livestock by the black people must be controlled; second, the gathering and collection of "scrap" to build fences and sheds must be prevented; and third, the siting of houses should not necessarily be in rows, even when streets are straight and regular. The first two of these factors deal with the control of land use, and its strict enforcement. The third factor is illustrated by Floyd (see figure 356), and shows the set back of houses from street lines in locations. It is interesting to compare this to the plan for Hampstead Garden Suburb by Raymond Unwin published in his book *Town Planning in Practice*, (1909), (see fig. 358), and in which he shows cottages facing one another are pulled back from the street front to create little squares for purposes of the picturesque. Floyd is thus using ideas specifically derived for middle class English suburbs and recommending their use in townships for poor black people in South Africa.

Floyd calls for much open space and parks to break up the monotony of the townships and to create interest. He even recommends that "Native styles of hut (traditional African kraal) design should be introduced" and that the township layout should enable this to take place. This is a peculiar idea for him to introduce here as Floyd has been so strong an advocate, as was Calderwood, of the Anglo-

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Calderwood indicates how the set-back of planting and of building lines are intended to give interest to the street scene. Calderwood, Native Housing in South Africa, p110 (above); Principles of Mass Housing, p112 (below).
American way of life, using the garden suburb model as an ideal form to be emulated in many respects.

Floyd discusses the sizes of plots in the locations with respect to economy, claiming that since few locations pay their way, local authorities can only provide sub-economic housing. Although the Native Affairs Department requires plot sizes of at least 50 x 75 feet regarding 50 feet as the minimum frontage, Floyd recommends an efficient size of 40 x 80 feet. Extravagant frontage, he claims, taxes the provision of services, and the more economical the services, "the more will be the amenities that may be provided." 

He also claims that a "sufficient" garden is essential.

Too small a stand cannot be used for Natives because picannins do not use the closets but make use of the ground around the houses. This habit makes a garden essential. Apart from this crude practical reason the massed, dense effect created by small stands should be avoided. Natives will appreciate and make full use of a garden where water is available or the rainfall allows this.

The above quote is typical of the attitude which runs parallel to the technocratic issues of economic sizes which planners like Floyd use to justify their decisions. Gross generalizations of an image of the "Native" are called upon to show that these people certainly do not share all "our western" standards, and that what is provided for them is therefore both generous and sensibly separated from white areas.

43Floyd, T. B. Township Layout, p27
44Ibid., p27
Road bay block. Floyd made much use of this layout in the townships he and his partner Bowling designed. Floyd claimed that it improved efficiency since he believed that black inhabitants of the townships would never own cars and thus not require road access to their houses.

Floyd, Township Layout, p32
Floyd is quite clear in stating that the townships are derived from the principles of the "European" suburbs, which in turn were largely derived from the Anglo-American notions of suburban life. However, what I refer to as corruptions of an ideal for political reasons, Floyd call "special considerations."

Most of the principles involved in the layout of residential townships for Europeans apply equally to Native locations but in certain respects there are differences and these need special consideration when planning.4 5

The differences Floyd refers to more specifically include the lack of traffic in "municipal locations," the omission of "servants' rooms and the other problems of European residential areas where black and white live on the same erven."4 6 A further difference is due to the method by which locations are administered. "The "headman" principle is often adopted and this is facilitated if houses are grouped into units and these units into super-blocks."4 7 This is a way in which Floyd promotes the idea of "road-bays," whereby much of the inner part of a block can be used, and road-making and the provision of services can be economized. Floyd has several examples in his book. See figures 362. After doing a technical study, Floyd sums up by stating that road bays where no road access to garages need be supplied, such as in locations, will prove to be economical; but that in white suburbs where road access must be provided (white people can afford to have private vehicles whereas black people cannot) the

45 Ibid., p27
46 Ibid., p27
47 Ibid., p27
Examples of well designed sub-division of blocks into plots. Floyd takes care not to face these houses in a white suburb towards the outbuildings and servant's quarters of neighboring houses.
Floyd, Township Layout, p39
road bays will prove to be more expensive than the ordinary long block, wasting land and making this layout uneconomical.

It is interesting to compare the erf (plot) size of 40 x 80 feet recommended by Floyd for use in the "native locations," to those he suggests for use in the white suburbs. The smaller erven in white suburbs, he claims, should approach the rectangular shape, and that 60 x 120 feet is adequate for small houses, but "the average house of good type requires a site of 70 x 150 feet or 80 x 150 feet at least." Floyd provides no reasons as to why he believes that the sizes of erven recommended for people of different races should be different sizes, yet in the context of South African politics it is accepted and understood as being so. He may claim reasons of economy and affordability, yet the black people were never given the opportunity or the choice of land ownership like the whites, the incentives being removed, and the townships forced upon them, the argument of economies cannot be proved outside the realm of political activity.

In discussing the "Position of and the Space About Buildings," Floyd once again reveals his attitude towards black people. I point out the attitudes of these educated planners with much influence and power to reveal them as having a racist and therefore political bias, and to show that this bias manifests itself in the designs for the resulting townships. Thus Floyd describes the position of a house on a site in a white suburb:

The front garden should be of such a shape as to enable a suitable layout to be made. The side space is valuable in separating the dwelling form the adjoining ones, giving privacy and providing for light. At the rear the
### BUSINESS FRONTAGE IN RELATION TO POPULATIONS OF COUNTRY TOWNS 1951-6

<table>
<thead>
<tr>
<th>Town</th>
<th>Business frontage in feet</th>
<th>White population served: town and country</th>
<th>Non-white population served: town and country</th>
<th>Number of white persons served by one foot of business frontage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christiana</td>
<td>2,800</td>
<td>3,500</td>
<td>6,500</td>
<td>1.25</td>
</tr>
<tr>
<td>Naboomspruit</td>
<td>2,800</td>
<td>3,000</td>
<td>3,000</td>
<td>1.0</td>
</tr>
<tr>
<td>Potgietersrus</td>
<td>7,000</td>
<td>8,000</td>
<td>117,000</td>
<td>1.15</td>
</tr>
<tr>
<td>Kroomstad</td>
<td>14,000</td>
<td>15,000</td>
<td>42,000</td>
<td>1.07</td>
</tr>
<tr>
<td>Louis Trichardt</td>
<td>8,000</td>
<td>8,000</td>
<td>200,000</td>
<td>1.00</td>
</tr>
<tr>
<td>Parys</td>
<td>5,900</td>
<td>6-7,000</td>
<td>25,000</td>
<td>1.16</td>
</tr>
<tr>
<td>Venterdorp</td>
<td>5,000</td>
<td>6,000</td>
<td>26,000</td>
<td>1.2</td>
</tr>
<tr>
<td>Vryheid</td>
<td>8,000</td>
<td>7-8,000</td>
<td>60,000</td>
<td>1.0</td>
</tr>
<tr>
<td>Zeerust</td>
<td>4,500</td>
<td>5,000</td>
<td>46,000</td>
<td>1.11</td>
</tr>
<tr>
<td>Wolmaramsstad</td>
<td>4,600</td>
<td>5,000</td>
<td>11,000</td>
<td>1.1</td>
</tr>
</tbody>
</table>

Note: These figures are taken from investigations of Bowling, Floyd and Richardson. The population figures are approximate only as it is impossible to determine exactly the population served by a town. That for non-White persons differs greatly as in some districts large native reserves occur and these are occupied by Bantu persons of low purchasing power. These figures differ from earlier investigations but the difference may be accounted for by the greater increase in non-White populations and their purchasing power as compared to that of the White population. The figures also include much frontage not fully used.

Business frontage in relation to (race) populations of country towns, 1951-1956. Note that even though the government does not prevent black people from shopping in white areas, Floyd as a planner still separates the races in studying this phenomenon.

Floyd, Town Planning in South Africa, p124
space is useful in separating the Native servants' quarters, with their noise, from the main building. 48

Further, on the "Probable and Possible Placing of Outbuildings," Floyd writes:

These (outbuildings, by which he refers to servants' quarters) must never be in front of or close to dwellings nor so situated as to be in full view of the dwellings across the road. The erven should be so designed that this is always avoidable. 49

Thus Floyd believes that black people are noisy, they need to be accommodated near by for the convenience of having servants, but not so near as to be heard or seen. Floyd gives many examples of good and bad sub-division of blocks into erven in order to demonstrate the proper and improper positioning of outbuildings on sites in white residential areas. Suburban layout can thus be seen to be strongly affected by racial considerations in Floyd's thinking. See figures

Floyd's attitude involving race and planning are further exemplified in his discussion of business centers. In quoting the proportion of business to allow for the population in a suburb, he claims that one foot of business frontage will serve 8 persons, which is the equivalent of one 20 feet frontage shop per 160 persons and one 60 feet frontage business erf to 96 residential ones. Floyd writes that:

These figures are for Europeans and it has been found that half of this is required for Non-European suburbs. 50

Floyd gives no reasons for the fact that "Non-Europeans" require half the amenities and shops than "Europeans," and if we assume it is

48 Ibid., p37
49 Ibid., p38
50 Ibid., p54
Number of persons to various types of shops or business premises.

<table>
<thead>
<tr>
<th></th>
<th>Number of persons to one shop (Average)</th>
<th>Average of 7 American cities New York Regional survey</th>
<th>Number of persons to one shop or business</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>City Suburbs</td>
<td>Town</td>
<td>based on 8 suburbs</td>
</tr>
<tr>
<td>General dealer and grocer</td>
<td>500</td>
<td>400</td>
<td></td>
</tr>
<tr>
<td>Draper and clothier</td>
<td>1,000</td>
<td>1,300</td>
<td></td>
</tr>
<tr>
<td>Butcher</td>
<td>2,000</td>
<td>1,850</td>
<td></td>
</tr>
<tr>
<td>Baker</td>
<td>4,000</td>
<td>3,500</td>
<td></td>
</tr>
<tr>
<td>Chemist</td>
<td>2,000</td>
<td>2,300</td>
<td></td>
</tr>
<tr>
<td>Cafe and tea room</td>
<td>4,000</td>
<td>2,500</td>
<td></td>
</tr>
<tr>
<td>Hairdresser</td>
<td>2,000</td>
<td>2,400</td>
<td></td>
</tr>
<tr>
<td>Auctioneer</td>
<td>12,000</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td>Garage and filling station</td>
<td>3,000</td>
<td>2,000</td>
<td></td>
</tr>
<tr>
<td>Cycle dealer</td>
<td>4,000</td>
<td>4,500</td>
<td></td>
</tr>
<tr>
<td>Greengrocer and fruiterer</td>
<td>2,000</td>
<td>5,000</td>
<td></td>
</tr>
<tr>
<td>Furniture</td>
<td>5,000</td>
<td>5,000</td>
<td></td>
</tr>
<tr>
<td>Tailor</td>
<td>—</td>
<td>2,500</td>
<td></td>
</tr>
<tr>
<td>Watchmaker and jeweller</td>
<td>—</td>
<td>3,200</td>
<td></td>
</tr>
<tr>
<td>Hardware</td>
<td>6,000</td>
<td>7,000</td>
<td></td>
</tr>
<tr>
<td>Bazaar</td>
<td>8,000</td>
<td>7,000</td>
<td></td>
</tr>
<tr>
<td>Fishmonger</td>
<td>8,000</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>Stationer and printer</td>
<td>6,000</td>
<td>2,800</td>
<td></td>
</tr>
<tr>
<td>Bottle store</td>
<td>—</td>
<td>4,000</td>
<td></td>
</tr>
<tr>
<td>Bioscope</td>
<td>4,000</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Miscellaneous shops and offices</td>
<td>2,000</td>
<td>1,000</td>
<td></td>
</tr>
<tr>
<td>Total business</td>
<td>European area 1/150</td>
<td>Small town 1/100</td>
<td>non-European 1/400</td>
</tr>
</tbody>
</table>

Note.—The number of persons to one business premises increases with increase in percentage of non-European population, or school population. The number decreases with increase of density of district, wealth of population, popularity as pleasure resort and distance from other towns. The number increases for a small town near to a city, but decreases for a city near to other small towns (radius approximately within 50 miles).

To quota of shops or business premises for small towns add two Banks, one Post Office and one Bioscope if over 2,000 population and not close to large city.

Number of persons to various types of shops or business premises. "Zoning in its relation to the use of Land and Buildings", by T. B. Floyd, Minutes of Proceedings, S.A. Society of Civil Engineers, Vol. XXXII, 1934. Note that Floyd is unable to leave out the question of race and includes a note below this table to remedy this fault.

Floyd, Township Layout, p63

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because the black population cannot afford to economically support as many shops, Floyd assures us that higher income suburbs require less local shopping, whereas it is in areas where weekly paid workers live (mostly black labor), that the biggest local shopping centers develop. This contradiction is difficult to understand, and Floyd's attitude must be ascribed to a rationale which assumes that "Non-Europeans" do not require the same standards as "Europeans."

Floyd's bias towards black people as "uncivilized" is further illuminated in his discussion of the positioning or situation of a business center in a town, and the planning of roads around them. He claims that local shopping centers are gathering places for the "native servants" of the neighborhood, and that this can take place near main feeder roads "with far less annoyance" than in the center of a residential area. The "natives" are regarded as an "annoyance" and are to be kept away from the white suburb's center. Planning principles are thus based on racial prejudice and are presented in a text book on township layout as "scientific." Further, Floyd writes, small white towns which have their own black locations in close proximity, do not have the same problem (of "natives" gathering about the shopping center), as these people go home to their location at nights and weekends and are thus not an "annoyance."

Thus the principles of apartheid planning are fully endorsed by Floyd, and the concept of the complete separation of races is accepted as a good thing. A further indictment of "Native" behavior by Floyd is the following:
<table>
<thead>
<tr>
<th>Town</th>
<th>No. of persons to one business premises</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barberton</td>
<td>82</td>
<td></td>
</tr>
<tr>
<td>Belfast</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Bethal</td>
<td>68</td>
<td></td>
</tr>
<tr>
<td>Boksburg</td>
<td>200</td>
<td>Near large city</td>
</tr>
<tr>
<td>Carolina</td>
<td>130</td>
<td></td>
</tr>
<tr>
<td>Christana</td>
<td>200</td>
<td>Poor area</td>
</tr>
<tr>
<td>Ermelo</td>
<td>105</td>
<td></td>
</tr>
<tr>
<td>Heidelberg</td>
<td>170</td>
<td>Near large city</td>
</tr>
<tr>
<td>Klerksglorp</td>
<td>165</td>
<td>Poor area</td>
</tr>
<tr>
<td>Lichtenburg</td>
<td>230</td>
<td>Poor area</td>
</tr>
<tr>
<td>Louis Trichardt</td>
<td>130</td>
<td></td>
</tr>
<tr>
<td>Middelburg</td>
<td>130</td>
<td></td>
</tr>
<tr>
<td>Pietersburg</td>
<td>130</td>
<td></td>
</tr>
<tr>
<td>Potchefstroom</td>
<td>188</td>
<td></td>
</tr>
<tr>
<td>Rustenburg</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>Standerton</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>Vereeniging</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>Volksrust</td>
<td>110</td>
<td></td>
</tr>
<tr>
<td>Witbank</td>
<td>140</td>
<td></td>
</tr>
<tr>
<td>Zeerust</td>
<td>120</td>
<td>Large Native population</td>
</tr>
<tr>
<td>Bethlehem</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Frankfort</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>Harrismith</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Heilbron</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>Kroonstad</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>Caledon</td>
<td>62</td>
<td></td>
</tr>
<tr>
<td>Calvinia</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Cradock</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>De Aar</td>
<td>120</td>
<td>Poorly populated district</td>
</tr>
<tr>
<td>George</td>
<td>81</td>
<td></td>
</tr>
<tr>
<td>Graaff Reinet</td>
<td>120</td>
<td>Large Native population</td>
</tr>
<tr>
<td>Queenstown</td>
<td>108</td>
<td></td>
</tr>
<tr>
<td>Worcester</td>
<td>110</td>
<td></td>
</tr>
<tr>
<td><strong>Johannesburg Suburbs—</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vrededorp Area</td>
<td>120</td>
<td>Serves other areas</td>
</tr>
<tr>
<td>Parkview</td>
<td>250</td>
<td>Poor area</td>
</tr>
<tr>
<td>Rosebank, Parktown North area</td>
<td>150</td>
<td>Well-off area</td>
</tr>
<tr>
<td>Hospital Hill, Hillbrow area</td>
<td>150</td>
<td>Well-off area</td>
</tr>
<tr>
<td>Yeoville, Bellevue</td>
<td>168</td>
<td></td>
</tr>
<tr>
<td>Turffontein and Southern suburbs</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>Mayfair and Fordsburg area</td>
<td>115</td>
<td>Serves other areas</td>
</tr>
<tr>
<td>Melville</td>
<td>125</td>
<td>Poor area</td>
</tr>
</tbody>
</table>

Floyd, Township Layout, p64

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Floyd's certainty as to the poor behavior of black people is powerful and he paints a picture of conditions to be avoided relating to the differences between the races in the creation of environments. A table from Township Layout (see figure 370) makes a very clear statement as to the provision of different environments for white people and for black people. My analysis of Floyd's work does not deal specifically with black "townships," but rather with the attitude of Floyd to black people in white suburbs. This attitude is directly translated to make a difference in the design of such places in accordance with both apartheid principles and Floyd's own interpretation of the "problem."

In a discussion on Special Open Spaces for white suburbs, Floyd cites the need for agricultural showgrounds, golf courses, a racecourse, camping sites and most importantly, he stresses the need for a site for Dingaansday gatherings. Dingaansday, now referred to as the Day of the Covenant, is the most Nationalistic of Afrikaner public holidays, and recalls the day when the boers defeated Dingaan and the Zulu warriors at the famed Battle of Blood River. It has become common to hear political leaders speak out for their "volk" on this day at various rally grounds around the country, and as it is revered by the Afrikaners, it is despised by the majority of the black population. It is necessarily associated with the Afrikaners' power.

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51 Ibid., p58
and superiority over the black people, and thus inherently political. Floyd writes that gathering grounds for Dingaansday meetings should have a large flat portion for meetings, a wooded area for picnic grounds, and if in large parks "must be set apart in order to enable the responsible committee to control same and ensure that outsiders do not cause a disturbance during gatherings."\(^5^2\)

By recommending a blatantly political site in every new town that is planned Floyd is clearly flaunting his political colors, (or those of his Afrikaner superiors?), and it is values such as these which become so deeply entrenched in the white population and in the form of their suburbs and towns through the work of planners like Floyd. He is by no means an exception to the rule, on the contrary, by including such values in a books on planning he is entrenching these values even further, and showing his belonging to the apartheid status quo.

**Land Control**

Floyd, writing in his book *Town Planning in South Africa*,\(^5^3\) describes the history of the control of the use of land in terms of controlling the races who could use the land.

The development of towns resulted in a flow of the non-white population to the towns and the question of separation, which later crystallized into the "apartheid" policy arose. . . This need of control was first met in the layout of new townships by means of restrictive covenant on racial occupation, use and density. The first restrictive covenants or conditions of title as they were called were on a racial basis preventing ownership or occupation by persons of non-white race groups. Later such conditions were extended to use, density and other factors affecting the amenity of an

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\(^5^2\)Ibid., p72

\(^5^3\)Floyd, T. B., *Town Planning in South Africa*, Shuter and Shooter, Pietermaritzburg, 1960
area. The idea was not entirely new but rather naturally flowed out of the idea of servitudes, which were imposed from earliest times in respect of thoroughfares, water furrows and water rights.5 4

Floyd points out that the earliest restrictions on the land were racial, and the only reasons he suggests for the control of the "intermixture" of uses were to improve the "amenity of an area." His view, that "non-whites" affected the "amenity" detrimentally, as far as white people were concerned, must be seen in the terms he uses, restrictions on a racial basis. These are not "scientific" or objective. These layerings of racism and their incorporation into town planning texts enables and aids the health of apartheid in South Africa. The history of town planning and the history of apartheid become inseparable.

Legislation
While I have dealt fairly comprehensively with the history of the townships in the preceding chapter, Floyd discusses "relevant legislation" and in his attempt to clarify the laws and Acts dealing with housing in particular, the complexity, difficulties and political maneuvering by various government departments becomes apparent. The Housing Acts of 1937, 1944, 1945 and 1957 created many Commissions and Boards which were given varied and sometimes overlapping responsibilities in the preparation of layouts for housing schemes, town planning schemes and regional schemes. The shifts of power from one government department to another occurred at an important time with respect to the creation of the townships. They reflected the direct control that the government

54Ibid., pp41-42
had over the provision of housing for black people, and that any so-called "technocrats" claiming to work objectively towards providing a "scientific" solution to the housing "problem" were necessarily working closely with, or for the government.

Writing about "Native Areas", Floyd describes some of the legislation passed in attempting to control these areas, and gives his reasons for these controls. His reasons reflect those of the government law makers and are stated quite plainly. He describes how the Land Acts of 1913 and 1936 were set up to control and allocate land in the rural areas to the black tribes. He claims that this was necessary because "these people are notoriously bad farmers and have destroyed or ruined much of the land in their occupation." He also explains how control of the locations in the urban areas was done by the Native Affairs department and the Bantu Housing Board.

The reasons for racial legislation are couched in patronizing terms of helping the "natives" because they are "such bad" farmers. The land is controlled by the white government and allocated to the black people as tribes, whether they feel strong connections to these tribes or not, and whether they want that land or not. They are not necessarily consulted, but are "looked after" by the department of Native Affairs. The ideology of apartheid can be seen to separate the majority black population into tribes in order to prevent a massive unity against common cause, the white minority. The *raison d'etre*

55Ibid., pp44-45
for the government departments responsible for the creation of the townships is government policy, and not a planning ideal or a desire on the part of the inhabitants.

Floyd explains that the reasons for the Group Areas Act are simply to "enable racial zoning of areas for the use of various race groups," and describes how together with the system of racial classification, this act is a pillar of the apartheid system. Racial zoning of land is seen by Floyd as perfectly natural, he discusses it without passion, as though this legislation is quite sane and moral, perhaps no different to any other servitude or right of way over land which might be legislated. The Group Areas Act necessarily goes hand in hand with racial classification and thus each person is allotted their legal space in the country.

In contrast to the provision of housing for the black people, Floyd describes the situation for white people, for whom housing is available on the basis of home ownership assisted by building societies, rather than on a tenant, government or local authority housing scheme basis. Since the main provision of homes is through the sale of land, Floyd claims that town planning is therefore an administrative matter based on the control of the subdivision of land and the control of use for purposes of health, amenity, convenience and economy. Thus all zoning including racial zoning is done for the claimed purposes of health, amenity, convenience and economy. This

\[56\text{Ibid.}, \ p45\]
is to suggest that without the racial separation, these factors would be adversely affected. This is a giant slur against people who do not share Floyd's skin color. That Floyd sees town planning as an "administrative matter" means that town planning in South Africa is seen as an arm of the national(ist) government, carrying out and putting its policies into practice.

Attitude to Town Planning in South Africa
Floyd refers to his partner in practice, Colonel P. J. Bowling as the "father of Town Planning in South Africa," as he claims that Bowling was the first person to start work on town planning schemes in South Africa. Bowling came from England to southern Africa in 1931, and Floyd comments on the differences Bowling must have found upon his arrival in Africa, "like a fish out of water." 5 7 Floyd praises Bowling, and yet contradicts himself by stating that because South Africa differs from Europe in the complexity of its racial make up, the successful planner must be South African, which can be understood to mean that the planner must support the government and apartheid in practice.

Floyd is a pragmatist in that he sees town planning as being closely allied to the laws of the country. He claims that the form and character of town planning schemes in any country are "largely dictated by the enabling legislation." 5 8 He goes on to quote Dr. Thomas Adams form his book Recent Advances in Town Planning.

57 ibid., p47
58 ibid., p51
and whom he calls "the greatest of all English town planners," as saying:

Giving statutory effect to their proposals must always be kept in mind. In the final analysis the value of a plan is conditioned by the extent to which it can be given legal effect. Law is a "means to an end." 59

Floyd agrees with the statement that town planning without legal support is of little value. This is important to this thesis as legislation in South Africa is made by a minority white government, who, since 1948 has used all the tools in its power to create apartheid and to make it work. A direct link between politics and the practice of planning can be found in legislation, because town planning legislation requires all local town planning schemes to fit into the bigger picture of racial zoning in the country.

Since planners are required by law to act within the limits of apartheid legislation, it becomes important to examine their personal values to see whether they accept these constraints or not. Although I am only examining a few individuals, their work had vast repercussions affecting the lives of many thousands of people who had to live in the houses and in the townships for which they were responsible. Floyd believes that the principles of nationalism in town planning should go further than the "foundations" provided by the enabling or controlling legislation. It must be remembered that nationalism in the South African context is synonymous with racial nationalism, and for the whites who support the "Nationalist" government, it can be interpreted as support for apartheid and a

59 Cited in Ibid., p51
separation of the races. Nationalism does not necessarily refer to those policies which benefit the entire country and the majority of the people.

... A town must be the expression of the people who live in it and the country in which it is situated. It must be national. The work of the town planner is to lead and guide this expression to a great extent. He must create the set of circumstances, which gives the opportunities for such expression.60

Floyd claims that all town planning must be "national in its outlook" and suited to the nation concerned. He believes that this requires a knowledge of the people, of the history, of the ways of life and customs of the people of the country. Floyd fears that foreigners might not understand the principles espoused by the government on trends of "social development," or the political structure of the country. Floyd is placing his world of planning in full support of the government, and does so because he claims his knowledge of the history of the country enables him to understand the "trends". He claims that "to be able to plan ahead trends in social development must be known and the town planner must apply this knowledge whether he agrees personally with such trends or not."61 His belief that planners must work within the "system" sounds more like a confident Nationalist party politician facing opposition than like a planner assisting a landless majority. Floyd places serving government ends above finding new solutions through the process of planning to South Africa's complex situation. Furthermore, he maintains that the white races have kept "a surprizing order and

60 Ibid., p60
61 Ibid., p58
stability" in South Africa, and his viewpoint on Nationalism in the country refers particularly to white supremacy rather than to all the inhabitants in the country. He claims that it is the government's planning legislation which has assisted in enabling the white race to maintain such "order" in the country, and for this reason it must be supported. Floyd also stresses repeatedly that town planning is an administrative function, subject to government policy, and that it cannot be isolated from other administrative activities. Floyd states quite clearly that planning must kowtow to government policy, as it serves as an administrative arm of apartheid. It is his understanding of the "background" of towns in South Africa which he believes gives him the right to practice in South Africa, and which leads him to fully support the government's legislation on which all planning rests. This is a strong call for the support of the principles of apartheid.

Attitude to History
Floyd believes that the study of past and existing conditions, or a civic survey, is essential for a town planning scheme to be prepared. He claims that the facts that need to be known deal not only with the form of the environment in which people live, but must be broadened to include socio-political aspects as well.

It is contended that without a good knowledge of the history, customs and ways of life of the peoples of the country no correct use of facts collected can be made. The same applies to a lack of knowledge of development, economic, social and governmental trends.\textsuperscript{62}

Thus if civic surveys, by which town planning schemes must be prepared, deal with the history of the form of a place, and include a

\textsuperscript{62}Ibid., p59
Three-roomed house, NE 51/6. Also known as the "matchbox", this is the most commonly built house in the townships of the 1950s. Note that even the living room is regarded as a bedroom. There are no internal doors, although Calderwood's writings stress the need for privacy. Note also that there is no bathroom, although the idea of "civilized" and "western" living is stressed. The realization is a long way from the theory.

Calderwood, Native Housing in South Africa, p29
"knowledge" of the social and governmental trends, then it is clear that by this that Floyd means an acceptance (comprehension) of government legislation and apartheid principles, dealt with as equally important as other "facts" collected. "Governmental trends" are dealt with as facts, not as ideology of a particular people which might be contentious and differ from that of the majority of the country.

South African History
Floyd write about the conflict between the English and the Afrikaner, the white people of the country, as though he were a politician. He pays scant attention to the majority of the population, the black people, just as though he were a politician answering to a white electorate, as exists in South Africa. Floyd claims that due to the rapid pace of urbanization in South Africa, the state of the urban population, black and white, is in a state of flux. Ways of life are changing rapidly and he writes that he is not yet sure what will arise. If planning is, about extrapolating the facts of the past into the trends of the future, as Floyd claims it is, then he states that to him it is not yet evident what this future will be. He thus relies entirely on the lead of the government to point out that direction, without advocating, negotiating or directing towards a better place, as planners are often thought of as doing.

Floyd predicts this criticism and answers by being both defensive and aggressive towards visionaries and idealists. He notes that the town planner must realize in a "practical way" just what town
Three-roomed semi-detached house, NE 51/8. This is similar to two of the 51/6 houses placed together with small external stores between them where they meet. Note that it is difficult to differentiate between the units from the elevation, and that even the store doors are the same as the units' front doors. This anonymity and repetition can be seen to represent a lack of identity and reflects the lack of citizenship which the occupants of such units lived with. Calderwood, Native Housing in South Africa, p30
planning can do. He claims that the "right approach" to the subject is necessary, and that a planner will fail if he does not fully appreciate economic limitations.

Floyd criticizes the lack of power of the planner and the lack of his professional standing, being regarded, in Floyd's eyes, by some, as almost mystical. He is upset that "laymen", among whom he counts politicians, have much control over town planning.

... There is nothing magic in town planning, it is but an instrument of administrative control and its value depends on the quality of the instrument. Schemes which, like fairy tales, pander to people's escapism and interest for a while, are useless and a great waste of effort and money.63

Some have criticized the schemes of certain towns on the grounds that these merely established the status quo in development. There are no schemes where this is entirely the case and this criticism may be regarded as an exaggeration. ... Must town planning always mean change merely to suit the whims of the town planner? The answer is of course, no.64

For Floyd, then, there is no attempt to use planning for purposes of altering the status quo. This is not to say that his work and attitude do not have a particular political bias. In fact he is very much in support of the existing status quo, and goes to great lengths to defend his position. By the "whims of the town planner" Floyd may well be referring to the schemes proposed by Le Corbusier for La Ville Radieuse and to Frank Lloyd Wright's dreams for Broadacre. These were schemes introducing much change in the way in which people lived, and Floyd clearly does not support such megalomania on the part of the planner. However, by supporting the principles of

63Ibid., p63
64Ibid., p64
Three-roomed house, NE 51/9. This is the most commonly built house type which includes an internal bathroom, in townships throughout South Africa. It forms the basis of houses built today in the "homelands" by their respective "governments".
Calderwood, Native Housing in South Africa, p31
apartheid, and planning the townships where thousands of people will live, the schemes are in fact as megalomaniacal as Le Corbusier's or Frank Lloyd Wright's; they are just not as creative or well thought out or new.

Redevelopment and Blighted Areas
Floyd writes about how town planning schemes have been able to halt the spread of blight in the cities, especially by that caused before town planning schemes by the mixture of business, industrial and residential uses in some places. Floyd cites the case of Sophiatown as the clearance of a slum area, where expropriation was the "only practical course to follow." He suggests that the local authority should take the lead, and even though it might result in a financial loss, he claims that the result in the "interests of the town" will be a gain, by which he is referring to the interests of the white people. In the case of Sophiatown, a township of mixed races, the expropriation and removals were forced at gunpoint and with bulldozers. The residents did not want to move as they saw no gain in moving to the new township of Meadowlands, an extension of Soweto, ten miles further away, and the resultant disintegration of their community.

Floyd calls upon the writing of Dr. Thomas Adams writing in Recent Advances in Town Planning once again to support his ideology of redevelopment, which, it must be noted, was not unique to South

\[65\text{Ibid., p69}\]
Analysis of the standard plan of the NE 51/9. Calderwood's analysis is an example of "scientific" planning for the most efficient plan. His concerns include sufficient natural light through the windows, the ability to arrange furniture in the house, and minimum "circulation" area or passage way. Architectural aesthetics play only a minor role in this planning of mass housing when compared to the "science" of housing people, and the ideologies behind the assumptions of the planning.

Calderwood, Native Housing in South Africa, p28
Africa, but occurred throughout Britain and the United States as well. Thus the motivation for new development and the forceful removal of slums is imported and justified by Floyd who sees it as appropriate in the South African context, whose conditions he previously described as being unique and needing careful local consideration. The issue of racial removals and zoning are well illustrated with the example of Sophiatown, which I have described elsewhere in the thesis.

**Townships and Locations**

Commenting on a housing scheme for white residents by the National Housing Commission, which used the ideas of Henry Wright, Floyd comments that the ideas are satisfactory when dealing with large sites upwards of 40,000 square feet, but the idea of turning the back of the house to the street is hopeless when applied to a housing scheme with small plots. The South African planners were obviously keen to learn from the British and American designers, but they were also inherently conservative in the aspects of what was acceptable for suburban or township design. Thus the concepts of a single house on a single erf was acceptable, but the position of the house on the erf was to follow a less innovative path.

Floyd only mentions "locations for the Bantu" to say that in these places rigid economy to keep the costs low will dictate the layouts. While the smaller erven in white areas are said to be 10,000 square feet, and even as small as 6,000 square feet, the stand sizes for the
Three-roomed semi-detached house, NE 51/10. This is the same as two 51/9 houses placed together and sharing a party wall for economy.

Calderwood, Native Housing in South Africa, p34
black people "are generally about 40 x 80 and 40 x 70 feet"66, (about 3,200 to 2,800 square feet). Floyd is fairly bitter at the provision of locations for the black people, as the land is provided by the white people. White applicants for a new residential or industrial subdivision are required to provide land for the "Bantu workers." For every acre of industrial land, three acres of land in the location must be provided; and every white residential plot must be matched with a site in the location for black people. Floyd claims that this places black people in a position of privilege as two sites for every black family are provided: one by the industrial site where the husband works and one by the residential site where his wife works. Floyd feels that this is an unjust burden to place on the white population as it results in increasing their housing costs.

Floyd's argument would be convincing in a free society, but the fact that the black people are purposely kept apart from the white people means that doubling up on all amenities is necessary. It is the price the white people must pay for their apartheid ideology, and even this seems to Floyd to be unfair. The fact that black people, whom Floyd claims are placing an unjust burden on the white home owner, cannot live where they choose, and that they provide the labor for the white man, and that they have been forced into this situation by the white government, does not seem to count in Floyd's understanding of the situation.

66Ibid., p73
Three-roomed semi-detached house, NE 51/11. Similar to two 51/9s placed together with a small external store between them.

Calderwood, Native Housing in South Africa, p35
Housing

Floyd explains the differences in housing for white people and black people mostly along economic grounds. For the better-off white people it is largely a matter of private initiative and self-ownership, most homes being built with the help of building society loans. For the lower income groups, and especially the black population, housing is state aided and controlled by the National Housing and Planning Commission. The building of the houses is carried out by the local authorities, most of it being of a "sub-economic type." Early housing funds were used for show schemes and much public money was wasted. As a result black people built their own "shanties and shacks" which "resulted in great slums." Floyd is upset by the provision of housing for black people, calling it a "waste", and generalizing that these areas are turned into "slums". He is not able to recognize that the provision of housing for black people, and their general poverty, is more likely a result of apartheid legislation and exclusion from economic mobility. This would not necessarily be the case if South Africa were a free society, with all people having equal access to resources and to housing of their choice.

Property Rights

Floyd equates the South African system of land registration and ownership with the security and stability of the country, as well as with the political ideology of the country. He claims that "if the state is fascist or communist the approach to town planning must of

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67Ibid., pp83-84
Two-roomed semi-detached house, NE 51/12A.
Calderwood, Native Housing in South Africa, p36
necessity also be so but where the state is democratic the approach must be democratic." This may well be true for the white population, and should be seen in line with Floyd's dismay at the provision of land by the white government and population for the black townships.

**Co-ordination**

Floyd writes about the many government departments becoming involved in "spheres" that affect town planning. He cites the Land Tenure Board which administers the group areas act, the Native Affairs department which concerns itself with the residential areas for black people, and the Natural Resources Development Council, which "tries to visualize the broader picture of town planning." The fact that these bodies overlap with each other has made planning difficult, and the addition of the duplication of facilities for different races creates inefficiency, but Floyd claims that so long as all planning co-ordination and administration fits within government policy, then it must be prepared to sacrifice efficiency where policy so demands. Thus Floyd accepts that planning is a "co-ordinating administrative" function, and that and that it must be subject to government policy, even at the cost of inefficiency.

**Regional Planning - A Comparison With Europe**

Floyd's South African nationalism is his main reason for criticizing the "schemes" from overseas, which he claims are not suited to local

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Two and four-roomed semi-detached house, NE 51/13.
Calderwood, Native Housing in South Africa, p37
conditions. He claims that the weakness of the European pattern of villages and towns is inefficient as it "destroys the flow of traffic on the transport routes." The regional pattern of towns in South Africa is not that of Europe. On the contrary, South Africa is a "young, democratic country," where private enterprise is dominant, and Floyd claims that the development of the resources should be left in the hands of private enterprise. Further, he claims that distant pastures often appear green, but that the best guide for South African planning is experience under that country's own peculiar conditions.

Floyd explains the differences he sees between South Africa and Europe:

1. South Africa will always be a predominantly pastoral country as far as use of land area is concerned.

2. Water resources will often be a limiting factor to development.

3. The natural resources such as minerals and the industrial possibilities are not yet fully known.

4. The regional pattern of towns is not that of Europe.

Floyd is making a case for the uniqueness of planning in South Africa, and though he previously writes about the uniqueness of the social make up of the country as reasons for it being different to other places in the world, here he attempts to find more "scientific," that is economic or environmental reasons for South African planning.
One-roomed house, NE 51/20A. The outward appearance is as a large single house on a piece of land, whilst it is really accommodating quite a different population. Note that the rendering shows no outhouse or communal ablution facilities.

Calderwood, Native Housing in South Africa, p38
Floyd also claims that the formation and administration of towns should depend on the numbers of white people expected to inhabit and area. A town should only be planned when there is a sufficient number (over 2,000) of white people expected to become inhabitants. Thus planning in his view is to cater for the needs and the benefits of the white population.

**Zoning and Land Values**

Floyd describes what land ownership means for people, and by omission he describes what the deprivation of ownership means as well. The ownership of land means the possession of rights of use in such land. The effect of zoning is to remove some of those rights, and Floyd adds that there is certainly justification for doing so if it is in the "public" interest. The fact that racial zoning removes from certain people any rights to use the land for any use is not necessarily in the interests of all the people of South Africa. It is zoning working in reverse, in a sense, that instead of the use of the land being restricted, it is the people who are restricted and against whom this legislation works. Floyd claims that zoning in South Africa is based on the principles of zoning in other countries, "except that the additional factor of race consideration has been included."69

In writing about the "balance" of zoned uses to each other, Floyd exposes white values, and these ideals can be seen as not applying to the townships for black people through examination of the plans he

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69 *Ibid.*, p111
Reitz town planning scheme; map showing use zoning. The "Native Location" is separated from the white town by a buffer zone, a main road, parks, municipal and government land and industrial land. The white residents enjoy a variety and a choice of position relative to possible places of employment and the town center.
Floyd, Town Planning in South Africa, p115
produces. See figures 398 400

An example of his attitude is in the planning of residential districts in proximity to industrial or business uses. Floyd claims that residential use should be separated from the industrial or business use by enough distance to retain amenity, yet not so far as to destroy convenience and economy.

The plans of Reitz and of Potgietersrus shows how the white residential areas surround the business areas of the town, and that the "native location" is placed on the far side of the town and of the industrial areas. Floyd does not treat the amenity available to all people equally, but holds different value systems for the white and for the black populations. Black people working in the town have further to travel, they live right next to the industrial zone which they cannot escape, and they are generally distanced from the center of the town by a series of buffers, including the zoned spaces of "municipal and government," "park," and "industrial." White residents can live all around the town, have a number of school sites, sports grounds and "special areas" for their pleasure, which are not accessible to or provided for the black population.

Similarly to the manner in which the size of a town was defined in accordance with the numbers of white population, the areas of a business center are defined as a ratio of business or shop frontage in feet per white person in the town or city. In taking the number of people served by businesses in small towns, the white population
Potgietersrus town planning scheme; map showing use zoning. This is a plan for a white town showing the relationship of the "Native Location" to the town center. The township is separated by a buffer zone, a river and an industrial area. The white residential area provides a selection and choice of positions (locations) with respect to the town center and alternative places of work.
Floyd, Town Planning in South Africa, p119
only is taken. Floyd provides no explanation for this, although it is easy to surmise.

Writing about particular zones for white towns, Floyd once again provides insight into how he believes the locations or townships should be placed with respect to such towns. Floyd writes that industrial zones should be easily accessible to all races. However this accessibility is not necessarily equal, and the industry should be carefully positioned so that "non-white" workers can approach their work without traversing white residential areas. Floyd does not give reasons for this, although would claim it is in compliance with government legislation. However, this factor becomes one of the most important he considers when positioning the industrial areas and the township or location of the town.

Floyd writes about reservations as distinct from use zones, in that use zones restrict the use of buildings, whereas reservations restrict the use of land. Floyd places the "non-white" group areas in this listing of reservations, and it is in the same category as parks, road reserves, sewage disposal works and cemeteries.

**Provision of Sites**

Since the provision and zoning requirements are estimated and calculated depending on the number of white citizens likely to inhabit an area, it is interesting to note how Floyd foresees calculating the provision of sites for black people in the townships of white towns.

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### TOWNS NOT OVER 5,000 EUROPEAN POPULATION

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<th>Area of site required in morgen</th>
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<tbody>
<tr>
<td>Town Hall, Municipal Offices, Library, Market and Fire Station</td>
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<td>Abattoir</td>
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<td>Workshops, Stores and Power Station</td>
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<td>Stables, Sanitary Depot and Pound</td>
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<td><strong>Total</strong></td>
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<td>Cemetery</td>
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<td>Location Site</td>
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<td>and With buffer strips probably</td>
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*Note: Should the town unit be not likely to reach the 5,000 mark within a reasonable time the location and cemetery sites should be reduced accordingly.*

### TOWN IN GROUP ATTAINING A EUROPEAN POPULATION OF 10,000

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<td>Location Site</td>
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<td>and With buffer strips probably</td>
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Floyd's calculations for the amount of land required for the design of a new town includes the explicit provision of an area for the "location" or township site and its required surrounding buffer zone.
Floyd, Town Planning in South Africa, p146
The location sites are determined by assuming the same Bantu population as that of the White group, although in industrial towns this may be double. In such cases the area should be doubled. About 10% of the Bantu population is taken as residing on the premises of the employer. This may be high in small towns and low in large cities. The size of stand in locations has been taken at 40' x 80' and allowance has been made for open spaces, schools, roads and public purposes.\textsuperscript{70}

Even the form of town plans in South Africa reinforce the fact that the black people are to serve the white people. When Floyd writes about the area being doubled, he does not refer to the area of the location site being double that of the white residential erven, as the standards for black people and white people in South Africa are assumed to be quite different. He is referring to doubling the numbers of stands at the standards suggested for the black "townships". Tables VI to IX from Floyd's book gives some idea of the municipal provision of sites in towns. His reference to "buffer strips" is to the area of "no man's land" which surrounds the locations in order to further separate them from the white centers.

Density Zoning
Density zoning in South Africa is based not upon the British "land-unit method" which fixes gross density, but upon a method devised by Floyd whereby the minimum sizes of erven or subdivisions are specified, which determines nett density. Floyd believes that economic conditions play a part, in that lower densities require a larger spread town, greater distances to travel and increased costs of services. However, he regards economic conditions in another light, that which deals with the lifestyle of white people and their

\textsuperscript{70}Ibid., p144
Reduced road widths as suggested by Unwin and used by Calderwood. Note the concern with the semi-private-public interface suggesting an Anglo-American suburban environment.

Calderwood, Native Housing in South Africa, p76
servants, thus linking the practice of density zoning to the political dispensation of the population. Floyd claims that a feeling for spaciousness in South Africa has led to a tradition of white suburbs being laid out with large plots. However, as the cost of land and services rose with time, people had to accept smaller sites for their houses. Since World War II the rise in wages for the "non-white" sector of the population has placed an additional burden on the economy of the white population to the extent where even smaller erven are encouraged. With dismay Floyd states that only the white middle income group can afford domestic servants or even a "garden boy" to keep their yard tidy.\textsuperscript{71}

To judge density zoning according to the wages of servants is surely a very strange method of planning, however it is obviously a real concern to planners in South Africa typified by Floyd. Floyd also footnotes that "at present the average number of persons per house in non-White areas is 5-6 and in White areas 4 Whites plus a non-White servant making 5 in all."\textsuperscript{72}

When Floyd discusses the actual size of erven it is clear that he is applying two value systems, one for white people and another, less comfortable one for black people.

\ldots to lower the size of the site below 4,000 square feet for persons of the White group would result in a cramped congested appearance to anyone born in South Africa. A feeling of depression would certainly result.

In locations for Bantu persons and in areas for colored persons the size of

\begin{footnotesize}
\footnotesuperscript{71}\textit{Ibid.}, p151
\footnotesuperscript{72}\textit{Ibid.}, p151
\end{footnotesize}
Minimum standards as designed by Calderwood to reduce the costs of road building, increase the density and still retain a suburban feel.

Calderwood, Native Housing in South Africa, p77
erf may be reduced to 3,000 square feet. This area would give a satisfactory appearance with the small dwelling units usually erected for the unskilled laborers of these race groups.73

That black people who are also born in South Africa would not feel depressed by rows of small single dwelling houses on cramped congested sites does not occur to Floyd. He claims that the monotonous effect of these small houses are not as depressing as rows of attached houses, or equal to the "deadly monotony" of rows of blocks of flats. Floyd claims that density has a bearing on the aesthetic and on amenity largely through the aesthetic. He believes that lower density areas are more pleasant and attractive than those of high density, and therefore that the black townships are fairly attractive.

Racial Reservation

Floyd points out that racial zoning is a popular term for the reservation of sites for a particular racial group, and that it is akin to use zoning in a town planning scheme. He explains the "technical aspects" of racial reservations, and that the planning for race groups other than the white population in South Africa "takes the form of suburbs or dormitory towns."74 Floyd admits that the townships are planned as suburbs, and that they are designed by government departments, or at least approved by them. While whit towns are prepared under an ordinance, black townships are prepared under the Group Areas Act, which means that a dual set of planning schemes are required each being approved by a different authority.

73Ibid., pp153-154
74Ibid., p204

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Neighborhood in Kwa-Thema. Note: centralized parks in the middle of neighborhoods; long rows of houses which are placed in different directions, not necessarily following the contours or orientation; and the amount of land given over for the "buffer-zone."

Calderwood, Native Housing in South Africa, p181
Floyd is not concerned with the moral correctness of planning in this manner, but is concerned with the bureaucracy, how it is done, who does it, and that it is done correctly. He is concerned with the technical aspects and quite willing to work under the existing government legislation for such planning.

Floyd claims that the act has been successful in "pegging areas and preventing racial groups from penetrating into residential areas occupied by other groups." However he does claim that difficulties have been encountered when trying to establish new areas for racial groups, especially in the government's attempts at moving people, and the see sawing property values that loom ahead of such attempts. Racial zoning has had a vast effect on the values of properties. White and black areas in proximity to each other are valued quite differently, and typically white people do not want to live in proximity to the townships, while black people want to live closer to their place of work, or the amenities of the town. Floyd regards this as a problem equal to the difficulty in moving people, which has been accomplished in many forced removals often with awful social and psychological costs involved.

Buffer Strips
Between Group Areas of different races the government deems it a necessity to provide a piece of no man's land which will act in separating the races physically by a greater distance. Thus "buffer

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75 bid., p202

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Neighborhood in Kwa-Thema. Note: buffer-zones; random relation to contours and to orientation; and the internal parks borrowed from Anglo-American suburban designs.

Calderwood, Native Housing in South Africa, p180
strips" are created as pieces of "sterilized" land which may not be used except for their existing use. Such zones may not be subdivided or disposed of to anyone except the state or local authority. The Group Areas Board requires suitable buffers in the way of railway lines, main roads, rivers, streams and ridges or other natural features. Where no suitable features exist, a buffer strip varying in width from 200 to 500 yards may be required by the Group Areas Board and the Minister.

The reasons given for the buffer strips are to separate the races. The reasons for the separation of the races is a political one, that of building the policy of apartheid, and realizing apartheid in practice. Thus the planning and inclusion of buffer strips, for example, into one's design has political origins and political ramifications.

D. M. Calderwood - "Native" Housing

D. M. Calderwood is a South African architect and researcher who has done much work in the field of African housing. His work for the NBRI and his own research has led to the building of many thousands of houses for the black population as well as several designs or "town plans" for "experimental" townships in South Africa. He explained his designs for mass housing to me as a student of architecture at the University of the Witwatersrand, in Johannesburg. The most famed and most often built house was called the 51/6. I remember it being held out as an example of solid, factual research, as a "scientifically" designed house to solve the massive problems of the housing shortage in the country. I have come to understand that as a
Calderwood believed that plantings would do much to make residential areas better places to live. Unfortunately the townships are usually built in dry dusty areas - and vegetation and plantings are not prominent. Furthermore, neither land nor houses are owned by the residents in the townships and thus these dormitories are not cared for in the same manner were tenure available. The planting that does take place in the townships is not of the aesthetic nature hoped for by Calderwood, but consists of the growing of salad and vegetable gardens, fruit, and so on - to augment the diet and to sell at informal markets to bring in some income.

Calderwood, Principles of Mass Housing, p106
technocrat, Calderwood worked within the framework of apartheid ideology, often collaborating with quasi government research organizations like the NBRI and the CSIR. His viewpoint, then, I assume to be in line with Government thinking at the time of his writings, and as he is one of the few who has written on the subject of mass housing and "native" housing, I read his work as representative of the government policy, however "enlightened" and philanthropic he may consider his intentions to be.

In his book Native Housing in South Africa (1953)\textsuperscript{76}, Calderwood introduces the design and provision of the townships in South Africa through the study of "Native" housing and mass housing in the country. In the abstract to this book Calderwood claims that:

\begin{quote}
The provision of good housing is shown as an important factor in the formation of a stable and efficient labour force and the creation of a community capable of shouldering their own responsibilities.\textsuperscript{77}
\end{quote}

Calderwood thus brings to his task the greater moral responsibility of creating a solid economy with civilized and responsible citizens. Beyond these words lies the inference that the black population which is not housed according to Calderwood's standards of "good housing" are neither "stable and efficient" nor are they responsible. This attitude is typical of white people who wish to do the right thing for the benefit of the nation.


\textsuperscript{77}Ibid., p1
Calderwood's analysis of layouts on 50 x 70 feet plots. Note that it is very difficult to build an extension onto these tiny box houses. Their plans and relative positions and size to their plots prohibits the making additions by occupants to these houses.

Calderwood, Native Housing in South Africa, p111
Calderwood describes "why housing is important," citing "proper" food and shelter the most important necessities for man. The key word in his description is "proper" as it carries with it many implicit value judgments, specifically meaning as being suitable to the South African government's intentions and to Anglo-American (or "European" or "western" or white) standards and culture.

Calderwood writes that beyond the problems of overcrowding, intermingling, illegitimacy, and high mortality rates due to the "housing problem," and "more important . . . is the bad publicity which bad housing can give." The slums of a city cannot be removed without the determination to do so, and a visitor to bad housing and beautiful monuments and historic buildings are remembered equally well. No part of a city or town forms the whole; each unit fits together to give the overall picture.

In South Africa, the proper housing of the urban Native will establish family groups, who will have to shoulder their responsibilities and will create a better national economy. A properly housed community will cost the tax payer less; health, crime and productivity in industry will be affected.

Thus are the reasons for technocrats such as Calderwood put forward for becoming involved in the development of "native townships."

The political reasons for government interventions have been dealt with in Chapter Two in this thesis. Calderwood sees the problems of black urbanization and industrialization in the light of social and economic issues. Government politics are not mentioned as a factor in the problems. The townships and the "proper housing" which they provide are to alleviate the social evils caused by the modern urban

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78 Ibid., p3
79 Ibid., p10
80 Ibid., pp10-11
The provision of housing is more than just the provision of houses. Both Calderwood and Floyd stress this point, but the security which turns a house into a home are politically avoided in South Africa. Collection of all areas to be provided for in neighborhoods except housing.

Calderwood, Native Housing in South Africa, p78

<table>
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* Cemetery sites are excluded in total as usually an area is provided separately outside the estate land considered.

N.B.—No provision has been made for industrial sites, disposal sites and buffer strips.
ways of life. They will improve the image of the city or town to the visitor or tourist, and housing is thus seen be Calderwood in superficial terms, as an aesthetic to leave an impression. Second, proper housing will allow workers to remain healthy, thus contributing to a "stable labour force" and to "maximum efficiency in industrial workers," and thus be of benefit to the national economy. Reasons for addressing the problems appear less related to ideals of human rights and moral principles, but rather more to the appearance of maintaining western standards of civilization and the health of the (white man's) economy. The attitude towards the people to be housed is not to improve their conditions from their point of view, but rather that of a patronizing (colonial) attitude for the white rulers' own benefits. A Christian element may be seen in such attitudes in so far as an attempt is made to improve the lot of the less fortunate according to one's own principles and values.

Calderwood, writing in *Principles of Mass Housing*,(1964), introduces the question of housing and of towns and cities with a brief historical overview. He understands that without the core of sentimental, moral and religious values the early structure was simply a shelter; and that with these values it became a home. Further, he understands that a village becomes more than a mass of shelters when the needs of the individual family are subjected to the mass activities of town organization. Calderwood appears to understand the complexities of housing to a certain extent, putting

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A reduction in space of any one amenity will not radically affect the gross density figure. Changing the dwelling type, i.e. from single-storey detached houses to a row house layout; or from a single-storey row house development to one of 6-storey flats, is the only way to increase densities. "Space requirements and percentages allocated to land uses."

Calderwood, Native Housing in South Africa, p83
himself across as a humanist. However, as I shall show, township housing remains in the realm of government provided shelter, and does not go far towards providing "homes" for people.

Calderwood quotes extensively from Lewis Mumford's books, *The City in History* and *The Culture of Cities*, to make the point that as the populations of cities grew, so did their urban slums, with conditions of overcrowding, disease and landlord exploitation taking over from the higher standards of space that had existed in the Middle Ages. Poor conditions in such urban slums are understood (by Calderwood selectively quoting Mumford) to be caused by "the townward drift of rural populations," which "upset the provision of the good residential areas that were originally planned with adequate open spaces."82 This idea of open spaces is introduced by Calderwood at the start of his discussion on the provision of mass housing and leads directly to the study of locations or "native townships." The planning of the townships is thus seen largely as the design of the open spaces between the houses, as well as the provision of facilities which will provide that "moral and religious" value and organization of "mass activity" which will turn a house into a home. The facilities referred to include communal buildings and land for the purposes of education, recreation, health, religion, administration, commercial and industrial.

Open spaces are required by a concentrated group of town-dwellers. These spaces must be associated closely with the residential areas and not confused with the central open spaces of the town... In a residential area of high density it is especially important that open spaces be provided and.

82Ibid., p8
Calderwood’s attempt to show the serious shortage of housing for black people in South Africa, and hence the motivation for the government’s intervention in providing housing in the townships of the urban areas. Calderwood, Native Housing in South Africa, p15
if the people are in the low-income group and unable to afford their own cars or fares for buses and trains, leisure hour demands will be fulfilled by these open spaces. The lesson of the late mediaeval towns, where such spaces were built over, resulting in residential areas becoming unhealthily overcrowded, must be taken to heart if good housing conditions are to be maintained.83

This preoccupation with open space was one force behind the creation and control of the townships as they have come to exist. Calderwood claims that despite man's advancement from cave to tent to permanent structure, that his "house has always been influenced by his social and economic conditions, and in the final analysis it is probably only by good legislation that solutions to housing problems will be found."84 In this respect Calderwood, like Floyd, defers the problems of housing to legislation, placing the responsibility in the hands of the legislators, that is, the government. "Overpopulation and the resulting decay can, possibly, be ascribed to the lack of control of occupancy and the financial rewards that are reaped from such housing."85 Control over the urbanization process is seen by Calderwood as a key responsibility of the government legislation he previously calls for. Calderwood defends his "historical" outlook on the housing problem by claiming that in designing the "new society" it is well to learn from the mistakes of the past. He claims that any industrial development undertaken will influence population movements particularly from the poor rural areas, and that such changes will be immense both in scale and in speed. This new industrial urban society will bring "its own new problems" and

83Ibid., p8
84Ibid., p10
85Ibid., p10
South Africa's housing revolution. Facts and figures to prove the case, including the support of Gropius and Le Corbusier for mass production. Calderwood, Principles of Mass Housing, p88
Calderwood suggests that urbanization should be dealt with by the creation of "housing schemes."

Calderwood writes in "The Case for Providing Housing" in *Principles of Mass Housing* that the threat of a world population explosion is directly linked to the provision of housing. He claims that the birth rate of the world, particularly of the people living in poverty, must be controlled, or else we face "the danger of war and revolution." He believes that the solution will require "great international action" and that by increasing production and standards of living it will be possible to "make people accept their own responsibilities." Thus Calderwood gives to housing the responsibility for providing better standards of living, which in turn will prevent the population explosion, civilize the people living in poverty, and keep "war and revolution" (communism in the South African context) at bay. These are some of the assumptions which correlate with the government's aims in promoting the building of low-cost mass housing in the townships for the black population of the country. Calderwood also writes that housing

... is one of the basic needs of man and, at the same time, directly connected with his social and economic development and his inner demands. In other words, housing will fulfill the material and spiritual aspirations of urbanizing populations, and it will lead to their upward mobility in the class hierarchy of society. This is a noble aim for

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86 Ibid., p 11
87 Ibid., p 11
88 Ibid., p 11
housing to achieve, but I believe that the results of the houses and the townships which were in fact realized do not actually fulfill these ambitions. On the contrary, the resulting urban form is one which purports to convey a sense of middle class values to their inhabitants, and yet works to keep the attainment and realization of a free middle class lifestyle at bay. These intentions have resulted in housing within the confines of apartheid legislation, whose laws set the parameters for it, and ensure the continued supremacy of the white population.

Calderwood makes several points in his "case for providing housing," which must be regarded synonymous with providing townships, as the houses he argues for exist only in the environments of the government legislated (and therefore apartheid enforcing) "locations" or "townships". Calderwood's case may be summarized as follows:

a. In each town or city the largest portion of the land is that devoted to housing, and in the low-income townships of South Africa, where there is no provision for industry and the housing development density is fairly low, over fifty per cent is devoted to residential purposes. (What this has to do with "proving his case" is difficult to follow, but he suggests that since much land is devoted to housing, the housing development itself should be given considerable and equivalent consideration.)

89 Ibid., pp 11-18
b. The residential area is the locality ("location") in which people spend most of their time (the black people have little choice) and it should therefore receive the planning consideration it deserves. Aspects to consider include the interior space of the dwelling and the external spaces covering the demands of the family in the immediate vicinity of the house.

c. The family demands more from a dwelling than mere physical protection, and it is the fulfillment of spiritual demands which turns a house into a home. The material demands of the house will be dependent upon the standard of living and what the occupant can afford to pay for them. However for low income families "ideals have to be trimmed to reality otherwise nothing will be achieved." "Family housing should, if possible, provide adequate protection from the elements, a good supply of fresh air, sun and light, sanitation and washing facilities (bathing, potable water and drainage to carry off waste water), space for cooking and eating, sleeping arrangements which provide privacy for the parents and a separation of the sexes for the children, and possibly storage and a living room." According to Calderwood, the benefits which may accrue from such "family housing" include:

(i) Family responsibility can be a strong deterrent to crime, drunkenness and delinquency.

(ii) Family housing of the basic standards mentioned will go far towards improving health, including mental health. Housing and health are interrelated fields.

(iii) The creation of a home is an essential requirement of citizenship. (This is an important point, and it is ironic that
Service access to row-houses. Calderwood comments that such houses will provide a clean appearance, suggesting that what matters is not the reality of life in the township for the residents, but that visitors will be impressed by the good conditions in which South African blacks are housed. Service roads are merely for the collecting of garbage; it is not as if these lower-class black residents will have home deliveries of milk and newspapers each morning as do the residents of the middle-class white suburbs in South Africa.
Calderwood, Native Housing in South Africa, p64
Calderwood uses it in its positive sense, suggesting that it will be possible to make citizens of the "natives" yet. However, the statement holds true, but in the negative. In other words, for the black or "native" population of South Africa, citizenship is denied, ownership of houses was denied, the ability to create a home was actually denied. Thus by denying these people the ability to create a home, it is possible to deny them citizenship as well.)

(iv) Housing is not just houses, and when the attention is drawn to the residential area with its schools, churches, shops, clinic, parks and recreational grounds, the full benefits of housing in relation to health and human comfort will be appreciated. The houses and the townships work together to achieve their aims.

d. Housing is very important in the economic picture of the country. The percentage of the national income devoted to the construction industry in 1960 was about six per cent of the geographic national income, forty three per cent of which is devoted to residential construction. In 1960 the building industry employed 92,000 people or eleven per cent of the total employment in secondary industry in the country. If all secondary industries devoted to residential areas are included, the percentage of total employment would be over twenty per cent.

Calderwood's case thus consists of several interlocking observations:
a. Much land is used for residential areas;
b. People spend much time there;
Layout of row-houses in Kwa-Thema, designed to increase density and reduce costs while retaining a suburban quality.
Calderwood, Native Housing in South Africa, p153
c. Benefits will accrue to the inhabitant whose house is also a home, fulfilling physical, spiritual and political needs; 
d. Housing is important to the country's economy.

Calderwood maintains that a demand for housing has been created by the continued townward drift of the rural population, despite the possible unavailability of employment, the resources of water and food supplies, or the limited number of houses. The reasons he cites for this demand are the following:
a. The natural increase in the population, which results in a steady demand; 
b. Badly constructed or old houses having to be replaced - slum clearance and the prevention of decay; 
c. An increase standard of living, causing people to want something better than they had previously, and 
d. The townward pull due to economic and social pressures.

"People require housing and, as they move and congregate, so the housing demand grows."90

Calderwood suggests the definition of the objective of housing as: "The provision of sound homes in an environment in which people can live full and happy lives."91 By "sound" housing, Calderwood is referring to more than the provision of shelter, and is arguing for attention to the environment surrounding the houses as well. He

90 Ibid., p17 
91 Ibid., p17
The arrangement of plots for row-houses. There is much communal open space in this layout which belongs to no-one in particular and as a result is not cared for. The idea may be good but the realization is disastrous. Calderwood, Native Housing in South Africa, p63
calls for the provision of schools, shops, sports-fields and even a
corner pub (in Africa?), in order to meet the needs of all "the people,"
the young, the old, the single, the married, the well-off and the poor.

The term "full and happy lives" must not be confused with the planners'ideal; it is that which the people want and it will vary according to age, family composition, religious beliefs, social structure, and income level. This is confusing enough with the planner imposing his concepts upon the widely divergent variables of which any society is composed.92

The planners' "ideal" and "concepts" which Calderwood refers to I understand as being those concepts "forced" by planners on people, as opposed to "that which people want". Calderwood seems to say the right things, in that should have access to homes in environments with access to communal and social facilities, and they should not be imposed by some distant planner. However, "native housing" and the townships are exactly what he argues against, and yet he supports them by his actions and is one of those planners. The townships are a planner's ideas (many "planners" in fact, if government departments are included), forced onto a vast number of the black urban population. His work appears to be full of contradictions of this nature.

Reasons given by Calderwood in support of mass housing in the townships, and "proper housing" (see above), to alleviate the social evils of urban life, include the aforementioned fact that a properly housed black worker will be to the benefit of the white man's economy. Calderwood quotes the "Institute of Family and Community Health" in support of his argument:

92Ibid., p17
... absenteeism is related to the distance of the worker's home from his place of work as well as to his family life. Among Natives the lowest incidence is found in men who live with their wives and families in town, whereas the highest absenteeism occurs in married men living away from their rural homes in migrant laborer's hostels.93

Calderwood continues to point out that "the efficiency of a worker properly housed is always greater than those not housed, but, what is more important, the reduction in labour turnover is vitally affected."94 Calderwood then links the fact that housing will benefit industry to the "moral implications of housing and family life."95 He claims that "proper housing" will result in a responsible population which reduce the incidence of crime. "Proper housing" is regarded as "European" housing; the traditional forms and culture of African building are implicitly rejected. Further, Calderwood assumes that "European" housing is the equivalent of "good family housing," and infers that this did not exist in traditional forms of housing, whose social configurations were actually far more complex than those adopted by the white people from Europe! Once again, the reasons given in favor of "proper housing" are not strictly humanitarian or egalitarian, but in order to safe-guard the white population against the risk of rising crime rates brought about by poverty and disenfranchisement under apartheid.

The proper housing of a family will allow that family to live a good life. The children will be brought up in the environment of a united family and will accept their responsibilities in the future. Overcrowded slum areas cannot produce responsible persons; it is through good family living that responsible persons will grow. A family housed in the confines of an iron

93"Health of the Worker in Industry ", Institute of Family and Community Health, in Calderwood, D. M., Native Housing in South Africa, p11
94Calderwood, D. M., Native Housing in South Africa, p11
95Ibid., p12
and mud shack, in which all the activities of the family, such as cooking, eating, dressing, undressing and sleeping occur in one room, are not housed in an environment conducive to living a good family life. This is a family which will tend to disintegrate; the children will, as they grow older, run away, even if they are to become vagrants, prostitutes, criminals or shebeen kings and queens through lack of employment or parental control. Looking upon their childhood and the conditions that their parents were forced to accept will not encourage these young people to face life in a realistic manner. Responsibilities of family life are not associated with poverty, overcrowded slum areas and family argument - the life of easy come easy go has a glitter of something more appealing and more adventurous. The road to crime is being built upon a foundation of bad housing and broken family life.

Calderwood gives the physical environment much responsibility for the evils of which apartheid and the policies of separate development are really to blame. Yet poverty is not a result of living in a mud shack; it is a result of being excluded from opportunities for better education and employment, excluded from the right to own land and houses, and from the basic lack of freedom and the disenfranchisement which black people live with under apartheid. Crime is not due necessarily to "overcrowded slum areas," but to the same politics of exclusion which lead to the establishment of these slums in the first place. Calderwood's critique of the physical environment leads him to recommend mass housing in the townships over which much white control is exercised in order to prevent the occurrence of the evils he predicts and sees, but which further serves to entrench the disenfranchisement of the black population.

Concluding on the importance of the provision of housing for the "natives" in South Africa, Calderwood quotes Lewis Mumford in The Culture of Cities, and this quote, out of context in Calderwood's book,

96Ibid., p13
serves to strengthen and support his claims. He quotes Mumford supporting the provision of minimum standards of housing for health reasons, including "those social provisions" necessary for the "nature of children and the education of responsible citizens." 97

Calderwood notes that permanent urban "Native" communities have been created due to the pull of industrialization and urbanization of the "European" population. In other words he supports the "Stallard doctrine" that the white man is responsible for the industrialization of the urban areas, and that he alone should therefore reap the benefits. He believes that the "technical" approach to the housing of urban "Native" families, and the construction of "Native townships" will help to create good family lives and responsible groups of people. Calderwood stresses both the importance of the planning of the house as well as of the neighborhood, "with its schools, shops, sports fields, community center and parks." 98 Thus the houses and the township design are considered to contribute towards creating responsible people through promoting "proper family living."

Calderwood also writes briefly in favor of home ownership, although he swiftly allows this idea to rest in accordance with the government policy of the time. It is only in the late 1980s that the government has allowed and encouraged black "ownership" (ninety-nine year leasehold) on property in the urban townships. The reasons

97 Lewis Mumford, "The Culture of Cities", in Calderwood, D. M., Native Housing in South Africa, p14
98 Calderwood, D. M., Native Housing in South Africa, p14
Calderwood gives for his support of home ownership in 1953 are that it will foster pride and responsibility in the inhabitants, and he quotes the National Housing and Planning Commission's consolidated circular of 1952, when it states that home ownership schemes are easier to administer and less costly than letting schemes. Furthermore, "and from the national point of view, home ownership is a stabilizing influence and one of the main bastions against Communism and other social ills." 99

The security of the state and of the white minority are put forward as the major reasons for providing housing and in particular for the ownership of housing, and it was for these reasons (among others) that ownership was eventually encouraged. This offer of ownership, however, came too late, as residents were by this stage sufficiently politicized and organized to protest against both the payment of rent and the ownership of houses in places not of their choosing, and against the ideology of apartheid in general. For the sake of a "workable approach" and in line with apartheid ideology, ownership was not a priority in the housing of the black population in the 1940s and 1950s.

Calderwood believed that there were several factors which needed immediate attention. In brief I list them as follows:

(a) Every family should be housed in a dwelling of its own;
(b) Each dwelling must be a fit unit for family living;

The New Town of Hook, England. An examination of population distribution growth and levels at any given time for a stable population, in order to determine the provision of services, for example the number of schools required. An example of the "research method." Calderwood, Principles of Mass Housing, p34
(c) The rents must be such that they can be afforded by the families housed;

(d) The financial burden must be cut to a minimum;

(e) Finally, this state of affairs must be brought about as quickly as possible.

Thus Calderwood's philosophy begins to be exposed. He believes in certain suburban ideals within the framework of apartheid, using the tools and skills of a technocrat. He also holds to the ideology of scientific and technological control over the realization of the townships, which translates into the control by the white over the black population.

No system can provide the only solution at this stage, but in order to achieve efficiency and the best use of materials, labour, and monies available, detailed planning is essential. No system is going to be successful unless it is well organized and planned in every detail and then is supervised by enthusiastic officials. It will be shown that co-operation and team work are vital to the task that lies ahead, and it is from these aspects that a technical solution can be found.\footnote{\textit{Ibid.}, p16. My underlining.}

I will discuss the technocratic scientific approach next, but it is clear here that Calderwood believes that the scientific approach is a "realistic" approach, and that this together with "official" control, the policies of white controlled township living for urban blacks can be implemented.

**Technocratic "Scientific" Approach**

**The Research Process**

The purpose of Calderwood's thesis \textit{Native Housing in South Africa} is "to study the technical approach to the problem of housing urban
Aptitude tests and minimum training allowed black builders to become proficient in particular tasks very quickly. These photographs indicate the building of small houses at various stages. From top to bottom they are referred to as: task 4, task 5, task 7, and task 13.

Calderwood, Native Housing in South Africa, p168
Native families."\(^{101}\) His book *Principles of Mass Housing* claims that their are two aspects to solving the housing problem. The first is that of team work, the second that of research. By "team-work", he refers to both the "desire and willingness of the people themselves" as well as "the activities of the group of specialists working on the scheme." By "research", he means "a process of finding out facts by scientific study."

Calderwood assumes that "scientific" research can provide the solutions to housing problems required of it, and that the implementation of such solutions should not be held up by a lack of skilled labor. To the problem of a shortage of skilled labor he applies the "scientific" or "research process." For example, he believed that the potentials of a workman's skills could be examined by means aptitude tests, whereby "the potentials of an unemployed Native" can be investigated, and then "by classification the man is graded as suitable for engineering work, parcelling, delivery work, etc."\(^{102}\)

Through this system of aptitude testing and classification, industrialists are able to find labor able to contribute to their profits from the day they are employed. Further, with particular reference to the building industry, Calderwood conducted several experiments in building houses in the townships. These included training black people for jobs from which they had previously been excluded for reasons of protecting "skilled white labour," a political protection which gained much support for the government from these white

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\(^{101}\) Calderwood, D. M., *Native Housing in South Africa*, p14

\(^{102}\) Calderwood, D. M., *Native Housing in South Africa*, p12
Density and area graphs for various house types - the science of planning.
Calderwood, Native Housing in South Africa, pp 84, 85, 86
workers. However, without mentioning the politics, Calderwood explains it this way:

... and the workmen were then introduced to the new materials which they would have to handle and use within the skill which they were proved by the test to possess, good results could be obtained after a few hours of demonstration, and the shortage of skilled labour as it affects housing might be found to be non-existent. 103

Calderwood's attitude is simplistic and optimistic in his approach to the "problem," which in his mind is clearly defined. He believes that it is not luck or fortune which make it possible to attack the problem of mass housing, "but, when the determination to solve the problem is born and teams are formed which will follow the research method, the provision of sound houses in an environment in which the people may live full and happy lives can be achieved." 104

Calderwood describes that by research he refers to the "powers of observation and accurate recording . . . in order to arrive at a supposition which is then tested for validity by experimentation or application." Further, he believes that the "research process" emerges as a method of learning and acquiring knowledge in a systematic manner "in order to ensure that benefits may accrue to mankind." 105

Calderwood never steps back far enough to acknowledge that all the work he does within the "research process" is not objective, but in fact is well within the aims of the ideologies of the government. His

103 Calderwood, D. M., Principles of Mass Housing., p18
104 Ibid., p18
105 Ibid., p17

441
Services, building and land costs. As land cost increases, economical limit moves from one-storey to multi-storey units.

Calderwood, Native Housing in South Africa, p90
systematic acquisition of knowledge is used to benefit a certain value system, that of the white South African government, and not strictly for the benefit of "mankind." Calderwood claims that a study of the causes of problems can help to solve a problem, but he never mentions politics or apartheid ideology in this discussion, remaining at a level abstracted from the real reasons for the problems, and works strictly in the realm of the technocrat.

Calderwood explains that the "research process" when applied to the housing problem may find that either the problem has been encountered before and solved elsewhere, in which case that solution can be applied immediately; or otherwise it may discover that a certain problem is unique, in which case closer study and understanding of it can lead to abolishing the cause or at least preventing its undesirable effect.

The challenge which this thesis makes to technocrats such as Calderwood is that it is not possible to consider the "problems" of housing without considering laws and legislation and the ideology within which one is working. Calderwood claims to examine the causes of urbanization, however briefly, and like the government, does not examine policies which are assumed sacrosanct, even though they are largely responsible for aspects of the housing problem as they exist today.

In the tradition of the architect taught to study the requirements of his clients, Calderwood claims that he knows or will learn about the
ECONOMICAL LENGTH OF STREET BLOCK.

Government money must be spent efficiently, and as services are to run under the roads care is taken to ensure that they are economically designed. Calderwood, Native Housing in South Africa, p67
urban "Natives," not realizing that in fact his "clients" are not those who will inhabit the houses and the townships which he designs and builds, but that in fact the Nationalist Government is his client. Calderwood carries a great deal of implicit knowledge and assumptions about the ideology of housing people under apartheid, and values such as the separation of the races remain unchallenged in his work.

In addition, a great deal must be known about the urban Natives, and this calls for scientific investigations and studies. The need for having full and reliable figures and statistics of urban Natives cannot be overstressed. This is not just a scientist's wish but a realistic approach to the problem; in the shadows of misunderstanding and ignorance fear can easily develop, and it is our task to sweep away these shadows and let the light of understanding shine upon our land. No planning can hope to achieve success unless an insight into existing conditions is obtained, and for this reason socio-economic surveys of the Natives are essential.106

Calderwood is, however, aware that the issue of housing is only a part of a larger problem in the country, and that the technical approach which he supports is only addressing a part of the problem. He quotes a report by Professor P. H. Connell "Sub-economic Housing Practice in South Africa" published in 1947:

The social and economic problems which form part of the general problem [of sub-economic housing] necessarily touch the very roots of the country's social structure. . . . the task goes beyond the purely technical level; it is a social responsibility of the first consequence, not only in relation to present conditions, but of no less importance for the future of South Africa.107

Calderwood believes that the townships and housing which he designed would work towards solving the problems of the country's

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106 Calderwood, D. M., Native Housing in South Africa, p16
# Resultant areas and density tables for single storey development

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<tr>
<td><strong>Total in acres</strong></td>
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<td>9028</td>
<td>119706</td>
<td>149133</td>
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<td>20832</td>
<td>239746</td>
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<td>Dwellings</td>
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<tr>
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<td>Dwellings</td>
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<td>195672</td>
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<td>819</td>
<td>822</td>
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<td>5125</td>
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<tr>
<td><strong>Total in acres</strong></td>
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<td>856</td>
<td>862</td>
<td>866</td>
<td>882</td>
<td>888</td>
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social structure. However, rather than approach the social problems directly, he utilizes the government's policy of apartheid as the vehicle for achieving a solution to the problems, and works to the best of his ability to ensure that separate development will succeed. Calderwood is quick to dismiss everything he does not tackle, claiming that his technical approach to "Native Housing" will stimulate the provision of houses of good design, "set in neighborhoods (read "townships") which will create an environment for living a full and happy life." He uses the technical and research aspects of his study and gives them credibility within the context of the white bureaucrats who are responsible for the realization of the townships.

Adolph Schauder,\textsuperscript{108} a contemporary of Calderwood's working on similar problems in the country, writes that the Port Elizabeth Municipality experimented with methods of reducing building costs. Together with the NBRI and the CSIR and grants from the National Housing and Planning Commission, the aim of training black people to work efficiently on their own housing, and the simplification of housing to minimum standards of health, comfort and durability, have been attained. He explains that the NBRI has carried out socio-economic surveys of various "native townships" to determine the rent-paying capacity of the "Native" population and the optimum density for house construction per acre. Schauder continues to

Graph showing relation of plot dimensions to net densities allowing 25% for roads.

Economy of plot areas as determined in a graph showing the relation of plot dimensions to net densities allowing 25% for roads.

Calderwood, Native Housing in South Africa, p66
explain that by training black labor as specialists on particular, individual operations, instead of making them into all-round artisans, that "astonishing results can be achieved." He claims that after only two hours training "Natives" can lay bricks on straight walls, leaving only the special work to more skilled men. Thus black labor under white supervision becomes the most efficient and effective method for construction of houses in the townships meeting the minimum standards deemed acceptable to the white bureaucrats and technocrats in whose hands such decisions remain.

Conclusions
By evoking the work of Calderwood and Floyd and attempting to reveal the many implicit attitudes they have which support government ideology, I have shown how their claims for a "scientific" or "technocratic" approach to housing are in fact not objective. Their philanthropic desires to improve the lot of the "uncivilized native" must be understood in the light of the politics of apartheid. The values of a suburban life, which both of these men undoubtedly enjoyed, are believed to be the only values worth striving for, and thus their work aims to both help the ideology of apartheid succeed, as well as to house the natives in a manner which appears to be acceptable to the Anglo-American sensibilities. The actual result of their work is the reinforcement of the continued domination of the white people over the black people in South Africa.

109 Ibid., p5
The dominant directional routes developed prior to 1860 and have been traditionally dominant constituting the major structure of the area.

The subdivision of Woodstock within, and as a response to, these major routes started between 1860 and 1885 and is a larger, more piecemeal, development process than that in Salt River.

Salt River was subdivided in a more consolidated way over a shorter period and the subdivision was virtually completed between 1885 and 1901.

By 1931 Salt River-Woodstock is fully developed and characterised by the dominant directional routes (Albert Road and Victoria Road) and the internal gridiron structure.

Woodstock and Salt River, historical development. These suburbs developed over time and are quite different from townships which were developed as a complete entity. Dewar, Uyttenboogaardt, Levy, Menidis; Housing: A Comparative Evaluation of Urbanism in Capetown, UPRU, UCT, p27
PART THREE
Analysis and Comparisons

In this part I will analyze and compare the form of the townships with both its precedents as claimed by its designers, Calderwood and Floyd, and as planned housing areas which tend to suffer from environmental poverty. I will show how the intentions of the planners involved have been realized in ways quite different from their Anglo-American counterparts, how the government's policies have corrupted the suburban ideal so that only a semblance of its form remains. The townships remind us of Anglo-American suburbs, and yet they differ in many ways. Even if these ways are political, the form of the townships works to reinforce these politics in that it is a product of such forces.

This analysis is based upon a study made by the Urban Problems Research Unit (UPRU) of the University of Cape Town. Their study is relevant here as it arose out of a concern about the "environmental poverty" of planned housing areas, such as the townships in South Africa. Their study is a comparative evaluation of the performance of the evolutionary developed areas with construct based areas. My analysis is based on a caricaturization of suburbs as evolutionary developed areas, and townships as construct based areas. While most white suburbs evolved over time -- although some were

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Woodstock, building texture.
Dewar, Uyttenbogaardt, Hutton-Squire, Levy, Menidis; Housing. A Comparative Evaluation of Urbanism in Capetown, UPRU, UCT, p46
developed as totalities when land was subdivided and the suburb proclaimed -- the townships with which this thesis is concerned were built as single entities and instantly built. This is a basic and profound difference, and I examine it in further detail in this Part.

The UPRU authors are concerned with human development, and the relationships between people and the environment. Design disciplines have traditionally shifted between two approaches: that the "physical environment is considered all important in determining man's activities" approach, and alternatively, that the "physical environment is unimportant in determining these activities." The authors claim to hold the holistic position that man both influences his environment and that total man (physical, economic, cultural, social, psychological man) is influenced by that environment. At minimum, the physical environment is the stage upon which man plays out the activities of life, and upon which he imprints his presence. Environment also has the ability to enable man to create new opportunities which enrich his life (the suburban ideal), or alternatively, physical environment can restrict man's opportunities and reduce his level of satisfaction (the township reality).

The success of an environment is thus evaluated in terms of how well it enables and frees man to conduct those activities which are important in his life, how well it fosters meaningful choice and how well it elicits a creative response from man himself.

\[111\] Ibid., p7
Salt River, building texture.
Dewar, Uytenbogaardt, Hutton-Squire, Levy, Menidis; Housing, A Comparative Evaluation of Urbanism in Capetown, UPRU, UCT, p60
By definition, the process of human development involves self actualization - the utilization of an individual's own energies and talents to improve his condition. Good environment necessarily stimulates self actualization. While maintaining overall environmental quality, it provides the framework within which the individual does those things he is best able to do. It enables and frees - it does not restrict.\textsuperscript{112}

Some environments perform better than others, and those which do display a quality of timelessness. They are good over time, withstanding a variety of cultures, generations, and technologies. They are enriched by the passing time and cultures rather than destroyed. The qualities of their humanness are universal. The form of these "good" environments differs widely, which suggests that it is the qualities which are universal, and not the form. Form is a statement of the place and the time. It is derived contextually, spatially, culturally and temporally. Form is place related, and by definition, unique. There are, however, certain physical principles which generate the good qualities, which free and stimulate individual creativity and the enriching effects of time and change.

The positive qualities are described by the UPRU study by the generic term "urbanity," and refer to the potentials realized when people are brought into close contact with each other in dense suburban environments. It is the principles which underlie this quality which are identified by the study through the analysis of existing environments. A study of the built fabric should not be seen as a denial of the significance of non-physical factors in man's life or in the process of human development. As I have shown, political rights deeply affect the environments which are built for people to

\textsuperscript{112}Ibid., p7
1885 Lansdowne Road and Rosmead Avenue were already dominant by 1885. Within these major routes, two through-routes exist at this stage. These are less dominant than the major routes but more dominant than any other routes in Harfield Road.

1900 A third through-route developed between 1885 and 1900, with little other subdivision during this period.

1931 The major subdivision of the area occurred between 1900 and 1931, a process of infill between the dominant directional routes and the through-routes.

1975 The process of action and reaction over time has created a structural framework comprising the dominant directional routes and the grid, with the latter being characterized by three through-routes. In addition, the gridiron structure is made of relatively long blocks compared with the shorter blocks of Salt River.

Harfield Road historical development. This suburb also developed over time and consequently has a variety and a hierarchy of clearly identifiable spaces and an environment which UPRU describes as "particularly positive". Dewar, Uyenbogaardt, Hutton-Square, Levy, Menides; Housing: A Comparative Evaluation of Urbanism in Capetown, UPRU, UCT, p71
live in, and the physical environment is not more important than non-physical factors. However, the quality of the built environment does have a fundamental effect on the quality of life experienced by people living within that fabric.

It becomes more difficult to evaluate an environment which has political connotations, which one is forced to tolerate, as it comes with different "baggage" compared to one which is selected with a freedom of choice. However, in South Africa, the townships in which I claim people’s choice is minimal, are physically different from those suburbs in which people are free to choose. The former are usually designed by an individual or a small team and built altogether at once, the latter are usually incrementally grown over a period of time. The townships or the newer planned areas come about through the application of elaborate professional planning and design constructs, and display a sterility which inhibits rather than releases the potential for the qualities of "urbanity." The older, freer areas, which were developed prior to the advent of professional planning grew through an evolutionary or ecological process, they performed better than the new areas and resulted in rich and varied living opportunities for their residents.113

The qualities of "urbanity" are complexly interrelated and interdependent, and positively reinforce each other at every scale. Thus generalizations can be drawn from the analysis of a comparison

113Ibid., p8
Harfield Road, building texture. Subtle changes in the grid create much variation in block size and thus in the possibilities for built form.
Dewar, Uyttenbogaardt, Hutton-Squire, Levy, Menidis; Housing, A Comparative Evaluation of Urbanism in Capetown, UPRU, UCT, p78
between the newer, planned, construct-based areas, the townships, and the older, evolutionary developed areas, the suburbs, facilitated by discussion under the scales at which they are most clearly revealed.

**Metropolitan and Total Area Scale**

The positive qualities of an environment are largely influenced by the degree of integration of the local areas into the metropolitan region. The suburbs display a higher degree of integration than the townships for two main reasons. First, local areas were not conceived of as separate entities in their own right. Growth and development occurred naturally, responding to what had gone before, and without the creation of artificial boundaries between areas. Integration is enhanced by continuity of fabric. Second, development responded to and has been informed by major metropolitan movement routes. These routes have helped to achieve integration as they carry heavy traffic loads; they allow stop-start movement along their length; and intensive activities locate along them. Functions which require this intensity of activity logically gravitate towards them. These functions in turn generate further traffic and the cycle is perpetuated.

At the metropolitan scale these routes provide continuity and comprehensibility to the city. They are the threads which integrate the various parts of the metropolis. The image of the metropolitan area is related to these routes because of their dominance and the intensity of activity along them. Function and quality vary along the
Wynberg, historical development -1. The development of Wynberg over time has resulted in a rich environment providing many alternative conditions under which people there may live.

Dewar, Uytenbogaardt, Hutton-Squire, Levy, Menidis; Housing, A Comparative Evaluation of Urbanism in Capetown, UPRU, UCT, p93
routes responding to particular locations in the metropolis. Intense commercial strips are often flanked by large residential areas and reinforced by increased transportation alternatives, such as trains and buses. The commercial strips are supported by local residents as well as the larger metropolitan region. Businesses requiring large amounts of space tend to locate where there is less residential backup and a smaller supportive population.

Three important points emerge from a study of the suburbs. First, the integration of a variety of land uses with different location requirements and different degrees of compatibility with each other and with the residential environment is achieved naturally. It is not imposed by zoning or other land use controls. It occurs through logical locational responses to a clear structural framework and through the realization of the potentials of different locations. The uniqueness of place allows a real choice of environmental conditions. Second, large scale integration is successfully accomplished because different types of functions complement and reinforce each other. Third, the potentials along the routes for integration result not only from relative metropolitan positions, but also from the nature of the surrounding development. The scale of flanking development is significant and less vulnerable to invasion by other use than it would be if it were in small pockets.114

114 Ibid., p9
The major infill development occurred between 1900 and 1931 and by the end of this period, the physical structure of Wynberg was more or less complete.

Through a process of action and reaction over time, Wynberg has developed a physical structure with a dominant directional route, Main Road, and an internal gridiron structure, which is dominant by directional routes less major than Main Road but more dominant than the other roads of the area.

Wynberg, historical development -2.
Dewar, Uytenbogaardt, Hutton-Squire, Levy, Menidis; Housing, A Comparative Evaluation of Urbanism in Capetown, UPRU, UCT, p93
At the local area scale the routes perform a number of functions in the suburbs. Since they serve many areas they act as integrators, and activities located along them can derive support from both passing traffic and local residents. Thus higher order activities than could be supported by the residential population alone are attracted. These higher order facilities enhance the convenience of living in the area. The activities also attract people from other parts of the metropolitan region into the area, exposing the inhabitants to a wide range of people and influences. In addition, these directional routes protect the more sensitive residential fabric adjacent to them. The clarity of structure provided by these routes serves to keep the heavy traffic and the high intensity activities along the routes, releasing pressure on other parts of the fabric. The activities along the routes become the focus for people living in the surrounding areas. Such a road does not separate a community, but tends to integrate it.

This suburban situation can be contrasted with the construct-based, planned townships, which are less successfully integrated into the metropolitan area for several reasons. The townships have been conceived as separate entities and are spatially distinct from the rest of the metropolis. No continuity of fabric occurs. The belief that residential areas are incompatible with more intensive functions has led to the deliberate separation from major work and social opportunities of the city: in effect, they are dormitory areas. The major routes linking these areas to the rest of the metropolis are solely for the passage of vehicles. Although not freeways, stopping
Upper Wynberg, building texture. The topography has resulted in an irregular road layout, which, together with the integration of a variety of uses and house types has led to a diversity of condition.

Dewar, Uyttenbogaardt, Hutton-Squire, Levy, Menidis; Housing, A Comparative Evaluation of Urbanism in Capetown, UPRU, UCT, p102
along them is restricted and activities prevented from locating along them.

The routes tend to be located along the boundaries of these townships as buffers, and therefore separate rather than integrate the residential areas from each other and from the rest of the metropolis. Thus the reinforcing process existing in the suburbs which evolved over time does not occur. Through traffic brings no benefit to the area. Because the areas are separated they are inwardly oriented, and must generate the entire range of opportunities themselves. This lack of integration denies the residents certain opportunities entirely, or they must travel long distances to them (costing both time and money). Further, there is none of the exposure to outside people and influences which exist in the integrated areas. The inhabitants' range of experience is that generated by the local community.

This lack of integration negatively affects both the quality of life of the people living in these areas, as well as the metropolitan function of the movement routes which become no more than connecting movement channels. The freeways provide none of the continuity, comprehensibility or imageability afforded by the integrative routes. They are also inefficient as traffic along them will tend to be unidirectional, into work and out again, and they will thus seldom operate at capacity. This "separatist" pattern of development and the dispersal of activities necessitates more movement than does a more
Aerial photographs, places which are created over time. Harfield Road (above) and Salt River-Woodstock (below).
integrated area, demanding a greater energy and financial resource utilization than in the evolutionary developed areas.

Thus at the metropolitan scale, the nature of integration and location and nature of metropolitan routes has a fundamental influence on the quality of local areas.

The clarity of structure within the evolutionary developed suburbs allows non-residential functions to be integrated with the residential fabric. Because of the clarity, most movement and the most intense activities logically gravitate towards the dominant routes, and these activities reinforce each other. The result is that the local level of service provided is higher and the convenience of living in the area is enhanced. The channeling of the most intensive movement protects surrounding areas from through traffic and invasion by other activities, allowing very fine-scaled fabric to exist in immediate proximity to shops, work opportunities, social and cultural facilities, etc. The clarity of structure increases the choice of environmental conditions available, from active to quiet.

In the townships, the principle of separation governing the establishment of the areas as a whole holds within the area as well. Each function is regarded as a separate element and not an activity, limiting integration. Each function has been arranged and programmed in an "arithmetic" or "scientific" manner, with each individual function or group of functions being placed centrally to the local areas they are supposed to serve. Furthermore, there is
Bonteheuwel, historical development. Bonteheuwel was conceived and built as an entity and its performance is considerably inferior to those areas which developed through a process of action and reaction. One of the constructs on which the area is based is the belief that certain activities (particularly working and living) are incompatible and that they should, therefore, be located in different parts of the city. This is also done to make the areas in which "non-white" people live less permanent than those areas for white people. Bonteheuwel lacks work opportunities, shopping facilities, and has few social and cultural facilities. "Moreover, it is a boring and sterile environment."

Dewar, Uytenbogaardt, Hutton-Squire, Levy, Menidis; Housing, A Comparative Evaluation of Urbanism in Capetown, UPRU, UCT, p129
none of the clarity of movement structure which exists in the evolutionary developed suburbs; the reinforcing impact of movement flows have been evenly distributed across the area. This results in a generally inadequate level of service, as activities do not reinforce each other, they are compartmentalized, each requiring a special trip, and limiting the range of environmental conditions.

The suburbs are also superior to the townships because of the generality of their movement structure. The multi-directional structures, for example the grid, operate as enabling devices. They are easily legible and provide a wide range of route alternatives. This offers inhabitants a degree of "voluntary anonymity" because residents can choose their degree of exposure to neighbors. It also offers a element of safety, since routes and journeys are less predictable. Furthermore, the grid facilitates a variety of environmental conditions, as small changes or interruptions in its scale or configuration result in quite differing conditions. Structural generality does not reduce the range of opportunities to a limited number of places, it allows opportunities to be pursued by any individual on the land that person occupies. Thus the adaptability or "resilience" of an area is increased, and changing demands over time can be more easily accommodated.

The townships have a highly specific structure which offers little choice of movement routes, which therefore make little contribution to the necessary qualities of anonymity and safety; environmental choice is replaced by uniform sterility; and their adaptability to
Bonteheuwel, aerial photograph.
Dewar, Uytenbogaardt, Hutton-Squire, Levy, Menidis; Housing, A Comparative Evaluation of Urbanism in Capetown, UPRU, UCT, p127
change and their enabling qualities are reduced, since opportunities tend to be restricted to a limited number of places.

A quality which contributes to the resilience of an area is the range and choice of environmental condition which exists. Range and choice are in turn facilitated by the clarity and generality of the structure.

A further important factor is the involvement of many people in the making of a place. Those areas which developed over a long period of time through a process of small-scale development exhibit a far greater variety of condition than those areas constructed as entities. Moreover, the variety has been achieved without a loss of unity or coherence, because individual decisions have been controlled by some constraint, whether structural constraints (for instance the road pattern), historical constraints (people responding to what has gone before), or technological constraints (limitations in building materials or techniques). In this sense, constraint is an enabling factor which allows individual freedom while protecting the public good. In the construct-based or township areas, constraints exist, but there is little opportunity for individual freedom. This is because the part of the environment upon which the individual can best express himself, the unit, is entirely planned and constructed by the public agency. The involvement and expression of many people in creating a richness of environmental condition does not deny the possibility of

\[ \text{\textsuperscript{115}} \text{Ibid., p11} \]
Bonteheuwel, building texture. As a probable reaction to the supposed uniformity of the grid, the road pattern laid down is a complicated and highly specific one. However, the long blocks give priority to the motor car, and the maze of blocks limit its efficient use. The relationship of houses to the street is also repetitive and monotonous and results in uniformity and dullness. The separation of uses and the lack of diversity in residential building types contributes further to its uniform character.

Dewar, Uyttenbogaardt, Hutton-Squire, Levy, Menidis; Housing, A Comparative Evaluation of Urbanism in Capetown, UPRU, UCT, p136
rows or runs of identical units. When these conditions occur together, the variety of one is complemented by the regularity of the other, and vice versa. When the scale of uniformity becomes too large, however, the overall result is increasing sterility.

Local Area and Building Scale

Environmental qualities are enhanced at all scales through the recognition and response to the uniqueness of place. The potentials inherent in particular places should be recognized in the design and making of buildings or areas and should be exploited for positive benefit. The key to the creation of opportunities and richness lies in the creation of uniqueness and the response to it, which can be released and revealed by constraints such as structure, slope, climate, and location. Uniqueness is the structural key to which individual ingenuity may respond, and it follows that environments cannot be created through the application of standardized rules or theories, or by mimicking "foreign" or imported ideas.116

It becomes clear at this local and building scale that the totally private sections of the individual dwelling unit (behind the front wall) are only a small part of the overall positive environment. However, the private space abutting public space is totally interdependent with that public space and each fundamentally effects the quality and manner of usage of the other. Both the public and the semi-private space work together to affect the performance

116Ibid., p11
Buildings -1. The richness and diversity of places which are built up over time allows for rich and complex environmental conditions. The tightly knit fabric of Woodstock (right) still satisfies the privacy requirements of the residents. However, there is a lack of private open space, and the reaction to this lack has been one of the main reasons for the trend away from attached housing and towards larger plots.

Dewar, Uytenbogaardt, Hutton-Squire, Levy, Menidis; Housing, A Comparative Evaluation of Urbanism in Capetown, UPRU, UCT, p180
Buildings -2. The houses in Harfield Road (left) built later than those in Woodstock, illustrate the results of this trend towards larger plots. The residents have ample private open space, but problems of privacy between houses arise as the windows of neighboring houses face each other. The houses in Sun Valley (right) represent the culmination of the trend and are representative of the purist thinking which has dominated most recent housing schemes. In their creation, there has been no recognition of the complex interdependence between the private, semi-private and public functions. The interface between houses does not provide privacy for the residents; the interface between the house and the street neither contributes to the private space nor to the quality of the street space. It can be seen that the end product of this purist philosophy is a poverty stricken and barren environment, providing accommodation but little else.

Dewar, Uytenbogaardt, Hutton-Squire, Levy, Menidis; Housing, A Comparative Evaluation of Urbanism in Capetown, UPRU, UCT, p180
Hanover Park, historical development. Hanover Park has been conceived and constructed in its entirety and consequently there is little evidence of individual ingenuity and creativity in the area. The environment lacks the variety of condition which stems from the involvement of many people in the making of a place.

Dewar, Uytenbogaardt, Hutton-Squire, Levy, Menidis; Housing, A Comparative Evaluation of Urbanism in Capetown, UPRU, UCT, p147
of any living area, and so the entire or total space should be viewed in terms of its social function and regarded as social space. The "health" of this relationship between public and private space is dependent upon the definition of the "interface" between these spaces. This interface performs a number of roles:

1. It clarifies the definition of public and private;
2. It allows (or prevents) environmental continuity;
3. It plays a major role in creating the quality of the public space; and
4. It affects the ways in which the private space is used.

The interface is thus the "enabling constraint" which releases individual freedom while maintaining the quality of the public space. The interface may be made in many ways, from walls to vegetation, and the manner of making will influence the performance and the "feel" (soft, hard) of the area.

Interdependence between public and private space is clearest when private and public space abut, but this interdependence holds true even for non-contiguous space. For example the amount of outdoor private space will affect the role of public space in an area. In older areas, inadequate private outdoor space negatively affected the areas performance. In reaction, many of the newer planned areas have increased the amount of outdoor space to the degree where the potentials of "urbanity" have been destroyed. In such cases, such

\[\text{\cite{117}}\text{, p11}\]
\[\text{\cite{118}}\text{, p12}\]
Hanover Park, aerial photograph. The lack of a grid iron road pattern does not make this place varied or pleasant. The area is spatially distinct in the metropolis, being separated from other areas by the large peripheral routes and wide buffers of open space.

Dewar, Uyttenbogaardt, Hutton-Squire, Levy, Menidis; Housing, A Comparative Evaluation of Urbanism in Capetown, UPRU, UCT, p145
as the that of free standing houses each on their own small plot of land, the legitimate desire for individual privacy has been pursued to the extent that the public good breaks down, and a lack of responsibility to the total environment is exhibited. Such environments lack quality and break down when faced with the complex requirements of people in the urban areas. The most successful environments are thus those in which the interdependence of public and private spaces is consciously recognized in their design.

A further factor in determining the quality and performance of environments at a small scale is the integration of different uses and activities. Integration affects the performance of social, cultural, commercial and other factors when they become integrated into the life and fabric of that community. Integration also stresses the multi-functionality of facilities. For example, the experience of shopping becomes a learning, social and recreational experience, and the shop a facility for these experiences. Schools become more than just facilities for institutionalized learning, they become used by the community for social, recreational or religious purposes as well.

Integration also encourages different functions to reinforce each other. For example, a public open space integrated into a residential open area may affect the function and performance of both. The houses may provide a sense of enclosure, surveillance and safety to the open space which will determine how the space is used and who uses it. The open space may provide visual relief to the residential
Hanover Park, building texture. The uniformity and dullness of the environment, coupled with the lack of opportunity for individual self-expression, imposes a negative form of anonymity upon inhabitants. Dewar, Uytenbogaardt, Hutton-Squire, Levy, Menidis; Housing, A Comparative Evaluation of Urbanism in Capetown, UPRU, UCT, p154
fabric and act as an extension to private outdoor space. A similar comment might be made about apartments on larger plots within a dense single story fabric.

The integration of a range of environmental conditions and of different uses and house types will affect the quality of the social space, particularly as these have different building heights which contribute to the rhythms of the social space. Further, the different functions have different operational requirements which therefore demand different interface relationships with the street. For example, a house requires privacy from public space, which defines the form of the interface in a particular way, whereas shops and other social facilities require a higher degree of exposure to public activity, to which the definition of the interface must again respond. The result is that in an integrated environment the social space takes on an enriching diversity as defined by the various interface relationships. The variation also defines to the motorist or pedestrian the dominant or changing functions, which clarifies and reinforces the uses and functions in turn. Thus it is not the variety per se which is significant, but the complexity of integration of different uses and types. This integration is most directly experienced at building or street scale, and the key to its success is the way in which the interface is made.

The most positive integration occurs when the interface takes into account and is made in such a way that both the different requirements of private uses and of public spaces are recognized,
Houses in Soweto with backyard shacks, makeshift repairs and fences between neighbors.
met and maintained. The interface also influences the effect of one private space upon another, and its role is to clearly define the areas of responsibility to prevent conflict between neighbors - "good fences make good neighbors." The emphasis of the interface in such a condition is the protection of privacy.

Another factor influencing environmental performance is the multifunctionality of space. The activities of people cannot be compartmentalized into simple spatial parcels. "Socializing" does not only occur in "social facilities" but in the street, in shops, at work, etc; "living" does not only occur in the house but it is part of all of people's activities. Thus the most positive environments are those in which the complex demands made upon space are recognized and are consciously accommodated. Often this accommodation of multifunctional requirements means that none are accommodated optimally, but the overall performance will be superior. For example a road which is a movement channel but also plays an important social role - may not operate ideally for cars and pedestrians, but its overall performance is better.

Unifunctionality of thinking not only affects environmental performance at a small scale. It is also this thinking which, more than any other, underlies the purist approach to city development (industry must occur in "industrial areas", metropolitan shopping facilities must take the form of "shopping centers", "residential areas" must be distinct from work areas and so on) and this approach. . . contributes substantially to the inefficiency, inequality and sterility of urban areas.

General Comments

119 Ibid., p13
120 Ibid., p13
Buildings. This series demonstrates regression in the performance of areas over time. This can often be attributed to reactions in the newer areas to perceived inadequacies in the older areas. In attempting to improve the inadequacies, many of the positive qualities exhibited in the older areas have been destroyed. In Woodstock (left), privacy between individual units exists because the units are attached. In addition, the run contributes positively to the quality of the street space by giving it a sense of enclosure, continuity and scale. A perceived inadequacy, however, is the lack of private outdoor space. In Upper Wynberg (center), an attempt has been made to increase the amount of private outdoor space, and the houses are now separated, each on its own plot. Privacy between houses is now a problem however for the side windows of adjacent units face each other. The units still maintain a degree of integration, provided by their orientation and the garden walls, and consequently the street space is still defined. In Sun Valley (right), the trend is taken still further. Plots are now larger and privat outdoor space has been significantly increased. Privacy between units is still a problem however, as the units are not far enough apart for distance to provide privacy. In addition, the houses make no contribution to the street space. The sense of enclosure, continuity and scale is destroyed and the street is no longer equipped to perform its social role. This has occurred largely because the emphasis of approach has been on the individual unit and not on the quality of the whole. It is a manifestation of a "purist" or "elemental" approach (an approach which focuses on each element separately and not on the whole) which has been seen to fail at all scales.

Dewar, Uytenbogaardt, Hutton-Squire, Levy, Menidis; Housing, A Comparative Evaluation of Urbanism in Capetown, UPRU, UCT, pp206-207
SUN VALLEY
The total housing problem is more than just the provision of houses, it is the provision of total living environments. These must satisfy the complex and diverse requirements of the urban population and must provide the opportunities of a "healthy" environment. In terms of this "total problem," the provision of the house is a small part of the fundamental design question of what and how much must be laid down.

In the development of a living area or a program aimed at stimulating human development, freedom and creativity must be possible and allowed. Richness and diversity of environmental condition can only occur when many people have a hand in the making of a place. However, if either individual freedom or restriction are taken too far, then detrimental effects may result.

The unrestrained pursuit of individual preference may destroy the quality of the whole and there is thus a conflict between individual freedom and the social or public good. Further, if opportunities for freedom are taken too far then that freedom itself is destroyed. Freedom exists only in the context of the opportunity for choice, and choice, in turn, is created through constraint. If constraint is taken too far, however, individual freedom is again reduced. Constraint thus releases and stimulates individual freedom and creativity, protecting and controlling the public good in the face of individual freedom and providing coherence and continuity to the whole.
Mitchells Plain. This recent scheme attempted to realize many of the principles which are found in the areas that developed in an evolutionary way.

Dewar, Uytenbogaardt, Hutton-Squire, Levy, Menidis; Housing, A Comparative Evaluation of Urbanism in Capetown, UPRU, UCT; p119
In environments such as those built through mass housing techniques in the townships, in which constraint is synonymous with total control, constraint is taken to the point where individual creativity is almost entirely stifled. The results are negative for both the individuals and the quality of the whole. The uniformity and dullness of many of these areas is, in large part, a consequence of excessive restriction. On the other hand there are also areas where individual freedom has been pursued to such a degree that the coherence and the quality of the whole has been destroyed, negatively affecting the lives of the individuals. While older white suburbs have a coherence resulting from the uniformities in building materials, a coherence in physical features; the townships have a coherence which results from the instant and mass-production of their environment, which in turn is a product of the coherence in laws which ensure that such places are built.

Thus to answer what and how much needs to be laid down in living environments, the answer is that it is those essential constraining structures which the individual cannot create which should be provided. It is those enabling elements which allow both freedom of choice and the opportunity for the individual to create for himself, and yet maintain the quality of the whole, the public good. The most significant of these are the public spaces (including semi-private spaces) and the interface between the public and the private spaces which must be provided. The constraints must allow the individual's freedom and should be provided in an enabling way.
A scheme presently being developed by Uytenbogaardt, Macaskill & Schneider for the Cape Divisional Council illustrates the application of many of the principles of the gridiron structures of Salt River, Woodstock, Harfield Road and Wynberg.

Mitchells Plain, predicted land use. This was an attempt by designers to create a new township learning from the lessons and the study of places which had grown over time.

Dewar, Uytenbogaardt, Hutton-Squire, Levy, Menidis; Housing, A Comparative Evaluation of Urbanism in Capetown, UPRU, UCT, p75
Many modern environments lack the essential qualities largely because of the growth of "professionalism" and specialization with respect to the making of environments, especially since the industrial revolution. Thus "experts" emerge in the face of the increasing complexities of life, and the emphasis is drawn away from the whole to the part. As more and more is known about less and less of the built environment, the essence of the whole is being lost. Furthermore, this increasing concern with the parts has been conducted under the veil of the mystique of rationality, of "scientific thought," which carries with it an aura of inevitability. The building of rational theories has dominated the making of environments, and each theory reacts to the previous theory while the environmental performance consistently declines. The theory building process is driven by an over-emphasis on the need for orderliness, without recognizing the duality of order and disorder.

The characteristic of orderliness which ensures sterility is simplicity. The activities of people represent a complex totality which needs to be reflected in the environment. Without such necessary complexity environments become restrictive. The replacement of complexity with simplicity, of purism instead of integration, uni-functionality instead of multi-functionality, variety of use types instead of interdependence, and so on, which has been a part of the process of theory building, has been enhanced by a parallel concern with administrative convenience. Thus complex ideas are "streamlined," performance standards replaced by physical standards, and thought replaced by standardized rules which ignore the uniqueness of place.
A house in Soweto which is being altered and a porch enclosed. The large window on the right also appears to be an addition.
The element which lifts order beyond orderliness, and which is therefore necessary for the creation of successful environments, is a creative synopticism of thought which recognizes the necessary complexity of man, his life, and the role of the environment in that life; which recognizes too, the complex processes of independence and reinforcement which constitute the essence or urbanity.121

Synoptic thought and understanding does not imply knowing everything about people and their environment, but it is based on a recognition what is significant; of what should be left to the individual to create, and what should be provided to stimulate that ingenuity and creativity. It is a synopticism based on rationality and understanding, which allows for other capabilities, and which recognizes not only "what is", but also "what can be".

A treacherous consequence of the process of specialization has been the removal of the responsibility of the individual to establish a relationship with his environment. Another is that a person's sense of possibilities has been curtailed. Specialization has resulted in the exploitation of people's ability to adapt. A person's sense of possibilities is experientially determined, yet the experiences offered are sterile. Yet because people adapt, the recognition (and crises) necessary for change does not occur. Environments which are enabling are not created by asking anticipated users what they want or by placing the entire responsibility for the creation of environments in the hands of the inhabitants. Ideas are required which free individual creativity beyond the replication of "what is." Lastly, the "timelessness," or the ability of environments to

121Ibid., p14
Density case study, Moroko, Soweto. Compare this township layout to that of Houghton, Johannesburg, a white middle-class suburb. Drawn at the same scale, it is clear to see how the township design is a corruption of the Anglo-American suburban design as adapted in Houghton. The concept of a single house on a plot in a block is the same; the differences are: the sizes and designs of the houses (those in Moroko are identical to each other, those in Houghton are all uniquely designed and include outbuildings to house servants), the sizes of the plots, the sizes of the blocks, the density of the housing, and the income of the residents.

Adapted from: Gallagher, Aspoas, Poplak, Senior, Walker and Walker, A Housing Options Assessment Manual, An Urban Foundation Study, Housing Policy Unit, pp B4
Density case study, Houghton, Johannesburg.
Adapted from: Gallagher, Aspoas, Poplak, Senior, Walker and Walker, A Housing Options Assessment Manual, An Urban Foundation Study, Housing Policy Unit, pp B3

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Not providing housing is to treat man like a desert where erosion is allowed to develop unchecked until it is beyond reclamation.

(D. M. Calderwood, *Principles of Mass Housing*, p15)
accommodate change is influenced by many factors, including clarity of structure, generality of structure, significance of interface, precision of definition of territory, and more. Most important is the attitude displayed towards change in the creation of environments. Growth and change are not accommodated by leaving large amounts of undeveloped space so that areas can grow to predicted sizes in the future, sacrificing today's generation for those of tomorrow. Successful environments are those which have always performed well, having retained their unity and their holism. Thus if environments which foster and enrich life can be created for their own time and place, made with generosity, then "time will make willing detours" for them in the future. Such environments are not created through the application of standardized rules or universal theories. They come about through an environmental consciousness and the application of ideas which are related to place and which free the potentials and the creative ingenuity of people.

Conclusion
I have covered a lot of ground in this Chapter, which I have called "Anglo-American Suburbs, Attitudes, and Analysis." In it I have traced several aspects relating to "space and race" in South Africa. I have shown how Anglo-American suburbs themselves became a corruption of a suburban ideal, and how the townships in South Africa are again a corruption of that ideal, if not a corruption of the corruption of the ideal. I then examined some of the attitudes of the

5 February

The white people,
they worry that they eat too much.
We worry because
we don't have enough to eat.

Ntombi, Thula Baba, Ravan Press, Johannesburg, 1987
page 29
people involved in the design of the South African townships in order to make explicit many of the implicit political values which these men had. This was in order to show exactly how the suburban ideal has been corrupted for political ends in South Africa. In the final part of this Chapter I tried to show at yet another scale how the townships are corruptions (in the sense that they have perverted or adulterated) the benefits that a suburb has to offer and have resulted in environments of poor quality offering little opportunity for improvement and for self-actualization. In the final Chapter I will go on to explore further relationships between architecture and politics, and shall examine the "urban question," the ways in which urban sociologists and political economists have sought to use Marxist ideologies in studying the problems of the city.
BETWEEN TWO WORLDS
Nat Nakasa

How long will this woman hold out against the community that says she's abnormal and insane? How long will the black man on the fringe hold out against the insults and police hounding which often costs a house, a job or the freedom to live without tension?

These are questions that drag even the jazz-hunters into political talk, however apolitical they may wish to be. Legislation for the separation of people according to racial or colour groups makes life nearly impossible on the fringe.

Yes, people on the fringe have long conversations about this. Practically none of them is ever in court for any immorality. They generally credit this to the openness and naturalness with which they lead their lives.

There isn't the "forbidden fruit" urge. When a black fringe-man meets a white woman, there is no question of the couple jumping into a clinch or into the nearest garage.

A young African writer put it into a few lines in a recent short story. The story is of two young men, a black one and a white one. A policeman stops the two men in a Johannesburg suburb and asks the black one why he is walking around in the white man's area instead of going to enjoy himself in the Bantu areas with his own people. "Who are my people?" the black man asks, challenging the classification.

This man said all there is to be said about the fringe. The fact of being born into a tribe, be it Afrikaner of African, does not matter on the fringe. These people who are neither proud nor ashamed of it, are the emergent group in South Africa.

That new South Africa is being preceded by bold discussion and action. During a press conference, an executive of the South African Broadcasting Corporation was extolling the virtues of his pride in being an Afrikaner. "Aren't you proud of your own African tribe?" he asked an African journalist. "No, I'm not," said the journalist. "I see nothing to be proud or ashamed of there."
This is perhaps one of the hardest concepts to get through to Afrikaners and Africans. The idea of "my own people" is deeply entrenched in the two groups. Much more so in the case of the Afrikaner people, whatever the historical reasons may be.

I found this feeling in an Afrikaner Nationalist's home. I was having dinner with Jannie Kruis and his pretty wife. Jannie gave me a drink, offered me a room in his house and asked me to see him more often. When I asked how he could make all these offers and still vote for segregation, he answered simply, "I have to vote for my people's party. How can I desert my people?" He wouldn't be shaken from his stand.

An advocate spoke of his early days in the Orange Free State. "I grew up with African boys and girls," he says. "But when I went to boarding school, there were only white children around me. So that when I came back home I couldn't even shake the hands of my childhood playmates. I had been taught it was wrong. I had been ordered to live by the values of separation."


pages 12-13
Illustrations by Dumile Feni, in Somehow We Survive, an Anthology of South African writing edited by Sterling Plumpp.
CHAPTER FOUR

Abstractions and Conclusions

Space is political. Space is not a scientific object removed from ideology or politics; it has always been political and strategic.¹

This Chapter will be presented in three parts. The first two parts will deal with further considerations of the relationship between architecture and politics. Having explored the political agenda of the South African government, the history and form of the townships, and the attitudes of the some designers of these places, I now wish to try to bring these themes together in a more generalized and theoretical way. In this section of abstractions and conclusions, I have attempted to tackle many disparate pieces and pull them together as they all bear some relation to the broader topic of politics and cities. First I will discuss various thoughts about politics and architecture, and how architecture and its broader relation, planning, can actually work to serve political purposes, or if architecture and designed towns only take on (political) meaning because of the various ideologies of the inhabitants, the designers and the politicians. Second, I will examine some aspects of urban ideology and its relation to space and race in South Africa, and I will explain some relationships between what can be observed in the townships and what can be observed about them. Third, I will look at some recent developments in South Africa and suggest some future trends.

THE INSTITUTE OF SOUTH AFRICAN ARCHITECTS,
NON-EUROPEAN HOUSING.

<table>
<thead>
<tr>
<th>AREA OF HOUSE</th>
<th>NUMBER OF BEDROOMS</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>770 sq.ft.</td>
<td>3</td>
<td>KITCHEN DINING COMBINED</td>
</tr>
</tbody>
</table>

NORTH ELEVATION.

EAST ELEVATION.

PLAN.

NOTE: SUITABLE FOR EAST AND WEST FACES OF SITE OR 60° FRONTAGE.
One of the house types from the Housing Brochure prepared as a result of the housing competition sponsored by the South African Institute of Architects in 1953. Note that houses such as this were rarely if ever built for black people in the townships, being truly middle class housing and larger than those usually built. Note too, the rendering technique, the clere-storey windows, and the international aesthetic regionalized for use in the townships. That architects become involved with aesthetics of such houses and accept apartheid ideology and township policy is typical of the professional's attitude in South Africa.

Calderwood, Native Housing in South Africa, p97
An architecture which is of essence political would be those buildings and town designs which promote, provoke, and create the opportunity for political ends. It is difficult to provide examples of entire buildings which fulfill such requirements, as all buildings contain political ideas. To designers many of the assumptions made about the way people live are implicit, but when people have a limited choice about living in environments which are designed according to another's assumptions about how they ought to live, then this clash of ideologies can be seen to be political. Every wall is an assumption about the way we live our lives. Walls can include or exclude people, they can be on one side of them or the other. The designer, architect or planner's ideas about how people ought to live, which may not be about governing, but which may share significant assumptions with those who do govern, is nevertheless political. The assumptions are made concrete in everything that is built. Similarly, assumptions can be evidenced in that which is not built, which also can greatly affect peoples' lives. This is to suggest that there is an architecture which is political, which overwhelms and humbles, or empowers and includes, or sends mixed messages decoded differently by different individuals, depending on life experiences. In South Africa, the experience of a political architecture would have quite different meanings depending on one's race.
The walls of a building can be used to imprison and separate, or they can secure and protect. In reality, more subtle building forms and types can work to separate people, empowering some and working to disenfranchise others, or both simultaneously, from different perspectives. An extermination facility might belong to the extreme of architectural and political types, and whereas its external appearance might be that of a shower room, the knowledge that its use is very different gives such an edifice a very different meaning. I suggest that such knowledge cannot be separated from our experience or study of the building.

Architecture can be used by and for political purposes, but often the primary intention of the designer is to create and realize a competent technocratic accomplishment to suit a client's brief. A client with an explicitly political agenda requires particular buildings or forms of town design in order to achieve specific ends are obviously prime examples. For the designer this might suggest a technocratic approach, or allow for an extravagant budget, or an opportunity for rich symbolism, but the building itself does not necessarily embody the political ideal, it merely houses it. In this case it is the occupant or even the circumstances of the commission which bring to the building a political agenda. Even subsequent events which become associated with the building, unbeknownst to the designer may give the building political connotations. In some senses a building "houses" an ideology in the same way that a government might use a technocrat. The walls, or the information may in itself be neutral in
Police station, Witbank township. Note that the presence of the police in the townships, although not housed in grand quarters, are ever present. The police station is usually carefully positioned in a township so as to be visible upon arrival and departure from the township by residents, and the numbers of police and military on patrol have particularly grown since 1976.

Calderwood, Native Housing in South Africa, p134
character, but the way in which they are used layers them with further meaning and implications. The ideology which is most tied to architectural expression is that which explicitly, if subtly, affects the built environment. In South Africa the ideologies of apartheid: the separation of the races, the controls of the influx of black people into the urban areas, and the inculcation of "western" values in the lifestyles of the African population are associated to the resulting form of the townships.

The architecture or urban plans most closely aligned to the politics of a place are those buildings built for and by the government. Such an architecture might be an Assembly building, a palace or an Ambassador's residence. Examples include: South Africa's Tri-cameral parliament buildings, where the Asian, "Colored" and white people each have their own assembly halls in line with apartheid's grand scheme. Assembly buildings, however, do not merely house but, through careful manipulation of culturally-resonant symbols, serve to highlight patterns of dominance, and, by extension, submission. Specific policies may not be advanced by "architecture" itself, but architecture, through its associations, supports the social relations and structure of power that legitimates the ideas of elite rule. A further example is the "buffer-zone" surrounding the townships in South Africa, a no-man's land planned to separate the races by some legislated minimum distance. Both of these examples are designed solutions in support of the ideology of apartheid.

2 Note that the Tri-cameral parliament as an institution is a move away from the older apartheid notion of more limited power sharing,
"Kitskonstabels" (Instant police) patrolling the boundary of Kayalitsha township in the Cape. These black policemen carry shotguns and are an ever roving presence in the townships to maintain the law and order of the white regime.
Buildings shelter people and architects are taught that they provide amenities for people to carry out the functions of their lives in greater or lesser comfort. People are remarkably adaptable, and the controls which buildings can assert over them are therefore limited. However, buildings do provide the forms within which people live their lives; their actions are shaped by the walls and openings. Architecture can also work in a very different way which I have hinted at above. It can work symbolically and affect peoples' emotions and play with their senses, and in this way the building might become associated with a particular political ideal, such as fascism or democracy.

Buildings and town plans can change function and symbolic meaning over time. They are political either because they themselves represent a political agenda, such as a monument to a racial nationalism. Further examples of why designs are political are: the provision of different sized, form and standards for houses of different people in various areas according to their race; or because they are commissioned by and/or for people for political ideals, such as government buildings, from police stations and town halls to mass housing over which the government remains the landlord. In both these respects, the architecture is an accomplice to a political agenda, to the ideology of the ruling power in a country. In this fashion the architecture is "in complicity" with the client. Human beings can sense in inanimate objects certain qualities which reinforce ideology. People do the work and the buildings or towns begin to "mean" when
All architecture is political

Architecture as an ART or with MEANING - POLITICAL

All architecture is art

Architecture is autonomous from politics as a SCIENCE
placed in a broader social and political context. These are not the only ways in which architecture and planning can have political content, but are important ways of understanding their ramifications.

It is valuable to view the relationship of architecture and planning to politics from the perspective of the architect. Either the architect may regard all architecture as political in that it works to further the aims of the governing power, acknowledging that every decision can be traced to further the ruling party’s policies. Alternatively, the architect may regard all architecture as an art, as the aesthetic play of light on volumes and masses, being totally autonomous from politics and the world of ruling people, and as referring only to itself and its own history and world. A further view, that apparently followed by Calderwood and Floyd, is that architecture and planning are "sciences;" they are technical skills required to find the most efficient solutions to problems which are set by others. These views are worth representing on a matrix, or graph, together with building types and their political content, as they are evidenced in South Africa.

In attempting to create such a matrix, I find that the complexity of racial issues in South Africa adds a political dimension to almost all building types, whether it is the architect’s intention to do so or not. With the politicization of space, largely due to the racial zoning and inequalities in South Africa, a building is imbued with a political content simply by being commissioned, existing and occupied. Thus rather than a matrix defining architecture as political or as art, it
Complexity of race in South Africa adds political dimensions to all buildings, some more and some less so.

Less political building

Buildings "open" to all
- Museum
- Theatre
- "International" hotels

"Social" content not non-racial

Buildings reinforcing status quo
- schools
- hospitals
- "International" hotels

reinforcing disenfranchise-ment
- office building
- house in white suburb
- house in township

Buildings supporting apartheid
- barracks
- compounds
- Parliament in the "bantustans-homelands"
- prison

More political building
becomes more valuable to graph architecture as more political and less political. The same can be done for larger scale planning issues, such as new townships, roads, zoning issues, etc.

I will briefly explain how certain buildings are political in the South African context, and whether some are more so than others. A 51/6 house in the township of Soweto is a government built and rented building in order to house the black labor in convenient proximity, and to induce certain assumed middle-class values in the occupants. Its residents have little choice or selection in this process. In this respect such a house is more political than an owner-built house in the white suburbs, where the family has some choice as to the relative location with respect to work opportunities, etc. However both houses fulfill political ends as they are place specific, and exist only in places zoned by the government for the particular race of the owner and the occupants. A further example is provided in the study of a hospital. Such a building certainly provides much needed socially beneficial services, and for this reason can be seen to be, in a liberal's eyes, less "evil" than say a central prison for political detainees. However, when it is realized that hospital services are segregated to serve South Africa's different race groups independently according to government policy, then it is no longer clear how "innocent" this building remains. Further, hospitals serving black people are overcrowded and understaffed, while white hospitals have empty wards and high-tech equipment never even used. Thus it becomes clear that even hospitals are subject to the political agenda, and that to design one is to further fulfill that
ARCHITECTURE IS POLITICAL

Political ideas by design solution

ARCHITECTURE USED FOR POLITICAL ENDS

Design solution for political ideals

colorbox

concentration camp
- prison
- parade ground
- buffer zone
- wall

democratic fascist
- House of Assembly
- "native" housing
- white suburbs
agenda. Some architects might personally support the philosophy of separate facilities and design such buildings whole-heartedly to the best of their ability. Others may feel that such support for a system of apartheid is abhorrent, and decide not to. Moreover, the situation may change in the future. It may well be very different in fifty years time, and professional practitioners will have to judge for themselves how they feel about the social and political situation at that time. See tables/matrices

Meaning
The ways in which buildings can further gain architectural or political interpretations are explored by Nelson Goodman in an essay "How Buildings Mean". I wish to use the categories which Goodman sets out in order to further explain the ways in which mass housing and the townships can take on political values.

Goodman writes that the memory of architectural works is not usually transmitted in a directly descriptive or denotative manner. Architectural works are, however, definitely placed within a physical and cultural environment. These environments change over time, the cultural environment usually altering more slowly than the physical. Architecture also has the practical function of providing shelter and facilitating activities, which often dominates its aesthetic function; its practical purposes may often obscure its symbolic function. The above mentioned dilemma between the poles of

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architecture as an art or architecture as fulfilling social requirements may be rephrased in terms of Goodman's characterization then, by equating what he refers to as "art" with the way in which architecture begins to become more than shelter, to take on social and cultural uses and meanings. On the other hand we have architecture as a "science," the provision of practical functions, of efficient shelter. In the same manner that art can be opposed to politics, so too can science be opposed to politics. It should be remembered that science, too, can be political; neutrality is an illusion, as I shall explain below.

Goodman helps us to understand both how a building can be a work of art, and how it can be political. He writes that: "A building is a work of art only insofar as it signifies, means, refers, symbolizes in some way." However, not all symbolic functioning is aesthetic, and neither is all that signifies a work of art. Further, a building may become associated with social or political movements, with sanctuary or terror, and in this way become a symbol unrelated to its being an architectural work. This is particularly important in the context of South Africa where political awareness is high, and between forty to fifty percent of architectural commissions are for the state. Such buildings may be seen to be symbols of the state and thus of the government's policies, unrelated to their architectural merits.

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4 Ibid., p33.
5 Andre Viljoen, "Drawing Conclusions", Finance Week, November 17-23, 1988, pp44-46
In describing ways of meaning, Goodman groups references under four headings: "denotation", (literal) "exemplification", "expression", and "mediated references".

**Denotation**
Denotation refers to the word naming the object, any labeling or application of a symbol to an object, and the associations with that word or label. Representation does occur in architectural works, most obviously those covered in sculpture, or those that depict something else. Although the houses in the townships in South Africa do not have labels, signs or sculpture on them, they are mostly identical and become a symbol in themselves. They are recognized, one from the other, by the number stencilled by the local council on the front door, which symbolizes the bureaucratic allotment of houses to many thousands of families. If a house in a township has a colored flag outside it, it is a "shebeen" or drinking house, and may be recognized by this sign. This would be an example of direct denotation as it explains the function of the place.

**(Literal) Exemplification**
A building may also exemplify or express certain properties without representing them. Thus certain properties held in the architecture exemplify or mean as symbols or references to such properties. The mass housing built in the townships in South Africa not only have numbers stencilled on their doors. They are also known by their official labels as 51/6 or 51/9 according to their design type, or more colloquially as "matchbox" houses, a name which carries with it a
certain good-humor but also associations of government "philanthropy" which is really not that at all. These township houses exemplify the government's patronizing attitude towards the black population in that they are like western designed houses in that they are rectilinear and use western building methods, but they are not duplicates of white suburban housing.

(Metaphorical) Expression

"Not all the properties (or labels) that a building refers to are among those it literally possesses (or that literally apply to it). . . . A building may express feelings it does not feel, ideas it cannot think or state, activities it cannot perform."\(^{6}\) Obviously the ascription of certain properties to buildings in such cases is metaphorical. Thus in South Africa, township layouts, housing and positioning in the urban areas are expressive of apartheid principles, but they do not literally themselves divide and rule. The values of state control and government policy are given to these places and buildings. They are the built representatives of apartheid. They are built by the government or local council on racially zoned land, they encourage disenfranchisement by exacting rents, not allowing tenure, and by being some distance away from the place of work. Apartheid is not literally possessed by these places, but its properties are referred to by their existence. Another example of metaphorical expression can be seen in the design of the townships. They are a metaphorical taking of the Anglo-American suburban ideal in order to express the

\(^{6}\)Ibid., p40
ideals represented by them. The townships express the suburban ideal by placing each small house on its own tiny site, and literally building suburbs, however, their social and political environments are literally quite different to the Anglo-American suburbs, and their physical and aesthetic results are also quite different.

**Mediated Reference**

Architectural works, like abstract paintings, can claim autonomy from reference to anything and to be solely self-referential, yet certain of their properties refer to properties of other things, those equally formal or abstract - perhaps, which are thus associated with, and thereby indirectly referred to.

Further complicated varieties of symbolization sometimes use chains of referential links. Thus by referring to another architecture, for example, the architect can claim to be referring also to other values associated with that other architecture. This indirect or mediated reference is often termed "allusion." Goodman reminds us that "reference by a (architectural) work via a chain is seldom unique; a building may reach symbolically to the same referent along several routes."7 An example of a chain of referential links in South Africa may be seen in the government built housing in the townships. Here, the Anglo-American ideal of the box-like house on land of its own is a referent to western values, which in turn is hoped to create "civilized" and "cultured" people, which will create a middle-class

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7Ibid., p43
black population, which will be supportive of stability and the status quo, which will be politically suitable for the apartheid government. In this way various sets of values are referred to by the housing in the townships, and by a chain of references which refer to another architecture.

The reasons for a building's existence, or its design, or the thoughts and feelings it inspires and arouses should not be confused with what a building means. A building can "evoke" feelings that it does not intend to, that it neither "alludes" to nor "expresses." Similarly, the causes which give birth to a building should be distinguished from allusion and other references: "...an architectural work does not always refer to economic or social or psychological or other factors or ideas that brought about its construction or affected its design."8 Thus even when a building does mean, does "remind" us in some way of something else, its meaning is not necessarily a function of its architecture.

A work of architecture can mean in ways which diverge from the architect's intentions. Many interpretations of a single work are valid. The extremes of this argument may be summarized into absolutism, which declares that only one correct interpretation exists which is that in accord with the artist's intentions; and relativism, which regards all interpretations as equally valid, with no right or wrong interpretations. Architecture is difficult to interpret because

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8Ibid., p43

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of the difficulty of perceiving and synthesizing it all at once.
Goodman recommends a third view, which he calls "constructive relativism" which recognizes that certain understandings of a work are right while others are wrong. This determination of right and wrong interpretations is thus left to "those who are most concerned [to] apply and constantly develop their own procedures and sensibilities." Goodman suggests that one way a building's success as a work of art can be judged is in terms of good fit; "fit of the parts together and of the whole to context and background." Such a "fit" is not fixed and can evolve with respect to concepts and expectations which can give way slowly. Fit is not only or necessarily a physical fit, it can be in terms of what the components and the whole signify and exemplify, it can depend upon what is expressed or denoted or referred to via complex chains.

Goodman does not write about how to determine what particular buildings mean, but rather about the kinds of meaning involved.

A building, more than most works, alters our environments physically; but moreover, as a work of art it may through various avenues of meaning, inform and reorganize our entire experience. Like other works of art - and like scientific theories, too - it can give new insight, advance understanding, participate in our continual remaking of a world.

It is in this way that I have looked at the townships and the houses designed to go in them. By attempting to illuminate what they mean in terms of fit - into a political context - I have shown that they

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9 Ibid., p46
10 Ibid., p46
11 Ibid., p48

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fulfill complex roles which may be perceived differently by different people. Some claim that they were designed to fulfill the philanthropic intentions, as the green or garden suburbs of the "white" communities (Anglo-American influenced); while another may observe that their very form was intended to keep the inhabitants as second class members of the country of their birth.
PART TWO

Urban Ideology

The theme of "space and race" should not be seen as lost in these theories of urban sociology and political economy. Such theories deal with ideologies and cities at an abstract level, and few authors have applied their work to concrete examples. They deal with the social forces operating in the city and as such provide the more non-visible elements of space - the policy (and ideology) behind it. Thus this section is about the relationships between what can be observed in the townships (concrete examples), and what can be observed about them (social forces).

Here I deal with the issues raised by Peter Saunders about the nature of the "urban question," particularly as viewed through the lens's of humanism (Henri Lefebvre), urban sociology (Manuel Castells), and political economy (David Harvey). The "urban question," as I have come to understand it, refers to various ways of looking at political and economic forces in cities, particularly from a leftist (Marxist) viewpoint.

I wish to distill from their writings of Saunders, Lefebvre, Castells and Harvey the connections made by them between politics and urban environments. If, as I contend, the form of the cities, the
suburbs and the townships\(^{12}\) in South Africa are a result of two interlinked factors: the control of the means of production and of the land itself by a small capitalist elite; and second, the ideology of separating the races of the country (for the claimed benefit of all) to perpetuate the control of power in the hands (by the arms) of the white minority. In other words the factors resulting in the spatially political townships are: the disenfranchisement and repression of the majority of the population, and the racist principles of apartheid to satiate the minority's perception of threat to the white middle-class way of life. I find that the arguments of the above mentioned authors become relevant to making the connections between architecture/planning and politics.

Saunders, in *Social Theory and the Urban Question*,\(^{13}\) addresses "The urban as ideology" where he explores the writings of Lefebvre\(^{14}\), Castells, Harvey and others by stating that "...Marxist theory has rediscovered the problem of the city, ..."\(^{15}\) Saunders claims that the viewpoint of Marx and Engels, that the capitalist city is theoretically insignificant, has been recently reconsidered in two steps.\(^{16}\)

\(^{12}\)I have concentrated on the case of the townships, but they cannot be understood in isolation from the city - especially in discussion of the "urban question."


\(^{14}\)Lefebvre, H. *Le Droit de la Ville*. Anthropos, 1973. (This translates as *The Right to the Town*. Contrast to Davenport and Hunt, *The Right to the Land*. David Philip, Cape Town, 1974. It appears to be an "urban" versus a "rural" question. In SA, however, the access to the land is complexly tied together whether in the country or the city, economically and politically.)

\(^{15}\)Saunders, op cit., p149

\(^{16}\)Ibid, p149
The first step is the critique of existing urban theories (such as human ecology) and urban practice (planning) as "ideological." The concept of ideology with respect to the "urban" has been defined by different writers in two distinctly different though related ways, as varying interpretations of Marx's work. The first interpretation of ideology emphasizes the notion as a means of legitimating class domination, from the arguments advanced in the Communist Manifesto that "The ruling ideas of each age have ever been the ideas of its ruling class." This type of explanation of urban problems is termed ideological because they reflect and are subordinated to the class interests of the bourgeoisie. Reflecting on urbanism in South Africa, this can be seen to refer to the present day continuation and legislation of European (white) colonial domination over the land's Native (black) population. The form of the South African cities today results from the imposition of the ideas of the ruling class over the country's majority population. It is not simply a question of class, however, since it must be noted that it is possible for black people to get ahead and attain a higher class without increasing their degree of influence, control, or power. The issue of racism is not central to Marx in the manner that class is. It would be an acceptable generalization to place the black South Africans in the working class and the white South Africans in the middle class. Exceptions to this generalization do exist, however, and in such cases


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it is the racial classification which determines one's privileges and rights, and not a question of class in South Africa.

Another interpretation of ideology, also found in Marx, contrasts "theoretical ideologies" with "scientific practice." Saunders claims that the ideological appearances of material reality reproduce ideological modes of thought in an elaborated theoretical form "which is justified by a spurious claim to scientific status." In the South African context, the group exercising hegemony has undertaken to house, and thereby assert spatial control over a massive and rapidly urbanizing population. It has done so with quick reference to efficiency, economics and building "science," practically masking its theoretical, political ideology with a "scientific" practice when it is expedient to do so.

The second step in reconsidering the theoretical significance of the city, (having established the conception of urbanism as ideological), is to develop a theory that is neither subordinated to class interests, nor simply builds (formalizes) existing ideological representations. Saunders describes a major division between humanist and determinist interpretations of Marxism. The humanists address the urban question "in terms of the limitations and potential of "urban society" for human liberation and individual self-realization." They see the "urban crisis" as central to advanced capitalism, focussing on the "production of space" (that is, on the way in which capitalist

18Ibid., p150
19Ibid., p150
organization becomes extended and imprinted upon all aspects of everyday life). They focus on the need to develop new forms of struggle against the capitalist domination of space. The determinists, on the other hand, are "contemptuous" of socialist humanism, and reject the idea of the individual human subject as "metaphysical." They regard the "urban crisis" as secondary to the basic class struggle in industry, and see the urban question "as significant only in so far as urban crisis enables an extension of the traditional struggle against capitalist domination of industrial production." 20

The humanist viewpoint in South African terms would be the empowering of the disenfranchised population to improve their quality of life through such schemes as home ownership in the urban areas - for example; the co-option of existing urban (western, middle-class) standards. The determinists would argue for a mass mobilization and a rejection of the improvement of the individual's quality of life in favor of collective empowerment against the regime, in the cliched fashion of strength in unity, however impoverished.

Saunders points out that these disagreements are not "merely academic", but reflect very different views regarding Marxist strategy. The humanist approach, illustrated in the work of Henri Lefebvre, seeks fundamentally to reorient the workers' movement towards the question of the quality of everyday life. The determinist approach, and the theories of Manuel Castells, on the other hand,

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20Ibid., p150
seek rather to encompass urban struggles within the existing workers' movement. 21

Henri Lefebvre

Saunders refers to Henri Lefebvre's work as: "the humanist critique of urbanism." 22 Lefebvre argues that any theoretical system that guides human actions in such a way that they serve to maintain the existing system of social relations may be termed ideological:

Any representation is ideological if it contributes either immediately or "mediately" to the reproduction of the relations of production. Ideology is therefore inseparable from practice 23.

Lefebvre explains the traditional ideology in capitalist societies as a system which reproduces itself naturally, without deliberate human intervention, for this not only serves to legitimate the system, but also denies the possibility of radical interventions to change it. 24 (Deterministic Marxism and "bourgeois" theories are put together and rejected equally, by Lefebvre, as they both deny the effectiveness of the conscious human subject to undermine the practical struggle against capitalist domination.)

21 This field of work derives mostly from European literature (French and Italian) and is still of relevance in making the intellectual connections, albeit translating them physically and culturally, to the situation in South Africa with which I am concerned.

22 Saunders, op cit., p151


24 Saunders, p152
Ideologies are given the role of securing the "assent of the oppressed and exploited," even of creating a sense of "false consciousness." Ideologies are general social theories that have the practical effect of maintaining the dominance of particular class interests. In this sense Marxism is not ideological in that it facilitates and enables the struggles against the source of their domination; it is revolutionary in its practical effects. Ideology in South Africa is thus the status quo maintaining capitalism of the white hegemony over the massive underclass population, united in their struggle against a common disenfranchisement. Lefebvre does not discuss ideological theory in terms of it being a science (with a privileged insight into "truth" and "reality") or an ideology, but in terms of those theories which have revolutionary practical effects and those that secure political contentment and containment. The policies of highly controlled urbanization in South Africa can be seen in the light of the latter; capitalist ruling classes claiming "scientific" and "technocratic" method in housing the urbanizing masses. The ideology supporting this policy is to secure the support (or at least the acquiescence) of a middle-class black "buffer" against the onslaught of possible revolution. South African policies of controlling urbanization can thus fall into either category of ideology or of "science." Furthermore, the definition of "science" needs to be examined, as it is not without its own ideology.

from the introduction by Sterling Plumpp
"...Literature, as man's clearest mirror, most faithful commentator on the trials he undergoes, is nowhere more evident than in South Africa since 1948, when under the implementation of apartheid 87% of the country was sectioned off for whites. Blacks were shoved into nine separate "homelands" according to national culture (Xhosas in the Transkei, Zulus in Kwazulu, Pedis in Lebowa, etc), and coloureds and Indians were cramped into bleak settlements. Though apartheid is but a footnote in the long history of oppression against Africans by whites, it is nevertheless the most inhumane and brutal example of butchery since Hitler's Nazism. Resistance against the policies of Apartheid has resulted in major upheavals, such as the heightened activities of the 1950s and early 1960s which culminated in the Sharpville massacre, and the banning of the African National Congress, and other progressive movements. Other significant incidents include the 1976 Soweto uprising, and the growth and increasing power of black trade unionism which caused strikes and forced changes in 1980.

This political activity within South Africa since 1948 can be viewed as a demarcation line from which to place generations of writers. Conditions within the society caused writers to take stands which led to exile or imprisonment.
For Lefebvre, space is represented as a purely scientific object, and gives rise to a planning "science" that claims to be precise, objective and mathematical. It is a technocratic theory, in that spatial forms are taken as given and planning is conceived as a technical intervention which can bring about particular effects on the basis of a scientific understanding of a purely spatial logic. In South Africa, the planners of the massive housing schemes and those responsible for the creation and layout of the townships regard their task as a technical problem to be solved, believing and leaving the politics beyond the realm of their task. Such technocrats may regard the issues of planning and politics as quite separate from each other; or they may regard their task as the technical fulfillment of the politicians decisions, (acknowledging a political content to their work but quite divorced from it - in acting as technocrats). Hitler's architect, Albert Speer, is an example of a technocrat working to fulfill the program designed by another without necessarily designing the political program himself. In fact, Speer became the chief of Hitler's armaments production as the Second World War progressed, claiming that both tasks were equally demanding in matters of organizational and technical abilities. His attitude towards his task and towards politics enabled him to change his roles with ease, and he was instantly able to leave architecture for armaments.

The concept of being able to carry out a task without questioning why is important to South African nationalist policy if one considers the South African political process as one of organizing the country's resources (spaces and races) for the assumed benefit of all. The task
of governing is viewed as technocratic in this respect, and not political. However - it is clear to see how the racist policies quickly divide and unite people into mass opposing ideological sides, which begins to frame the political question in South Africa. What was hoped to be a "technical" solution has become a political solution.

Lefebvre claims that politics are conceived of as an irrational element that intrudes upon the spatial system from outside it rather than as an essential element in the constitution and perpetuation of spatial forms. His writings support the argument that spatial forms are politically created and serve political functions. Lefebvre writes:

Space is political. Space is not a scientific object removed from ideology or politics; it has always been political and strategic. . . . Space, which seems homogeneous, which seems to be completely objective in its pure form such as we ascertain it, is a social product. The production of space can be likened to the production of any particular type of merchandise.26

The notion that space is a product of capitalism and infused with the logic of capitalism (production for profit and exploitation of labor), gives importance to the urban ideology of space as a pure and non-political object. The ideology of space will provide an explanation for the raison d'etre of the townships in South Africa. I understand that the owners and planners of the space, who may be called the capitalists (from a political perspective this includes both those who are aware of the ideology of their "science," those classed with the capitalists in a political sense, i.e. those wielding power in the state in South Africa (literal capitalists), as well as those who merely work

26Lefebvre, 1977, op cit., p341, cited in Ibid., p154
and continue within the given system - whatever it might be, and thus unwittingly linked to that system (metaphorical capitalists)), realize that the control over the space, as a resource is equivalent to the "birthright," for which many of their ancestors fought and died for, on both the black and white sides, represents and is the equivalent of control over the politics of the country. However, these very groups prefer to think of a science of space, of densities and numbers, abstracting the realities of a life on this earth into an ordered and distantly controlled environment. The links between the physical results of their political beliefs and their claimed philanthropy (as in a colonial sense of "the upliftment of the natives") are difficult to make, however obvious one may instinctively know them. Where land is a precious resource, especially where it is laden with mineral wealth, those who control and own it have the power of the state in their hands.

Lefebvre calls not for a science of space, but for a knowledge or theory of the production of space in capitalist societies. It is the contradictions that this process of production generates, he argues, which will provide the basis for political struggle over space.

According to Saunders:

The basic contradiction in the production of space is that between the necessity for capital to exploit it for profit and the social requirements of those who consume it; in other words, the contradiction between profit and need, exchange value and use value.2 7

This contradiction results in the political struggle between individualist and collectivist strategies, in South Africa between the

27Saunders, p154
minority of land owners and the majority of land dwellers. Black land dwellers have been forced from the unique forms of African communalism towards individualist ways by means of "one-man one-plot" strategies. However, the same forces which work to divide can also be seen to provide a common opposition against which to unite, and so the sense many uniting against a minority rule leads to the forming of a collectivist strategy. This is a theory which finds strength and support today in the 1980s in the liberation movement.

Lefebvre argues that capitalism has transformed space itself into a commodity. Capitalism has been able to turn space into a scarce and alienable resource. Space is created as an homogeneous and quantifiable commodity. In South Africa space, and the access to it, have been limited not only by the requirements of capital necessary to acquire it, but also by a system of racial legislation, ensuring that the most valuable resources (in terms of land) remain in the hands of the ruling elite. Thus the commodity becomes scarce, valuable and a source of ideological conflict. The scarcity of legal urban living spaces for black people - as held and perpetuated by the township policy - has turned space in South Africa into a scarce and alienable resource.

The transformation from the capitalist industrial production of merchandise to the production of space as a commodity (in generating surplus value and in realizing profits) is what Lefebvre refers to as "the urban revolution," and he equates it to the industrial revolution in which the basis of production shifted from agriculture.
to manufacturing. The fact that South Africa straddles both the first and the third worlds complicates the issue of which revolution is actually occurring. In part, it is still in the throes of the industrial revolution, with massive urbanization and the depletion and movement of the population in the rural areas - for reasons of pursuing what might be found near the "bright city lights," and in part it is struggling with the revolution described by Lefebvre, and exploiting its masses over the question of the resource of space. In South Africa the two revolutions (the industrial and the urban) might be seen as one and the same. The townships are a product of both these revolutions. For the urbanizing black population (due to the industrial revolution), the townships provide a place to live near the cities, where they can sell their labor; and at the same time the white people in the cities are protected from this rural influx. As a commodity, space in South Africa is valued not by the free-market, but by land use, which is largely controlled by racial policy and legislation. The land in the townships has a different value to a white person than it does to a black person.

Because space has become a commodity, it is "occupied" or colonized by capitalism and imposes the form of capitalist relations on all of our lives. The form of our cities, the architecture and planning symbolizes capitalist relations. Leisure space is commercialized to reflect capitalist relations, and even homes in the suburbs are products of capitalist relations because central areas are taken over by commercial functions throwing residential space to the periphery. Whether privileged white individuals choose to live in the suburbs or
black people choose to live in the townships, the result is that there is not much choice of alternatives in South Africa. However one might say that the affluent white people choose it (they have the political power to do so), whereas the poor black people are forced to it, (as they lack political power). "The logic of capitalism is the logic of the social use of space is the logic of everyday life. The class that controls production controls the production of space and hence the reproduction of social relations."28

Lefebvre argues that the colonization of space by capital proceeds only by fragmenting and decentralizing the population:

The center attracts those elements which constitute it (commodities, capital, information, etc.) but which soon saturate it. It excludes those elements which it dominates (the "governed", "subjects", and "objects") but which threaten it.29

The situation peculiar to South Africa throws a literal light on this matter. The city, the traditional center of the (western) society, has been fragmented and dispersed, legislating dependent colonies to the periphery ("subjugated, exploited and dependent spaces: neo-colonial spaces")30 while retaining economic and political offices of administration at the center. Thus, political power becomes centralized, while "culture" is weakened, dispersed to the periphery. Capitalist space (the reproduction of the relations of production) has become a terrain for confrontation. A system of internal colonization has focussed the disparities between the underdeveloped regions

28Ibid., p156
29Lefebvre, 1976, op cit., p18, cited in Ibid., p156
30Lefebvre, 1976, op cit., p85, cited in Ibid., p157
(including rural, urban peripheries, and informal settlements) as against the over-urbanized metropolitan centers.

The South African policy of apartheid divides up the land according to racial classification. The whole of space is covered with this ideology, which results in a reaction against both the policy and the government implementing it. The stronger the oligarchy's attempts to regulate and mediate by means of its control of the decision making centers, the stronger the opposition to it grows. The paradox becomes an irresolvable crisis. This may be a reason for the attempt by the ruling class/race to regionalize power and disperse the antagonism against its policies to regional centers with a limited measure of local representation. While this may relate to present day and current events in South Africa, its relevance is in drawing attention to the inseparableness of political ideology and urban form.

The contradiction in urban society revealed in the struggle between the center and the periphery may also be seen as evident in the differences between economic growth and social development. The assumption that the forces of capitalism, that economic growth, would result in development and an improvement in the quality of life has been undermined. There no longer exists a belief in the minds of the South African majority in the "trickle down" effect, that the quantitative will eventually result in the qualitative. Thus the contradiction between private profit and social need, between capitalist domination and social life, has been revealed. Lefebvre sees the struggle over the use of space and the control of everyday
Illustrations by Dumile Feni, in Somehow We Survive, an Anthology of South African writing edited by Sterling Plumpp.
life as being at the core of the conflict between the requirements of capital and social need, the urban crisis as the "fundamental crisis of advanced capitalism." 31

For Lefebvre the critical struggle of the "urban question" is to bring about the management of space by and for the masses; hence the title of one of his books, *The Right to the Town*. Lefebvre believes that the potential for human liberation offered by urban society is immense, but that it can only be realized through the struggle against the capitalist domination of space, and hence by transcending the technocratic ideology of space of the bourgeoisie and the narrow economistic ideology of the existing Marxist parties.

In South Africa, "the right to the land" gives added emphasis to "the right to the town," with the weight of racial zoning on top of capitalist protectionism and exploitation. The "technocratic" working methods of the white minority together with its political ideology of apartheid would thus be overcome, according to Lefebvre's thinking, when the "value" of space is removed from the agenda. In these terms the present system of relations will change when space no longer remains either a capitalist entity or a racial one. This is certainly utopian thinking. Every individual would, in some anarchic manner, be responsible and have the right to his or her own space in the city or land. An enormous jump from present day South Africa, requiring

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31 Ibid., p158
much creative thinking and a leap of faith, without guidelines or a safety net to catch either the falling bodies or their ideologies.

The Case of Castells

Castells criticizes existing theories of urbanism as ideological, and he seeks to find the way in which people live in relation to the "real world." He explains that the reason he does not choose science is because science involves a theoretical transformation of ideological concepts into scientific ones. It is important to understand that science itself is not objective, does not reflect concrete reality without embodying previous assumptions about what that reality is. This is important in two respects. Firstly, the claims to science as an objectifying and depoliticizing tool no longer hold up under this view. Calderwood's and Floyd's claims in using "science" (and not political ideology) as the efficient technocrats they are, can thus be seen to contain a certain amount of implicit knowledge which is based on either ideology or on previous "scientific" practice - (that of the Anglo-American planners?). Secondly, if science is ideologically based, then they can both "work" towards the same ends, even though they may well claim quite different bases or thought processes. They can be used to reinforce each other as seen, for example, in the case of the South African government providing housing to its own set minimum standards and renting it to the black urban populations.

Castells (premising much of his work on that of Louis Althusser) explains that "concrete knowledge" is produced wholly within the
realm of theoretical practice. The problem therefore is not one of ideology versus science, since both are a way of representing concrete reality. Neither ideology nor science are ideal ways of representing reality, but are rather explanations for the ways in which individuals relate to reality in their everyday lives. Both are not ideas about reality, but refer to the very way in which we live that reality. It is only when science breaks with ideology and becomes autonomous from it that it becomes possible to recognize ideology for what it is, our subjective or imaginary lived relation to the world.

Castells' reformulation of the urban question asserts that units of consumption are socially organized and provided within the context of a spatially bounded system. The coincidence between a spatial unit and a social unit is explicitly identified as that between spatial organization and the organization of collective consumption facilities. Castells prepares what he believes to be a secure scientific foundation, a spatial unit of collective consumption, (over Lefebvre's old urban sociology), which he analyses according to his theory of social totality (a theory found in Althusserian Marxism), which breaks down into three levels, the economic, the political, and the ideological. Saunders explains that it is through the process of consumption that individuals reproduce their labor-power (for example by consuming food, housing, recreation, education and so on) which then re-enters the system as a resource to be used in the process of producing new commodities. Consumption is therefore defined within this theoretical system in terms of its function in
reproducing labor-power, and in this way its relation to the other elements (production, exchange) and levels (political and ideological) of the total system is established.\footnote{Ibid., p170}

What is of additional value in this critical study is the constant questioning and quest for a "secure scientific basis" which will distinguish a theory from the ideological character of previous theories. This is relevant to the discourse of housing and township design in South Africa at two levels. The technocrats who write about their work at a theoretical level lack the intensity of study and the intellectual search for a grounding to the basis of their work, an epistemology, that one finds in Castells, for example. Secondly, these South Africans make many inherent assumptions and hold many implicit values - which I have attempted to draw out in my discussion on their attitudes - and these can certainly not be termed scientific in the sense that they refer to the "truth" or to "concrete reality." Thus the sociological and ideological claims of the designers can be seen as their method of theorizing and reasoning the building of townships and the maintenance of the white hegemony and the status quo.

Saunders rejects the claim that Castells' attempt to utilize Althusserian method can distinguish between scientific and ideological theories. The reason is that a reliance on epistemology is not able to "legislate" on the question of correct scientific method per
Saunders quotes Hirst\textsuperscript{33} when he writes that even Marxism is not a "science," (equally it is not a "non-science", science-ideology is an epistemological distinction), it has no privileged knowledge.

Marx has no privileged starting-point for analyzing reality and (that) his method consists in hypothesizing certain relations as means of providing a plausible explanation for the phenomena he identified in the real world. This is a perfectly acceptable method on its own terms, but it contains no means for asserting itself as the general and only scientific method for analyzing social reality, nor does it establish any general criteria of scientificity against which other approaches may cavalierly be dismissed as ideological.\textsuperscript{34}

Thus while Marx's method claims no privileged insight into reality, it generates "more or less" plausible explanations of phenomenal forms "by positing the operation of essential relations;"\textsuperscript{35} but there is no need or reason to accept these explanations to the exclusion of others. Saunders draws the following conclusions from the above: that there is no theory that can lay exclusive claim to knowledge; there can be no general epistemological principles outside of specific theoretical approaches; theoretical pluralism is inherent to social science; and in the absence of general criteria of scientific and ideological theories, the epistemological division between science and ideology must be rejected.

David Harvey

A reverse approach to that of Castells and urban sociology is offered by political economists, represented by David Harvey, who attempt not to locate specific social phenomena (such as processes of

\textsuperscript{34}\textit{Ibid.}, p175
\textsuperscript{35}\textit{Ibid.}, p178
collective consumption) within a spatial context, but rather to locate the question of space itself within the context of the political economy of advanced capitalism. Space is seen as important with respect to the role it plays in the continuing and expanding process of capital accumulation, (and not only with reference to the reproduction of labor-power). Harvey's major work Social Justice and the City,\textsuperscript{36} suggests that there are both "liberal" approaches (which take existing ideas as given), and "Marxist" approaches (which examine ideas critically), to the ideology-science distinction. Harvey claims that neither is in some way privileged, and he discusses both in the two parts of his book.

Harvey's argument suggests that the creation of space is largely dependent upon the investment decisions of industrial capital (decisions regarding the location of factories, offices, and so on), that the key function of urbanization is that it stimulates new effective demand for the products of industrial capital (for example, the spread of the suburbs increases the demand for cars), and that investment in the built environment is largely a function of problems encountered by industrial capital in respect of the creation and realization of surplus value.

Harvey explains how the spread of home ownership has helped to maintain political stability by creating: "a large wedge of debt-encumbered home owners who are unlikely to rock the boat because

they are both debt-encumbered and reasonably well-satisfied owner-occupiers. Home-ownership . . . as a device for achieving social stability went hand-in-hand in the post-war period with the drive to stimulate consumption through suburbanization."\(^{37}\) (I will return to the political significance of home ownership later in this chapter.)

Harvey suggests that the process of switching investment from one "circuit" to another to prevent over-accumulation (primary: industrial sector; secondary: fixed investment other than direct raw materials; tertiary: investment in science and technology or in social expenditures) is self contradictory. For example, investment in the built environment overcomes problems of over-accumulation at one point in time only to block the resolution of these problems at a later period. Furthermore, those attempting to overcome the barrier to accumulation which is represented by the immobile physical investments of an earlier period (existing home-owners), may well undermine political cohesion and stimulate a challenge on the part of those most affected. Such resistance and community activism arises as response to the pressures for change. In South Africa, the ownership of houses by black people in the urban areas has only been recently allowed. The offer to purchase government or local council houses has been largely rejected by the black population. The ideal of accumulating physical, material objects is of little

relevance unless it goes hand in hand with the recognition of human rights, of the franchise, and of an equal say in government.

A second contradiction recognized by Harvey is that between capital and labor, whereby the exploitation of labor-power creates a class that increasingly confronts capital. A further contradiction can be seen in the situation where certain sections of the capitalist class may ally themselves with working class struggles over the consumption fund (a commodity aiding the process of consumption), and that the working class itself may be split internally in respect of urban questions. As Saunders explains:

For example, workers may seek to own their homes (say, because of the potential for accumulation that home ownership affords), and this will tend to be in the interests of finance capital (which can lend on house purchase) and of industrial capital (since it performs an ideological function and underpins worker commitment). The result may therefore be an alliance between these various groups against landed interests (such as private landlords). Similarly, industrial capital will support working-class demands for cheap housing since lower rents or mortgage charges will facilitate a reduction in wages (because a reduction in the costs of reproducing labour-power reduces the value of labour-power and hence enables a lowering of wages if other factors remain constant).38

In this manner (class interests splitting or uniting in struggles over the consumption fund), the complexity of forces working towards the provision of housing can be seen to touch many facets of a country's economy. The ideological ideal of home-ownership is thus shown to have supporters and opponents in various classes for economic reasons.

38Ibid., p227
Saunders criticizes Harvey on the grounds that class struggle is tacked on to the end of Harvey's analysis - "crises of over-accumulation may provoke some sort of working-class response"³⁹ - but is not central to it as the major contradiction of over-accumulation is not brought about by the working-class at all, but is the result of competition between individual capitalists which results in an aggregate detrimental effect to the interests of that class. This perspective indicates that the crisis of capitalism is self-engendered, while the working-class "stands by on the sidelines of history and at most plays a reactive role, while capital inflicts its own wounds as a result of the incessant drive to accumulate."⁴⁰

The Political Economy of Housing

Political economists address housing as an aspect of consumption and reproduction of labor-power, as well as the significance of housing in the creation and distribution of surplus value. In this way they have come to question the production of housing (creation of surplus value), the ownership of housing (distribution of surplus value in rent), and the consumption of housing (reproduction of labor-power).⁴¹

From a Marxist standpoint, the production of housing in a capitalist society takes the form of commodity production to the extent that it is produced for its exchange value, and in this sense it can be

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³⁹Ibid., p231
⁴⁰Ibid., p231
⁴¹Ibid., p232
analyzed in the same way as the production of any other commodity. Housing is unique, however, in that it is a key element in the "productive consumption" of the work-force and thus an important condition of continued industrial production; moreover, it is a very expensive commodity to produce and thus to purchase. Housing is thus not sold to workers in a single transaction but is paid for over an extended period of time, with a variety of financial institutions mediating between producers and consumers, advancing credit or facilitating rentals over extended periods of time. The building societies, landlords and local housing authorities play their most important roles in how housing as a commodity is exchanged and how the surplus value embodied in it is realized.

I have noted in my writings on Calderwood and Floyd how an important factor encouraging the provision of housing for black people in the urban areas by the white hegemony was that it would lead to the creation of a stable and healthy labor force, conveniently housed in calculated proximity with respect to the work place. This analysis relates to the process of capital accumulation rather than to that of class struggle, which is often regarded as secondary in the political economy literature. Working class interests are served, in that some housing is provided, not through philanthropy, but because they are actually subordinate to, and a by-product of, the interests of capital. State intervention in the provision and distribution of housing was necessitated by the contradiction

\[42\text{ibid., p232}\]
between industrial capital's need for cheap and reliable labor-power
and the inability of the building industry to reduce the cost of
housing in line with that of other basic commodities. State
intervention, whether rent controls, subsidies or direct provision,
was therefore servicing the requirements of capital rather than the
demands of the potential consumers of housing.

Rent control does not directly affect the working class, for while the
extraction of rent may displace class conflict from the work place to
the community, it is clear that in so far as rent represents a
deduction from surplus value, the "real" contradiction is expressed
not in the relation between landlords and tenants but in that
between industrial capital and petit bourgeois rentiers. Therefore,
Saunders explains, petit bourgeois landlords "were sacrificed on the
alter of capitalist profitability, and the explanation of state regulation
of rents is to be found, not in the struggles of the Glasgow working
class, but in the requirements of capitalist profitability for a cheap
and appeased labor force."\(^{43}\) The same arguments have been used to
explain the growth of the public rented sector. All township housing
in South Africa was in this sector until recently. State provision of
housing was supported by both the working class and industrial
capital, and it was important in both ensuring the continued
reproduction of labor-power, as well as being a concession to the
working class that could be made without fundamentally challenging
dominant economic interests. Thus M. Ball suggests that the prime

\(^{43}\)Ibid., p237
function of public housing "is to house the working class adequately as cheaply as possible." Finance capital always appears as a principal beneficiary of the extension of state housing since local authorities have to borrow in order to finance house construction. As rent paid to private landlords represents a redistribution of surplus value away from industrial capital, so does interest paid to loan capital, since debt charges are paid for by local authorities out of rents and taxation, which in turn increases the necessary average level of wages. Similarly, tax subsidies to owner-occupiers through mortgage relief operate in the interests of loan capital as they enable house buyers to pay high interest charges.

The working class has remained on the periphery of this above discussion, and while their demands may influence the timing and the form of housing policies, it is the various requirements and interests of different sections of the capitalist class that determines them. Not only is rent control, state housing provision, support of owner-occupation and so on explained in terms of the balance of power between private landlords, financial, and industrial capital, but such policies are also beneficial to capitalist interests and (therefore) dysfunctional to the long-term interests of the working class. The main reason for this is that the working class is divided among and within different housing tenure categories which serve to fragment class solidarity.

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In South Africa, the tenure over housing allowed the black people by the government has varied over time. From 99-year leasehold allowed in certain townships in the 1930s, to a time of monthly rentals only in the 1960s, and now more recently, a return to 99-year leasehold in certain townships in the 1980s. The variations have been a reflection of changing government policy and their attempts to handle and control the black urban population. Class and race are not necessarily synonymous in South Africa. Although usually regarded as the working class, there exists a small middle class black elite who are also subject to racial rules regarding tenures in urban areas. Such class divisions work together with the government's racial divisions to further fragment black opposition solidarity.

Local authority strategies of the allocation of public housing systematically fragment the working class by creating divisions between "respectable" and "unrespectable" estates by individualizing the housing question through the mechanism of the housing waiting list, and similar methods. Owner-occupation, on the other hand, undermines the cohesion of the working class by fostering an ideology of possessive individualism and by sustaining worker compliance through the imposition of a long-term debt burden. While recently attempted in South Africa, offers of owner-occupation have been a case of too-little too-late. The politicization of the black population has led them to oppose the government's attempts at this subjugation and appeasement for political rights, without giving any "real rights" over to the black population. The political-economy of
housing thus regards the working class as a passive and fragmented recipient of outcomes rather than as a significant causal agent of change. Government housing policy in this respect can be regarded as capital's housing policy. Working class struggle may affect when and how the state responds to the interests of capital (as an intervening variable), but it cannot change the functional relation between the two. Government housing thus serves an ideological function in appeasing industrial militancy and fragmenting the working class.

The provision of housing benefits the industrialists and the capitalists and undermines the power of the working class, and yet policy initiatives have often originally been brought about to serve the direct needs of the working class, and these reforms may later be seen to benefit particular capitalist, dominant class interests.

There are grounds for arguing that the requirements of capital accumulation take precedence over demands for social provisions in capitalist societies, but this does not necessarily imply that the interests of capital are necessarily reflected in those social provisions which are made. However, urban struggles do not necessarily reflect the categories of capital and labor, and in conflicts over the provision of welfare or housing it is as members of a consumer group and not of a class that individuals confront capital. Such conflicts often involve different individual members of the same class confronting each other on opposite sides (landlords against industrialists, for example, or owner-occupiers against council tenants).
The offer of home-ownership in South Africa for the black people by the state can be seen in the light of a deliberate strategy to induce workers to identify with bourgeois values. The capitalist class has a commitment to owner-occupation on ideological grounds, at least for themselves, the white people in South Africa. The housing policy in South Africa has the effect of benefitting capital, consciously or as a by-product of a generous welfare policy. From my analysis of the work of Calderwood, it is clear that, among others, a conscious aim of the designers of the townships (and of the state sponsor) was an encouragement of Anglo-American middle-class and capitalist values.

The contradictory functions of placating unrest through the supply of social provisions (housing), and the increased taxation or costs on the economy to pay for such provisions is a double edged sword. It creates tensions in the capitalist state between capitalist profitability and social provisions. The state must ensure the profitability of monopoly capital, and it must also ensure the continued commitment of strategic sections of the working class by maintaining legitimacy. The state thus intervenes in bearing the costs of social provisions to take the burden from private capital. In a sense it finances the overhead costs of the whole process of capital accumulation. Without the huge volume of state spending, capital would make no profits at all.
The needs of capital are only a starting point, and cannot explain the social policy. The requirements of capital simply set limits on what other groups may achieve through political mobilization. It is necessary for the capitalist state to recognize the significance of both the functional needs of capital and the political demands of non-capitalist interests in respect of different aspects of state activity. Social investment can be explained in terms of the requirements of capital accumulation, and social consumption in terms of the relative power of different classes engaged in political struggles. This framework may be developed when we recognize that the state responds in different ways to capitalist and non-capitalist interests in respect of different types of policy. Saunders claims that this can only be done if it is explicitly recognized that the question of capital accumulation and the question of social consumption are theoretically distinct and specific, and that explanations and concepts developed in respect of one cannot easily be carried over into the analysis of the other.

Political economists focus primarily on capital accumulation, and assume that state intervention and political struggles in the sphere of consumption simply reproduce the character of state intervention and political struggles in the sphere of production, "and in this way its analysis of social provisions such as housing and of the conflicts that surround them collapse into economism and functionalism and fail to recognize the specificity of the social consumption process."45

45Ibid., p247-8

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The strength of the political economy analysis is in the way in which it approaches the question of space and the built environment through an analysis of commodity production, but its weakness has been its assumption that the processes of social consumption can be explained in much the same way.

Conclusions
It is possible to view the reasons for the creation of the townships in South Africa through the various lenses of either the urban sociologists or the political economists. The two most important points, in summary, which I feel can be drawn from either perspective, are, first, that the government's or planner's claimed philanthropy in the provision of welfare goods, such as housing, cannot be separated from the benefits which will accrue to the middle class and the state through beneficial conditions of capital accumulation. That the state is paying for much of the infrastructure to house an efficient labor-force benefits the causes of capital as well as benefitting (though questionably) the inhabitants of such dwellings. The second important factor is the ideological co-option and attempt to create a sound black middle-class which will serve to strengthen support for the present status-quo in the country, (or allow for a more peaceful transition of power, based on similar capitalist economic assumptions, but with blacks holding more power). Alternatively, the state intervention in welfare provisions without any community consultation may also result in the creation of a united opposition against certain particular state interventions; not a result desired by government, but no less real. Both of these
above points may be seen as post-rationalizations, by this in no ways
demeans the analysis or understanding of their existence, it merely
makes it more difficult to act prescriptively rather than to react after
the fact. I believe that such understandings are important to the
task of architects, planners, politicians, and critics of the
government's provision of housing in a country, and that they can be
applied to the situation in South Africa.
PART THREE
Recent Developments and Future Trends

Recent Developments
While this thesis concentrates on the period in South Africa between the 1930s and the late 1960s, it is still relevant to note some more recent developments as they will assist in explaining the period I am describing.

Special Commissions in 1976 (the Theron commission) and 1979 (the Riekert commission) recommended alterations to Group Areas legislation affecting business rights, which the government subsequently agreed to. Special Commissions in 1976 (the Theron commission) and 1979 (the Riekert commission) recommended alterations to Group Areas legislation affecting business rights, which the government subsequently agreed to.46 Residential segregation remains, but provision for the issuing of permits to disqualified (the preferred terminology at present) people to allow them to use business areas assigned to another race has been created. The Theron commission also removed restrictions on the occupation and ownership of property in industrial zones outside group areas. It did not accept the principle of opening business areas and other facilities in white designated areas on an unrestricted basis.47

The Riekert commission, (appointed to inquire into a series of racial laws and their relation to efficient manpower utilization), found that business segregation had begun to erode in practice: businessmen

who were unable to trade in a particular area were using "nominees" of the qualified race to acquire business rights, a practice it labelled "undesirable." It discovered that in race-conscious South Africa, economics were color blind. The commission urged the government to suspend removals of disqualified traders and to limit the nominee system. The government accepted these proposals in principle - but only if they did not lead to residential integration or the underutilization of the 1,200 business areas erected for displaced black traders.

The government's retreat from business segregation continued in 1981, with further commissions appointed to investigate the possibility of open trading areas, to promote black small business. A joint committee contended the following year that it would be "inopportune to repeal the Group Areas Act at this stage," but it proposed that trade exemptions be granted more easily and appeals to the minister processed more swiftly. According to Pirie, these changes made reflected a growing government concern to promote small business and create a black "middle class."48 They were also prompted by changed conditions, which included economic decline in CBD's as a result of the flight of white capital to the white suburbs, and evasion of the law by racially disqualified businessmen through the "nominee" system. It had proved impossible to stamp out this practice, and commercial race zoning was hardly enforced in some areas.

The joint committee also suggested an important change in the enforcement of residential segregation, urging that the Group Areas Board be required, before recommending the proclamation of a Group Area, to ensure that suitable alternative accommodation was available for disqualified people. This echoed the Transvaal Supreme Court judgment of 1982 (State vs Govender) which has had the effect of preventing the authorities from evicting people convicted of Group Areas violations in absence of alternative accommodation. The consequence of this has resulted in an influx of disqualified people into unofficial "grey" areas, and has contributed to the erosion of the Group Areas Act. Gradual (illegal) erosion of unjust regulations will hopefully lead to the realization of the unworkability of apartheid.

The Strydom Committee of 1981, established to investigate the Group Areas Act, found that the process of declaring Group Areas had largely been completed, and it suggested the scrapping of the Act in favour of the Land Affairs Act. Separate residential areas would no longer be maintained by the Act, but by title conditions of the land. Property owners would then be responsible for control, and segregation would be enforced by local authorities rather than the police.49 The Strydom report also urged that Central Business Districts (CBDs) be desegregated on application by local authorities, and after ministerial approval, and that the Reservation of Separate

Amenities Act be abolished. This report was not adopted or officially approved, but it has influenced present official thinking.

The Committee found that Chinese people were not sufficiently concentrated in any one place to justify a Group Area, and that they generally lived in "white" areas and used "white" amenities. The Committee recommended that Chinese people be granted the same rights as whites with regard to ownership and occupation. (They would be "disqualified" in the event of cohabitation or marriage with a member of another population group. Even with the repeal of the Immorality Act and the Mixed Marriages Act in 1986, the Group Areas still hold, and upon the event of such co-habitation across the color line, the couple is required to leave the white areas and live in the darker raced Group Area.) In 1984 the Group Areas Amendment Act endorsed these recommendations and disbandoned South Africa's only Chinese group area, Kabega Park, in Port Elizabeth, so that now Chinese people may live in white group areas only. It is clear that the Chinese people were not regarded as a "threat" to white domination, which is why the government removed this restriction.

In March 1984, the President's Council Committee on Economic Affairs presented its report on measures restricting the functioning of a free market system in South Africa. It recommended that Africans be given the same rights in CBDs as those envisaged for "Colored" and Indian people. Local authorities could request the proclamation of specific areas as "free trading zones" to be opened to
all races for business, professional, religious, or educational purposes, under the Group Areas Amendment Act of 1984. Thus a process of desegregating certain limited areas has begun, with 63 areas having applied for this status, for economic purposes, rather than moral reasons or other planning issues. Pirie argues that this policy of desegregating only certain confined areas will continue to restrict the expansion of existing enterprises and the launching of new ones. Of these applications, 41 have thus far been accepted. The area may be opened only after the Group Areas Board has received written representations on advertised changes, and after it has heard evidence in public. Its recommendations are made to the Minister, while changes are made by the State President. This system makes the government ultimately responsible for opening business areas, but, it also gives no formal powers to insist on their being opened, since it can act only in response to local requests. The new system applies to all races, and allows the blanket opening of specific areas so that individual permits are not required to trade in them.

The clearest indication of present government attitudes is likely to emerge when the findings of the President's Council's Constitutional Affairs Committee, which has been examining the Act, are released. The committee is known to have sharply criticized the Act and to have advocated a system of "local option" in which municipalities would have the right to decide whether to desegregate suburbs

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52 SAIRR, Quarterly Countdown, first quarter, 1986.
subject to an appeal by aggrieved parties (including neighboring municipalities) to the provincial administrator. In late 1986, however, the committee's report was referred back to it for further investigation. This has been interpreted as a sign that these proposals are too far-reaching for the government.53

The Future - Conclusion

With the continued erosion of residential segregation, the official government attitude has been to attempt to contain the changes which are already occurring by limiting the effects of spontaneous desegregation. One effect is that the operation of the Group Areas Act is relying more on "executive discretion" than on the official machinery provided by the law; made clear by the color-blind eye turned to the emergence of "grey" areas in some high density living areas, and to contraventions in certain "unopened" white business districts. For the first time, the issuing of permits is being handled by second tier, provincial government. This implies a devolution of power, which, observers predict, may devolve further to local authorities, who would be allowed to exercise a degree of "local option."54 One hopes that "natural" forces, such as supply and demand, location of resources, and freedom of choice, will be given more importance. Planning at a local level is hopefully more sensitive to environmental issues and to the rights of people to choose their own environments, than planning as a political strategy at a national level. While the government retreats from rigid

53 Festenstein and Pickard-Cambridge, p30.
54 Ibid., p31.
enforcement of the Group Areas Act, it has not yet entertained the idea of abolishing segregation entirely, but indicates a lack of official confidence in the Act's ability (the police power?) to continue to enforce it.

Instruments of official policy such as Guide Plans and the local government Demarcation Board are still operating under the assumption that the present broad policy of residential segregation will remain essentially unchanged. Although they do not provide for the demarcation of Group Areas, they determine future regional zoning and political arrangements within segregationist assumptions. As a result, assumptions regarding future development are not necessarily based on realities, such as the need to cater for the rapid influx of blacks into metropolitan areas, to meet the demand for housing closer to city centers. The role of guide plans in particular will have to be re-examined if separate group areas are not to be entrenched in the future. Architects and planners are required to continue to work under the laws of the apartheid regime if they wish to practice as registered professionals. In this sense their work, willingly or not, is performed in the service of apartheid.

There are still formidable obstacles to be eliminated before unrestricted access, and a sense of morality and justice, are brought to the ownership and occupation of land by all races. So long as politics, controlled by a frightened and powerful minority at present, continue to control social and environmental planning issues, the experience and the form of South Africa's cities will reflect this.
South African space will remain politicized and, especially, the segregated suburbs and townships seen as the embodiment of apartheid legislation in practice.
Graffiti on the wall of a school in a Cape township as an act of defiance against the state and in support of the African National Congress.
"Dolly Rathebe, famous '50's jazz singer and film actress." The story of this photograph is told by the editor of Drum magazine, Anthony Sampson, for which it was taken. The photographer and model were arrested on top of a mine dump outside Johannesburg being suspected by the police for contravening the Immorality Act (sex between different races). It is also interesting to note how the western values of a woman in a bikini were used to sell magazines. The "cross-over" culture was encouraged only on the government's own terms, so that the free-hold Sophiatown was removed from the face of the earth in the white man's triumph, to regain control over the black middle-class.

Bailey's African Photo Archives, photographer: Jurgen Schadeberg.
Sophiatown, program to the play, Junction Avenue Theatre Company.
Another View

There are two extreme emotions that I have come to associate with the "feeling" I experience when in urban environments. The first of joy, of celebration and freedom, and the second, its opposite, that of desperation,- of pain and imprisonment. I wondered why and how a single city can invoke in me these apparently opposite emotions without it apparently changing, and thought instinctively that it must have to do with the range and depth of factors of which a city is made. I thought too of the power of the city over a person, and that it represents the thoughts, actions, and wills of very many people over very many generations, and in fact might be traced all the way back through the evolution of people to Adam and Eve, or the Apes, or the Big Bang. I thought that their existence is the inevitable result of the passing of time and of political will in human beings. Some refer to this political will as the survival of the fittest, or the lust or greed for power, or the sometimes held opinion that "some pigs are more equal than others"- by birth or divine right or by dint of belonging to a "superior" or "chosen" race. Perhaps cities exist because of a universal, or societal, or an urban soul or spirit somewhere beyond us all and existing because of us, despite us, and stronger than the sum of us as individuals.

My sensing of the power of a city for joy and pain, for freedom and imprisonment, led me to ask whether and how cities might be perceived as both "emancipators" and as "prisons." We know well
enough of examples of cities with citadels, providing protection for the rulers against the populace; and as fortresses, providing protection for its inhabitants from outside attack and invasion. This equally infers that those outside, or outcast from the city and its walls are frustrated and prevented from reaping its benefits, (the inherent benefits of a city are certainly worthy of exploration, as they may exist without inhabitants, or despite them, or no matter who they may be), an inverse sort of prison in that it keeps people out instead of keeping people in. I then considered all the people within my imaginary city's boundaries. It is quite conceivable that not all the inhabitants are equally content in the city; some experiencing the joy and others the pain. There are many examples of this type of city, easily found by looking for political and social injustices. The city is not the cause of the pleasure or the pain, except that it provides, in such cases, both the backdrop and the stage. But this leads, I maintain, to changing the nature of the city, its continued production and its use. It is not merely non-valued object space. It is laden with meanings, controls and social systems which make the city both an active participant in the prevailing ideologies, as well as its passive recipient.

The contents of a city are vast. A city is perceived and created by its entire population, by their imaginations and their "spirits," combined in different ways. A city is also made up of the intentions behind their creation and actions; and of the generations which preceded them, and of the dreams of those to proceed them. Is it thus only the individual's changing perceptions that I am considering here, or
could there be something about the city itself, the ways in which its contents reveal themselves, and appear to change, and do change, that may be the cause of the richness of experience that may be had in a city? In a sense what I am suggesting would require a study of both the perception and the imagination of humankind, in order to achieve some method for describing the city; and this would have to be for a frozen moment in time, as these abilities and senses of people are constantly changing due to the complex nature of the creatures that we are. The nature of cities includes all of these complexities.

A Theory?
Cities reflect the nature of the human race, born of its visions and its sweat, and perceived by its common and individual minds and senses. Cities are both as limited, and as broad, as the possibility of people, their creators and participants, allows them to be. The reason that cities are different, then, must be due to the particular circumstances surrounding their origins, purposes, and population; their social make up and control, their government, their politics.

A strong political policy involving land-use planning and thus city form results in the city being a reflection or product -- and more than a symbol-- an essential element in the practice of the politics in that place. I suggest that when this same political theory includes the empowerment of one group of people over another, when it benefits some and exploits others, then the experience of the city cannot be separated from this socio-political relationship. Political
theory links city form to psychological and social "emancipation" or "imprisonment."

I think of Johannesburg/Soweto, South Africa. About how it is a utopia for some, and a hell for others. Oh, how different people must view the same city, from opposite sides of the same coin. I find myself wondering whether these view-points of the city, then, are only political, or whether the city is many things at the same time. About how one city can be both a provider, "protector," (for those that have), and an excluder, a "prison", (to those who have not). It leads me to consider the concept of parallel universes, where by two worlds exist side by side, simultaneously, even experiencing the same physical realm, and yet each world remains invisible to the other. I question whether even two people can share a single world, or whether we each create our own "realities" out of our unique combinations of genes, environment, education, perception, etc. Yet I suspect that the nature of Johannesburg, in this example, is such that it is a place shared only for work, a commercial and retail core, with dormitories to its South-West and to its North-East. What is it that will allow the oppressor to take the oppressed's money in the city, yet not give those people equal rights in other respects? The shared realm is minimal. Politically motivated legislation forces people to live in certain areas according to their race. In other words people physically inhabit only small parts of their city. Few white people from Johannesburg's northern suburbs have ever visited Soweto, nor do they even think of themselves as living in a place called Johannesburg-Soweto. The entire city (country) is "inhabited" by the
spirit of racial doctrine, which-- in a sense-- unites the disparate parts of the city, making it "the same city." It is this political habitation which provides the common experience of cities in South Africa, and which causes the cities to be polarized into black and white, to have and have-not, to privileged and exploited. The common thread of the city is its politics, however varied the experience of it might be. There is irony in the fact that the cities and the work-place are where all people mix, and it is politics which keeps their suburbs separate and the races apart.

To further explain my the experience of the city, I need to describe the pains and the pleasures that the city has given me. Both these states of heightened emotion come from a similar state of sensitivity and awareness, as opposed to the condition of merely coping and surviving in a city. The moments of joy seem to have come from marveling at the incredible feat it is to have achieved and built a city. Its sheer size, the organization and the labor, the riches and the monuments of celebration - the buildings, defying gravity, and defining, even proving the achievements of man. I believe all the inhabitants of a city are responsible for, and contribute towards what a city is at any given moment, a zeitgeist. To see people oriented by their creation, made to feel secure by its concrete presence, and thus in some unconscious way, (for I suspect we have lost this conscious ability), located in the cosmos; that world somewhere beyond all that which we know, and of which we can only suspect, or spiritually hope for.
My description of the city as a cause of pain, or as an exploiter, needs to be explained in terms of my own experience of it, and in terms of that other universe (or universes) I imagine I see, and yet cannot live in, but shall attempt to explain.

My own frustrations arise out of such mundane experiences as being caught in my car in a traffic jam, or cursing the city when I can't find parking. I sometimes feel trapped when I get lost in the city, unable to find my bearings or see a familiar landmark, and yet know that I'm not far away from places I may know quite well. I feel trapped when I come up against the bureaucracy of a city, requiring permission and permits for a variety of activities from city or government officials, and yet realize that my experience was as a member of the politically privileged class in South Africa. How petty these above concerns must seem to people who have to break the law to be in these places because of the color of their skin. Most frustrating and painful of all is the lack of morality and justice I have had to witness, and felt helpless in attempts to change, fight, justify or understand. At these times the architecture described above as uplifting and inspiring, becomes a symbol of repression, of an imposed order under which a mere individual has no real freedom to do as he or she wishes, but is a "prisoner" of the city.

The city, being unique in form and situation because of its raison-d'être and its distinct socio-political formation, embodies politics in its physical form which is why it is both a symbol of, and in fact is the tool of repression.
The other universe I describe is that of the experience of the politically unprivileged, the disenfranchised. In the context of South Africa this refers to people, who, classified according to their race, who are not members of the ruling elite. I imagine their abhorrence towards the politics of the country can be experienced in the city. The city is becomes a symbolic representation of their continued suppression, and certainly embodied in it are laws and rights denying (or granting) freedoms of action, of movement, of work and of recreation, of life. Thus the city which can empower some is the same city which can imprison others, as it is molded to reinforce the status-quo, a reflection of its politics. This belief rests upon the notion that a physical place takes on the projected politics of its inhabitants, and if not enmasse, then certainly by sensitive individuals. In South Africa, I maintain that the political issues and the planning and urban issues are the same, and cannot be separated.

I cannot help wondering whether the Black Consciousness Movement, or similar, in South Africa could take control of the very cities which may psychologically suppress them, by encouraging the understanding that the cities, the present containers of apartheid, are also their cities. It is the black people who really built the cities, whose sweat spilled while building roads and pouring concrete thirty stories in the air, and who are even responsible for the money that paid for them, being the miners who wrenched the mineral wealth from the belly of the land. The cities then no longer represent white
apartheid domination, but may be seen as symbols of black achievement. Do (South African) cities have this innate ability within them to represent, to stand for, political ideology, or even freedom and imprisonment? This is a rhetorical question, and if this is so, what I ask is whether the psychological aspects of the powerful and powerless can be reversed without physical revolution and destruction, without a change in city form, which, I believe, reflects the status-quo?

Philosophers, historians, architects and urbanists have tackled the problems and aspects of the relationships between social, cultural and city forms, and the effects that they have upon each other, the politics of architecture, as it were. I point this out as have I examined how politics and city form are inextricably linked in the situation of South Africa, where land policy and social policy affect how land is used and how the city is used, for political means other than environmental care.

The Problem of Method
Neither politics nor sociology are parts of my academic background, and though I have called upon both fields in this thesis, the language necessary is not always within easy grasp of the architect or environmental designer. The complexity of the subject, of linking politics to the provision of housing and the urban question, of relating the townships to suburban ideals, is complex and can be viewed through a variety of lenses. I have attempted to show many sides of the picture, from a historical understanding of politics in the
larger South African context, to particular histories of townships. I have examined the nature of suburban design and Anglo-American values held as important and shown how they were corrupted for use in the designs of the townships in South Africa, suggesting that their use as referential links (mediating references) to western culture would help the process of "civilizing" the black South Africans and inculcate in them a sense of middle class values. I have examined the attitudes of two particular people, Calderwood and Floyd, who were involved as researchers and practitioners in the creation and realization of several townships, and found that they held many of the government's racial prejudices implicitly in mind. Finally, I have attempted to relate ideology, science, and the "urban question" through the lenses of urban sociology and political economy, and shown how these views relate to the provision of the South African townships by the government in that country.

Finally, I will end this thesis with some reflections about the difficulties of dealing with this subject as one with which I am emotionally attached.

Admission of Bias
The difficulty in being objective in this study is immense. The racism and political ugliness which I have witnessed in South Africa and which permeates the environment is not easy to document. In this thesis I have tried to show and to expose some of the reasons which some people give for their support of the system of apartheid. They are often couched in non-political and even philanthropic
ideals, the need to help the "natives" because the "Europeans" are more advanced, cultured, and civilized. The world of the black inhabitants in South Africa is never really entered into, their social and value systems are assumed to be aspiring towards western values, and some corrupt form of these is forced on to them in order to maintain a status quo of white superiority.

I am all aware that I have been very fortunate, having had this opportunity to "escape" the country for some time in order to reflect on my feelings about living and working there. I am a product of what white South Africa can produce. My parents' hard earned affluence has afforded me this opportunity to study, and afforded me my viewpoint of white, liberal privilege. The dilemma of the liberal is how to value or judge the rest of the world. It risks the danger of condescension over both those it despises as well as those it supports, (would "takes pity upon" be too strong and soppy a term?). How do I escape my own education, my own moral values and my privilege in order to avoid arrogance? Even my attempt to encapsulate the problem in a thesis of this sort is proof of my privilege. Must I view this too as proof of my guilt at having "escaped"?

Limits of Experience

I am not unaware of the limitations of work of this nature. I admit that I do not know the full range of experiences of the townships that I write about. I have not lived in them. My life has been quite removed from the experience of them. Thus the view that I have
presented of the townships is both privileged and not privileged. It is privileged because I have had the opportunity to do this study, and it is not privileged because I am not able to present a view of the life from inside the townships. This is a significant problem, that my viewpoint is a particular one, that allowed of the bourgeoisie. It is also significant to note that history is usually written by the victors, and that the story of the vanquished is not always accessible. More generally, when studying politically charged environments, it is easier to gain the records of the powerful, of the rulers, than it is of the suppressed, the beaten, the "underdogs."

The problem of method of writing a thesis like this is the problem of distance. How does one write about a place in which one both belongs and does not belong? How does one write about a subject which for them is emotionally charged? Two alternative answers are apparent. First, it is possible to write in a distanced, cold and machine like way, setting out the facts according to a theory, or a chronology. The alternative would be to tell the story in a very emotional manner; to use the thesis as an outburst of pent up anger and frustration and in this way to exorcise the demons which the subject arouses in one. Both these methods, I believe, will achieve a measure of the catharsis sought. I have tied to attain a certain emotional distance from the subject, whilst maintaining a passion for an intellectual understanding of its complexities.
Hope for the Future

I had wanted to try to end this thesis with some sense of hope for the future, with a feeling that the places I have written about will not always be symbols of repression, "prisons" for an ideology. I find it extremely difficult to imagine the townships moving towards some kind of a twenty first century suburban ideal. I can't help feeling that perhaps that time of hope has passed. That the political situation in South Africa has polarized to the extent that it is now difficult to imagine a differently organized society existing in the same physical environment. It is as if the monuments to the old regime, from township houses to Dingaansday parks, would need to be destroyed in order to create (merely the new foundation) for a new society. At other times I imagine that a population which feels itself empowered could transform the places they now inhabit by somehow (re)possessing them and taking control of their choices and destiny. With the political right and freedom one must surely imagine for a post-apartheid society, will come a sense of ownership, a pride in place, a choice. With that might come a miraculous transformation of an environment which works to disenfranchise people at present, to one which empowers them, which dignifies them and provides for thousands of people a taste of the suburban ideals without the patronization and disqualification which exists today.

As an architect I care greatly about our built and unbuilt environment. I realize now that a better environment will require both changes in the social and political structure as well as in the
built environments which must support it to make the dream come true. The dream of a better place is a worthy cause, and more and more people are becoming willing to die for it. Those empowered by the apartheid system, on the other side of the buffer zone, are also willing to fight for their privilege and status. It is difficult to see how to achieve that dream from here. Blood has already been spilled. The country is already in a state of civil war. If only enough people dream the same dream, then maybe that dream will come true.

The end.
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