The township concept in modern South Africa

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Abstract

This dissertation will look at the articulation and consolidation of a "township concept" in the administrative environment of early apartheid South Africa. It is argued that the concept - a joint product of two seemingly divergent discourses, one of modernity and the other of racial domination - was conceptualised and identified as a solution to the urban crisis of the 1940s. I further argue that the concept of a township for the urban African population - with all that it entailed - reflects the way in which the crisis and the role of the African in the South African urban system were perceived by policy-makers. The socio-economic environment and the intellectual context in which the concept was introduced affirmed the relationship between space and society and the extent to which spatial solutions could resolve socio-economic problems. It is at this point that urban discourses, from urban administration to physical planning, met with the apartheid project for *Separate Development*. The intellectual construction of a "tribal" or "transitional" identity which normalised exclusion from the sphere of social interaction in the cities was permanently ingrained in the urban tapestry through the racialisation of town planning. The spatial model of the township attests to a congruence in the processes by which urban Africans were to be governed and the ways in which urban resistance was to be suppressed through a reinterpretation of the urban subject as a member of a geographically and socially-contained community. The administrative model contained within the township concept was to reinforce the discipline imposed by the spatial model (through the marginal location of the township, ethnic zoning, and single-storey houses) with the use of housing provision as a mechanism for influx control and the constitution of structures of government supportive of *Separate Development*.

The things of the world cannot be known except through the knowledge of the spaces in which they are contained.

- Roger Bacon

In this here space, I would like to acknowledge the support of my supervisors, Professors Derek Japha and Andre du Toit, who gave so generously of their time. I am indebted to Sue Parnell for a long list of references on South African urban history and an insight into the South African urban landscape. Many thanks also to my friend Veronique Rioufol, whose astute and critical eye caught many an error in the later drafts of the text. Finally, I am grateful for the emotional and financial support of my parents, Eva and Shaban Souesi.

Chapter 1: Knowledge, power and space in the township

Introduction

In the early years of apartheid the concept of the "modern Native township" was advanced on two parallel fronts. The first front involved the direction of state policy in the late 1940s, and the debates within the National Party about the practicable and desireable extent of racial segregation.[1] The resolution of a housing shortage which had taken crisis proportions for the government was critical for securing a stable African urban labour market for manufacturing (Wilkinson, 1981; Evans, 1986; 1997; Posel, 1991). Whether the National Party accepted the presence of a permanent African population in the urban areas - as has been argued in other accounts of apartheid (Evans, 1986; 1997; Posel, 1991) - or not, there can be no doubt that the Department of Native Affairs (DNA) attempted to reverse the tide of *urbanisation* through strict criteria qualifying Africans for public housing allocation in urban areas (basically anywhere outside the 'homelands').[2] Meanwhile, major theoretical aspects of the developments in the international arena of architecture and town planning were appropriated by local professionals in the search for a solution to the housing shortage in the urban centres of South Africa. On this second front, the most scientific means of providing accommodation for urban Africans was the subject of debate in architectural and town planning[3] circles, particularly as science was regarded as the key to the resolution of the housing shortage. These two parallel initiatives - housing as part of an influx control and stabilisation strategy for urban labour, and housing as a development-directed, humanitarian approach to social change - seem to have come together in the proposed housing solutions of the 1940s and 1950s. It is this seemingly awkward and paradoxical fusion of modernist housing discourse and apartheid policy, resulting in the construction of modern townships, that characterises the use of space as both an expression of, and a medium for the imposition of racial domination in South Africa.

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[1] See Posel, Deborah, *The Making of Apartheid*, (Oxford, 1991).

[2] Ivan Evans (1986; 1997) argues that the Sauer Report did not determine apartheid policy, for the simple reason that African labour was necessary for the survival of manufacturing, and that Verwoerd was aware of this. Deborah Posel (1991) has also argued that the Fagan Report may have been more important than is generally conceded. I would argue that the township project - with thirty year leases for home ownership, the differentiation between urban and rural living conditions, and the institution of non-traditional mechanisms of government side by side with traditional ones - demonstrate that the National Party was not ready for complete "separate development". This is not to say, however, that the Department of Native Affairs did not want to stem urbanisation. It was widely believed that the numbers present in the urban areas were more than sufficient for labour needs.

[3] I use the term "town planning" to refer to the physical planning of urban or peri-urban areas, using the term interchangeably with "urban planning."

This dissertation will examine the modern township as a joint product of the two intellectual initiatives discussed above. The first - the modern housing movement - emerged within the discipline of architecture and town planning as it evolved from the 1920s onwards. The second initiative - the housing programme of the Department of Native Affairs - championed the notion of "separate development" and contributed to giving concrete shape to the hitherto relatively abstract political programme of apartheid. The dissertation will examine the township concept at the level of the interaction between these two discourses.

Guiding my research has been the question of how the notion of a township for the African population could have emerged as the dominant spatial formation for a racially and ethnically defined urban unit, given the non-racial approach of international modern housing discourse and the chasm between the constitutive intellectual traditions.[4] I argue that the articulation of a concept of the modern township, as a joint product of modern housing discourse and the administrative priorities of the apartheid state, should be located in the context of specifically modern ways of managing and controlling the urban population. In other words, physical planning discourse on the one hand, and the administrative discourses generated by the Department of Native Affairs on the other hand, shared the objectives of imposing order in the city, to be achieved through both the active participation of urban residents and a centralised state apparatus.

The issues which have guided my inquiry into the township concept are both universal and contextually relevant. The questions I ask and the issues I identify clearly differentiate between the urban models in the international literature, and the township concept as it was formulated in the early apartheid era. I argue that the use of township space to control the African population was very specific - to the extent, of course, that South African modernism cannot be generalised into modernism in architecture, and apartheid cannot be generalised into colonial practice. As a mechanism for the management of the African population in the urban areas, the township was very modern. The seeming discrepancy between modernist and apartheid objectives, I argue, may shed some light on the ways in which the township acted as a mechanism of power. The issues which I identify as central to the study of the township concept therefore concern the township itself, and the intellectual traditions by which it was composed.

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[4] It must be noted here that I realise that racial segregation *was* contested - more obviously by the resistance movements and Liberal organisations such as the South African Institute of Race Relations. It was also contested, however, by a few of those involved professionally in housing discourse. See Kuper, L. et al, *Durban: A Study in Racial Ecology* (London, 1958); Harrison, Philip and Alan Mabin, *"The Contribution of the Town and Regional Planning Commission to Planning and Development in Kwazulu Natal: 'Imaginative planning with practical considerations?' 1951-1996"*, (Hammanskraal, 1996).

Among the key issues to understanding the township concept are the recognition of housing as an instrument to control and manipulate the urban population, and its relation to the perceived necessity for a housing practice which was determined by scientific processes; the compatibility between housing discourse and Department of Native Affairs policy with regard to their respective visions for the township; and finally, the ways in which the township acted as a mechanism for the surveillance, control, and reproduction of a quantitatively and qualitatively pre-determined group of people.

The discussion into the township concept begins with the housing "crisis" of the 1940s and the decision to provide *modern* housing, no less, for the politically disenfranchised population. Foremost among the questions which this study poses is the reason behind the insistence on scientifically-based housing, in light of the existence of alternatives which were not only cheaper but also easier to implement. Beginning with the provision of public housing by the British Labour government as an instrument for the pacification of the working classes from the late nineteenth century (Swenarton, 1981), public housing schemes have been equated, in industrial or post-industrial states, with social control. The spatial models which were introduced by the Modern Movement were designed in this tradition of housing provision for the dissipation of urban unrest (Swenarton, 1981; Mills, 1989; Pinnock, 1989; Robbins, 1994). This fact nevertheless fails to explain the rhetoric of the Department of Native Affairs on the importance of building *scientifically planned* townships. Why was science perceived as providing a solution to problems of a political and economic nature by a regime committed to racial domination?

Central to the key issue of the ambiguous relationship between housing and the production of discipline, then, is the role of science as the foundation for modern methods of governance. The role of science as a legitimating mechanism (Thompson, 1984) for the imposition of norms and the establishment of the scientific foundations of modern methods of governance (Gordon, 1980; Dreyfus and Rabinow, 1982) is highlighted by the relationship between planning and apartheid discourses. The way in which the township was to be used by the state does not necessarily coincide with the way the township operated to establish or reinforce relations of power. This dual *modus operandi* of the township as an apparatus of power will be discussed further in the chapter.

The second issue to guide this study involves the acceptance by professional planners of apartheid principles as a significant factor in the realisation of the township concept. While the spatial model for the township was taken from modern architectural and planning theory, in

reality the implementation of the concept in the South African context was a far cry from the moral objectives of modern architecture: the provision of housing for all, the imposition of minimum standards of hygiene in buildings, and the construction of an environment which would be more sensitive to human needs. Thus, while modern housing discourse emerged as a response to the disorder of the industrialising city and the consequent destabilising effects of poor living conditions directly upon urban labour and indirectly upon the economy, and while the decision to apply modern housing principles to the racialised space of the South African city was based on similar concerns with industrial disorder, that decision came to be informed by racialised notions of community which were essentially incompatible with the non-racial community structures espoused in modernist discourse (and were in fact, contradictory to the modernist objective of de-segregating the city). For modernists, the interdependence of citizenship and space rendered the former a function (and a natural consequence) of the latter. The objective of architecture and town planning - if it may be said that there was a single overriding objective - was to stimulate a civic awareness amongst the urban population through the creation of an environment conducive to the emergence of a strong community spirit. The provision of scientifically constructed mass housing was therefore assumed by planning professionals to be conducive to the cultivation of good citizens. In this perspective, the South African government's denial of citizenship to blacks was, in the most literal sense, a contradiction of modernist notions of community. The question, then, is why the plan for the modern township, as a compromise between modern notions of citizenship and the particular racial stratification of twentieth century South African society, was rarely challenged by contemporary planners.

The third issue involves the use of the township as a policy instrument, and the spatial dimensions of power. In addition to the consideration of the role of science in housing discourse and professional compliance with the interpretation of such discourse through the lens of apartheid, the dissertation will focus on the ways in which the township was expected to act as a mechanism of control and the ways in which it *did* act, without necessarily being expected to do so. A theoretical distinction therefore needs to be made here, between the intentional use of the township as an instrument for the imposition of a certain urban order, and a capacity (which was not recognised as such by the actors involved in the realisation of the project) implicit in the spatial order of the township, to reinforce relations of domination. This dual aspect of township space - the recognition that a spatial model could act as a mechanism of control, and a related discursive subjugation of the African population through spatial forms and norms - will be examined in the second part of the dissertation.

Identifying these three issues as major areas for analysis begs the question of why and how to deal with the township at all. My interest in the township as a concept - apart from the fact that it is a dominant aspect of the current political reality - was triggered by the observation of a paucity of academic research on the architectural dimensions of the modern township. The African township, home to the majority of urban South Africans, is a poorly researched area of South African historiography (Beavon, 1982; Parnell and Mabin, 1995; Maylam, 1995). While this study does not claim to be groundbreaking (far from it), it has been conducted with that realisation in mind. With a few notable exceptions, social scientists have neglected the urban forms on which apartheid was based. As a result, the township, as a *concept*, has not really been investigated.

The following study attempts to historicize the African township as a concept which cannot be taken for granted but must rather be explained in terms of the modernisation of control over subject populations. The reason for using this particular perspective is quite simple. While the content of the analysis undertaken in this study is temporally and geographically specific, it relies on universally applicable notions of the relationship between power and knowledge and the nature of discourse as mediator of power/knowledge. As such, the study parts company with more conventional approaches to apartheid. I turn to a point made by Sue Parnell and Alan Mabin, that *"the lack of emphasis on urban growth, urban design and urban management in the existing literature underscores the persistent treatment of South African urban segregation as unique"* (1995: 61). In line with Parnell and Mabin's approach, the following dissertation attempts to challenge the notion that the determination of apartheid space was retrogressive, reactionary or exceptional. This challenge is, in effect, a rejection of conventional approaches to apartheid which may generally be located within the Liberal/Marxist debate.[5]

It is, of course, recognised that apartheid, and more specifically the housing crisis of the 1940s, cannot be understood without reference to the mechanics of the labour market.[6] As Peter Wilkinson argues,*"'township policy' ultimately constitutes a class-bound political practice"* since modern housing emerged within the framework of capitalist society (Wilkinson, 1981: 2). But rather than simply accepting capitalist modes of production as underlying all spatial practices, the perspective to be taken up in the present study looks at strategies of power and spatial practices as supportive of capitalist forms of production. I argue that the focus on economistic

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[5] For a critical discussion on the Marxist/Liberal debate over apartheid, see Posel, Deborah, *The Making of Apartheid*, (Oxford, 1991); Hindson, Doug, *Pass Controls and the Urban African Proletariat*, (Johannesburg, 1987).

[6] Critical urban social theory focuses on the fundamental importance of the organisation of production in creating and structuring social processes. See Smith, D.M. (ed), *The Apartheid City and Beyond*, (London, 1992).

analysis has led to a misinterpretation of the forms and functions of apartheid urban space. Writing outside a Marxist perspective, Adam Ashforth contends that *"when new alignments in the structures of power within the state were forming, new understandings of the place of 'Natives' within the political economy had to be devised"* (Ashforth, 1990: 2). Ashforth's contention is indicative of the futility of treating "Natives", much less their economic status, as an *a priori* category. In fact, the construction of the social and anthropological category of the *"Native"* acted to consolidate Africans as a sub-category of the urban subject, a social phenomenon which was reinforced through the spatial arrangements of the professional planning fraternity.

The South African township in the literature

Township historiography has, in a sense, blown in the wind of methodological trends. Until the mid-seventies, studies of the township were conducted within narrow sociological perspectives.[7] Revisionists of the early 1970s introduced broader theoretical perspectives but often ignored the township as marginal to their central concern with class struggle and industrial conflict.[8] The spatial model of the township, and its status as a product of modernity remained marginal to its role as a reservoir of labour. The township, described as a descendant of the industrial compound, was given little specificity outside its status as an institution for labour exploitation (Rex, 1974). While the modernist character of its form and anticipated functions was ignored all together, the greatest weakness of a Marxist approach to the township lay in its inability to explain the social programme of the Modern Movement except in purely economistic terms. Even so, many of the insights upon which this study has relied were mooted in revisionist writing. In an article entitled *"The instruments of labour exploitation in Southern Africa,"* Rex wrote that *"what emerged in South Africa through the conjunction of the overcrowded native reserve and the mining compound was a system of labour exploitation which was about as rational as it could be from the point of view of the exploiter"* (Rex, 1974: 7). This statement is typically revisionist in

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[7] In general, the studies of the 1970s focused on township life. Among their main objectives was the "de-criminalisation" of the urban African in the perceptions of white South Africa. Examples include: Wilson, M.H. and Mafeje, A, *Langa: A Study of Social Groups in an African Township*, (Oxford, 1963); Mayer, P, *Townsmen or Tribesmen*, (Cape Town, 1961); Pauw, B.A, *The Second Generation: A study of the family amongst urbanised Bantu*, (Cape Town, 1963); De Ridder, T, *The Personality of the Urban African in South Africa*, (London, 1961); Reader, D.H, *The Black Man's Portion* , (London, 1961); Dundon, J.P, *Native Life in a South African Location*, (Unknown, 1954).

[8] Prominent revisionists were particularly concerned with the system of labour distribution. See, for example: Legassick, M, *"South Africa: Forced labour, industrialisation and racial differentiation,"* in R. Harris (ed), *The Political Economy of Africa*, (Massachusetts, 1975): 229-270; Legassick, M. *"Legislation, Ideology and Economy in post-1948 South Africa,"* Journal of Southern African Studies I (1) (Oct. 1974); Wolpe, H. *"Capitalism and cheap labour power: segregation to Apartheid,"* Economy and Society I (4) (1972). Rex's article on institutional sites of exploitation was different in this regard, for its recognition of the importance of the spatiality of power, despite the fact that it also took a revisionist approach. See Rex, J, *"The compound, the Reserve, and the urban location: the essential institutions of Southern African labour exploitation"* South African Labour Bulletin 1 (4) (1974): 4-17.

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its treatment of apartheid policy as making perfect economic sense. Yet Rex's description of apartheid as *rational* is suggestive of the emergence of a modern *technology* of power grounded in scientific reasoning, an approach to be taken up twenty years later in the work of Jennifer Robinson and Deborah Posel.

It was only in the Social History movement of the 1980s, and obviously not unrelated to the resurgence of urban struggle, that the township once again became the focus of social analysis.[9] Yet the approach of the Social History movement was insufficient for conducting anything but a micro-sociological analysis. Moreover, the Social History movement retained traditional points of reference and located itself within the Liberal/Marxist debate. This is most obvious in urban history studies, where pioneering researchers aligned themselves within this perspective.[10] Revisionist perspectives undoubtedly triumphed in the early days of the movement. In fact, a Marxist approach to the township was relevant, even if it was not completely adequate in addressing the key issues of urban reform and the relationship between space and society. It was relevant in that urban planning emerged to facilitate capital accumulation within a consumerist society. For example, Peter Wilkinson, possibly the first writer to talk of a township "concept" and link it with the housing shortage of the 1940s, described urban planning as *"the theoretical field of state intervention into the 'urban' where the latter "refers not only to a spatial form, but expresses the social organisation of the processes of reproduction"* (1981: 2).[11] Wilkinson's definition is not totally incompatible with a perspective which addresses broader issues of spatiality, without necessarily taking an economistic approach towards the urban.

In later work, Wilkinson and others have redressed many of the weaknesses of the Social History movement and revisionist thought by integrating their perspectives with or relying on approaches which have already done so. In these writings, as in much of the international literature, the analysis of professional discourses, emerging from the human sciences and propagated through

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[9] See, for example: Cobbett, W, *"Industrial Decentralisation and exploitation: the case of Botshabelo,"* The South African Labour Bulletin 12 (1987): 1-13; Bekker, S.B. And R. Humphries, *From Control to Confusion: The Changing Role of Administration Boards in South Africa, 1971-1983*, (Pietermaritzburg, 1985); Brewer, J, *After Soweto*, (Oxford, 1986); Mashabela, H, *Townships of the PWV*, (Johannesburg, 1988); Seekings, J, *"Trailing behind the masses: the UDF and township politics in the PWV region 1983-1984,"* Journal of Southern African Studies 18: 93-114; Mandy, N., *A City Divided* (Johannesburg, 1984).

[10] A good overview of the Social History movement, as it emerged and developed within the History Workshop of the University of the Witwatersrand, is given by Phil Bonner, an active member. See Bonner, P. *The University of the Witwatersrand History Workshop: A Retrospect.* Problematising History and Agency, Conference at the African Studies Department, University of Cape Town, 22-24 Oct. 1997. Alan Mabin and Susan Parnell's collaborative work is representative of this literature. See, for example, Mabin, Alan. and S. Parnell, *"Recommodification and working class home ownership: New directions for South Africa?"* South African Geographical Journal 65: 148-166.

[11] In that particular article, Wilkinson relied on a theoretical framework provided by Manuell Castells.

institutional channels, has revived interest in the relationship between knowledge and power. Within a theoretical perspective based on power/knowledge, the importance of space in the determination of relations of power and the imposition of hegemonic rule has also been recognised, bringing about a re-evaluation of space as purely symbolic or passive. It is within these parameters that the present study examines the apartheid township as a *concept*.

Sources

I have divided the main body of literature from which this study draws into six areas, according to their contribution to the following text, and not necessarily in accordance with their own theoretical objectives or priorities. It is emphasized that these categories are by no means rigid, and that many works may fall under two or three categories. In fact, those works which have been most useful have done precisely that. They may, for example, have conducted an analysis of apartheid discourse within a perspective based on the modernisation of control, thereby encompassing three different categories: *discourse analysis* and the theoretical literature pertaining to it,*South African urban history*, and *theoretical perspectives which historicise power*. The basic contribution of these various sources to my own research has determined their classification below.

The issues relating to the distribution of the African population in the urban areas have most thoroughly been examined in the field of *South African urban history*. This set of literature has been a rich source of factual information. I have divided the writings in urban history in two groups. The first set relates to *labour history*, and has not generally been concerned with spatial practices. Alf Stadler's work on the squatter movements and the bus boycotts of the 1940s (1979; 1981), Phil Bonner's studies of urbanisation on the Rand (1989; 1995), Rodney Davenport's historical account of urban areas legislation (1969; 1991), Doug Hindson's study of influx control (1987) and Dan O'Meara's article on the mineworker's strike (1975) are amongst the historical works from which my research has drawn for a broad picture of the African labour market at mid-century.

Within this same set of literature but falling under a slightly different category is the research produced in *urban geography*. The research in the field of historical geography has drawn attention to one of the most salient features of apartheid, namely the spatialisation of power. I distinguish the work of these writers from that of their purely historical colleagues for its disciplinary foundation in the spatial environment. This includes Alan Mabin's studies of town planning history (1990; 1992), Susan Parnell's histories of public housing and health and town planning legislation prior to and following WWI (1988[1]; 1991; 1993), Harry Phillips' study of

public health reform in the 1910s and 1920s (1987), and G.H. Pirie's unique research on ethnic zoning in the 1950s (1984), to name a few. Peter Wilkinson's study of the resolution of the African housing crisis in the post-WWII period (1981) has been extremely useful in bridging the gap between the histories of the squatter movement and the spatial solutions of the state. Finally, while I have not relied to a great extent on John Western's work, it must be noted that, as one of the first writers to have approached apartheid as a fundamentally spatial phenomenon, he is also among the first human geographers to have applied sociological notions of the interdependence of space and society to the South African context (1981; 1996).[12]

The second set of writings focuses on space as an element of power. This includes non-South African writings on *colonial discourses of space*, as well as South African work from the field of *town planning history and urban geography*. To begin with, a distinction must be made in the treatment of space in urban history (whether from a town planning or a geographical approach). While urban history has always been concerned with relations between the built environment and society, it has not, until recently, regarded space as an instrument of power. Thus, while a geopolitical approach is obviously useful in examining the apartheid state, the potential for a spatial analysis exceeds that of questions associated with traditional notions of territoriality.

Understanding apartheid in terms of a technology of power is an approach which has gained currency in the past few years[13] (Robinson 1990, 1992, 1996; Comaroff 1992; Posel, 1996), and which owes many of its theoretical assumptions to discourse-based approaches (discussed below). John and Jean Comaroff (1992), for instance, have linked the imposition of the missionary notion of *"house as home"* with the hegemony of the paternalistic colonial state. Jennifer Robinson (1996) writes of a spatial technology of apartheid as the primary mechanism for state hegemony. Robinson argues that the *"location strategy"* (1996: 2) harnessed the administrative capacity of the state for the complete control over human movement.

Like its South African counterpart, *international literature on the colonial city* has usually taken the form of a case study. It has, however, been less bound to Marxist perspectives. Several of these studies of modern architectural and town planning discourse, as implemented in a colonial setting, have been useful to my own research. Paul Rabinow's article on the architectural

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[12] In Western's account, communities which were affected by the Group Areas Act experienced *anomie* - a condition which corresponded to the physical displacement of population removals. Here, the use of force is reinterpreted as social coercion. The social violence which culminated in the removals of the Coloured population in Cape Town under the Group Areas Act (and which of course can be applied to removals under the Slums Act) is a more adequate measure of state power.

[13] I am indebted to Professor Derek Japha for introducing me to it.

practices of the French in Morocco, for example, refers to a Foucauldian theme (1992: 167-182). Rabinow describes both the earlier phase of modernity -*"techno-cosmopolitarianism"* - and*"middling modernism"* proper, as consisting of the regulation of society - an object of knowledge and reform - through art and science.[14] Rabinow's terminology is fairly precise in exposing the key issues around which the modern project revolved. He summarises modernization as the identification, evaluation, and operationalization of tradition in the name of health, productivity and efficiency, and writes that *"[t]he restless and unstable practices which seek to combine social representations of order with norms of health are central to the multiple imbrications of welfare and modernity"* (op cit: 168). The colonial imposition of a *"rectangular grid of civilisation"* in the missionaries' attempts to order a landscape that appeared chaotic (Comaroff 1992: 279; Robbins, 1994: 91) constituted the first of these social representations, to which the discourses of medicine and urban administration soon added in complexity. This literature begs the question of whether the invocation of medical and administrative discourses in the implementation of the Urban Areas Act could render Native locations of the interwar years modern projects. In a sense, it could. Yet the township of the 1950s was a very different project from the "model" locations of the interwar period. The discontinuity between the segregationist and the apartheid era is revealed in literature on relations between state and bureaucracy, to which I now turn.

The third set of literature deals with the *apartheid state and the role of the bureaucracy*, and particularly the Department of Native Affairs and local authorities, in buttressing repressive urban policies. Writers in this group have recognised that two aspects of modernity are critical to the discussion on the African township: a strong, centralised state and an urban adminstration with the capacity to produce and interpret information. Ivan Evans (1986; 1997) most consistently examines apartheid state policy in these terms. Peter Wilkinson (1993) has also focused on the role of the state in the production of specific discourses of housing/space and the relationship between those discourses and the formulation of apartheid urban policy. Both Evans and Wilkinson demonstrate that the first aspect - the centralisation of state agencies and the establishment or transformation of institutional structures, from public research bodies such as the Social and Economic Planning Council (SEPC) and the National Housing and Planning Commission (NHPC), to the Department of Native Affairs - affected the very essence of the way in which urban policy was conceived and carried out. Bound to this trend in governance and urban administration, and constituting the second aspect of the modernisation of the South

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[14]Paul Rabinow's distinction between the two phases of modernity is useful in understanding the shift from segregation to apartheid, and its implications for African housing (Rabinow, 1992: 167).

African state, was the production of knowledge which was deemed crucial to policy formulation. Evans (1997) has provided a comprehensive account of the modernisation of the bureaucracy and the implications of bureaucratic transformation for a more systematic administration of Africans in his examination of the transition from segregation to apartheid.

Fresh *theoretical perspectives on the nature of modernity* seem most applicable to a study of the township concept. Underlying the use of these perspectives is the realisation that South African history has only recently been examined within a more global context. They argue that the township, considered as a discourse in and of itself, must not be presented as an historical aberration (Mabin, 1992: 13). Recent approaches to apartheid have tended to deflate the notion that the South African experience must be exceptionalised (Mamdani 1996: 27-28; Parnell 1995: 6). The fourth selection of writings adopts this theoretical perspective, and generally contextualises South African urban history within modern administrative practices. Deborah Posel's (1991) work is a significant milestone in the study of apartheid as intrinsically modern. Along with Ivan Evans, Posel insists on the inherently contradictory nature of apartheid and questions the validity of both revisionist and Liberal approaches. In *Modernity and Measurement* (1996), Posel contextualises apartheid practices within the wider framework of modernity. She asks whether the obsession with statistics and demography is not indicative of modern techniques of power á la Foucault.

The necessary *primary sources*, both South African and international, constitute the backbone of the study. This material has been drawn from professional journals, monographs, or the records of local research bodies, such as the National Building and Research Institute (NBRI) and local government or affiliated administrative organisations. The majority of writing in this category is prescriptive in nature, and falls under one of three groups: records of local administration, including those of the Institute of Administrators of Non-European Affairs (Southern Africa); articles by South African planners and architects; and international (modernist) literature on housing.

Administrative records and circulars were to be disseminated within a relatively narrow bureaucratic circle, and as such, are particularly revealing of the motives of the local and central state, as well as those of overzealous bureaucrats. The *Record of Proceedings* of the *Institute of Administration of Non-European Affairs* is a significant source of information on the co-operation and conflict between the National Party and its opposition at the administrative level, and clarifies many of the ambiguities which have arisen over the degree to which apartheid was contested by the bureaucracy and the *areas* and *reasons* in which and for which it was

contested. H.F. Verwoerd's speeches to municipal administrators, collected by A.N. Pelzer (1966), as well as articles from the journal *Bantu*, published by the Department of Information as a propaganda tool for the urban African "elite", clarify to a certain extent the intentions of the Department of Native Affairs in the field of public housing.

The next group of primary sources comes from the professional discourse of town planning. These texts have been the most interesting for the present analysis of the interaction between modernist and apartheid discourses. The earliest South African articles on town planning attempted to consolidate the profession locally, and generally called for the application of modernist principles. *Native Housing* (1939), a joint student thesis, is representative of the modernist ethos amongst professionals at the time. The housing shortage and poor living conditions were a major concern for the profession, which generally attempted to lower the costs of housing through the provision of simple, yet efficient designs for township schemes. From the 1950s onwards, however, the profession became more involved in the housing programme of the Department of Native Affairs. The early utopian rhetoric of the pre-WWII period gave way to a more technicist approach. *Minimum Standards of Accommodation for Non-Europeans,* published in 1949, were modified and racialised by 1951. In 1954, *Research Studies on the Costs of Urban Bantu Housing* were published as an authoritative guide to township construction. In this period, administrators entered the professional discourse. One example is J.E. Matthewson, Manager of the Non-European Affairs Department (NEAD) of Benoni, who published his dissertation on *The Establishment of an Urban Bantu Township* (1957) as well as numerous articles in *Bantu*, believing himself to be an expert on the subject of town planning.

Within the primary sources, theoretical texts from the discipline of architecture and planning have constituted the final group of writings. I have attempted to refer to the texts which influenced the work of South African professionals involved in the production of housing discourse. My main texts have therefore been Catherine Bauer's *Modern Housing* (1934), which essentially guided the delineation of minimum standards for the black population, *The Athens Charter* (Giradoux, 1943), a manifesto of the *Congres International d'Architecture Moderne* which encapsulates the social objectives of the Modern Movement, and C.A. Perry's *Housing for the Machine Age* (1939), a text which provided the spatial model of neighbourhood planning, appropriated for the townships of 1950s.[15]

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[15]C.A. Perry introduced the neighbourhood unit in earlier work, none of which is referred to in the mainstream professional South African literature.

Finally, I come to the *theoretical perspective* of the present case study. My theoretical perspective has been based on the work of Michel Foucault or literature dealing with or deriving from Foucault's work. I have relied on Foucault's methodology mainly because it introduces a significant analytical dimension to qualitative research. A particular approach to the concept of discourse and discourse analysis, and a historically relevant interpretation of power (with *pre-modern* and *modern* modalities) characterise studies based on a Foucauldian perspective. Using discourse as a category of analysis means attempting to determine the role of discourse in the nexus of power/knowledge. According to Foucault, *"[d]iscursive practices are characterised by a delimitation of a field of objects, the definition of a legitimate perspective for the agent of knowledge, and the fixing of norms for the elaboration of concepts and theories"* (1970: 48).[16]

In *Discipline and Punish: The Birth of the Prison* (1979), Foucault introduces a historicised notion of power, one which allows for a historical and geographical contextualisation of the township as a mechanism for the production of a disciplined community. Colin Gordon's (1980) collection of interviews and lectures by Foucault is a basic text on power/knowledge. Among the anthologies and critiques of Foucault's work, G. Burchell's *The Foucault Effect: Studies in Governmentality* (1991), Dreyfus and Rabinow's *Michel Foucault: Beyond Structuralism and Hermeneutics* (1982), Paul Rabinow's *The Foucault Reader* (1985), and Barry Smart's *Foucault, Marxism and Critique* (1983) have proven most relevant.

In the South African literature, Foucault's perspective has been employed in studies of discourses of the human sciences and discourses of space, in their capacity to constitute social objects and subjects. The studies have been conducted with the particular objective of analysing relations of power. Some discourse analysis has been conducted within a state-centred approach, to varying degrees of depth. These studies, while limited in number, have been significant in understanding the modern regimes of segregation and apartheid, and establishing both the continuities and discontinuities between them. Adam Ashforth's *The Official Discourse of Twentieth Century South Africa* (1990), Aletta Norval's *Deconstructing Apartheid Discourse* (1996),[17] Deborah Posel's *Modernity and Measurement: Further Thoughts on the Apartheid State* (1996), and Saul Dubow's *Scientific Racism in Modern South Africa* (1995) analyse the discourse of racism, segregation, and apartheid state-formation in terms of a technology of

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[16]The concern in the present study is mainly with discourses of power (as opposed to discourses of resistance), in other words, the organised forms of knowledge which establish parameters for social action and acceptable social behaviour. Discourses of resistance will necessarily be touched upon, particularly as these discourses come to constitute discourses of power themselves.

[17]Aletta Norval (1996), in analysing the role of discourse in the construction of identity, focuses on the production of an imaginary space wherein identity is consolidated, always in opposition to the "other".

power, generated by specific scientific disciplines and their methodologies. A similar conceptualisation of discourse and the ways in which it acts to establish or perpetuate relations of domination underlies the arguments of the following pages. By conceptualising discourse as a particular form in which knowledge has historically been organised in Western society (Fairclough, 1992: 27) I do not mean to exclude more current definitions, nor limit the scope of my analysis to the rigid discursive structure of the sciences. Rather, a theoretical framework which begins with Foucault's conceptualisations of discourse as related to power and knowledge will, to a certain extent, establish the parameters within which my own argument will be framed.

Theoretical approach

In exploring the township concept as a product of modernism and apartheid, I have relied on an analytical framework derived from the work of Michel Foucault, in part because it allows me to look at apartheid as a modern phenomenon. A brief exposition of Foucault's conceptualisation of modern governance as a technology of power and the relation between power and knowledge is already overdue. It must be noted that the study is not an attempt to apply the whole of Foucault's theoretical propositions to the township, nor is it an attempt to confirm his arguments with a case study. I use certain aspects of Foucault's perspective - as it stood in his latest work (since his perspective underwent several shifts) - as both a theoretical guide and a methodological tool. There are therefore several aspects to Foucault's work which will obviously be excluded from this short summary. Foucault himself said that *"what I say ought to be taken as 'propositions', 'game openings' where those who may be interested are invited to join in; they are not meant as dogmatic assertions that have to be taken or left en bloc"* (1991: 74). What is of relevance to this study is how Foucault perceived the modern state, its objectives, and its modus operandi.

Foucault made available certain theoretical concepts and methodological tools which are quite distinct and particularly useful in terms of understanding the modern state. The central question posed by Foucault is universally relevant: how does the modern state operate? Several theoretical cues are given: the modern state survives through a reinterpretation of traditional means of control over subject populations; the rationality of governance is formed and transformed by the knowledge of the state's resources, accumulated through specific institutional channels and interpreted by those institutions; power/knowledge allows the state to run its affairs as an enterprise, its overriding objectives being the management of the population and the economy of resources. In brief, the state survives through the manipulation of the human body to achieve a transformation in modes of living so as to ensure the reproduction of human resources

which will perpetuate the cycle of exploitation, thereby maximising economic outcomes through the minimisation of loss.

Governmentality

I will now briefly examine certain aspects of Foucault's work on *governmentality* which necessarily include concepts and themes explored throughout his work, before situating the South African township within the theoretical context of Foucault's work. Foucault's work on *governmentality* (1991) integrated the various streams of thought present in his previous work. It is therefore a good starting point for a discussion on power as a *historical condition* and on the historical emergence of the link between power and knowledge. Foucault located the link between power and knowledge in the new political rationality which emerged in the sixteenth century. In this rationality, the state became an end in itself, and the accumulation of knowledge became vital to practices of governance. *"The government"* Foucault explained, *"particularly the administrative apparatus, needed knowledge that was concrete, specific, and measurable in order to operate effectively. This enabled it to ascertain precisely the state of its forces, where they were weak and how they could be shored up"* (Dreyfus and Rabinow, 1982: 137).

The *"art of government"* which characterises the practices of the modern state integrates *population*, *economy* and *security* . Government is, of necessity, government over a *population*. Government is also government over *things*. While population defines the state, economy defines the extent and nature of its practices. Foucault thus identified the *"essential issue in the establishment of the art of government"* as *"the introduction of economy into political practice"* (Foucault, 1991: 92). A technology of power is developed so as to harness the potential of the body to produce and reproduce. This technology became available to, and simultaneously made possible the system of capitalist production. In sum, power was exercised through disciplinary techniques which facilitated capitalist production and introduced to the field of economy a new way of perceiving and using the human body.

The rationality of governance, based on the triad of *population*, *economy* and *security*, underwent a transformation in the early nineteenth century with the emergence of the human sciences. Scientific rather than juridical categories constituted the *"object"* of political attention (Dreyfus and Rabinow, 1982: 134). The appropriation of scientific categories, developed by the empirical human sciences, led to the exercise of a new form of power:*biopower*. Biopower was defined as *"forms of power exercised over persons specifically in so far as they are thought of as living beings: a politics concerned with subjects as members of a population, in which issues of individual sexual and reproductive conduct interconnect with issues of national policy and power"*

(Gordon, 1991: 4-5). As the body became the *"object"* of power, a *"disciplinary power"* emerged to produce a human being who could be treated as a *"docile body"* (Foucault, 1979; Dreyfus and Rabinow, 1982: 134).

Biopower, Foucault argued, preceded capitalism and was, in fact, accountable for its success (Dreyfus and Rabinow, 1982: 135). The docility of the human body implied an ability to control its actions through a false autonomy. Humans could be disciplined into certain roles, of which those within the capitalist system of production proved the most useful to the reproduction of the state. Foucault wrote that the excercise of power (in line with current modes of production) was *to be obtained at the lowest possible cost*; *its impact, intensity and extent were to be maximised without interruption*; *the economic growth of power was linked to the output of the apparatuses through which it was excercised* (Foucault, 1979: 118). *Discipline* was the formula through which power could be excercised in such a way as to fulfill the three above criteria. Crucial to this formula was the importance attached to detail. Power was to be excercised through the mechanisms which regulate everyday life. Discipline thus constituted a total intervention into the private life of individuals, much as military discipline denies the right to privacy.

Power/knowledge

In order to fully appreciate the notion of biopower, it is necessary to backtrack slightly - in terms of the chronology of Foucault's work, at least - to questions of power/knowledge and the role of discourse in the articulation of subject identities. What was the relationship between the production of knowledge and the disciplinary practices of the modern state? The human and social sciences are implicated in the production of *"docile bodies"* and therefore in the domination of the subject. Foucault perceived power as a process which "objectifies" and "subjectifies" humans (Dreyfus and Rabinow, 1982: 56). Rabinow provides one of the more lucid explanations of these processes. He dissects the processes of *"objectification"* and *"subjectification"*, as they appear throughout Foucault's work, into *"dividing practices"*, *"scientific classification"* and *"subjectification"* (Rabinow, 1984: 7-11).[18] I use these categories as guiding references to Foucault's works, which I briefly look at in terms of their conclusions on the relationship between power and knowledge.

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[18] The relation between processes of objectification and subjectification is both interdependent and causal. While objectification and subjectification are not mutually exclusive, the treatment of humans as objects of a given discourse precedes and normalises the constitution of identities voluntarily appropriated by subjects themselves.

"Objectification" - the treatment of humans as objects, and more generally the process which generates discursive objects (both human and non-human) - establishes and consolidates social divisions. Foucault's early work on the asylum and the clinic may be seen as dealing with the dividing practices at work in these institutions. *"Dividing practices"* may therefore be defined as practices which tend to treat humans as objects, thereby negating their humanity and remoulding their identity in accordance with the needs of the institutions within which the practices are developed. Yet the social implications of these practices extend beyond the institutionalised individual. Social division, represented and reinforced through spatial arrangements, constructs social categories which become embodied in consequent discourses of resistance, and of power. The study of the asylum, the clinic and the prison in *Madness and Civilisation, The Birth of the Clinic* and *Discipline and Punish* [19] respectively attest to these dividing practices and the historical evolution of strategies of control during the past three centuries. The operationalisation of these means through specific institutions thus means that spatial practices both determined and were determined by, social norms.

Practices of division, both social and physical, reach a new level of complexity with the widespread acceptance of scientific output as *"truth"*. Scientific reasoning, as it developed from the eighteenth century onwards, was intrinsic to the demarcation of boundaries between reason and madness, truth and falsehood, objectivity and subjectivity, as well as the creation of a social hierarchy founded on theories of biological determinism. These boundaries constituted dividing practices as well. Initially acting as a medium for the imposition of a certain rationality, *"scientific classification"* was soon extended to the imposition of discursively based identities and professional norms.

Foucault was careful to relate these changes in scientific dicourse and practice to the social and economic environment. The rationality of industrial forms of production placed great value on the

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[19] *Discipline and Punish* explores the emergence of modern society through the transition from retributive to reformative justice. This history of the prison from pre-Enlightenment to nineteenth century Europe reveals Foucault's main thesis on the nature of modern society. This is described as evolving from a refinement of power through techniques which focused on the physical distribution and organisation of the human body. Modern technologies of power are distinguished by their concern with the manipulation of *"docile bodies"* for economic production. By focusing on the institutional mobilisation of the coercive capacities of space in the service of economic production, *Discipline and Punish* attempts to address modern industrial relations outside the framework of class struggle. The emergence of specific institutions for the control over the productive abilities of humans is critical to the nature of modern society. The individual body and the social body as a whole therefore become the simultaneous locus of action upon social behaviour. In a more spatial representation, Foucault included the distribution of humans in space as an element in the modus operandi of modern disciplinary techniques. This includes enclosure in a monotonous environment, partitioning in equal units (cells), the delineation of a functional space, and the organisation of a serial space. See Foucault, Michel, *Discipline and Punish: the birth of the prison*, (New York, 1979): 143.

maximisation of human potential. The era of reform, initiated with the industrial revolution but realised only after the revolution's consequences for the reproduction of the labour force became clearer, introduced a new way of perceiving and managing the human body. This new approach to labour and labour management was a watershed for the emergence of the modern human sciences.

For Foucault, the single most important element of modern statehood is the value attached to control over the human and the social body. The concept of society as a social body which exists parallel to the biological bodies constituting it, had important consequences for the transformation of methods of control over human action. How were humans to be controlled, and how could their individual actions be brought in line with the behaviour desired from the group? As mentioned, the reformism of the industrial and post-industrial era initiated new practices in labour management. The state's wealth and power were located in the strength and productivity of its population (Gordon, 1991: 10). The human body was no longer something to be discarded after use, but was rather to be cared for, trained, and disciplined.

The establishment of specific disciplines (such as biology or psychology) with authoritative claims on human nature allowed for a further categorization of the human subject as object of institutionalised knowledge.[20] Like the dividing practices which had operated to exclude social groups or individuals from society, discursive objectification legitimated social exclusion and categorisation. Yet there was a significant change from the divisive practices of the past. Firstly, they were more egalitarian in that all humans were subjected to the imposition of discursive categories. Secondly, this egalitarianism was justified by and directed towards the amelioration of living conditions (Dreyfus and Rabinow, 1982: 140). As Stephen Gould wrote with respect to twentieth century studies of intelligence, classification was no longer practiced in order to limit but rather to ameliorate (Gould, 1981: 160-161). Hence the introduction of welfare programmes as government policy.

Foucault and the township concept

Foucault's conceptualisation of the nature of modernity incorporates most of the key issues around which a discussion of the township may be conducted. The notion of a simultaneous *diffusion* and *centralisation* of power, exercised through a set of practices introduced within a

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[20] It is thus that the reformist zeal in the humanitarianism of the nineteenth and twentieth centuries, operated at the level of a *"technology of the soul "* (Foucault, 1979: 30). To use Foucault's words yet again, *"a corpus of knowledge, techniques, 'scientific' discourses is formed and becomes entangled with the practice of the power to punish"* (op cit: 32).

specific institutional context, can readily be identified as crucial to the exercise of power in South Africa. Describing modern state practice in terms of *disciplinary power* is the key to an understanding of the township as a mechanism of power, and integrates the basic concepts within Foucault's approach and the issues which come to the fore in the study of the South African urban landscape as a product of power. Disciplinary power comprises a set of discourses within their institutional sites and the constitution of those discourses through and for strategies for the production and reproduction of "docile" bodies. The parallel with the township, as a product of the interaction between two discourses (grounded in scientific disciplines and disseminated through institutions) and intended for the reproduction of a politically/economically defined population group, is clear. The main conceptual tools which have been provided by Foucault are critical to an understanding of the township concept in these terms. These include the concept of *discourse* and *its role in the construction of subject identities*; the *relationship between discursive practices and administrative practices*; and the *spatiality of power*.

Power/knowledge is about the formation and implementation of discourses as an inherently political exercise (Gordon, 1980: 77). Foucault's conceptualisation of power is intrinsic to the centrality of discourse as a methodological tool. Where discourse is constitutive of knowledge (Fairclough, 1992: 38), power is operationalised through that codified knowledge known as science. The encapsulation of knowledge within rigid disciplinary structures supported already established relations of power, thereby participating in the construction of particular truths. The role of biology, anthropology, and demography in the construction of an ethnic and racial African identity or the re-organisation of urban space on the basis of discourses of medicine and urban planning are, for instance, illustrative of a political and administrative rationality grounded in science.

A further distinguishing feature of power/knowledge is its reliance on metaphors which materialise the exercise of power without reducing it to the field of the economic. Here, the spatiality of power is particularly significant to an analysis of the township as a spatial model and a spatialised form of control. The manipulation of space is an essential element in Foucault's notion of power. As Dreyfus and Rabinow explain, *"[d]iscipline proceeds by the organization of individuals in space, and it therefore requires a specific enclosure of space"* (Dreyfus and Rabinow,1982: 154). This recognition of the control over space - and not only over territory - as *"an essential constituent of [the technology of power]"* (ibid) extends the analysis of apartheid society beyond the field of group areas towards a more critical examination of the types of spaces that apartheid produced and the institutional sites of oppression.

Overview of chapter structure

Before I proceed with a brief overview of content, I must add a point on structure. While I have tried to arrange the information in as logical and accessible a way as possible, chapters are not ordered chronologically (with the exception of chapter two), nor are they thematically autonomous.[21] In brief, the information and arguments contained in the following chapters, and not only the chapters themselves, are interdependent, for the simple reason that discourses themselves are interdependent. This dissertation must be read with that fact in mind.

The dissertation is divided in two parts. Part I examines the *context* in which the township concept was conceived: Chapter Two looks at the socio-economic conditions of the concept's emergence, while Chapter Three focuses on the intellectual milieu of the concept as a discursive construct. Part II looks at the township itself: Chapter Four deals with the spatial model of the township as a mechanism of control, and Chapter Five takes a similar approach to the administrative model for the township.

All four chapters revolve around the relationship between the accumulation of knowledge and the exercise of power. The discussion makes it clear that this process is both conscious and subconscious. Knowledge was accumulated by the state because it was believed that this knowledge could impart the ability to simultaneously control and manage large groups of people, particular social formations, and the individuals of which they were composed. The modus operandi of discursive practices was not necessarily limited to clear-cut motives. In fact, the construction of subject identities and the consolidation of norms is not intentional, and all the more effective for its unintentionality, as a mechanism of power. The recognition that knowledge does facilitate control, however, points to the objectives of discursive practitioners, and is obviously important in an analysis of the township as an intended mechanism for the imposition of relations of domination.

I begin with Chapter Two, which grounds the modern township within the socio-economic context which made its particular form not only relevant, but also a necessary element of what Heribert Adam termed the *"modernisation of racial domination"* (Adam, 1971). This chapter differs from the other three which follow in that it highlights the role of resistance and its absolute centrality to

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[21] The centrality of the school in the neighbourhood unit, for example, is discussed as part of the spatial model for the township (chapter four). The application of ethnic grouping and mother-tongue education is, however, an administrative issue. Bantu Education is therefore also touched upon in chapter five. Similarly, the discussion of the Modern Movement focuses on the importance of state intervention and integrationist principles for community development, topics which fall under township administration as well as being crucial elements of modern urban discourse as it is discussed in chapter three.

the formation of state policy. In what may otherwise be criticised as a deterministic account of the formulation of apartheid strategy, Chapter Two focuses on the economic and social factors which led to the failure of the United Party's housing policy, or lack thereof.

The chapter is divided in two parts. The first part looks at the urban crisis of the 1920s, 1930s and 1940s as a *population* issue. While the state was faced with a massive influx of Africans into the cities, it struggled to exercise control over the mobility and behaviour of this group. The administrative practices of the segregationist state were such that it was unable to contain resistance to racial domination. The collapse of spatial controls revealed not only the weakness of the administrative mechanism but also a possible field of state intervention for the imposition of discipline on the urban workforce. The second part of Chapter Two looks at housing as a response to urban crisis. Here, I look at the reasons for the construction of housing schemes for Africans. I examine the housing alternatives of the interwar period as a crude precedent to the township concept, in terms of dealing with the issue of control, and highlight the failure of interwar housing policy to respond to the changing urban environment.

Chapter Three looks at the intellectual context which generated the township concept. Having determined the reasons behind the implementation of a housing programme for Africans, this chapter tries to understand the importance of carrying out that programme along *scientific* lines. It argues that science, because it was accepted as objective and rational, was not questioned for its treatment of urban subjects in ways which buttressed the racial hierarchy.

Chapter Three is also divided in two parts, dealing with universal and local modernism respectively. The first part looks at modernism in architecture and town planning and identifies three areas of activity which hold the most significant implications for South African urban policy: the introduction of minimum standards of accommodation, the economic rationalisation of space, and the use of spatial models to manipulate human actions. The second part of Chapter Three examines these interventions within the local context of the South African profession. Here, it is argued that the construction of African identity, the rationalisation of its physical and social exclusion, and the normalisation of sub-minimal living standards for blacks were articulated in scientific and modernist terminology which legitimated their consolidation and subsequently, the normalisation of the township as the place of the urbanised *African* .

I move to Part II of the study, and Chapter Four, which looks at the spatial model of the township, discussed briefly in the first part of Chapter Three. The main objective guiding the division of urban space was the desire to create a social system which was acceptable to

Africans and with which they could identify, and one which would ensure the reproduction of a docile workforce. With this aim in mind, the township was conceived, in terms of structure *and* administration, as an apparatus of control. On the structural side, the spatial model of the township is analysed in three scales, into which the chapter is divided: the township as a *satellite* town, the township as a *neighbourhood*, and the township as *series of houses* , with the house centred on its site.

The first scale of township space involves the location of the township with respect to the (white) urban core. The overriding concerns of economy and security take expression in the use of buffer strips surrounding the township and separating it from other racially-defined areas, and the economic use of land. The second scale looks at the internal space of the township as a *neighbourhood unit*. In accordance with this choice for the spatial model, the size of the township is determined by the school, located at the centre of the unit. Ethnic zones divide communities within the township. Finally, the centralisation of buildings at the entrance to the township emphasises its role as an apparatus of observation. The third scale of township space is the single-storey house, situated at the centre of a plot. As a unit for the reproduction of African labour, the house represents the oppression of the state and acted as a medium of oppression in itself. The house imposed a moral order and a homogeneity over the township which played a significant part in the exercise of disciplinary power.

The final chapter in this study looks at the plan for the administration of the township. While the spatial model for the township in the form of the neighbourhood unit provided for local autonomy and regionalised administration, it also centralised civic activities within the township. The apartheid state relied on this spatial model for the elaboration of a plan of regional administration which made the exercise of power economically rational but simultaneously closed all avenues for community participation in processes of government. The de-democratisation of modern town planning at the administrative level was the most flagrant contradiction of modernist principles and perhaps for this reason, the most unsuccessful implementation of the *scientifically-generated* plan.

Of concern in Chapter Five are the ways in which the state attempts to intervene directly in matters of township administration. In this chapter I argue that the state was constantly struggling to achieve a balance between the centralisation and the diffusion of power, a process which is revealed in the administrative intentions for the African township. I first discuss the state's shift to regional planning as a more *modern* method of governance. The second part of Chapter Five

looks at the implications of the notion of self-help for the introduction of *"autogenous development"* in the urban areas.

Before proceeding with Chapter Two, some clarifications are in order. The object of analysis is the concept of an *African* township - as opposed to a township for *blacks* - because the relationship between the state and the African population was different to that between the state and non-Africans. While the planning research was often undertaken for the black population as a whole, the concept of a township which could act as a disciplinary mechanism was developed to contain the African population as the major source of resistance to state policy. While similar solutions were applied to the Coloured and Asian groups, a distinction between state strategy for Africans and that for other non-white groups is, I believe, mandatory in any discussion of apartheid. The idea is not to fall into the racial categories by which South African history has been examined by default (Parnell and Mabin, 1995) but to accept power as being applied differently in relation to different discursive objects, such as the racial categories which were normalised by the sciences (see Chapter Three). The basic difference between Africans and other non-white groups in terms of state policy was the approach to Africans as non-urban, and the formulation of policies which attempted to reverse the urban status of the African, even while accepting the need for an urban African population.

Chapter 2: The housing crisis of the 1940s

Introduction

The township concept was elaborated in a context of severe housing shortages and urban resistance to state policy. What did the urban crisis consist of and why was public housing conceived as a response to the crisis? How did the crisis, in the form of urban malaise and organised and spontaneous resistance, shape housing policy? Chapter Two will deal with these questions in two parts. The task of this chapter is to map out the socio-economic trends behind the conceptualisation of the township as a solution to a series of crises in urban management. The chapter will examine certain conditions which faced the government in the run-up decades to the National Party victory, and assess the perceived importance of housing provision in interpreting those conditions.

The first part of Chapter Two looks at the crisis, beginning in the early 1920s,[22] and the way in which that crisis was perceived in the policy dialogue over African urbanisation. The events of the years between the First and the Second World Wars point to a definite shift in state practices and an identification of state security and economy as tied to questions of population management. If, as Foucault argues, the idea of urbanisation is synonymous with that of police (Gordon, 1991: 20), then the solutions to problems of urbanisation must necessarily have been framed in terms of control. I look at the South Africa urban environment of the 1920s, 1930s and 1940s with this proposition in mind. I identify the urban crisis as one which involved a need for a re-interpretation of state practices based on a changing configuration of human and material resources. This first part proceeds to examine changes in urbanisation and industrial production as generative, in part, of the crisis in urban management. I move on to look at how the emergence of new forms of resistance to both a modernisation of methods of control and an even greater delimitation of space renewed the debate over the residential status of Africans in urban areas.

The second part deals with housing as a response to the urban crisis. Here, I question why municipal housing for Africans was introduced. I look at the provision of housing as a form of controlling the spread of epidemics and securing good health, and the use of housing as a means of re-organising residential patterns and controlling African mobility and activities in the cities. I turn to the housing alternatives which were available to urban Africans between the two

[22] It is not my intention to periodise urban history into a "pre-crisis" - "crisis" era. I begin with the 1920s because the elements of the urban crisis which preceded modern township formation became visible and readily identifiable in the interwar period.

World Wars and ask why these alternatives, entrenched in the Urban Areas Act of 1923, were not really alternatives at all in terms of operating to control Africans and African resistance. The state's inability to adequately address the gap between rentals (from which the costs of construction would be recovered) and African wages is revealed as a major constraint in the ability to govern economically and is indicative of the failure to integrate key aspects of urban policy such as population growth and movement, economy, and discipline, into a comprehensive strategy for urban governance. The events of this period are central to the formulation of housing policy in the late 1940s and the explosion of research on urban African living conditions as a pre-requisite to the elaboration of strategies of control.

The urban crisis and the changing face of the cities

It is generally accepted that the failure of the United Party to resolve the urban crisis of the 1940s was largely to blame for the victory of the Nationalists in the national elections of 1948. The crisis was intricately tied up with the broader *"Native Question"* and the extent to which Africans should be afforded residential rights in the cities (Swanson, 1976). The Stallard doctrine and the position that Africans should not be afforded land rights in the urban areas guided policy in the 1920s and 1930s. Indecision over the extent to which African urbanisation was desireable or reversible prohibited the implementation of a definite policy of control over movements and residence. Rooted in earlier segregationist drives to secure prime real estate for industrial or residential development (Christopher, 1987; Baines, 1990), obliterate commercial competition, particularly from the Indian community in Natal (Swanson, 1987; Parnell, 1991) and control the spread of epidemics which were associated with the black community (Swanson, 1983), the legislation of the interwar period did not resolve the question of African residence but tried to attack specific aspects of the emergent crisis, such as the formation of class-based resistance (Parnell, 1993), the radicalisation of African workers' movements (Bonner, 1987), the poor conditions of the Reserves (Packard, 1989) and the urbanisation of African women (van Onselen, 1982; Eales, 1989).[23] These aspects of a wider crisis revealed the government's vacillation over African residential rights as problematic.

The urban crisis took on its most significant dimension in the 1930s. The collapse of the Reserve economy (Dubow, 1989: 66-67), the mechanisation of agricultural production, and the boom in manufacturing were both symptoms and consequences of an unprecedented rate of urbanisation (Hindson, 1987; Wilkinson, 1992; Parnell, 1993). The increasing need for a differentiated labour

[23] Legislation of the interwar years attempted to divide the working class both geographically and economically, through the provision of housing to whites, the enforcement of the industrial colour bar and the *"civilised labour"* policy and the destruction of mixed-race areas (Parnell, 1988; Freund, 1989).

force rendered African residential rights and freedom of movement a question of accommodating divergent industrial demands. The mechanisms of control, and the conviction that Africans could be contained by them, were simultaneously shattered by transformations in the urban environment. Overcrowding in freehold areas and illegal occupation of land alerted the authorities to the shortage of housing and the failure of the housing delivery system. The sharp demographic shift from the reserves to the towns had implications for the growth of new types of resistance to the social and spatial marginalisation of the African population. Squatter movements presented a relatively amorphous, yet numerically powerful threat to municipal hegemony. The movements, organised and motivated, were a radical and unpredictable element of the urban system, which government felt had to be stamped out. Black unionism challenged the terms of the economic contract which was meted out by industry, and consequently the means of industrial production itself (O'Meara, 1975; Bonner, 1987). At a third tier, the resurgence of politically representative organisations for the black population introduced a form of resistance whose specificity took the authorities by surprise. Police had not been prepared to deal with passive resistance, such as rent and bus boycotts or stayaways (Lodge, 1983), particularly during the relaxation of pass controls (Hindson, 1987: 55).

Compounding black resistance to racial domination was white resistance to changes in the industrial colour bar and the subsidisation of services. Policies aimed at making blacks, and specifically Africans, more productive, were regarded by the white working class with suspicion. Central government and local authorities were thus squeezed between the interests of their constituencies. Ultimately, the government's ambivalent stance over the "place" of the urban African was blamed for the state's inability to control the African population.

Urbanisation, industrialisation, and the debate over the urban African presence

With the disintegration of the rural areas, thousands of Africans flocked to the towns in search of work. High population density, land shortage, soil exhaustion and overstocking characterised rural life in the 1930s. Droughts in 1932-33, 1944 and 1946, led to heavy cattle losses and crop failure (Maylam, 1983: 416) - conditions which virtually eradicated the possibilities for subsistence outside urban areas. What differentiated this townward movement from earlier ones, besides scale, was the fact that it was a movement of families rather than of men.[24] The ratio of men to women, Hindson records, went from 2,2:1 in 1936 to 1,8:1 in 1946 to 1,6:1 in 1951 (Hindson, 1987: 53). According to Charles Simkins, the percentage of Africans living in the

[24]The number of women in the urban areas had already increased by 50% between 1911 and 1921, and by at least that much between 1921 and 1926 (Dubow, 1989: 124; Hindson, 1987: 33).

urban areas with their families went from 30% in 1936 to 38% in 1946 to 45% in 1951 (*ibid*). The sudden increase in the ratio of women to men was compounded by a changing ratio of workers in mining to those employed in manufacturing, construction, and electricity (O'Meara 1975: 150). Thus, the ratio of migrants to permanent urban Africans was significantly reduced and the African population in the cities was different in the 1950s to that of even a decade earlier.

This townward movement, the result of rural poverty and urban opportunity, occured at a time when the dominant forms of industrial production were themselves undergoing a change. South Africa's departure from the gold standard in 1932 marked the beginning of an unprecedented boom in exports which allowed the country to slip out of the Depression. The 1930s were characterised by an expansion in manufacturing (Freund, 1989). By WWII, manufacturing commanded the largest portion of the national income, surpassing even mining by 1943 (O'Meara, 1975: 149). The expansion of the industrial workforce renewed protest against the exploitation of labour. As African bargaining power grew, so did its ability to determine the course of policy on African residential rights, wages, and ultimately, housing provision. Organised resistance was essentially aimed at addressing the need for an economic wage to support continued residence in the cities, the exclusion of Africans from the commercial sphere and the restriction of African mobility. One of the most significant manifestations of organised resistance, the miner's strike of 1946, described by Dan O'Meara as a *"milestone in South Africa's social and political development"* (O'Meara 1975: 147), demonstrates a shift in the relationship between African workers and their employers. With particular reference to the strike, O'Meara writes that *"[t]he growth of African trade unionism certainly altered the power position of African workers, particularly during the war, giving them at least a latent weapon, which, as the strikes illustrate, they were not loathe to use, and a number of these resulted in wage increases"* (O'Meara 1975: 154). The belief that the pass system interfered with the movement of labour and thus, the free market system, gained much prominence. The fear that demand for labour would surpass supply led the authorities, under pressure from secondary industry, to relax the implementation of pass laws (Hindson, 1987: 55). Resistance to spatial restrictions emerged at different levels of sophistication - from the slums and squatter camps which mushroomed on private land, to the occupation of council land and the rent and transport boycotts and strikes of the 1940s.

In a sense, the debate over African residential rights in the cities and the number of Africans to be allowed into the urban areas was a debate over the type of labour force that would be required. It was also a problem of wages and a problem of keeping the labour force tied down to the particular requirements of industry. The question of African permanence in the cities was one of resolving all three problems. The agricultural sector complained of a shortage of labour as

Africans flocked to the urban areas (Dubow, 1989: 61). The mining sector was also faced with labour shortages and difficulties in recruiting (op cit: 54). In manufacturing, however, a *skilled* African population was in demand. In fact, a balance was drawn between these divergent economic interests. The 1921 Stallard (Transvaal Local Government) Commission's view of Africans as *"temporary sojourners"* in the urban areas dominated the framing of urban areas legislation (Davenport, 1991: 5). Yet even while the Natives (Urban Areas) Act of 1923 is regarded as the first legislated articulation of the Stallard doctrine, and of a solely temporary urban status for Africans (Davenport, 1971; Parnell, 1991; Swilling et al, 1991), its implicit recognition of a permanently urbanised African community is revealed in the differentiation between Africans which its residential alternatives make clear. The five "pillars" of the Act - influx control through a system of labour allocation, the control of segregated townships by local authorities, the independent Native Revenue Account, limitations placed on land purchase, and representation exclusively through Advisory Boards (Bloch and Wilkinson, 1982: 4) - provided a skeleton for African administration. This framework combined a stricter regulation of African labour with an acceptance of freehold title for at least a section of the African population. The Act thus combined an attempt at controlling the African presence - in contradiction to the recommendations of the Godley Committee of 1919 for reform in the pass laws (Dubow, 1989: 45; Hindson, 1987: 12; Ashforth, 1990: 126-7) - with an acceptance of African freehold title outside *locations* and an economic differentiation of African communities.

The belief that urban Africans could be returned to the reserves and to their "roots" continued in the policy dialogue of the 1930s and 1940s. In the early twenties, South African liberal intellectuals had espoused segregation as a benevolent response to the social dislocation experienced by Africans in the cities (Dubow, 1989: 116-117). While liberal support for segregation died out by the late 1920s, the issue of urbanisation became more prominent than ever, and the fear of "proletarianization" remained a constant theme of liberal writing (Dubow, 1989: 70). The Department of Native Affairs' Young-Barrett Committee was set up in 1935 to consider proposed amendments to the Urban Areas Act. It rejected every feature of the Stallard Commission's report, emphasising the existence of a significant number of Africans who *"have definitely divorced themselves from the tribal life of the Reserves"* (Dubow, 1989: 125). The conditions prevailing at the time of the passage of the Urban Areas Act had changed dramatically by the 1940s. The trend towards an acceptance by the government of a permanent African population grew with the industrial expansion of the war effort. By 1947, the United Party government accepted a percentage of Africans as permanently urbanised. In typical postwar reconstructionist fashion, the Fagan (Native Laws) Commission reflected the official mood by

adopting a "middle road" in segregation and a differential degree of control over the African communities in the urban areas (Ashforth, 1990: 134).

The multiple amendments to the Urban Areas Act demonstrate the inadequacy of legislation in dealing with the transformations of the urban environment and in achieving the desired degree of control over urban Africans. Local authorities were in no way prepared to deal with the emergence of an urban-based resistance movement (Evans, 1986; 1997). In part a facet of colonial practice, the emphasis of administration remained on the provision of cheap labour for mining, the principal earner of national income until the mid-1940s (Dubow, 1989: 54). While the objectives of the 1923 Act remained the basis for administration, the Act itself underwent several amendments before it was to declare all urban areas as prescribed (white) areas in 1952. The 1931 amendment prohibited women from entering urban areas without a certificate to prove that accommodation was available (Bloch, 1982: 7). In a 1937 amendment, local authorities had to send a biennial estimate of labour requirements and any other details on an area's townships to the Minister of Native Affairs. Newcomers were given fourteen days to find work, while women needed the permission of the home magistrate to leave the rural areas. As these measures indicate, the desire to limit access to the cities was strengthened in the period before WWII. The 1937 Amendment to the Native Administration Act (1927), Evans writes,

> brought to urban administration a new discourse centering around technical information, centralization, and bureaucratic hierarchy [...] The importance of empirical information, managerial control, and the internal cohesion of the overall machine thus detached themselves from pristine fears that whites harbored about "racial mixture," their medical anxieties about socially transmitted diseases, and their amorphous anxiety about "unregulated Natives" in the urban areas [...] Administration was increasingly rendered into a bureaucratic realm ruled by Native administrators, who, in turn, were increasingly governed by the technicist consideration of "operations and methods (Evans 1997: 51).

The first step towards a modernisation of Native administration did not go far enough in resolving the problems with which it was faced.[25] The direction of urban administration between the passage of the Urban Areas Act and WWII was a reflection of a deepening crisis in the cities.[26]

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[25]The Urban Areas Branch of the DNA was established only in 1935.

[26]As administrators tried to exercise control by augmenting the gambit of existing legislation, commissions of inquiry criticised the state for failing to improve living conditions.The Murray Thornton Commission of 1935, for example, criticised the Health Department for its failure to curb squalor in the freehold areas and some locations of Johannesburg, a criticism which was gaining even greater support as demographic statistics began to play a greater part in determining the dimensions of the housing shortage.

The collapse of spatial controls

The environmental consequences of the transformation in the industrial and demographic landscape were perhaps the most alarming for local authorities, because they were so visible and because they displayed the state's inability to deal with African resistance. Housing delivery was virtually at a standstill at a time when public housing was most urgently needed in the cities. To say that a housing shortage emerged in the 1940s would perhaps imply the absence of a serious shortage in housing prior to that period. While this is true for Johannesburg (Wilkinson, 1981), Robinson (1996) and Younge (1983) and Le Grange (1985) document the existence of severe shortages in Port Elizabeth and Cape Town respectively. It may be safe to assume that needs differed vastly throughout the country, as did the record of municipalities in providing subsidised housing for the black population.

If urbanisation in Johannesburg was not representative of urban trends in the rest of South Africa, it virtually constituted the urban crisis. The figures on the rate of growth in Johannesburg demonstrate this. The African population of Johannesburg jumped from 96,000 in 1927 to 244,000 in 1939, to 395,231 in 1946 (Lewis, 1966: 48-51).[27] The African population therefore more than doubled in the ten years before the war, and nearly doubled during the war itself. In Johannesburg, approximately 1,627 houses were built between 1918 and 1928 (Lewis, 1966: 48-49). By 1935, another 5,625 houses had been built. The figures were hardly astounding, considering that 50,000 families in Johannesburg would be in need of housing by 1948 (op cit: 51). While the Johannesburg City Council attributed the backlog - at the figure of 154,185 houses nationally by 1947 (Wilkinson, 1981: 5) - to the cessation of the building programme three years earlier, a little over 7,000 houses had been built in the two decades during which the Urban Areas Act had been in existence.

The authorities were faced with some resistance in the slum removals of the 1930s, but none so alarming as that which characterised the squatter movements which flourished on the Rand in the 1940s. While squatter movements on the Rand were limited to the years between 1944 and 1950, these movements were only the final burst of gathering cloud banks (Bonner, 1991: 89). Phil Bonner notes that there was hardly a time between the Anglo-Boer War and the 1950s when squatter settlements did not flourish in some part of the Union.[28] The movements of the 1940s

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[27] The precision of these figures is, I believe, in itself revealing of the discursive construction of a "crisis".

[28] Conditions in these settlements, though generally poor, did vary from place to place. Services were sometimes provided by landowners to tenants, as in the case of Cato Manor in Durban, where water and sanitary services were installed in 1944. The majority of land in Cato Manor was leased to Africans by Indian landowners, resulting in a *"black belt"* around Durban by the 1930s (Maylam, 1983). Maylam records that at about this time Cato Manor was first considered a threat by the Medical Officer of Health

were nevertheless qualitatively different. The first movement emerged in 1944, when sub-tenants from Orlando township occupied vacant land and erected shelters. Despite pleas from the Johannesburg City Council (JCC) to remove the squatters, the government refused to act unless alternative accommodation was provided in accordance with the Slums Act of 1934. In 1946, a thousand families occupied vacant or partially completed houses in Orlando, after the request by the Orlando Advisory Board on behalf of the tenants that the JCC provide land for their sub-tenants, was ignored.[29]

In one of the earliest comprehensive accounts of these movements, Alf Stadler described the conditions of their emergence within the economic reality of the 1940s. Squatters were generally subtenants who could not afford the economic rentals or even the sub-economic rentals of location housing.[30] *"Squatting"*, Stadler noted,

> was a response to a situation in which the costs of family subsistence had to be met entirely from wages, yet in which wages were below the cost of family subsistence. Squatting may be seen, then, as an attempt to reduce the costs of subsistence in a situation in which, because of the swollen "reserve army" moving into the city relatively unimpeded by influx controls, wages could be held down during a period of rapidly rising living costs (Bozzoli 1979: 22).

Squatters lived a relatively tenuous urban existence, with few chances of gaining a place on the highly politicised waiting lists for housing (Bozzoli, 1979: 29). With respect to Cape Town, Le Grange observed that

> low wage levels were unable to permit the working class to enter the private housing market realistically and in the absence of local authority or state housing provision, the only recourse left was to move into the squatter settlements on the Cape Flats (Le Grange, 1985: 30).

Peri-urban settlements beyond municipal boundaries, such as Windemere in Cape Town or Alexandra in Johannesburg, flourished in such conditions, since inhabitants were virtually immune from pass regulations.

As Paul Maylam writes, there were several advantages of living in a shack settlement, including freedom from the regulations of municipal locations, cheap accommodation which is close to work, reduced transport costs, and the opportunity to engage in informal sector activity,

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(MOH), who, contrary to the Local Authority, found inhabitants to be among the *"best class of native worker"* (op cit: 414). The MOH described Cato Manor as *"a dense mass of hovels, constructed of whatever scrap material comes to hand"* (op cit: 415). The settlement moved from less than 2,000 at this stage, to comprise well-over 5,000 shacks by the end of the decade.

[29]Following this request for land, the Council attempted to remove James Mpanza, leader of the earlier movement, from Johannesburg.

[30]Sub-economic housing was housing that was subsidised by the state. Economic housing was housing that was not.

especially the illicit liquor trade (Maylam, 1983: 415). Phil Bonner (1989: 69) similarly draws attention to the possibility for self-employment and capital accumulation as the main advantage to life in the camps. In fact, the shack market emerged as a major contender in the informal economic sector. By 1950, African shack builders began charging for materials and construction work, with further profits to be made in the shack-renting business (Maylam, 1983: 419).

There were several aspects of the squatter movements which challenged the authority of the state. Squatter movements were autonomous and self-sufficient. It was not an autonomy which had been spawned by the state, however, and was therefore unacceptable to it. The highly organised nature of the movements (Stadler notes only one instance of mob violence) suggested the existence of a governing mechanism which commanded the obedience and respect of urban dwellers as the Advisory Boards of the townships had been unable to do.[31] The Commissioner of Police warned the Secretary of Native Affairs in 1944 that, *"parallel administrations run by dangerous fanatics"* had sprung from the *"breakdown of civil administration in Johannesburg's shantytowns"* (Evans, 1997: 41).

Some of the squatter camps were highly organised - in the form of cooperatives (as in the camp of James Mpanza) - with water, pit latrines and, in one case, a school (in Khumalo's camp). This autonomy was flaunted in the boycott of the *"site and service"* schemes introduced by the council in 1947 as a concession to squatters.[32] In the municipal areas, sub-tenants associations, enjoying the support of the Communist Party, became hostile towards the Advisory Boards (Evans, 1986: 42-3). The camps were, according to Bonner, immune from the tentacles of Advisory Boards or even wider politics of resistance. He writes that the

> preoccupation with the daily problems of social order and survival, for example lent them an introverted character, which narrowed their political horizons and made them peculiarly impermeable to national political organisation. In Apex, and its successor township Daveyton, squatter residents gave negligible support to the woman's national anti-pass campaign, and an ANC-inspired resistance to ethnic zoning proved a total flop (Bonner, 1989: 77).[33]

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[31] The control which the Advisory Boards and the municipality practiced, over trading licences, for example, was lost to the internal organisation of the camps. Once official control had been established over these camps through the provision of services, priority for trading licences was given to previously informal traders, the argument being that ties with white wholesale traders would be retained (Stadler, 1979: 34).

[32] The "site and service" scheme initiated by the the Johannesburg City Council in response to the squatter crisis was simply the provision of services and/or breeze block shelters to the squatters.

[33] Feuds, often with an ethnic basis, were said to have been encouraged by certain leaders (Bonner, 1989: 78). While these were seized upon by municipal administrators and DNA policy-makers as proof of "tribal" rivalry, they can only be credited as providing a platform in the struggle to consolidate the authority of self-proclaimed squatter leaders. Lewis wrote in 1966, for example, that *"men rose overnight to assume*

Urban protest in this way brought the issue of African residential rights to the forefront of government policy. The decision which came with the Urban Areas Act to implement stricter influx control measures to achieve a smoother and more efficient distribution of unskilled and semi-skilled labour temporarily decided the question over the permanence of at least a part of the African population and a housing strategy to regulate African residence. Posel descibes the Urban Areas Act as attempting to *"engineer, as far as possible, a three-way numerical match, between the numbers of African people permitted to be in an urban area, the numbers in employment and the numbers allocated township housing"* (Posel, 1996: 7).

The question of why municipal housing had been provided for Africans at all is perhaps more complicated than may seem at first. Finding itself compromised by contradictory policies which failed to sustain and ensure the reproduction of a differentiated urban labour force, central government was squeezed between the divergent interests of different sectors of the economy. The consolidation of an African middle-class,[34] the regulation of the industrial colour bar, and the continued use of the Reserves as reservoirs of cheap labour were all defined as directly dependent on a comprehensive housing strategy. I turn to the housing solutions of the pre-apartheid era and assess the role of housing provision in the wider context of control over the urban African.

Spatial planning and housing as a response to the crisis

The significance of housing as a response to the various aspects of the urban crisis had already been grasped by local authorities. The crisis was not only a shortage of housing, but a question of dealing with African people and their demands while maintaining a constant supply of healthy and disciplined workers. In terms of health, control, and cost, housing provision was expected to attack the crisis head-on. Housing could eliminate overcrowding and squatting. It could curtail protest against high living costs by lowering these costs through lower rentals, and not necessarily an increased subsidy by the state. Finally, housing provision could quell African resistance by constituting new structures for community life. Thus, while housing may not necessarily have been (and most likely was not) perceived as an instrument of influx control in the interwar period, it was understood to be crucial to the resolution of the urban crisis.

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leadership and prey on the ignorance and latent violence of the Bantu who lived in these camps, and set up illegal courts where savage punishments were inflicted" (Lewis, 1966: 50).

[34] My use of this term is relational. While the African middle-class was important to the industrial system, it emerged within the racial hierarchy.

Discourses of health and questions of control

Questions of housing in the interwar years were invariably linked to health concerns (Trump, 1979; Packard, 1987; Parnell, 1988; 1991). Health and town planning legislation, enacted soon after the 1919 Spanish flu epidemic which ravaged the country (Phillips, 1987; 1988) , unified the provinces in providing a national framework for urban planning.[35] Health legislation was increasingly used from the 1920s onwards to remove Africans from slums or remove whole areas and facilitate segregation through the provisions of the Urban Areas Act. Local authorities were discouraged from treating Africans with tuberculosis or venereal disease and were advised to "repatriate" them to rural areas (Parnell, 1993: 483). Inter-racial neighbourhoods[36] alarmed local authorities into action. The Slums Act of 1934 gave local authorities discretion to declare areas as sanitary threats and proceed with removals, provided alternative accommodation was made available. "Model" housing schemes were a reply to this provision in the Act.[37] Buildings were routinely declared unfit for human habitation (Parnell, 1988; Robinson, 1996: 117) whether at the behest of Medical Officers of Health, or industries keen to seize prime real estate, or both.

Speculation in real estate and the land market was a destabilising factor over which the authorities had little control. Slum clearance was perceived as the most effective way to remedy the situation.[38] Of the three choices for slum removal noted by Parnell - *rezoning* the land for industrial or commercial use (thereby indirectly calling for the eviction of residents), *evicting* residents but housing them elsewhere (in accordance with the Slums Act), or *expropriating* residents before finding an alternative use for the land (Parnell, 1988: 116), the first of these - namely, rezoning - was the easiest and cheapest solution.[39] This freed centrally located land for more lucrative development, while facilitating the removal of Africans to locations or *Native villages*.[40]

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[35]Sue Parnell (1993) has shown that the efforts of Johannesburg's first Medical Officer of Health, Dr. Charles Porter, were crucial in establishing a town planning profession in the country. Parnell has demonstrated that the driving force for the legislation had been the Bloemfontein Health Conference, which preceded the epidemic by a few months (Parnell, 1993). See also Mabin, Alan, *"'Doom at one stroke of the pen': Urban Planning and Group Areas 1935-1955,"* (Johannesburg, 1990).

[36]Inter-racial neighbourhoods were a growing phenomenon with the urbanisation of Afrikaners in the 1920s and 1930s.

[37]Le Grange (1985: 29) has noted with respect to Cape Town that the Act expropriated more accommodation than the City Council was able to provide.

[38]Although council housing for whites was another way to segregate mixed-race neighbourhoods, housing provision was ruled by strict criteria such as income, family size, etc. (Parnell, 1988).

[39]Clearance of land occupied by blacks for the benefit of working-class whites is a theme which occurs repeatedly and has been explored by Parnell and others in the South African urban context (Parnell , 1988: 123).

[40]Jennifer Robinson's (1996) description of the removal of Korsten, an unsegregated residential area in Port Elizabeth, is indicative of the general trend. There, the Industries Committee, with its eye on Korsten,

The authorities had done little to ameliorate the housing shortage before it became critical. In addition to the growing shortage, the success of legal challenges to removal combined with the movement of evicted Africans to unmonitored neighbouring slum areas (a process also known as *"shack shifting"*) (Maylam, 1983: 420) to present a problem of considerable enormity by the 1940s. The government recognised that

> as the [Urban Areas] Act was progressively enforced, the number of Africans in non-proclaimed parts of [Johannesburg] such as Sophiatown, Alexandra and Denver, soared. People preferred these congested places to municipal accommodation at Orlando location, where, until as late as 1939, hundreds of houses stood vacant (Hansard, 1949 col. 6574 qtd. in Parnell 1988, 114-5).

Despite the reluctance of many Africans to move into locations or *Native villages*, the combined attack of Medical Officers and industry often left them with little choice. Stadler observed that *"regulations against unauthorised extensions to municipal housing were strictly enforced in Orlando [where the first of these movements orginated], even at a stage when relaxation might have helped the Council to deal with squatting"* (Stadler, 1979: 24). While the authorities had been concerned with peri-urban growth for some time, it was only in 1940 that the Department of Health appointed a committee to investigate 'irregular' settlement on municipal fringes (Mabin, 1992: 22). The conclusion it reached in its report - that there was a *"need for preventing the establishment of further uncontrolled areas"* (*ibid*) - was obviously not of a prescriptive nature.

By the terms of the Urban Areas Act, four types of accommodation were legally available to urban Africans: the *hostels* for migrant workers, *Native villages* [41] which were freehold, *locations* of sub-economic or economic housing, and *accommodation offered by employers*. Of these residential alternatives, only the latter was obviously not open to the state. Yet in the interwar period, sub-economic or economic family housing came to dominate the urban landscape over other forms of housing. Several reasons account for this. Firstly, while the hostel (or compound) was the cheapest form of *built* accommodation and the easiest means of monitoring the movements of Africans into and out of the city and containing them within an enclosed space, it did not nurture values of family life, nor did it provide for the needs of the educated, semi-skilled worker who was increasingly in greater demand. The hostel, therefore, could not produce a *civilised* Native. *Native villages* were the cheapest form of accommodation, in the sense that the houses were owner-built. As a result, this option was available only to a

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claimed that the *"fine site"* was *"admirably suited, in every way for industrial purposes"* (Robinson, 1996: 119).

[41] Defined in section 1(b) of the Act as *"self-built"* residential areas.

very small percentage of urban Africans who could afford the high costs of construction (increased with the imposition of building standards) and land ownership. Moreover, local authorities could exercise relatively little control over freehold areas and were averse to an expansion of African residential rights. Locations thus offered the best combination of affordability for Africans, supervision over residents' movements, and non-permanence.

A few "model" locations materialised in the interwar years (see Appendix A & B). The schemes invariably addressed the needs of the higher income bracket of the African population, simply because an economic rent would not only cover construction and administrative costs, but would actually provide for a source of revenue for services or even profit. In fact, the ability of Africans to pay such rents as were demanded was assumed, since rentals were based on guessed estimates of African wages, most of which were ridiculously overestimated (Butler, 1985: 62). These schemes were viewed with suspicion by those who could afford an economic rent. Located far from urban centres, and built with materials of dubious quality (Torr, 1987: 113), the houses were not very attractive to prospective tenants. Locations, unlike *Native villages,* did not offer freehold title. Middle-class Africans were naturally hesitant to enter into this particular type of social contract while land ownership and therefore greater security of tenure was still a possibility.

Further complicating the situation for local authorities was the widespread apprehension about the regulations imposed in locations, many of which had been designed to facilitate control. In Cape Town, for example, the 1922 Langa scheme was designed with policing capacities in mind.[42] According to the Mayor's minutes, the scheme

> had been designed upon the best examples of modern town planning. The railway giving access to the village would not be crossed by any roads ... This enabled the railway to be fenced off completely from the Native Township ... The reservation of a belt of trees 100 feet wide on the western boundary was suggested ... The main approach road to the Township should be through the Klipfontein Road ... Another important consideration in the layout was the question of supervision and the site for the Police Station had been suggested to give sufficient control. The man on duty at the tower would be able to see over the whole Estate ... The man on point duty in Central Square would be able to see ... from end to end of Central Avenue ... (and) be able to look into each of the large compounds (Le Grange, 1985: 232-4).

As Le Grange notes, resistance to move into municipal housing is hardly surprising in this context. In defiance of the constant surveillance of the location administrator, many Africans chose squalid or overpriced sub-tenancy over location housing.

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[42] Incidentally, the police station was never built in this form.

The failure to deliver houses [43]

The debate which had raged over the status of the urban African population had prohibited urban policy from moving in a concrete direction. While the Urban Areas Act and its amendments were drafted with the view that Africans were only temporarily in the cities, the need for labour in the manufacturing industry and the displacement of mining as the principle source of income for the national economy led the government to accept an urban African population and introduce policies to create a more stable African middle-class.

While housing provision would have to conform to this change in policy, industry refused to carry the costs and white unions reacted against wage increases for the African population. Any suggestion that industry be responsible for housing its employees was met with fierce opposition. A 1930 Housing Survey in Cape Town, for example, reiterated the conclusion that fair living wages were the only solution to the housing and health problem (Le Grange, 1985: 29). State intervention in determining wages was seen as an interference with the labour market, an action to which the government of the United Party was averse. Industry argued that the *Native* should become an *"economic entity in himself"* (Wilkinson, 1981: 26) pending increased productivity, a possibility which required mobility in the labour market. However, the consequences of lifting the job colour bar were aptly demonstrated in the 1947 white builders union strike against the use of skilled African labour. This reaction from white labour acted to discard even *Native villages* as a solution. Following the Pact government in 1924, and under the terms of the Industrial Conciliation Act, (white) building workers' unions had begun to challenge such housing schemes, as building (and specifically bricklaying) fell under semi-skilled labour, a category reserved for whites. Self-build thus became less of an option.

The housing shortage was, of course, due in part to the fact that the Urban Areas Act left housing provision to the initiative of local authorities. The inability of a majority of urban Africans to pay an economic rent forced local authorities to supply sub-economic housing.[44] This was problematic of itself, since municipalities were expected to debit the general rates account in order to subsidise the gap between African income and housing costs - a subsidy to which their main constituency, the white, home-owning middle-class, was opposed.[45] The dilemma over the

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[43] Many thanks to Prof Derek Japha for the figures on housing costs.

[44] While sub-economic housing was introduced in 1930, *locations* were excluded from the scheme until 1934.

[45] The Cape Municipal Ordinance of 1912, for example, required ratification of any expenditure by a public meeting of ratepayers, whose foreseen reaction to subsidising African housing often precluded even bothering to call such a meeting.

subsidisation of housing for Africans was thus most clearly felt by local authorities, to whom the Urban Areas Act had given responsibility for housing.[46] The Act created the Native Revenue Account (NRA), to be used to repay central government loans for municipal housing, in accordance with a specific subsidy formula. The NRA was responsible for housing, transport and services, and consisted of fines, rents, beer hall profits, and contract registering services.[47] According to the pre-war formula for the financing of sub-economic housing, local authorities were liable for loans at a 3/4% interest rate, and were obliged to bear a minimum loss of 11/4 % (Wilkinson, 1981: 28). As a result, the Account, by which services in the townships were to be financed, was in permanent deficit (op cit, 38). A National Housing Scheme in 1944 increased the interest rate on loans to 3 1/2%, but bound government to share in the losses incurred under a ratio of 2:1 or 3:1 (*op cit* : 10). The new formula failed to galvanize local authorities into action and sub-economic housing remained a liability.

Essentially, the problem of sub-economic housing provision was a direct result of low wages, and had been recognised as such by 1915, when the Local Government Commission stated that *"[o]vercrowding is caused mainly by the inability to pay adequate rents"* (Rich, 1978: 184). This conclusion was repeated by the Economic Commission of 1932, which argued that *"[t]he root of the matter is in the inadequate wage paid to Natives which renders them incapable of paying a fair rent for hygienic quarters, and this in turn involves the local authority in loss..."* (Wilkinson, 1981: 13-14). Johannesburg's City Engineer, Dr. E Hamlin, provided some estimates of the situation in 1945, demonstrating that if, as widely accepted both then and now, rent was not to exceed 25% of income, then 92% of Johannesburg's African workers would not be able to afford a matchbox house.[48]

For industry, subsidising housing would be equivalent to an increase in wages, an alternative which was unacceptable to industry unless it also involved increased productivity. In both cases which would facilitate housing provision - either an increase in wages or a decrease in rentals - state intervention was perceived as the only solution. As Wilkinson explains,

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[46] The Housing Act (1920) guaranteed funds to municipalities for [race] "group" housing schemes. African *locations* or "native villages" were financed under the Native Revenue Account, consisting almost exclusively of profits from the Kaffir Beer monopoly.

[47] Two-thirds of beer profits could be used to cover losses on the NRA and the rest for *"social"* and *"recreational"* facilities (Bloch, 1982: 38).

[48] If the average monthly rental was 12.5s for every £100 of capital expenditure, and the average expenditure on a house was between £500 and £600, then a rental of 62,5s per month was implied. Since 92% of African workers in Johannesburg earned less than 37,5s per month, then rental for a simple dwelling was four times too expensive (figures provided by Derek Japha).

> [...]if the general 'economic' wage of an 'unskilled' labour force is insufficient to meet the costs of its reproduction, then the only way in which the cycle low wages - low productivity - low wages can be broken is for the state to intervene either to supplement real wages through 'social consumption' expenditures (on the components of the 'indirect' or 'social wage': subsidised housing and transport, social security benefits, etc.) or to increase productivity of labour through 'social investment' expenditures (on education and health care facilities, technical training schemes, etc.) (Wilkinson, 1981: 16).

Between the two wars, central government had financed housing schemes initiated by local authorities at subsidised interest rates through revolving loan funds in each province (Bloch, 1982: 21). These provincial loan funds were overseen by the Central Housing Board, replaced by the National Housing and Planning Commission (NHPC) in 1944.[49] The National Building Research Institute (NBRI), set up after the war, sought ways to minimise the costs of "Native" housing. Other than instituting a short-lived training programme for African artisans, the NBRI offered little in time for the 1948 election.

Conclusion

While the housing shortage which developed by the late 1940s was of such proportions that it was termed a crisis, what was critical for the state was not the fact that by 1951, 176,000 African families needed a home in 1951 (Hindson, 1987: 56), as such, but the implications of the shortage for the state's ability to maintain order in the urban areas. In the Rand, the situation was particularly difficult for the local authority. There, Africans constituted a majority after 1946 and the rate of urbanisation was much higher than elsewhere in the country. What was so threatening about these forms of resistance was their scale in terms of the number of participants and their tactical precision in attacking the foundations of African administration. This resistance demonstrated a complete lack of discipline in the urban workforce.

The African presence was defined as problematic in terms of both health and manageability. Town planning was concurrently a campaign for a greater awareness in urban hygiene and a system for the re-organisation of the place of the "Native". In terms of providing a comprehensive housing strategy to control the urban population, urban policy failed on three counts: indecision over the permanence of the African population in urban areas which prevented the formulation of a clear policy on African housing and the subsequent provision of housing on a scale sufficient to cover the shortage; the inability of African wages to cover housing costs, even as housing was subsidised by local government; and the unwillingness of local government to cover the deficit on African housing from the general rates account, as well

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[49] The Housing (Emergency Powers) Act of 1945 extended the powers of the NHPC to include controls over the supply and pricing of building materials, the training of workers and the expropriation of land (Wilkinson, 1981: 9-10).

as the refusal of business to contribute towards the cost of housing on the pretense that a housing subsidy would equal an increase in pay without a parallel increase in productivity. To discuss the township concept in light of the events of the interwar years would, however, oversimplify the project. It remains for the following chapter to elaborate these conclusions by looking at the intellectual context within which the township concept emerged.

Chapter 3: The scientific solution to the housing crisis

Introduction

Chapter Two has looked at why a policy on public housing schemes for Africans was deemed crucial to the resolution of a host of social and economic problems, and why it was necessary for the Nationalist Party government to finance and support a mass public housing programme for the African population in the 1950s. If housing provision was a mechanism for the re-organisation of the urban workforce and the suppression of urban resistance through the allocation of space and the determination of spatial practices by the state, as Chapter Two has shown, Chapter Three asks why *scientific* forms of housing were necessary. Essentially, it is a questioning of the role of science in the resolution of urban housing problems and what this implied for the way in which the African population was governed.

The housing crisis of the 1940s highlighted the state's inability to respond to the question of how to produce and reproduce a healthy workforce for industry, and how to control that workforce at minimum cost. Efforts to address these concerns *scientifically* began to take shape in the 1930s. The accumulation of knowledge within disciplinary boundaries from the 1930s onwards was a process for the construction of both the problems and the solutions of urban government. The urgency with which emprical information was gathered in the human sciences was embraced by urban administrators as the key to a new urban order. The argument of this chapter runs along these lines: the production of knowledge through scientific procedures validated the search for a predictability in human actions by constituting the conditions for the initial definition of the urban condition as problematic and the plan for the subsequent transformation of that condition along pre-determined lines.

Like the previous chapter, the discussion of this chapter is divided in two parts which deal with the universal and local aspects of the modernist urban project. The approach to urban planning which was first articulated in the European Modern Movement and American modernism in architecture and town planning provided the theoretical and normative guidelines for mass housing provision. The first part of this chapter begins by looking at the social objectives of urban modernism and the avenues which were taken for their realisation. Modernism in architecture and planning focused on the two central concerns of urban governance - the community as an axis of resistance, and the health of the workforce. Within these concerns were contained three significant contributions to the sphere of urban policy: the delineation of *minimum standards of accommodation*, the *economic rationalisation of space*, and the introduction of *spatial models*

which were *to transform behaviour*. I focus on the perceived desireability and possibility of engineering human behaviour through an environmental intervention as particularly suggestive of the role of science in modernist practices.

The second part of Chapter Three looks at the South African housing research programme which was launched in the late 1940s, and the ways in which the African was interpreted in order to both facilitate and normalise the results of the research process.[50] This part of the chapter links the housing research of the 1940s and 1950s with the accumulation of statistical and anthropological knowledge about the African, which was undertaken consistently from the 1930s onwards.[51] Between the 1930s and the 1950s, the institutional generation of facts about the African population as a whole and as individual members of the urban system was undertaken to bring the urban African population under a more regimented state control. The three areas of modernist intervention into the urban sphere - minimum standards of accommodation, the rationalisation of resources, and the attempted spatial transformation of the human condition - were appropriated by South African architects and planners because they provided a basis for the *scientific* resolution to the housing shortage and the issue of urban management. The latter part of this chapter will show how science in modernism was crucial not only to the resolution of the housing crisis but also to the formulation of a particular urban structure conducive to a regime of racial hegemony.

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[50]The construction of African identity was a process which was fraught with the tensions of political expediency and an often-arising incompatibility of political rhetoric and the scientific evidence on which it was based. The paternalism of segregationist administration which justified colonialism as a commendable civilising enterprise was clearly an unprofitable project by the 1930s; the formulation of apartheid theory in the 1930s and 1940s, and the resurgence of an "exclusivist" Afrikaner nationalism (Norval, 1996: 51), at a time when conventional colonial practices were losing salience, was not coincidental. The leading exponents of Afrikaner nationalism were also prominent advocates of biological engineering (Dubow, 1995). The insistence on a scientific solution to the urban crisis was, after all, generated by the concern over *"race hygiene"* and the *"mental and moral disharmony"* which would accompany *"physical discord"* (Dubow, 1995: 272). If, in Charles Jencks' words, *"metaphors of cancerous growth reached cancerous proportions by mid-century"* (1985: 300) then the clinical solutions of the apartheid state was in tune with the conceptualisation of the problem itself. While these perspectives on the urban question were not exclusive to Afrikaner nationalists, they did signify a transition to a scientific basis for the formulation of policy which was important to the modernisation (and not the complete refutation) of colonial discourse which occured in the 1940s.

[51]In *Deconstructing Apartheid Discourse*, Aletta Norval notes that the status of the category of the Native was redefined following the completion of Hertzog's legislative programme for segregation in 1937. According to Norval, it no longer designated *"a temporary status of political subordination prior to full membership of a common society [...but was rather] transformed into specifying of a trajectory of advance 'along [the Natives'] own lines"* (1996: 33). It is not coincidental that this manufactured externality of the African to the *civilised* world of the European emerged in the late 1930s, when the use of science as a political instrument was first emerging.

Modernism in architecture and planning

Attempting to periodise modern architecture would be a futile and irrelevant exercise, and one which would miss the point of the following section - an understanding of what modernism in architecture and planning was about and how the spatial solutions of the apartheid state can be read within it. Modernism in architecture was both a representation of wider intellectual trends and an active element in their composition. Thus, while the *International Style* is most commonly equated with modernism, the movement spanned numerous intellectual currents and was essentially an agglomeration of styles and traditions, the *International Style* being only the most aesthetically representative of modernism, and perhaps the one closest to some sort of "genesis" of modernism in architecture.[52]

The essential aim of modernism in architecture was the transformation of society through the construction of a harmonious, technologically and environmentally sound urban environment which would encourage community interaction (Rabinow, 1992: 172). By recognising space as an active rather than a passive element of social relations, modern architectural practice invested the profession with a social mandate. As its practitioners were to emphasize, the project of modernity in the urban sciences consisted of a process which was to affect the very behaviour of its human subjects (Connell, 1938: 49; Rabinow, 1992: 168).

Three areas of intervention are relevant to the knowledge-generating capacities of modernist discourse and the imposition of state power through spatial practices: minimum standards of accommodation, the rationalisation of space and the standardisation of resource provision, and the imposition of spatial forms which could regulate human behaviour. The knowledge produced within these areas was directed towards the reproduction of a healthy workforce and the facilitation of control over that workforce, in line with the needs of the modern state.

Defining the urban problem: generating knowledge for action

The relationship between science and modernism was the most significant aspect of the Modern Movement(s) in architecture in that it had the most lasting impact for the way in which space and society were to be percieved in the post-war era. This relationship was first expressed in the approach of the Bauhaus school in Weimar Germany. The Bauhaus school and the Neue Sachlichkeit, which undertook a mass housing programme in the late 1920s, represented the first

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[52] See Jencks, Charles, *Modern Movements in Architecture*, (London: 1985).

articulation of a socially-conscious architecture.[53] The 1919 Manifesto of the Bauhaus argued in favour of a *"new guild of craftsmen without the class distinctions ... a working community ... mutual planning of extensive, Utopian structural design ..."* (Jencks, 1985: 59).

The urge to create a utopia was dissolved as modern architecture progressed towards a more technicist and more scientifically-grounded approach. By the late 1930s, the belief that society could be changed through architecture was discarded as naive, and modernists, wary of cherishing "utopian illusions"[54] (Connell, 1938: 21) replaced idealism with "realism" - what South African architect Norman Hanson described as an involvement in the *"struggle for making tolerable the material conditions of the lives of all the people by the planned and equitable use of our human and material resources"* (Japha, 1986: 7). The two modernisms that Paul Rabinow distinguishes (1992: 167) - *"techno-cosmopolitanism"* and *"middling modernism"* - clarify this transition within modernism. As Derek Japha explains them with respect to South Africa, the latter was the *"modernism of apartheid social engineering"* and the former *"the modernism of the creation of subjects through science"* (Japha, 1998: 437). *"Techno-cosmopolitanism"* facilitated *"middling modernism"*.

The knowledge produced by the sciences and within the discipline of architecture and planning allowed the state to exercise control in a variety of ways, all of which normalised that exercise and made it inconceivable to govern or be governed in any other way. Science and scientific methods of measurement acted to debilitate urban subjects in their capacity for autonomous action. This occured in two ways: firstly, the invocation of the concept of *science* and the ability to recall scientific procedures in political rhetoric drew a distinction between those who were in control, by virtue of possessing a certain knowledge equivalent to *truth*, and those who were not (Bauman, 1989: 4; Foucault, 1970: 54; Gordon, 1980). The *will to truth* or the *will to know* acted as a *"system of exclusion, a historical, modifiable and institutionally constraining system"* (Foucault, 1970: 54). Scientific discourses were thus appropriated for their ability to bestow authority upon those who invoked them (Bauman, 1989: 5; Posel, 1996: 20). It was within this context that the Athens Charter (1933) of the Congres International d'Architecture Moderne, founded under the auspices of Le Corbusier, could state that:

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[53] Between 1925 and 1930, 15,000 mass-produced, pre-cast slab construction "dwelling units" were built in Frankfurt under the direction of Ernst May. This project is generally regarded as a significant landmark in the introduction of the *International Style* and of the *Modern Movement* as a whole (Jencks, 1985: 38).

[54] See Japha, Derek, *The Social Program of the South African Modern Movement in Architecture* (Cape Town, 1986) for a discussion of the perspectives of South African modernists on the question of reforming living conditions for the African population.

> To ensure the city the means of a harmonious development, the Administration must take responsibility for the management of the land surrounding the city before the suburbs spring up. [What is needed is] political power ... clear sighted, with earnest conviction, and determined to achieve those improved living conditions that have been worked out and set down on paper; an enlightened population that will understand, desire, and demand what the specialists have envisaged for it ..." (Giradoux, 1943: 13).

- the specialists having been bestowed with the foresight to determine the desires of the population at large.

While scientific evidence was necessary to the justification and legitimation of state practices, science imparted an ability to control subjects which went beyond its use as an excuse for domination. The sciences, acting to constitute social truths, constructed subject identities. Urban subjects were known, and therefore recognised, only to the degree to which knowledge of their *condition* existed. Subject identities imposed by the human sciences allowed individuals to act within the limited capacity of their given identity, with the ability to change a condition to which the modern human disciplines, and the state, were "privy". Scientific evidence was crucial to the formulation of policy, and the conceptualisation of problems - urban or otherwise - as problems. Jencks observes, to this effect, that,

> ...what appeared more and more obvious in the early sixties was that an overriding part of the [urban] 'crisis' was caused simply by the fact that those people who were talking about it and supposedly trying to cure it were so committed to hygienic metaphors and professional values that their cure was equal in virulence to the disease (Jencks, 1985: 300).

The post-industrial urban crisis, as it was scientifically explained, normalised the racial and social hierarchy by problematising the presence of certain groups of people. In an intellectual context where morality and criminal behaviour were linked to intelligence (Gould, 1981: 160-161) and eugenics held credence (Gould, 1996: 54; Dubow, 1995: 166) the reproduction of the "superior" group was deemed essential to the survival of the city.[55] Remaking the cities to enable for the reproduction of the *"responsible"* (Dahir, 1947: 15) became a priority of urban planning movements. This required a rigorous process of identification and registration of every single urban inhabitant, and the consequent classification into socio-economic groups.

Minimum standards

Perceiving a vacuum in urban identity and a dissatisfaction with the types of subjects and societies that traditional spaces produced, modernists hoped to change society by addressing universal human needs. The modern urban subject was, according to architectural and planning

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[55] Frederick Osborn, Chairman of the Population Association of America, expressed alarm in 1937, at the decline of the birthrate of the more intelligent section of the US population (Dahir, 1947: 15).

discourse, endowed with rights. From the right to adequate air and sunlight, shelter and leisure time, to recreation space and public services, the modern city dweller was to enjoy an unprecedented degree of comfort and health. The most suggestive of these rights for the place of the citizen within the urban structure as a whole was the right to participate in local government and the right to education. These latter rights, while qualitatively different from the former, emerged within the same intellectual context of a perceived urban disintegration and moral/social decay.

Minimum standards of accommodation, an intrinsic element of modernist discourse, were significant in promoting an egalitarianism in urban space. Minimum standards were first suggested in the 1920s by the Bauhaus. The second CIAM Congress, held in 1929, specifically addressed the issue of *existenzminimum* - the minimum size and cost for a dwelling. Walter Gropius, a leading figure in modern architecture, described the minimum dwelling as representative of physiological and sociological human needs:

> The problem of the minimum dwelling is that of establishing the elementary minimum of space, air, light and heat required by man in order that he be able to fully develop his life functions without experiencing limitations due to his dwelling, i.e. a minimum modus vivendi in place of a modus non moriendi (Benevolo, 1971: 522).

The six conditions for any modern housing scheme - decency, health, amenity, comfort and convenience, and safety (Bauer, 1934: 142-143) - were to be ensured regardless of race or economic status.

Minimum standards, apart from affirming the universality of the human experience and the urban condition, addressed notions of citizenship, community, and participation in local government as universal rights. In the 1943 introduction to the Athens Charter, Jean Giradoux wrote: *"Every limitation placed on the way a citizen is granted his urban rights and allowed to enjoy them gives rise to a state of inequality which tends precisely to break up the body politic and to break down the country's overall functions"* (Giradoux, 1943: xix).
Like the empirical research which was undertaken in order to facilitate political control, the production of discourses on housing was both a conscious and a non-subjective exercise. Minimum standards of accommodation *were* conceived as capable of securing an increase in the numbers of productive individuals within the population and of reducing the costs carried by the state, but the primary benefit of improved living standards was perceived as accruing to those housed and not to the providers of housing.

Spatial models for a transformation of the human condition

Several intellectual currents came together to constitute a comprehensive theoretical foundation for the discipline of architecture and planning. Common to all of these was, in Jenck's words, the *"attempt to influence the lives of those who use architecture by indirect means - the ordered, disciplined forms evoking corresponding mental states in the people who use them [...]"* (1985: 45). Three models were particularly dominant in town planning: the Garden City, the Garden suburb, and the neighbourhood unit. Of these, the neighbourhood unit was the most quintessentially modern in that it espoused *regionalism* and was a significant force in the redefinition of the place of the individual in the city. It was, in fact, the model which was chosen for the townships.

Concern with labour agitation and the deplorable living conditions of the working class in the late nineteenth century led British industrialists to actively promote a scheme of suburban worker housing. In response, the Garden City, introduced by Ebenezer Howard in *Cities of Tomorrow*, was soon established as the first fully planned town (Swenarton, 1981). Catherine Bauer borrows a definition of the Garden City as a *"town designed for healthy living and industry; of a size that makes possible a full measure of social life, but not larger; surrounded by a rural belt; the whole land being in public ownership or held in trust for the community"* (Bauer, 1934: 111). The doctrine of the Garden City movement, Swenarton explains, *"[...] implied that, by improving conditions of housing and the physical environment, it was possible to make the people contented with a status quo that was, in other respects, unchanged"* (1981: 7). The movement introduced the five areas for planning intervention: health, industry, environment, public ownership, and control over the size of urban formations. Each of these areas involved one of two concerns in urban planning - the reproduction of a healthy workforce for industry and the ability of the state to control that workforce at minimum cost to itself.[56]

The Garden City movement helped to launch town planning legislation in Britain and provided a framework for later planning initiatives. The Garden suburb, designed by Raymond Unwin in the early 1900s, replicated the Garden City with an important difference - it was not intended as an autonomous urban entity, and was therefore solely residential. Both of these models constituted a rejection of the city and a search for a rural alternative (Swenarton, 1981: 11) to what was beginning to be perceived with increasing severity as an unviable urban structure. While the

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[56]The concept of *community* development in modern planning was significant for the conceptualisation of a modern utopia.In the early 1900s the community centre movement in the US emphasised the importance of engendering civic responsibility through the immediate environment. Paul Rabinow describes a similar approach of French architects/*"municipal socialists"* whereby local communities were to serve as a *"social anchor for national policies aimed at meeting social needs"* (Rabinow, 1992: 171).

Garden City became outdated as the Modern Movement gained ground, many of its elements, and particularly its autonomy, were retained in later planning initiatives. Of these, neighbourhood planning was the most comprehensive, both in terms of the provision of services and its vision for urban citizenship (Japha, 1986: 12-16).

Neighbourhood planning emerged in response to a perceived social disintegration, which was attributed to the urban grid. Accompanying this condition, or causing it (it was thought), was a disinterest in civic participation, with direct consequences for the economic environment. Neighbourhood planning was therefore an attempt to revive, and perhaps redefine, the condition of citizenship. It was a reassessment of individualism and the relationship between the individual and their rights, and the community. Neighbourhood planning principles were represented in the neighbourhood unit. T.B. Augur describes the neighbourhood as consisting of *"a residential cell capable of building up so strong a community life within itself that it would be capable of resisting the tendencies to depreciation and disintegration that might take place in the city about it"* (Perry, 1939: 79). The urban citizen would therefore be liable for their own well-being.

In essence, modernism in planning was inspired by a mechanistic view of the city, particularly as it was expressed in the late 1930s and with the neighbourhood unit and the concept of regionalism. It created a subject which could operate on its own momentum. Modern citizens were imbued with knowledge and control over their own affairs at a minimum cost to the state, and with minimum intervention. Self-help was co-terminous with economic self-sufficiency, and thereby shifted the focus from living conditions as related to conditions of employment - dominant in urban reformism at the turn of the century - to an articulation of modern citizenship as a responsible condition, whereby urban subjects accept responsibility over their behaviour. Modern architecture instilled the urban subject, as citizen, with the ability to act independently of the state, yet always in consonance with its directives.

The whole project of modernism was explicitly aimed at treating space as a laboratory - and here, the dilemma of engineered autonomy appears. The faith in predictability which characterised scientific research culminated in the efforts of modernists to achieve a completely productive use of space, while remaining oblivious to the irony of liberating subjects through controlled circumstances (Tafuri, 1976). Knowledge of the human condition was a means towards the re-constitution of the subject as an autonomous entity. The paradox of an engineered autonomy - the production of a modern citizen who would be free to act but would always choose to act in predictable ways - was essentially a product of the scientific search for predictability in human actions.

Human behaviour was judged to be as amenable to change as the environment. Yet modernity was not a homogenization of the human condition, despite the egalitarianism which characterised the democratic and often collectivist ethos of the discipline. Social identity and social condition (as scientifically-interpreted phenomena) - both constructed by discourses which are appropriated by the state and interpreted through specific institutions - were the key to the establishment of norms which consolidated social inequalities. While authoritarian and fascist regimes were averse to the project in democratisation and universalism, they embraced the notion of a spatial manipulation of social behaviour and the centrality of the state in the regulation of daily life.[57] Writing on a *"geographical consciousness"*, for example, one participant in the colonial discourse of Italy argued in 1928 that,

> [t]he formation of a colonial science ...requires, beyond scientific analysis, the accurate and profound knowledge of the geographic environments and of the societies inhabiting them ...The goal [is to] form our own colonial and foreign doctrine supported by a scientific basis [...] (Vachelli in Fuller 1992: 215-16).

- which returns us to the question of science in modernism, and the role of scientific discourse in the production of the subject.

While Foucault makes a theoretical distinction in the ways through which humans are turned into subjects, differentiating between normative divisions (such as madness and reason) and scientific categories (which objectivise the productive subject) (Dreyfus and Rabinow, 1982: 208), it is not difficult to see that scientific knowledge creates and normalises binary divisions as well as constituting humans as objects of certain discourses. Humans have been regarded as discursive objects - i.e. units of production or members of a population - precisely because the categories may be juxtaposed with each other and compared. In a sense, binary divisions, and the normative associations which come with them, emerge from a certain rationality which orders so as to understand, and is therefore inherent in the production of knowledge. In brief, categories which have emerged from scientific research can also constitute divisions between sets of people, and indeed render those divisions normal. Dreyfus and Rabinow explain that *"the spread of normalization operates through the creation of abnormalities which it then must treat and reform"* (1982: 196). The urban crisis needed a subject which was to be treated and reformed. In the case of South Africa, that subject was the urban African.

[57] In fact, few architects refused to work for the Fascist, Nazist and Stalinist states on grounds of principle (Jencks, 1985), even if the social ideals of modernism were described by these states as subversive and even as members of modernist schools (such as the Bauhaus) were persecuted by these regimes.

South African planning and housing discourse

The South African state embraced scientific research methods as a means towards the resolution of the housing shortage. The solutions to the urban crisis were in accordance with the terms in which the crisis had been framed. The issue was not whether housing should be racialised or whether it should be provided by the state. There was near universal agreement that the state and local authorities shoulder the burden for public housing costs. The dominant questions in planning research concerned the *inability of the African population to pay rent* (in other words, the degree to which African housing should be subsidised) and the ways in which *housing costs could be lowered to enable provision* by local authorities. These issues were the key to the provision of mass housing because they addressed the main weaknesses in the housing delivery system, as these were perceived by the state. That South African modernists and the state perceived economy as central to the implementation of a housing programme is not surprising in the industrial and intellectual context of the postwar era. As a short-term objective, the rationalisation of housing construction conformed with the rationality of modern technologies of power.

While numerous studies were undertaken on African living conditions as they pertained to inadequate shelter and the economic situation of the urban African, the resolution of the housing crisis may generally be attributed to three studies, carried out under the auspices of public agencies: the1949 report on *Minimum Standards of Accommodation* and its amended version of 1951,[58] van Beinum's study on the *Socio-economic status of Native Families*, and *Research on the Costs of Urban Bantu Housing.* These studies are particularly significant because they relate the research carried out in South Africa with the urgency of managing the industrial city. Underlying the projects carried out by the National Building Research Institute, the National Housing and Planning Commission, and the Department of Native Affairs is the pre-occupation with the health of the urban population and the extent to which its behaviour may be regulated or overseen. Moreover, like the statistical research which was undertaken to facilitate urban administration, the research which was produced for housing provision constituted a supervision of the routine of the body and a regimentation of space and time.

Scientific knowledge of the urban subject was the key to proper classification in the spatial order of the city and the social and economic hierarchy which would determine consumption capacity.

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[58]The research on standards pre-empted an explosion of research into African housing and living conditions. Many of these studies took up the challenge of lowering housing costs. See, for example: De Gruchy, Joy, *The Cost of Living for Urban Africans*, (Johannesburg, 1959); Gibson, Olive, *The Cost of Living for Africans*, (Johannesburg, 1954); Wix, Ethel, *The Cost of Living*, (Johannesburg, 1951).

Minimum standards regulated space and acted as a medium for the reform of the human body. As such, they were envisioned to increase the productivity of the body and ensure a reproduction of equally productive bodies. The classification of the population into socio-economic categories reformed society by organising it in terms of the ability to produce and consume. *Research on the Costs of Urban Bantu Housing* was a complex set of studies on the relationship between industrial time, space, and resources as they related to housing construction. The *Research* suggested a re-organisation of time/labour so as to maximise and regularise the performance of the African worker.

Towards an understanding of the problem

There has been, for some time, a familiar debate over the involvement of the South African architectural profession in the implementation of apartheid and the extent to which South Africans diverged from the social principles of modern architecture.[59] It is, in a sense, a question over the degree to which modernism may be localised. If, as Derek Japha has explained, there have been two traditions - the one local, the other universal - then the terms of this debate have been misleading. The localisation of modern principles has been as much an aspect of modernism as a whole, as their universality. As Rabinow aptly puts it, *"[t]he art of urban planning - and of a healthy modern society - lay precisely in the orchestration of the general and the particular"* (1992: 167). It was not only a question of adapting modernist principles to local conditions. It was also a question of achieving a balance between the house and the city, and one of creating types without generalising the whole of the urban problem - in other words, achieving a specificity which would allow planners to attack the urban problem at both an individual and a group level.This was, in short, the scientific approach.

The use of statistics and quantitative data paved a way of perceiving of the housing problem and of urban Africans as a mathematical equation (Posel, 1996). The confidence and faith in technological innovation which characterised universal modernist practices was echoed in the South African discourse. It was believed that the housing problem could be resolved if only it could be understood. Four prominent South African modernists wrote early on, in their thesis on *Native Housing* (1938), that:

> [t]here are laws in this madness... producing with mathematical certainty the very phenomena - crises, wars, revolutions - which appear to the untrained eye as chance results of chaotic disorder - these laws are inherent in our system of society, and as such can be analysed and verified (Connell, 1938: 1-2).

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[59] See, for example, some of the work in *Planning and Planning Personalities: Symposium Proceedings of the Planning History Study Group.* (Hammanskraal, 1996).

The utopian search for predictability relied upon this construction of society as an *"objectified social realm [...] governed by observable laws subject to the same logic of cause and effect as nature"* (Ashforth, 1990: 5). Within this framework, the housing programme was articulated solely in scientific terms.

The quantitative and qualitative information (in the form of social surveys, demographic statistics, and empirical studies) which was accumulated in the 1930s and 1940s was closely tied with the identification of housing provision as a key policy priority and a central aspect of urban governance. The objectification of the African subject (in other words the classification and characterisation of the African within and according to a series of normative categories) through the knowledge produced by scientific research, was intrinsic to the housing research programme. The economic rationalisation of the African and of African living space was achieved within the reformist context of modernist discourses of architecture, planning, and urban administration.

The use of scientific research for the governance of South Africa's urban areas grew parallel to the increase in numbers of the (African) population. The importance of empirical information for policy formulation was formally recognised in the Amendment (to the Urban Areas) Act of 1937.[60] According to Evans, the Act placed an *"unprecedented emphasis on the importance of empirical data about Africans in urban areas [... in order to] overcome the pervasive statistical ignorace in urban administration"* (1997: 50).[61] The Act made it mandatory for local authorities to take a census of the African population every two years, to submit the census to the Department of Native Affairs, and to report any information pertaining to labour requirements for a particular area. This *"statistical survey"* was to yield information which would be made available to the labour bureaux to deter Africans from leaving the rural areas in search of work (Evans, 1997: 50). The census was almost disproportionately responsible for the conceptualisation of the urban problem in scientific terms. The knowledge that 816, 456 Africans were on the Rand in 1946, that 18.1% of those were housed in locations, that 17,000 families were on the waiting list for housing in that same year, and that 3,000 families entered Johannesburg every year (Evans, 1997: 39), compounded with even greater empirical detail, was a turning point in the approach to urban governance.

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[60] Braam Fleisch and Sue Krige have traced the use of quantitative evidence to commissions of inquiry from the 1930s onwards (Posel 1996: 7).

[61] The Act also increased the discretionary powers of the Minister of the DNA and strengthened the department's authority (Evans, 1997: 51).

The relative precision of the population census enabled an unprecedented degree of foresight in urban policy. It allowed authorities to regulate the size of the respective population groups and determine trends in urban growth. The mere *fact* that the urban African population nationally had grown from 587,000 in 1921 to 1,150,000 in 1936 (Evans, 1997: 45) justified and rationalised the exercise of influx control. The census also constituted the first comprehensive effort to register urban inhabitants by race, thereby allowing municipalities to enforce the Urban Areas Act, identify the exact housing requirements for the African population, and act upon the information thereby obtained to segregate groups by race.

The articulation of the urban crisis and the formulation of a strategy to address it both evolved within the discursive environment of the thirties and forties. The approach of architects to the urban subject was complicated by the need to fuse the universal principles of modernism with the local reality - a problem whose solution was made simple with the emerging discourse of apartheid. I briefly turn to this discursive shift as indicative of the increasing modernisation of official discourse and the consolidation of modernism in spatial practices, as a result.

A brief look at the ways in which the African was manipulated as an object of scientific research may be helpful in situating South African housing research within the wider context of modernity, and in dealing with the continuities (... and discontinuities) between the pre-1948 and post-1948 periods. The main concern here is fairly universal: how was the compromise struck between the subject of modernist discourse and the subject of colonial discourse? As suggested earlier, the adaptation of theoretical principles to local conditions was a facet of modernism, and not a deviation - (obviously) so long as that localisation was not a contradiction. In a sense, this came to be the case in the research process undertaken by the South African profession almost by default. From the moment that the urban African was defined as a problem, reformist solutions were conceived in terms of exclusion - social and cultural, spatial, and administrative. The African, presented as alien to the (white) urban system, became the object of treatment and reform.

The opposition of "tribal" and "civilised" - categories which objectivised the *productive* subject (Foucault, 1982: 208) revealed the tensions within urban policy with respect to the question of African residential rights in the cities. *Tribal* Africans, for example, were spatially contained within mining compounds and posed relatively fewer problems for administrators. *Native villages* catered for the *"better type of native"* a category which occupied the ranks of semi-skilled labour and was considered increasingly essential to the economy as manufacturing grew in importance.

The *Native village* was a monument to paternalism, indicative of the spatial implications of tribal identity.

> Some of the better class Native and Coloured have superior houses. But we are dealing with a social problem, and it is not the better class Native and Coloured who constitute the problem to public authorities, but the wretched, the poverty-stricken, the class living more or less in misery and filth; through them is disease disseminated. They become a danger not to themselves alone but to the whole community (Lindberg, 1937: 7).

Regarding the African as tribal was important to the solidification of the industrial hierarchy. Migrant labour was rationalised, for instance, in the conviction that *"to detribalise the African was to do him a disservice"* (Davenport, 1969: 96). This rationalisation was prominent in anthropological discourses of the time (Mafeje, 1971: 254-255), and was a substantial force in the marginalisation and subjugation of the African population.

The conceptualisation of *Native* identity as "tribal" identity partially resolved the issue of African welfare. The widespread acceptance of theories of racial superiority as scientifically-grounded (Bauman, 1991; Dubow, 1989; 1995) fed into Church discourse, which drew attention to the plight of the *"detribalised native"* and promoted an image of the African as a child (Dubow, 1995: 209).[62] While tribalism was retained as a counterweight to the "civilising" influence of the European and a justification for the discrepancies in public expenditure on Africans, the shift towards an urban identity paralleled changes in forms of industrial production and related shifts in labour requirements. Africans who had broken their links with the rural areas were regarded as *transitional*, occupying a stratum between what was perceived as the highly evolved form of the European and the more primitive rural Native. The transitional status afforded to the African was certainly not an inclusion into the urban system.[63] It merely emphasised the perception that the African was, by nature, tribal.

The consolidation of anthropological disciplines, including physical anthropology, ethnology, and linguistic studies, within the sphere of Native administration, further implicated scientific process in the governance of the African population. Anthropological studies and social surveys confirmed the African as tribal by nature, and solidified the perception of the racial hierarchy as

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[62] Defined by Saul Dubow as the *"systematic expression and rationalisation of the idea of superiority and innate biological difference among distinct groups of human beings"* (1989: 5), the concept of race as inherently scientific should, Dubow argues, be regarded as intrinsic to the imposition of the South African racial order.

[63] The suggestive power of characterisations such as *"tribal"* or *"transitional"* cannot be isolated from the support which scientifically-grounded institutions enjoyed as loci of *truth* (Gordon, 1980). The social and spatial exclusion of Africans was reflected in the structure of the bureaucracy. Racially-distinct institutions regulated the marginalisation of Africans. The Natives (Urban Areas) Act of 1923 sanctioned the separate administration of urban Africans by providing for distinct spatial and administrative arrangements.

inevitable. Those who assumed knowledge of the African condition were imbued with a sense of authority, upon which they founded their recommendations for urban reform. By the early 1950s, a degree in Bantu studies was considered necessary to the *"counselling"* and *"arbitrating"* role assigned to township administrators. Township superintendents, *"specialising in the peculiar problems of the various Bantu cultures [...]"* would be required to deal with the *"endless stream of personal troubles [...] expeditiously and with understanding"* (Soweto, 1969: 11). Robinson writes that

> [b]oth the language and the project of 'Bantu studies' contributed to [the] reproduction of 'the native' as a particular and different subject about whom certain programmatic truths could be known ('the native mind', 'native civilisation', 'native culture') (Robinson,1996: 64).

Surprisingly, what differentiated the apartheid approach to the African - and the issue of the African urban presence - from that of the segregationist era, was the rhetoric of egalitarianism which surfaced after the Second World War as an ideological rebuttal to the condemnation of apartheid by the international community (Dubow, 1995: 276-78).

Architects and planners were caught between the recognition of "tribalism" as an irrefutable *truth* and the need to homogenise urban space so as to facilitate the installation of an efficient housing delivery system. In their research on the importance of social studies to good planning practice, Rodseth, van Heerden and Jennings wrote that

> [t]here appears to be no doubt that amongst urban Natives, the family unit is replacing the tribal unit as the basic cultural unit. While it may be desireable and possible to retard this process, and perhaps to a degree even to restore tribal influence and cohesion, it seems necessary in urban communities to ensure, as far as possible, the building up of a stable family life (Rodseth et al., 1954: App. VI (A)).

The juxtaposition of "tribal" and "familial" was not necessarily in tune with the policies of the Department of Native Affairs (nor with sound sociological evidence, for that matter), which did not regard the two as mutually exclusive. The emphasis on family life as the basis for physical planning was characteristically modernist, however. The nuclear family was regarded as the key to a stable and predictable society, as this passage from a 1951 development plan for a town in Ghana suggests:

> As urbanization takes place ...tribal ties and discipline must be superceded by other loyalties if a coordinated law-abiding society is to emerge. This policy requires non-traditional types of housing and accommodation [...] Differentiation of dwelling standards is purely by income and all income groups are represented in each community (King, 1980: 224 n.51).[64]

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[64] See also Lamprakos, Michael, *"Le Corbusier and Algiers: the Plan Obus and colonia urbanism"* (1992: 199).

While the economic differentiation of Natives and Europeans was to override the *"tribal"* in some post-colonial discourse, this was not the case in South Africa. Rodseth, van Heerden and Jennings, in their research on the importance of social studies to good planning practice, wrote that

> [t]here appears to be no doubt that amongst urban Natives, the family unit is replacing the tribal unit as the basic cultural unit. While it may be desireable and possible to retard this process, and perhaps to a degree even to restore tribal influence and cohesion, it seems necessary in urban communities to ensure, as far as possible, the building up of a stable family life (1954: App. VI (A)).

There was nevertheless a lack of unity over what the urban African was supposed to be and how he/she was to be understood. South African modernists in the architectural profession approached the research process with these preconceptions of the African and of modernism in mind.

Minimum standards and the economy of space

A committee of National Housing and Planning Commission (NHPC) members was established in 1947 to conduct research on the mininum standards to which houses (regardless of the racial classification of their occupants) were to conform. This research produced the first major work of the National Building and Research Institute, in the form of nine booklets collectively entitled the *Interim Reports of the Research Committee on Minimum Standards of Accommodation.* These reports, presented in 1949, set out to establish criteria for housing construction, regardless of racial or economic status. The *Interim Reports on Minimum Standards of Accommodation* of 1949 were taken as the basis for the design of the townships, starting from the experimental scheme of Kwa Thema (see Appendix F) in 1951 (Wilkinson, 1981; Japha, 1986).

The creation of standards for housing construction reflected a new consciousness in urban hygiene and a new insight into the mechanics of the housing market. Modernist discourse emphasised the importance of lowering costs, particularly the cost of money, through sound housing construction which would secure returns well into the future.[65] Undoubtedly the emphasis on quality (in modern housing discourse) affected the decision to apply standards to South African housing. Maintenance was only one aspect of the standards, however, which were intended to secure returns for human as well as material resources. The criticism that had been levelled against previous "model" housing schemes had focused on the high expenditure on such schemes, described as unnecessarily lavish (Guide, 1951: 28). Minimum standards, in and of

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[65] South African local authorities argued, for example, that houses must not only survive the loan period (forty years for the repayment of interest and redemption on subeconomic loans) but also remain an asset thereafter (Connell, 1947: 39).

themselves, rationalised and therefore often significantly reduced housing costs (although that was not necessarily the original intention).

Between 1949 and 1951, a Joint Committe consisting of members of the National Housing and Planning Commission (NHPC), the Department of Native Affairs (DNA) and National Building and Research Institute (NBRI) modified the initial recommendations in the *Interim Reports* (Japha, 1986: 15 & Graph No. 1 in Appendix I; Evans, 1997: 137) (see Appendix C). The establishment of the Joint Committee as well as its membership were highly political decisions in the more mundane sense. Designed to transfer decision-making power from the NHPC and the NBRI to the DNA (whose members dominated the committee), the Joint Housing Committee operated as an instrument for the implementation of government directives, overriding possible objections from the research agencies. The published (1951) version of minimum standards attests to the government's success in this regard. After continued research into the standards as part of the project to lower housing costs, the standards were racialised, lowered, and justified as such.

The 1951 *Standards* were published by the National Housing Office in Pretoria and disseminated to relevant public bodies as the *Minimum Standards of Housing Accommodation for Non-Europeans*.[66] The fact that the original report (1949) was modified to address *"non-European"* housing highlights the status of blacks as a sub-category of the town planning subject. The standards were reduced by about 30% with respect to room size. The reduction was more drastic, however, with respect to projected occupancies (Japha, 1986: 15). Japha notes, in this regard, that, *"if these revised standards are compared with housing standards prior to 1949, it will be seen that the entire excercise did no more than rationalise accommodation standards at levels approximately equivalent to already current practice"* (ibid). While there is little explanation as to the chosen specifications for room size and occupancy figures, these were often justified as culturally relevant. The dual use of a room as both living and sleeping quarters was, for example, registered as an urban *Native* living habit (*Minimum Standards*, 1951: 4). A survey conducted on African living habits and entitled *How our Urban Natives Live* concluded that *"the Native people are well on their way to adopting a European mode of living in their houses though certain tribal habits [...] are still retained to some extent"* (Spence, 1950: 235).

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[66] Until the early 1950s modern housing principles were discussed as universally relevant and were to be applied irrespective of race. In fact, several architects insisted on the elevation in living standards for the African population and the achievement of social equity through housing and service provision by the state.

The semi-Westernised condition of the urban African permitted, it seems, a sub-minimal form of accommodation.[67]

The willingness to compromise and racialise the standards was expressed by the members of the research committee even before the original standards were completed in 1949. Connell described the procedure thus:

> In the case of housing for European tenants, precedents from other countries were studied and used as a guide. In the case of Native housing, the standards of accommodation and domestic equipment had necessarily [...] to fall below the commonly-accepted levels, and in practice new standards in closer touch with the realities of the problem had to be worked out for this class of housing (Connell, 1947: 18),

later warning, however, that any reductions on costs would be made at the expense of standards (Connell, 1947: 4). The 1949 *Interim Report* in fact declared that *"[t]he Committee regarded as important the principle that the proposed minimum standards of accommodation should not be unduly influenced by considerations of cost [...]"* (*Interim Report*, 1949: 2). This declaration echoed the concerns of modernists and in this sense was not indicative of any particular insight on government. Catherine Bauer (whose work on minimum standards served as a guide for the Committee) had said, for example, that *"[t]he whole point of view behind such minimum standards precludes the possibility of modifying them in deference to class or income distinctions"* (1934: 146).

Housing costs and the regulation of the productive body

Despite the egalitarianism behind the concept of minimum standards economic status *was* relevant to housing provision. If minimum standards suggested a universal human denominator by which administrators would have to abide, the shift to an acceptance of a relatively stable African population in the cities highlighted his/her profitability as units of consumption. From being regarded simply as units of labour-power, urban Africans were weaved more intricately into the economic fold. This, in effect, denoted the capacity to spend. The survey *"How our Urban Natives Live"* (Spence 1950), mentioned earlier, was undertaken to determine the extent of furniture use in urban African households. It confirmed that capacity by concluding, *inter alia*, that the Native was a *"careful buyer"* and an *"excellent customer"* (Spence, 1950: 233).

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[67] A perspective which conformed with Verwoerd's logic: *"When one realises the difference in the standard of living of the European family and the Native family, then it is clear that for a family of five Europeans one should have 105 morgen and Natives on an average sixteen morgen. That means that the Natives could actually exist on one/sixth of the productive area on which the European could"* (Senate May 1951; qtd. in Dewar, D. and V. Watson, 1984: 3).

It was H.J.J. van Beinum's *"Study of the Socio-economic Status of Native Families,"* that consolidated the urban African as an economic entity. Undertaken for the Committee on Socio-Economic Surveys for Native Housing, the research placed urban Africans in three categories indicating rent-paying capacity according to their monthly earnings. The economic category represented 40.4% of the population, the sub-economic, 12.9%, and the sub-sub-economic, 46.7% (Wilkinson, 1981: 31). The most obvious conclusion - that the majority of African families would have to be heavily subsidised if local authorities were to provide housing - was never drawn. Despite van Beinum's entreaties that all three categories be catered for (Wilkinson, 1981: 32; Evans, 1997: 136), the Department of Native Affairs took the existence of a substantially large economic class as an indication of the feasibility of an economic housing scheme. The mere existence of an economic category was used to justify the imposition of economic rates across the board. It also legitimated the expulsion of families allegedly capable of paying an economic rate from sub-economic (council) housing. Verwoerd argued that *"[b]y reducing the cost of the house,... [i]n other words, by reducing rent, some families of the sub-economic group will be brought into the economic class"* (Pelzer, 1966:). What this implied, in effect, was that the sub-sub-economic group would be expelled from the urban areas as surplus to labour requirements.[68]

The implementation of minimum standards effectively placed a ceiling on the expenses on African housing, but it could not reduce them. A detailed examination was launched into the cost of housing and ways to reduce it. The research which followed the publication on minimum standards of accommodation provided the greatest challenge for the NBRI. *Research Studies on the Costs of Urban Bantu Housing* were undertaken between 1951 and 1954 by a committee of the Council for Scientific and Industrial Research (CSIR)[69] and relied heavily on the (revised) minimum standards published in 1951. Some of the factors that had accounted for the failure of local authorities to undertake sub-economic housing projects were already known, and had been documented in the late 1940s. Steep building costs, shortage of skilled workers, acute shortage of materials and, of course, the loans formula by which local authorities were sure to face losses, constituted the main factors which informed the committee's research. The socio-economic context in and by which the housing shortage emerged precluded both an increase in wages which would make rentals more affordable, and a subsidisation from the general rates fund, to

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[68] It also demonstrates the degree to which business was implicated in the process of housing allocation for influx control. Peter Wilkinson notes how business was aware of the advantage of lending money at economic interest rates over the payment of a monthly levy (Wilkinson, 1981: 40; SAB 28 (12) 1950: 11, 13).

[69] The committee consisted of five sub-committees and dealt with *"austerity"* and *"minimum class"* housing (the other two types being *"superior"* and *"good"* housing).

which white property-owners were generally opposed. The remaining solution was a decrease in housing costs.

The reseach on housing costs points to the significance of industrial time and the consequent application of a science of cost-reduction in support of the wage contract already in existence. The research committee managed to lower housing costs through a manipulation of the industrial contract, not through a change in the industrial colour bar but through a re-organisation of time and skill.[70] The researchers were aware that housing subsidies, by allowing employers to maintain low wages, were an indirect subsidisation of industry (Bauer, 1934: 225; Connell, 1938: 43). Research had already demonstrated that the standardisation of work processes and parts and the rationalisation of building methods through time and production charts (Bauer, 1934: 209) cut costs by 15% (op cit, 210). The committee on housing costs proceeded to apply a similar logic in the rationalisation of sub-economic housing.

The wage differential between skilled and unskilled or semi-skilled labour was an obvious starting point in any effort to decrease costs. Labour thus bearing the brunt of the attack on housing costs, housing construction was first subjected to an economy of time. In a detailed investigation into labour efficiency, the working day was divided in four parts - *"idle time"*, *"time lost to late starts"*, *"non-productive time"*, and *"actual working time"* - three of which could be acted upon.[71] To begin with, not much could be done to address late starts beyond the provision of materials ahead of time, and the organisation of workers in teams of approximately four or five, thereby allowing teams to work independently of each other. An advantage of detached and semi-detached houses was that they allowed such task teams to work independently, further minimising costly delays (Evans, 1997: 138). The advance provision of materials sufficient to the completion of a whole scheme was facilitated through the mass production of parts which minimised costs for the production of greater quantities.[72]

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[70] The use of African skilled labour in African housing construction was a significant victory for all actors concerned. The DNA, after much haggling with the white building workers union, succeeded in passing the Bantu Building Workers Act in 1951. The Act, which allowed skilled African builders to work in the African townships but limited them to those areas, was convenient to the policy of separate development, through which the state would "help Africans to help themselves".

[71] The following account relies on the committee's report as well as A.L. Glen's essay, *Time Studies of Labour employed on the Building of Urban Bantu Houses Using Native Building Workers on an Operative Basis* (Costs, App. U; Bulletin 12).

[72] These were in turn facilitated by the confidence which both the state-sponsored research and the authoritarianism of the state imbued in investors and the building industry that costs would be lowered - at all cost - and that the townships were likely to be realised.

Idle time was again addressed through the early procurement of materials, as well as forward planning. Since shortages of materials and funds were found to be the most detrimental to efficient production, *"idle time"* - time spent waiting for these shortages to be addressed - was to be eliminated through *"forward planning"*. In other words, the planning of every stage of the process in advance and the procurement of materials would create significant momentum to keep the building uninterrupted. An economy of scale, made possible through the use of pre-fabricated parts, would create substantial interest in the project, and generate enough profit to keep the supply of parts constant. Moreover, the fact that industry succeeded in selling materials wholesale rather than at discounted *"public works"* rates previously demanded by local authorities, was ultimately accepted as an incentive for the construction industry to remain involved in low-cost African housing.[73]

The costs on non-productive time were minimised through a revision of the ratio of skilled to unskilled workers. It was observed that brickwork accounted for 70% of all skilled labour. It was thus disassembled into its component tasks: spreading mortar; laying bricks; bringing bricks into line; stringing the line; measuring, plumbing and levelling of bricks. In each of the tasks specific to brickwork, the efficiency of African labour was compared to that of white labour. While researchers deduced that Africans were 77% as efficient as whites, it was found that performance dropped in two of the six tasks (namely bringing bricks into line and plumbing). Thus, skilled workers were selected for these tasks, while all others were performed by unskilled labour. Having modified the ratio of skilled to unskilled workers, the committee proceeded to examine the effects of greater specialisation.[74]

The minimisation in costs of housing construction still left the question of township services and maintenance unanswered. The solution had been legislated before the research was completed, however. The Department of Native Affairs won yet another victory, this time with business. The Native Services Levy Fund (1953) forced business to pay a tax, in respect of each African employee, which would go towards providing services in the townships. Business had, for years, challenged initiatives to fund housing through industrial taxes, arguing that Africans should become economic entities in themselves (Wilkinson, 1981; see Chapter Two). It eventually accepted that increased productivity, upon which this depended, was a function of good housing.

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[73] Again, it is likely that the involvement of the DNA gave confidence to investors and manufacturers.

[74] On-site training of unskilled workers proved a great advantage. *"Operators"*, workers performing a single specialised task, were able to replace skilled workers.

Conclusion

How did modern architectural and planning discourse contribute to the formulation and implementation of state strategies of population management? Some indications may be given by looking at the type of knowledge that was generated by modernism in architecture and town planning, the way in which knowledge was to be used, and the extent to which its subjects were given the opportunity to participate in the process. Modernism in architecture and planning is implicated in state practices through its involvement in the production of exactly the type of knowledge which would facilitate the imposition of discipline: an organisational system which would at once make government more economical and more involved in the determination of the space of individuals and the population as a whole. Participants in the discourse were authorised to speak of a set of problems, while the constitution of those problems and the elements of which they were composed was in itself a significant exercise in the introduction and consolidation of certain patterns of oppression.

What *did* science in modernism imply for the way in which the African population was governed? For the state, empirical knowledge was a precise and reliable instrument for the elaboration of strategies of surveillance and control. The census revealed a *truth* about the condition of the urban areas. Anthropological and ethnological knowledge of the urban African normalised racial divisions between population groups and facilitated the exploitation of African labour power. Socio-economic surveys drew several conclusions about the productive and consumptive potential of the urban African, confirming the position for African residential rights in the cities. Every bit of knowledge produced about the African, in his/her capacity as a culturally distinct entity or a productive entity, was either a confirmation or a denial of a place in the urban structure. In a sense, empirical knowledge production in South Africa generated *truths* about the African which invariably revolved around the issue of urban rights.

South African housing and planning research contributed to the elaboration of techniques for the management of the African population in a very particular way. Totalising and individualising techniques were contained within the generation of the *average/general* and the *particular*. As an orchestration of the general and the particular, modernism in architecture and planning allowed for the diffusion of power throughout society and its concentration upon specific members of the social system, through the accumulation of knowledge. While surveys became indispensable to good housing practice and would, according to Rodseth, van Heerden and Jennings, constitute *"the first attempt to get away from the custom of treating the whole native problem as if it were composed of 'averages'"* (Rodseth, 1954: App. VI A), the use of statistics to formulate general policy based on a Norm seems odd in light of Rodseth's cautioning note. It

is ironic that the result of the research on African housing came in the form of an "average", exactly what Rodseth and his colleagues had cautioned against in the approach to African housing.

Housing research achieved a generalisation of the housing situation in terms of the ability to afford economic rents. A *"cost norm for Native housing"* was derived, inclusive of material, labour, and overhead costs. From this, the *"norm house"* was established, of which the townships would largely consist. The science of detail which was developed in the research on the costs of housing was the key to lowering housing costs and resolving the question of housing subsidy and who was to pay it.

Housing norms and standards prioritised an economy of space, time and resources. Mumford's statement that functionalists had *"made a positive virtue out of the necessity for economy"* (Bauer 219) was never more real than in the case of South Africa. The inability to perceive a rational world outside the economic context - the delimitation of the urban to the reduction of cost - justified capital accumulation as a policy priority. As Evans puts it,

> [b]ecause the [DNA's] budgetary limits precluded a host of easier solutions, the sheer technical difficulty of devising formulae and "affordable solutions" that accorded with the low consumption capacities of the African working class convinced urban officials that they were engaged in a sound moral project (1997: 69).

Discretion on the part of the government meant, from 1948 onwards, that the administration of Africans would cost as little as possible. Economic discretion was not a disadvantage, but an essential element of discipline. Jabavu wrote at the time: *"Natives being under the perpetual threat of being 'moved on'...With these plans.. would it not be 'folly' as the authorities put it, for municipalities to spend money on services to locations that were only temporarily where they were? "* (Jabavu: 190; Pirie, 1984).

Chapter 4: The spatial model

Introduction

Chapters Two and Three have looked at the socio-economic and intellectual context within which the township emerged as an instrument for the implementation of the practices of the apartheid state. Chapter Four will focus on the township as a site for the elaboration of specific strategies of control. In other words, it will look at the township planning process as the production of a 'disciplined' space. Foucault's notion of discipline as an architecturally-bound practice which occurs within specific spatial contexts may be used with respect to the township as a site for the articulation of strategies of control. Foucault writes that,

> the exercise of discipline presupposes a mechanism that coerces by means of observation; an apparatus in which the techniques that make it possible to see induce effects of power, and in which, conversely, the means of coercion make those on whom they are applied clearly visible (Foucault, 1979: 171).

The question of investing bodies with a capacity to voluntarily act along pre-determined lines was addressed by the physical and normative barriers which were drawn within the city and between its inhabitants. Township space was to serve five basic functions, which determined the criteria by which the spatial model was chosen: the recognition of discipline as a function of economy; the management of the African population by the mere exercise of containing it within a defineable space and ordering it with respect to the productive roles of its members; the removal of Africans from the city to effect a more complete segregation of the population by skin colour and ethnic group; the surveillance of the workforce through violent and non-violent means; the imposition of a morality which was perceived as conducive to the emergence of a conservative urban African class to fulfill the demand for semi-skilled labour (and demonstrative of the justice of the Nationalist project). The autonomy of the township perpetuated the segregationist tradition, contained subversive activity within a sphere where military intervention could easily be imposed and away from the white inhabitants of the city, and provided a laboratory for the state's policies. Guarding the spatial system for the perpetuation of the industrial/racial hierarchy and the place of the urban African as an economic entity would be the military and the police, whose activities were to be facilitated by the provision of buffer strips around African communities, where troops could effectively be deployed.

The township, Chapter Four argues, reveals this spatial imposition of power, through form and function, to be inherent in modernist South African housing discourse. As elements of urban management within a non-democratic system, the disciplinary functions of township architecture were built into an essentially modernist notion of space. I have isolated three scales of township

space, according to which the chapter is divided: the township as a satellite formation, *located at the urban periphery* and separated from other townships by buffer strips; the *internal configuration* of township space, with the school at the centre of the unit; *the single-storey house*, centred on its site.

The township and the city

The urgency of transforming not only the living conditions of the urban African but also his/her behaviour, was expressed in the almost unanimous support for the type of planning which could develop the African community along politically pre-determined lines. Of the spatial models available in housing discourse, the neighbourhood unit was judged to be the most appropriate, in this sense, for the management of the African population in the cities (see Appendix C). The neighbourhood unit was informed by urban trends of the twentieth century. Amongst these were state intervention to control speculation in the land market and stabilise land values through the zoning of industrial, residential and commercial areas; the removal of the working classes to the fringes of the city and the regionalisation of industry to make use of these peri-urban reservoirs of labour; and the suburban household as a means to a healthier workforce and a sanitised city centre.[75] The South African city was not immune to these trends, even if their class basis was racialised through the intervention of the state (Parnell, 1993).[76]

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[75]The free enterprise system to which towns owed their rapid growth had been deemed dangerous to public interest. Private developers were distrusted in official circles for handling transactions across racial lines. Exclusionary clauses were already popular in title deeds to the effect that land or property be sold to whites only. Legislation at the local government level seems to have sanctioned this trend. Thus, twenty years prior to the Stallard doctrine and the Natives Urban Areas Act, towns were already perceived as the exclusive domain of whites.

[76]Two practices were introduced in urban administration which had far-reaching implications for land efficiency: slum removal and zoning. Slum removal freed property for more lucrative development near the city centre, and the functional division of areas created zones for specific activity, thereby stabilising land values. Both of these practices necessitated state intervention in the market, and therefore depended on a strong state. Legislation on land-use control initially extended powers to local government over individual market liberties. The economically destablising effects of land speculation were deemed a threat to social stability. Not only did speculators challenge the presence of the state in daily life, they also threatened to subvert the unified white constituency through a spatial equalisation of social and economic status (which, at a time when the franchise was linked to property ownership, also meant a potential equalisation of political status). As a prerequisite to modern planning, early activity in the planning profession stressed the importance of municipal control over land through "enabling legislation", as a springboard for consequent measures (Bezuidenhout, 1996). Five pieces of legislation, enacted prior to 1908, attest to centralisation of state powers through the acquisition and control over urban and peri-urban land. The Gold Law (1885) controlled the location of 'non-Europeans' of Asian origin; the Johannesburg Municipal Proclamations Act (1901) reserved approval for town plans with the Council; the Townlands Ordinance (1904) allowed the Local Authority to regulate land ownership and the appropriation of land for public purposes; the Proclamation of Township Ordinance (1905) established a Township Board to investigate applications to the Colonial Secretary for the establishment of a township. This latter act, replaced by the Townships Ordinance (1907), contained the most comprehensive powers. The Township Board was required to set out conditions for township layouts. These generally included the prohibition of subdivisions of land without the Board's consent, the prohibition of occupation by "coloured" persons, and the prohibition of sale to non-

While the concept of the African township incorporated these urban trends of the twentieth century, it nevertheless moved in a very specific direction in alienating itself from the discourse upon which it was modelled. The prioritisation of an economy of expenditure over African housing defined the inferior social position of the African and, like the reduction of minimum standards of accommodation discussed in Chapter Three, grounded the spatial practices of the state in a certain economic rationale for modern governance.

Discipline in expenditure

The decision to place the townships at the periphery of the city was the result of a cooperation between the Department of Native Affairs and the planning profession. This decision was not a compromise on either side - it was based on perceptions of the "correct" use of space as lying in an efficient use of space. It is nevertheless necessary to distinguish the role of modern housing discourse from that of apartheid discourse in the selection of sites for the African townships. For town planners, the appropriate location of an African township would be both a short and a long term economic investment. In the programme of *Separate Development* the functional division of land was extended to enforce a spatial hierarchy based on the role of different race groups in the system of production, distribution, and accumulation - suggesting a lifestyle so different between racial groups that daily actions would have to be contained within especially-allocated and self-contained areas.

At the root of the relationship between the township and the city and between the townships themselves are questions of economy and control (as the previous chapter has argued). Site selection was governed by the rationale of efficient land-use, beyond which the spatial order could not even be contemplated. The cost of land and land development impacted heavily on the selection of sites for African townships. While cheap land was found at the periphery, the land was not always suited to human habitation. Workers' health would therefore be compromised, resulting in a long-term liability for the state. Another factor in the location of townships was their proximity to industry and the feasibility of creating transport routes to and from the workplace. High transport costs would detract from rent-paying capacity, and as such, would increase the subsidy on sub-economic housing.

Since land was perceived primarily as revenue-generating, and its use for public housing as revenue-depleting, the planning profession regarded itself as responsible for the minimisation of

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whites (Bezuidenhout 1996: 3). Thus, as the time of Union drew closer, legal appropriation of land by the state could be effected at the local level. The process was soon to become a national one.

loss and the maximisation of efficiency in the "correct" use of land. The siting of townships was determined by the cost of land, topography and its implications for the cost of developing land, and the availability of transport, a factor which could lead to *"efficiency loss"* (Calderwood, 1951: 2) and which, as the bus boycotts of the 1940s had demonstrated, was best taken seriously. These factors condoned the location of modern housing schemes at the urban periphery. An economy of space could, for example, be achieved by increasing density for a given area. In fact, housing research in the early 1950s had focussed on precisely that issue. The effects of overcrowding on health, on the condition of services and on the land itself were to be weighed against short-term prospects for saving on land costs by increasing density, either through room occupancy or through plot size with respect to the house, or both. Similarly, the projected costs of land development were assessed both in terms of future servicing and maintenance costs for inappropriate land, and worker productivity which, if affected by environmental factors, would impact industrial efficiency. Local authorities were cautioned to consider the costs of developing cheap land. Topographical factors such as soil conditions, elevation, light and air circulation impacted on the decision to approve a site for development, in terms of the costs involved and the minimum health requirements for habitation. The temptation to invest in cheap but unsuitable land, as in the case of the Lamontville location in Durban (Torr, 1987: 110-111), would prove costly in the long term.[77]

Apartheid discourse added new limitations to the location of the townships, further narrowing the possibilities for site selection.[78] The intrusion of the state in the selection of sites was significant, yet subtle. Not least among its reasons was this desire to establish a presence in the daily life of the urban African by *"pre-inhabiting"* his/her space (Fuller, 1992: 230).[79] The singular relationship of black to white areas was expanded to include a complex network of legislated distances between black and white areas, African townships and industrial sites, African townships and white commercial areas, and finally, the distance between African townships themselves, within a given region. This network of distances was constructed through the

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[77] In Lamontville the absence of guttering and stormwater drainage resulted in serious damage to the houses from flooding and soil erosion during a storm in 1936. Rodseth, Government Inspector of Urban Locations at the time, criticised the council for retaining the best land for industry and suggested that the council "*exchange most of the area set aside for location purposes for some of the more level ground ... which had been intended for industrial purposes*" (Torr, 1987: 111).

[78] The Group Areas Act (1950) and the Native (Urban Areas) Consolidation Act (1945) constituted the primary directives for site acquisition.

[79] In reference to the hegemonic techniques of Italian colonial domination, Mia Fuller uses the term *"cognitive colonialism,"* - what she describes as *"an attempt no longer merely to control Ethiopians or their movements, but to ensure that the habitat of the "native" population was pre-inhabited by an Italian power, which was to be, in the natives' perception, everywhere"* (1992: 230). Similar dynamics were at work in South Africa.

perceived desireable relationship between different race groups and between them and the state, and was expected to solidify those differential relationships (Robinson, 1993).

For the DNA, the first criterion for a township site was adequate distance from white areas, as outlined by the Group Areas and Natives (Amendment) Acts, with buffer zones surrounding the township, the breadth of which would depend on the density of the white area.[80] It is necessary to quote at length the stipulations of the Department of Native Affairs on buffer zones, requiring the following:

> (i) buffer strips of at least 200 yards to be reserved all along and within the location boundaries except where natural buffers such as rivers or hills exist, or where there are other buffer areas, etc. which in the opinion of the Department are adequate
> (ii) a buffer strip of at least 500 yards (within the location) will be reserved between the built-up area of the location and the town or any other densely populated area occupied by any other racial group
> (iii) a buffer strip of at least 500 yards will be reserved within the location between the built-up area of the location and any National road (300 yards in the case of provincial main roads and 200 yards in the case of minor roads)
> (iv) an avenue of trees not exceeding four rows will be planted within the buffer strips immediately around the built-up area of the location to act as a screen
> (v) apart from trees the buffer strips will be kept undeveloped and clear
> (vi) the hinterland, which should not clash with other racial zoning, will be kept free of any development until it becomes necessary to extend the location
> (vii) the location will be developed radially away from the town with only one main access road through the nearest point of the town for the exclusive use of location residents. (In this connection it is to be noted that no other racial groups will be allowed access to the town through the location).

The precision of these specifications on the exact width of these vacant strips of land - to the number of rows of trees to be planted - indicate a considerable degree of anxiety over the spatial relations between communities, ironic for a regime with an avowed conviction in the natural tendency of different races to maintain strict community boundaries. Requirements for the availability of a *"hinterland"* for radial expansion and the multiplicity of buffer strips and the largesse with which their dimensions were drawn pushed the township even further from the urban core. Whereas an economy of land and a functional approach to space guided the exclusion of urban Africans from the cities, the use of land which was to remain *undeveloped* in order to separate populations groups was not economically rational.

The selection of sites was limited firstly by the identification of areas to be occupied by Natives yet falling under the jurisdiction of a local authority, and secondly by the proximity of those areas

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[80] Presumably the adequacy of a given distance from the white town would be judged by the time it would take the police to respond in the case of riots, and the respective safety of the white areas in the case of an insurrection.

to industrial sites and their distance from declared white areas or (white) areas of possible future commercial, industrial or residential expansion. Addressing the Congress of the Institute of Administrators of Non-European Affairs in 1956, Hendrick Verwoerd stated that *"the location should be so situated that the expanding European town does not encircle it in future"*. (Pelzer, 1966: 132). Site selection was further limited by the requisite that any new housing scheme preferably adjoin an already existing township, with enough land for future expansion away from the white area (Guide, 1951: 5). Planning guidelines drew attention to the relevant legislation *"[...] to insure effective segregation of races i.e. effective buffer strips, zoning, etc. [...]"* (Guide 1).[81] In fact, the selection of sites was racially contingent. Calderwood noted, for example, that in choosing a site, *"it is necessary to ascertain that the zoning of the area is suitable for non-European residential purposes [...]"* (1951: 1). The proximity of the township to industry, already a dominant concern within regional planning literature, was a significant factor for the racial hierarchy of the labour market and therefore the selection of township sites. An industrial buffer would separate the town from the black township, through which a road and rail access would link the two residential areas. Use of national or main roads by township inhabitants would thus be discouraged.[82]

Inside the township

The division of the urban population into artificial communities (and the deconstruction of spontaneous social formations) was the first step in the resolution of the urban crisis. For the Department of Native Affairs, the number of urban Africans *needed* within a given area, and not the number of Africans *present*, was the determining factor for the number of houses to be built. It was thus possible to limit the size and number of townships to the absolute minimum of labour requirements. The resolution to the housing shortage therefore involved the foreseen expulsion of a large part of the more recently urbanised African population. The reduced urban numbers were further divided into smaller communities, for which purpose the neighbourhood unit was ideally suited as the foundation for the spatial design of the township.[83]

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[81] There seems to have been little actual debate around the racial interpretation of zoning, despite the democratic intentions behind international planning initiatives. For a (then) contemporary condemnation of race zoning as professionally sanctioned practice, see Kuper et al., *Durban: A Study in Racial Ecology* (London,1958): 21; Mumford, Lewis, *The Urban Prospect*, (London, 1968): 56.

[82] Finding a site which would conform with the above criteria generally proved to be a difficult matter. Of this, Verwoerd stated that *"[i]t is not easy to find [the right place] when other developments have already reached a reasonably advanced stage, [...] when several cities or towns are located in the immediate vicinity of each other [...] when cities are extremely extensive and the various residential and industrial parts are far from each other"* (Pelzer, 1966: 132).

[83] The spatial model of the apartheid township was indirectly related to the Garden City, but was certainly not the same. The Garden City was not, Japha points out, a *"geographically isolated township in the form of a dormitory suburb, surrounded by arterial roads or a green space/buffer strip, in which low-rise low-*

The racialisation of neighbourhood unit principles was very gradual, and to a large extent was effected before the multiple directives on zoning, siting, and other aspects of the plan were issued from various state departments in the 1950s. Norman Hanson, among the first advocates for neighbourhood planning in South Africa, warned against the misuse of neighbourhood principles, although this did not necessarily include racial segregation, as Japha argues (1986: 9, 22). Even the most radical of the practitioners of modern housing in South Africa argued for residential autonomy for the African community, where the *"development of real community life and of a civic consciousness"* could act as a *"weapon against the effects of segregation"* (Jonas in Connell, 1938: 41). Kurt Jonas argued that

> [t]he abnormal social position of the Bantu in South Africa makes it necessary to give what would normally be a residential suburb, its own administrative and police centre, its goods station and shopping centre, its communal centre with educational and recreational facilities, its sportsgrounds and meeting places (op cit: 40).

Within this professional context, the neighbourhood unit entered the fray of the housing programme of the 1950s as a matter of fact.

The internal configuration of the township was, like the selection of its site, both supportive of the racialised order of the city and functionally-based. The unit was also capable of effecting an economy of land, increasing efficiency in land use and thereby allowing for a smaller site. Connell (1947: 34) draws attention to the fact that modern planning principles achieved a great economy in the use of land and in this sense, were ideally suited for township planning. The cul-de-sac, used in the Garden City and retained in the neighbourhood unit, reduced the ratio of road area to house plot area to the absolute minimum, as well as reducing the size of streets. It followed that the minimisation of street space would reduce not only the amount of land for development but also the costs of services, thereby doubling the economic benefits of such a plan. The commercial convenience of a regularity of plot size that a rectangular or curvilinear grid would provide would be unnecessary for a township where no substantial commercial activity was envisioned.

The theoretical assumption that communities built as neighbourhood units would enjoy self-sufficiency, thereby mitigating their reliance on the urban core, was reflected in the physical autonomy of the unit. This autonomy was maintained by its *"wide and conspicuous boundaries"*

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density housing and local community facilities are located along a characteristically irregular pattern of internal roads" - an idea by which, according to Japha, Howard would have been appalled (Japha, 1986: 20 n.41).

viz. *"[...] arterial streets, sufficiently wide to facilitate its by-passing, instead of penetration, by through traffic"* (Perry, 1939: 56). While Perry emphasised the multiple benefits of these boundaries to community life, including street safety and inconvenience to foreign vehicles, whose by-passing of the neighbourhood was discouraged, the implications for security in the South African context are clear. The integration of different forms of division within the space of the township and the use of the township as a mechanism of surveillance extended the presence of the state to the sphere of daily routine. The space within the township and between townships was thus regulated and observed.

The neighbourhood unit and the school

Clarence Perry's concept of neighbourhood planning is distinguished from previous planning models by its reliance on the notion of a community as advantageous to the well-being of citizens and, indirectly, their governance (see Appendix D). According to Perry, five principles were to determine the unit:

1) the population size of the unit should be that of a single primary school
2) the unit should be surrounded by arterial streets, so as not to be by-passed by through traffic
3) open park and recreation spaces must be provided
4) institutional sites should be grouped together at the core of the unit; shopping areas should be planned at the circumference so as to be utilised by multiple neighbourhoods
5) the internal street system should be so designed as to discourage its use by through traffic and facilitate circulation (Perry, 1939: 51).

Two overriding concerns may be isolated within neighbourhood unit principles as significant for the construction of townships as *neighbourhoods*. The first is the notion of community and its definition by the location of the school - the key to the consolidation of certain expected patterns of behaviour - at the centre of the unit. The second concern which is directly relevant to township formation is with *mobility* within the unit and outside it. The school determined the size of the community. A primary school for 2,000 to 3,000 people would thus constitute the fundamental unit of two to three thousand people, while the secondary school would bring together several units to form the wider community of the township, consisting of anywhere between 6,000 and 10,000 individuals (see Appendix E). The neighbourhood unit provided a *manageable* population size for the township, at about two to three thousand families. In the allocation of superintendents, the school was taken as a guidepost: one senior superintendent for every 10,000 houses. These would in turn be divided into four (ethnic) wards of 2,500 houses, with a superintendent presiding over each. The wards were perceived as *neighbourhoods*, electing a member each to the Advisory Board.

Ethnic zoning

The most significant diversion of community planning from modernist principles came in the form of ethnic zoning (see Appendix G). Introduced as policy by the Department of Native Affairs in 1952, ethnic zoning immediately came under attack from municipalities and liberal organisations. Municipalities were generally concerned with the expenses involved in duplicating services (Evans, 1986: 182), and as such, misunderstood the Department's intentions, which did not go as far as creating divisions of the same degree between ethnic groups as those between racial groups. For liberals, ethnic zoning was perceived as a threat to the stability of the community. The Johannesburg Riots Commission concluded, for example, that *"[t]here can to our mind be no doubt that the implementation of the policy of ethnic grouping was one of the causes which led to and facilitated the rioting,"* (Survey 1957-1958: 121) to which the Chief Information Officer of the DNA replied,*"[t]here were riots before [ethnic grouping] became the rule; some had ethnic origins - but this was not necessarily so. Ethnic grouping leads to better administration, control, and educational facilities"* (ibid). In terms of its operationalisation of *Separate Development*, ethnic grouping allowed the DNA to link the urban areas with the bantustans. Qualitatively, the linguistic divisions mandated by ethnic zones as vital to the policy of *Separate Development* were to create an awareness of difference amongst the various ethnic groups of the community, thereby confirming the "tribal" nature of the African as reconstructed within apartheid discourse. (This dimension of ethnic grouping will be discussed further in Chapter Five.)

Ethnic *zoning* as opposed to ethnic *grouping*, was a technical practice which, in South African planning vernacular, suggested a functionality to the enforced divisions between population groups. In practice, ethnic zoning and ethnic grouping were one and the same thing. The terminological distinction nevertheless points to the rationalisation of ethnic division as a professionally sanctioned practice. Ethnic zoning was indirectly related to the incentives for functional zoning - including the stabilisation of land values and the preservation of health (*see Chapter Two*). Ethnic zones were integrated into the spatial model as a form of linguistic division. This posed no apparent problem for planners since it was argued that the primary school, as the central structural component of the unit, required either a linguistically homogenous population or a pre-determined medium of instruction. Both the institutionalisation of ethnicity and the production of consent through the community's involvement in school administration could be achieved through ethnic zoning. Verwoerd said as much himself, in a speech to the Institute of Administrators of Non-European Affairs (IANEA): *"Ethnic grouping in the urban locations prepares the way for participation by the Bantu in location control [through] the formation of school committees [...] "* (Pelzer, 1966: 98).

Ethnic and linguistic divisions were justified by the zoning procedures already in force with respect to racial zoning. The fact that the neighbourhood unit was constituted by the school made the ethno-linguistic differentiation of township inhabitants and housing allocation all the more justifiable. Linguistically homogenous Bantu Education - the pillar of apartheid - could be placed at the core of the apartheid neighbourhood. The argument was made that mother-tongue education at the primary school level, as introduced by the Bantu Education Act, would necessitate zoning along ethnic lines, if children were not to walk 'considerable' distances to attend school (Pirie, 1984; Minutes of JCC, 27 July, 1954). Deborah Posel writes that

> the practice of ethnic grouping in urban townships [...] was morally justified by the 'fact' that administrators could count up more people of the same ethnic group living concentrated in the same neighbourhoods than not, thus 'proving' that people of the same ethnic groups had 'natural' dispositions to congregate together irrespective of the machinations of apartheid administrators (Posel, 1996: 22).

Panopticism and the township

The centralisation of administrative buildings at the entrance/exit to the township surrendered inhabitants and visitors to the official gaze. The trend towards centralisation of power within the state in the postwar era was represented in the centralisation of administrative buildings in the town plan. The centralisation of administrative buildings encouraged inhabitants to move toward the centre of the township, while pedestrian mobility was facilitated by the small size of these autonomous communities. In its autonomy, the township constituted *"an architecture that is no longer built simply to be seen [...] or to observe the external space [...] but to permit an internal, articulated and detailed control [...] an architecture that would operate to transform individuals"* (Foucault,1979: 172).

For the African township, clustering administrative buildings together at the edge of the township had always been the cheapest alternative, and the easiest way to keep a check on those entering and exiting the area (Mathewson, 1957: 30) despite the fact that in planning theory, the civic centre was to be placed at the core of the unit. That neighbourhood planning centralised administration was justification enough to continue the trend in South Africa, where the civic centre was generally composed of regulatory or revenue-generating agencies: administrative buildings which housed the advisory board and the superintendents' offices, the police station,the beer hall and brewery, and municipal shops. Township space was made transparent through this centralisation, which brought everyone and everything to the attention of the Superintendent.

The beer hall and the brewery - the basic sources of revenue - were subject to an elaborate scheme of surveillance. J.E. Mathewson, Benoni's Director of Non-European Affairs and keen supporter of *Separate Development* wrote on Daveyton township,

> [f]or the satisfactory working of a beer hall, the most important consideration is the efficient serving of beer in such a manner that the customers are speedily served through a foolproof system under complete surveillance and control (Mathewson, 1957: 83).

He went on to describe this system as consisting of a channeling process, facilitated by physical barriers, automatic cash machines and the issuing of tickets. *"Controlled entrances"* and passage through *"disposal points"*, Mathewson argued, would help to achieve *"greatest efficiency"* (op cit: 83). Special treatment was reserved for *"advisory board members and visiting dignitaries"* (op cit: 84) in the form of a private lounge. To top it all, Mathewson suggested, without effort at subtlety, that *"[t]he supervisor can maintain better control if his office is elevated to give him a view of the hall, disposal points, garden and off-sales department"* (op cit: 84). Mathewson undoubtedly intended for the panoptical nightmare to be played out in Daveyton's beer hall. The emphasis on surveillance and control, in his own words, leaves little to the imagination.

The same stringency that was recommended for beer consumption was applied to commercial regulations. Mathewson recommended the construction of a pipeline from the brewery directly to the beer issuing machines with meters on both sides *"providing a triple check on manufacture, sales, and cash takings"* (Mathewson, 1957: 84). Nor were entrepreunerial undertakings by Africans encouraged. The superiority of municipal shops in terms of subsiding the Native Revenue Account, complying with health requirements and providing goods irrespective of profit (op cit: 82) was, according to Mathewson, simply a consideration to be kept in mind in allocating trading licenses - other things being equal. The attitude that not too many shops be established was based on two generalisations which betray the calibre of their author. That Africans would prefer to trade in white areas was supported by the "fact" that Africans had *"no business acumen"* anyway (op cit: 35).

The house on its site

Reliance on the house as an integral part of Nationalist housing policy magnifies the position of urban Africans as units of labour. The nuclear family, as the site for the reproduction of labour-power (Comaroff, 1992), represented the political configuration of a modernising society. As the only form of accommodation available to African families, reliance on the house as the basic unit of construction was expected (by the state) to speed up township formation by lowering costs, facilitating influx control, and sharpening the divide between the urban and the migrant

communities. The assumptions with which planners and administrators entered into the process of implementing a township concept based on the use of single-storey dwellings to the exclusion of all other alternatives is worthy of a closer look, particularly in light of academic references to the *horizontal* townships as facilitative of police surveillance (Mills, 1989; Pinnock, 1989).

The house as home

The conceptualisation of the house as a space for the stablisation of the working class was introduced by Victorian industrialists and reformists (Swenarton, 1983). The household was increasingly perceived as nurturing acceptable sexual behaviour, and thereby counteracting the disintegration of the cities. This conceptualisation was articulated in different ways throughout the institutionalisation of town planning discourse, yet it was never effectively challenged or replaced. The supposition that housing provision would stabilise the working class seems to have followed from perceptions of the relationship between the house and urban citizenship. These perceptions were nurtured in the discursive cultivation of an urban crisis (*see Chapter Two*) and its victim, the urban degenerate. Just as the construction of the African as a differentiated economic, and demographic entity was intrinsic to the elaboration of a township concept, so the modernist emphasis on the house as the cog in the urban mechanism may be explained in terms of the hierarchisation of industrial/South African society.[84]

John and Jean Comaroff (1992) have argued that the reproduction of the social order through the regulation of familial relations has been the foundation of colonial hegemony as laid down by the *"civilising gaze"* of the non-conformist missions in eighteenth century Africa.[85] Africa was perceived as a *"desert"* landscape upon which a spatio-temporal grid of *"domesticity"* was to be imposed. The Comaroffs write that *"the rise of domesticity as an ideological construct in Europe - however much contested - involved the convergence of two conceptual planes, one socioeconomic and the other architectural"* (Comaroff 1992: 272). Domesticity was promoted as a Christian virtue, consolidating the house as a *"household"* and characterising the sexual division of labour as a fundamentally spatial transformation of social forms. To quote the Comaroffs again,*"[t]he evangelists believed that "houses" literally constructed their inhabitants -*

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[84] In the case of Algiers, Lamprakos writes that *"[i]n its de facto imposition of Western models of family life, the housing cells of the Plan Obus would have transformed the Muslim population into willing participants in the bourgeois city - that is, good consumers. The plan thus continued efforts by colonial administrators to undermine the social and economic basis of traditional communal loyalties"* (Lamprakos, 1992: 199-200).

[85] Steve Robbins adapts this concept to the *"bureaucratic gaze"* in reference to land-use planning policy in Zimbabwe in the mid-1980s, a characterisation which seems very appropriate to the argument being made here.

that their functionally specific spaces laid out the geometry of cleanliness and godliness" (1992: 281).

Moral discipline was spatially imposed through the house as "home". From the point at which the family was identified as the basis for the reproduction of the social system and of labour power, the spatial localisation of the nuclear family became a state project. The house - as a familial/conjugal space - imposed a moral order upon which the self-government of the township was dependent. The theological grouping amongst Nationalist ranks compounded established British paternalism with a series of moral juxtapositions: illicit liquor brewing and other criminal malpractices were identified as incongruous with the "peace-loving" nature of the "Bantu"; disruptions in family life and a loosening of morals characterised African urbanisation and the abandonment of tribal ways of living; finally, the participation of the Bantu in the construction of their houses and communities would give them a sense of pride and a stake in the continued survival of the spatial system, without attaching them to their environment as homeownership was believed to do. The house localised the family as the only desireable social entity, thereby ensuring the reproduction not only of a labour supply but also of a particular urban order. It was in this manner, in the words of the Deputy Minister of Bantu Administration, that the *"birth machine"* in the urban areas was to supply all future labour needs (Evans, 1986: 168).

The economic context in which moral perceptions were solidified and became a part of the discursively constituted realm of action, rationalised a conditional consumption of alcohol and conjungal conviviality. From the inception of the "Durban system" (which sanctioned a municipal monopoly over beer production and sales, the profits of which would go towards housing construction) in the late 1900s, informal production and trade in alcoholic beverages, and particularly beer, was illegalised (Swanson, 1976). Illicit beer brewing was condemned as the work of morally corrupt and, for that matter, recently urbanised, women. In practical terms, illicit beer brewing challenged the legitimacy of the "Durban system" and denied the municipality a basic source of income.

The interdependence of beer consumption and housing provision was more than a form of blackmail for the urban population. The system criminalised not only the *practices* of urban African women, most likely living as squatters or subtenants, but also the *women* themselves. Illicit beer brewing, far from being regarded as the only means of subsistence, was presented as incompatible with a moral lifestyle, and therefore destructive of the urban social order. African women, it was implied, were to be subjected to the discipline of the household (where patriarchal control would be paramount) if they were to be controlled (Eales, 1989; Posel, 1994). The fear

that the African middle-class would be stifled out of existence should housing standards be relaxed (Evans, 1997: 123; Parnell, 1991: 72) was ironically magnified by the delimitation of choices available to this class. Group Areas removals, in conjunction with the housing shortage which already plagued urban areas and the 1952 amendment to the Natives Act severely curtailing existing conditions for urban residence, meant that all housing to be provided by the state on an economic basis would have to be taken up by this "middle class". What secured the "stabilisation" of the middle class was the condition of marital status as a determinant for the allocation of houses, and therefore, of urban residence outside single-sex hostels.

The house as experiment

Lewis Mumford described the house as a *"biological institution [...] a shelter devoted primarily to the functions of reproduction, nutrition, and recreation [...]"* (Bauer, 1934: 141). This modernist perspective on the house as constituted by the functions conducted within it gave meaning to the house only so far as it could empower its inhabitants. The single-cell house, from which Mumford's functional articulation took its cue, had been introduced by the Bauhaus in the early 1920s, and was to become more important during the reassessment of mass housing policies in the period of postwar reconstruction. The basic principles of the Modern Movement were incorporated within this single dwelling. The *cell*, composed of mass produced parts, would allow for an individualised aesthetic composition at low cost.[86] The house as a *cell* was not necessarily single-storey. In fact, the cellular house was more often thought of as an apartment. Support for cellular modern housing in South Africa was expressed in the 1940s, and this included the desire to see a widespread use of apartment blocks (Kantorowich, 1948: 94-102; Niebuhr and Pistorius, 1947: 27-32).

Yet despite the fact that modernists had sung the praises of multi-storey buildings for decades, the modern African township consists almost exclusively of single-storey accommodation (with the exception of single-sex hostels). Its failure to materialise as part of the township concept was one more diversion from modernist principles. Why did the house dominate township plans? A significant portion of the professional discourse on African housing was concerned with the question of costs and how they would be met by residents, local authorities, and the state. As Chapter Three has demonstrated, the determination to render the urban African an economic entity directed the research of the committee on housing costs. Reductions in the cost of the house were required if housing were to be made affordable to even those capable of paying an

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[86]Mass production would spur an economy of scale in the building industry, with subsequent benefits for the supply and demand of materials and an economy in public expenditure.

economic rent. Local authorities relied on three options, all of which excluded the possibility of multi-storey accommodation. The first option was to provide a site for every family approved to remain in the city, whereupon the residents could build their own house. The second option involved the partial construction of a house which could be completed by the owner at a later stage. The third option was the provision of a completed house. The first and second options clearly prohibited the construction of apartment blocks since the tenants were expected to participate in the construction process. The third option - the provision of completed houses - was made feasible through the use of a single blueprint of the Norm house. The greatest advantage of houses was that the free-standing designs, namely the NE 51/6 and the NE 51/9 (see Appendix H), allowed for a piecemeal approach which would produce speedier results in consideration of the varying work ryhthms of the teams (Evans, 1997: 103). In a similar vein, not only was the house cheaper to produce than a high-rise building, its design could also be used in self-build schemes, a possibility not open to more complex structures. Furthermore, the knowledge required to build multi-storey buildings would require greater reliance on and further training of skilled or semi-skilled labour, as well as expert supervision and more costly blueprints, all of which would significantly raise costs. Conveniently, it was found that Africans disliked multi-storey accomodation anyway (Calderwood, SAAR 1951: 123).

Conclusion

The spatial model for the township provides the clearest diagram of the intentions behind urban policy in the early days of apartheid. Economy was a basic determinant of township space - site selection, the internal street pattern, and the costs of transport, all impacted upon the relationship between the township and the urban core. While that relationship was one of mutual dependency, the financial stringency which guided the delineation of the plan and bore over the process of housing provision acted as a disciplinary force, regulating the process by which space was to be allocated and exploited and the subjects which were to occupy that space.

The economic management of the population was but one aspect of the spatial design. The second aspect, and perhaps the most widely recognised, was the physical violence of the spatial model. The buffer strips stipulated by the Department of Native Affairs and the paucity of entrances and exits to the township reveal it to have been a place of incarceration. In the township concept itself, questions of security were approached in various ways. The most 'popular' approach to township space is one which prioritises the concern with security issues. Indeed, security and the policing of the townships *was* a priority for the state. The rationalisation of the police presence was effected as a localisation of modern practices, as a statement by J.E. Mathewson suggests, to the effect that *"local conditions must be taken into account, such as the*

presence of a South African Police Station and various amenities conducive to a full and happy life." (Mathewson,1957:102). A less well-established aspect of township space, the domination of the house in the townscape provides a key to a wider examination of the relationship between gender and space which could only be briefly touched upon in this chapter. Apartheid urban policy espoused a particular morality which was not very different from the paternalism of the segregationist state. Indeed, the conceptualisation of the *house as home* both in the policy of apartheid and in the mind of urban industry, culminated in the recognition of the house as a generator of urban labour.

Chapter 5: Township administration

Introduction

Throughout this study, it has been argued that the township concept was invented as an apparatus of control over the urban masses. If the objective of the spatial design, discussed in Chapter Four, was to induce a general visibility over township inhabitants, to what extent was this also an administrative model? Chapter Five will question the administrative basis for urban governance and the extent to which the vision behind township administration was aligned with the spatial model of the modern African township of the 1950s. The chapter will address these issues, looking at the state's efforts to immobilise the urban African by defining the limits of his/her place in the urban sphere through a spatial confinement within a separate civic realm. In brief, Chapter Five deals with the attempts of the apartheid state to contrive a material and social context within which to locate the urban African, and the strategies by which the African was to be *fixed* within that physical, social and economic context.

The first part of Chapter Five discusses the "mapping out" of African labour-power. Among the urban strategies devised to expand the state's domain, *regionalism* in town planning and the *site-and-service scheme* are perhaps the most illustrative of the centralisation of the *authority* to exercise power with a simultaneous diffusion of the *penetration* of power. Despite their disparate histories (the former emerging from within a universal modernist context, the latter occuring as a local response to the squatter phenomenon), the regional plan and the site-and-service scheme were two scales of the same strategy for the containment of urban resistance and the redistribution of labour. The site-and-service scheme and the regional planning of townships involved the state directly in the regulation of African mobility and the selection of the urban workforce.

The second part of Chapter Five deals with the social and political place of the African within the wider urban system and within the South African racial and industrial hierarchy. This final section looks at some of the institutional apparatuses for the imposition of a social/psychological "place" for the African and the ways in which discipline was to be enforced by the institution of governing bodies such as Advisory Boards, *tribal* elders, school committees, and white supervision, to regulate township life and act as a source of information and an "inside voice" for the state.

Regionalism and the urban labour pool

While the system of labour bureaux and the implementation of harsher influx control measures, introduced after 1948 to regulate the flow of the African population to and from the cities, were directly responsible for the redistribution of urban labour, this project in influx control was only part of a wider and more universal experiment in regional urban development. In turn, the state's adherence to regionalism was only part of the larger modernist trend in South Africa, and as such, was contextually relevant to the housing programme of the early 1950s. The DNA relied on the site-and-service scheme as a means of re-organising the city, selecting the appropriate candidates for urban residence, and disciplining the population into conforming with the criteria for urban residence. Similarly, the siting of townships on a regional basis emphasized the conditional mobility of Africans, one which depended upon the needs of white communities. Identifying and allocating a conditional place in the city, and at the same time rendering mobile the urban African, was critical to the exploitation of his/her labour power.

Regional planning in modernism

The significance of regional planning is revealed in the siting of townships on a regional basis to facilitate the implementation of influx control, reconciling the labour requirements of industry with the policy of separate development. Regionalism in urban planning was an opportune response to the incongruity of a high demand for skilled and semi-skilled labour and a drastic shortage of housing in the urban centres of South Africa. According to the state's reconstruction programme, as industry decentralised, it would take with it the surplus numbers from the urban core, thereby diffusing the housing crisis. Regionalism in planning would therefore facilitate urban administration by operating a redistribution of the urban labour pool in accordance with regional needs.

As Chapter Four has shown, state intervention in the land market and housing was vociferously promoted by the technocratic fraternity, including planners, architects, and administrators. For the practitioners of the Modern Movement, both knowledge and control were encapsulated in the state apparatus. Large-scale state involvement in the appropriation of land and land-use legislation had been initiated through town planning discourse. The Athens Charter stated, for instance:

> To ensure the city the means of a harmonious development, the Administration must take responsibility for the management of the land surrounding the city before the suburbs spring up. [What is needed is] political power ... clear sighted, with earnest conviction, and determined to achieve those improved living conditions that have been worked out and set down on paper; an enlightened

> population that will understand, desire, and demand what teh specialists have envisaged for it ... (Giradoux, 1943: 7).

The Social and Economic Planning Council (SEPC), the first modernist institution in South Africa to formally link state intervention with regional planning, initiated a new discourse on the possibilities of a spatially-based economic reconstruction. The SEPC operated between 1943 and 1945 and espoused a Keynesian approach to reconstruction where public works projects were advocated as *"an instrument to put unemployed labour and other resources to work"* (Wilkinson, 1992: 254). Indeed, the concern with a redistribution of labour seems to have permeated the reports of the council. Amongst its recommended committees was one which would *"undertake an early investigation of the social and economic condition of the Native people and into the better integration of the Native Reserves and urban Natives into the whole productive system"* (op cit: 256).[87]

The SEPC *Fifth Report on Regional and Town Planning* (1944) (Wilkinson, 1989: 249) is the most significant in terms of setting the parameters for large-scale state intervention in *regional* planning. The report argued that

> [p]hysical planning will be essential if in future the State is to promote the orderly development of the nation's resources and to strive towards a sound distribution of the population. This will have to occur on a regional basis. Purely local planning will be too narrow (UG 34-1944, pp. 3-4, paras. 20, 21; Wilkinson, 1992: 267).

According to the *Fifth Report*, the systematic intervention of the state was necessary to override the consequences of unregulated capitalist development (op cit: 262). This intervention was not to be directive one. The state was seen as having a regulative role in the market.[88] The report expressed the conviction that such regulation, through the control of the use of land, would allow the state to redistribute the population on a regional and a national basis. Thus, the council sought to come to terms with the urban crisis by replacing influx control with a redistribution of the population through a regionalisation of industry. This new approach was envisioned to broaden the focus of government by nationalising local problems. In the words of the council, *"A*

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[87] *Report no.1: Re-employment, Reconstruction and the Council's Status* UG 9 - 1943, p.5 para. 44

[88] As Chapter Four has shown, state intervention in the land market and housing was vociferously promoted by the technocratic fraternity, including planners, architects, and administrators. For the practitioners of the Modern Movement, both knowledge and control were encapsulated in the state apparatus. Large-scale state involvement in the appropriation of land and land-use legislation had been initiated through town planning discourse.The Athens Charter stated: *"To ensure the city the means of a harmonious development, the Administration must take responsibility for the management of the land surrounding the city before the suburbs spring up. [What is needed is] political power ... clear sighted, with earnest conviction, and determined to achieve those improved living conditions that have been worked out and set down on paper; an enlightened population that will understand, desire, and demand what teh specialists have envisaged for it ..."* (Giradoux, 1943: 7).

programme of regional planning and development is called for [...] It is only by such a wider approach that the distribution of economic activity and population can be soundly influenced" (Wilkinson, 1989: 264; Report: 3).

The regionalist approach of modern planning practice was seized upon by administrators as the answer to the siting of townships for the most efficient distribution of urban labour and, like the site and service scheme, was integral to the success of influx control. Regional planning would allow municipalities to share the costs of administration and service installation in the townships, balancing out costs between wealthier and poorer municipalities (IANEA Record 1953: 85). If the region could be treated as a single industrial unit (ibid), labour could be channelled to any of the surrounding white areas and could therefore also be accommodated in the townships closest to the workplace, thus minimising transport costs, with the resultant boost in the ability to pay an economic rent. Moreover, the assurance of multiple sources of employment within the same area (Africans having been prohibited from working in one area and residing in another), and therefore continued residence in the urban area, would encourage Africans to invest in home-ownership schemes (op cit: 86).

The centralisation of the state homogenised the implementation of policy.[89] Indicative of this is Verwoerd's statement that, *"[n]ow that the obligation of the building up of a community and the educational means to achieve it are placed in one and the same hands, a new era in the sphere of Native affairs is beginning. The Department is becoming a department of Bantu development"* (Pelzer: 88). Direct control over the process of policy formulation enabled the DNA to displace local authorities and override their objections on specific aspects of Nationalist policy for the urban areas (IANEA 1956: 108).[90] Moreover, support from professional planners for a centralisation of state agencies significantly involved the scientific community in the strategy of the Nationalist Party.

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[89]The localisation of decision-making within the Department of Native Affairs facilitated the implementation of disputed legislation. The DNA presided over all areas of urban policy on Africans, while at the same time undergoing a comprehensive re-organisation. The transformation of the DNA was undertaken with the advent of the National Party, and with the arrival of H.F. Verwoerd as minister. The intention behind the transformation was to achieve greater autonomy from local government, making the department a critical tool for the implementation of the government's directives.Discretionary powers held in positions of authority were expanded.The Urban Areas Section of the DNA fell under the Secretary of Native Affairs, unlike other subdepartments which fell under the Under-Secretaries (Evans, 1986: 325). Some NHPC members were also replaced in 1948, while the Directorate of Housing was brought under the control of the Minister of Health. After Verwoerd ascended to the position of Minister of Native Affairs in 1950, the DNA moved from a consultative position to actually examining schemes designed by the NHPC. Virtually complete control was assumed by 1957, when the Bantu Housing Board was established with members appointed by the minister himself.

[90]The cooperation of local authorities was necessary to the implementation of such policy, however, and the degree to which it was contested by certain local authorities is relatively limited.

The transformation in the institutional environment of the 1940s and 1950s helped to bring about the centralisation of the state (Evans, 1986: 172; 1997: 281, 284; Posel, 1991). Centralisation of government agencies within the Department of Native Affairs concetrated policy formulation concerning Africans in the hands of a few individuals, whose initiatives, it was hoped, were less likely to be questioned if they were to be carried through by their subordinates in the Department rather than local authorities.

The site-and-service scheme

The site-and-service scheme was the first point of selection for the residents of the future townships. Through the provision of a site to each African family the government managed to achieve several aims at once. In conjunction with the removal of *"black spots"* and the registration of passes, it enabled the authorities to identify every single African. The undertaking of a detailed census of the African population, drew the urban African closer into the fold of the security apparatus. The number of families, the number of members in each family, and the rent-paying capacity were recorded and filed with the DNA. W.J.P Carr, manager of the Johannesburg Non-European Affairs Department, linked the site and service scheme to the township project:

> no one really knew how many African families were living in the squatter camps to be cleared, and by allocating a site to a family, it could be established exactly how many families had to be provided with permanent housing when a particular site and service area was fully occupied (Carr, 1990: 50).

That the scheme divided the population into units of nuclear families was not coincidental. The nuclear family as the basic unit for the reproduction of labour was also the easiest to reduce relatively unobtrusively - while removals usually divided relatives and friends and fragmented the social fabric of settled communities, a division of the nuclear family was only attempted if members were to be expelled from urban areas altogether, thereby minimising possibilities for resistance. The allocation of sites to married couples would allow authorities to record the presence of women.

The site-and-service scheme made it possible to order the urban labour pool into "cells" of nuclear families, selecting those Africans who had already been trained for semi-skilled labour and who constituted the most obvious and readily available source of labour for manufacturing and public service positions (within the townships). The schemes relied on the Bloemfontein system, a long-established method of self-build which kept housing costs to a minimum for municipalities (see Chapter Two). The idea behind the scheme, however, was emblematic of the

township concept as a whole. Site-and-service schemes did not require an immediate expenditure on the part of the authorities, while minimising expenditure on housing. The idea was that Africans could build their own homes with materials provided by the municipality.

By accepting the presence of an urban African population, even temporarily, the Nationalists recognised the importance of manufacturing and the primacy of securing a stabilised labour force. They also recognised the inevitable urban/rural wage differential in the African labour market as inherent to the retention of migrant labour for the mining industry (Evans,1986:162-163). Reluctantly admitting that reliance on African labour would be inevitable, government proceeded to narrow the urban labour pool to the absolute minimum.

The site-and-service scheme, introduced by the Johannesburg City Council as a response to the squatter camps, was taken as a starting point for influx control. The scheme, later facilitated by the Prevention of Illegal Squatting Act (1951), was an ideal means of evacuating the squatter camps, clearing areas for white occupation, providing for the labour needs of white farmers, and decreasing the size of the urban African population, and constituted the backbone of DNA housing policy. It enabled the DNA to take inventory of the African urban population. In a speech to the IANEA, Verwoerd explained the motives behind the scheme:

> The underlying idea of a site-and-service scheme is merely to create first the essential conditions for orderly habitation, to collect all who are illegally or wrongfully housed in a legally recognised and controlled area, and then gradually to work in ever increasing measure for the improvement of housing conditions on such legal and sufficiently large residential plots (Pelzer, 1966: 133).

The conditions for *"orderly habitation"* were laid out in the 1952 Amendment to the Urban Areas Act. The Act limited urban residence to those Africans who had been born in the urban area, those who had been in the continuous service of a single employer for at least ten years, and those who had been in the service of more than one employer for at least fifteen years.

Defining the social and political place of the African

The extension of indirect rule to the urban areas, with the application of customary law and the ethnicisation of urban African subjects, was modelled on segregationist administration of the Reserves. Yet the formulation of urban policy occurred within a very different intellectual context. Indirect control over the townships was an attempt to prevent *thoughts* of resistance. Discipline, as it was envisioned, was to make resistance inconceivable. Control over township life was attempted through representative structures, three of which dominated the administrative model: the *advisory boards* which differentiated the urban from the rural African by constituting a Westernised form of representation, the *"tribal" system* which was to serve as a link with the

Reserves and a reminder of the "true" nature of the African, and *the school*, which was to prepare Africans for the role in the urban racial and industrial hierarchy.[91]

The attempt to revive the Advisory Board

Although attempts to introduce indirect rule in the townships date back to the Urban Areas Act (1923), the advisory board system of the early apartheid era was intended to be qualitatively different, as was the role of the township 'manager'. Advisory boards for African townships were established under the Urban Areas Act of 1923.[92] Due to the voluntary nature of the Act (with local authorities being able to choose whether to implement it or not), the boards did not become widespread until the Urban Areas Consolidation Act (1945) made it mandatory for local authorities to establish them.

The boards provided a channel for the mediation of disputes between township residents and the authorities (IANEA 1958: 46). As such, they were to diffuse opposition to the continuous refusal to allow direct African representation on city councils. They were to constitute the main source of information on political activity and social and economic grievances in the townships. Bloch and Wilkinson note that *"the boards generally became the vehicles for the narrow grievances and aspirations of a disconnected petty bourgeoisie"* (18). The duties of advisory boards remained basically the same throughout the inter-war period, and into the 1950s. With the Consolidation Act, the duties and powers of the boards were spelled out more clearly, with particular emphasis being placed on their *advisory* capacity (IANEA, 1957: 44). Yet by the late 1940s, it was generally conceded by government and administrators alike, that the boards had been an unmitigated failure (IANEA Record; Survey, 1955: 57).

Amongst the "malpractices" of advisory boards, a municipal administrator listed the practice of making pre-election promises, the prevalence of whites in posts which could be filled by Africans, the use of delaying tactics to stall amendments and other regulations, the influence of Shebeen Queens on elections, the allocation of trading licenses as political favours, and the allocation of houses to recent arrivals in the area (IANEA, 1958: 63). These practices were obviously problematic for the authorities. Pre-election promises raised expectations which could be explosive if they were not fulfilled, as was the case more often than not. Secondly, the prevalence of whites in post which could be filled by Africans was not only expensive, but also

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[91]These representative structures reflect the tension within apartheid policy on the permanence of the African population, hence the multiplicity of identities and roles propagated by the state.

92Act 25 of 1945 Sec. 21 (1) established a *Native Advisory Board* for every African township, comprised of three Natives and a Chairman (!) (Mathewson, 1957: 38)

deconstructive for the policy of autonomy (in financial and symbolic terms) which was advocated for the townships. Thirdly, the use of delaying tactics to stall legislation was a blatant challenge to the authority of the DNA and to the approach to Board members as allies of government. Fourthly, the influence of Shebeen Queens was a moral affront to the "upstanding" Christian community and the responsibility of whites to impose a certain moral order upon black women. It was also perceived as detrimental to the patriarchy of traditional African society which was so vigourously defended by administrators. In addition, illicit beer brewing and sales, and the sale of European liquor (authorised only in the 1960s) seriously curtailed the available resources for the township services which were to be generated from a percentage of the profits from the sale of Kaffir Beer. Shebeen Queens thus challenged both the moral order which decried what was perceived as a redundant and corrupting female presence in the cities, and the beer monopoly around which that morality was founded. Fifthly, the allocation of trading licenses as political favours undermined municipal control over African commerce. And finally, the allocation of housing to recent arrivals in the area was an interference with influx control and the role of housing allocation in the spatial re-organisation of the city.

The reason behind the authorities' discontent probably had more to do with the unpopularity of the boards with township residents, their reactions ranging from indifference to outright hostility, as well as the politicisation of board members. By the early 1950s, the advisory board system was considered untenable. The Location Advisory Board Congress had become a forum for the discussion of legislation rather than a vehicle for the transmission and justification of government policy to township residents. The Congress issued a resolution in 1955 urging the repeal of the Bantu Education Act and the placement of African education under Provincial Councils or the Education Department (Natal Daily News, 11 Jan. 1956; Survey 1955-56: 58). The Congress also demanded more employment opportunities, including that of employment of Africans in transport services; the provision of alternative accommodation in case of removals; the employment of more Africans in the Department of Native Affairs; preference to Africans in the allocation of trading licenses; a halt to the Sophiatown, Newclare and Martindale removals; and finally, an end to the industrial colour bar (Survey 1953-54: 53). The Congress disputed its lack of authority to discuss political matters (Survey 1953-1954: 52-53), even while administrators drew attention to the limited statutory powers of advisory boards.[93] Yet the boards were not

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93The DNA refused to send representatives to explain departmental procedures (Survey 1955-56: 58). Yet despite the stalemate the Boards were only replaced in 1972. One of the reasons for the failure of the DNA to act more resolutely was the hope that the question of effective control of urban Africans would be resolved through the spatial makeup of the modern township. Another reason was the gradual and often impromptu approach to the implementation of apartheid (Posel, 1991; 1996). Yet another reason for the

replaced until the early 1970s. Local authorities continued to believe that they could be sufficiently reformed to present no substantial resistance. Mathewson provides an insight into the intended modus operandi of the boards. *"An advisory board can be made a very effective instrument by organising it in a manner which imbues the members with the knowledge that their deliberations receive the full consideration of the authorities concerned,"* Mathewson wrote (1956: 106).

Verwoerd made clear the ultimate jurisdiction of municipal authorities over African townships (IANEA Record 1958: 70), enforced on a daily basis by the township manager or superintendent, who acted as representative of the city council (IANEA Record 1959: 67). The presence of the superintendent was nothing new to urban Africans. He personified the regime.[94] Even worse, that presence was pressed onto the subconscious of every township inhabitant. As Bloom wrote in 1956, *"life in the location is stifled by the dense web of bureaucracy. A man in the location goes about with the superintendent's signature all over his person"* (Bloom, 1956: 12). This effect was honed by the often close relationship between Native Advisory Board members and the superintendent. By keeping in touch with individual members and gaining their confidence, Mathewson argued, superintendents could *"obtain reports of any unusual happening in the township"* (Mathewson 1956: 101). This Mathewson touted as amongst the many benefits of centralised administration. The psychological hold over township inhabitants was entrenched in a web of regulations. Official permission was to be obtained before anyone could enter a township or hostel (Sec. 9 (b) of Consolidation Act (1957)).[95] The most disturbing, however, were the pass raids which were enforced with increasing vigour after 1958, following the extension of police powers to search (Government Notice No. 804, 13 June 1958; Survey 1957-58: 47). Of the raids, Motsitsi wrote in 1963: *"It is a habit. A habit forced...by the machinations of the law - the early morning beer raids, pass raids, permit raids. Raids, raids, raids. And yet a habit nurtured by the very way of life typical in all other locations"* (Pirie 1989: 318).

The Native Revenue Account

Among the instruments for township administration introduced by the Urban Areas Act was the Native Revenue Account. Like the Advisory Boards, the Account failed to render the township

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failure of the DNA to act more resolutely in bringing about self-government in the townships as a form of indirect control, is found in the reaction to the Bantu Authorities Act.

94 Bloom described, in 1956, how the superintendent *"has to administer the hateful and obnoxious laws. And the location people hold him responsible for them, because he is the man they see in the office. He is the law and the goverment."* Bloom, H. 1956. Transvaal Episode. Collins: London. pp. 13. qtd. in Pirie, 1989: 289).

95 And while visitors to the township were required to hold temporary permits, the office issuing these held public service hours and closed at 1pm on a Saturday (Survey 1958-59: 184).

financially autonomous, since the revenue was insufficient to provide for basic services and had to be complemented by funds from general rates (see Chapter Two). The Account was nevertheless retained for the apartheid townships and was complemented by funds generated through the Native Services Levy imposed on industry. The notion that the self-sufficiency of the township was to be sustained through largely internal sources of revenue prevailed in the DNA's model. The financial dependence of residents upon their own revenue-generating capacity tied them into a necessary consent for the mechanisms of domination. Amongst these was the municipal monopoly over the production and sale of beer, upon which the Native Revenue Account relied, and the profits of which were intended for the provision of services. In the constitution of a Native Revenue Account, the Natives Act (1923) purported to introduce some accountability into the administration of location finances, thereby protecting Africans from the avarice of municipal bureaucrats. Measures prohibiting the sale of liquor and permitting the establishment of a *"kaffir beer"* monopoly by the municipality were, in similar spirit, a combination of more rigourous methods of financial management and benevolent intervention in the "anti-social" practices of the urban African. The relationship between services and consumption of "kaffir beer", and the extent to which revenue for the NRA was to be generated by residents themselves.

Mathewson noted that a *"flourishing beer account"* placed towns in the *"fortunate position"* of being able to apply for services which could consequently be charged to the account (1956: 102). This Catch 22 situation - the choice between indirect support for the system, premised on the Native Beer Account, or a complete absence of basic services - circumscribed the means of resistance. It was thus thought that residents could be 'disciplined' into fuelling the apparatus for their control. A similar tactic was used with the implementation of Bantu Education and the provision of mass schooling, discussed below.

Urban Bantu Authorities: the experiment in tribalisation

As part of its policy of *"autogenous development"*, the Nationalist government tabled the Urban Authorities Bill in 1952.[96] The Bill was designed to introduce an *"indigenous government of elders"* (Bantu, July 1955: 26) in the township, who would be subordinate to the "tribal" aristocracy of the Bantustans. In the spirit of the times, the return to traditional structures of authority was legitimated as a benevolent gesture, one which would not only befit a modern township, but also bring about a degree of self-determination. As Eiselen informed the IANEA,

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96The Bill was not pushed through, its status remaining ambiguous for several years (to the chagrin of municipal administrators) until it was finally scrapped.

"in providing housing for our urban Natives, it stands to reason that it is easier to handle them if they do some of that handling, some of that administration, themselves [...]" (IANEA 1954: 30). The DNA and municipal administrators did not shy away from expressing their confidence in the disciplinary powers of traditional government. The widespread consensus that *"the system of seniority played an important function in regulating social behaviour"* (ibid), made the restitution of such a system desirable.

The imposition of "tribal" structures as facilitated by the division of the townships into ethnic zones. The Urban Bantu Authorities? relied heavily on ethnic grouping, which in turn relied upon the linguistic division of the African population. Ethnic grouping was a spatial strategy for township administration which relied on the school as a determinant of the population size of the township (as is discussed in chapter 4). Verwoerd declared that *"ethnic grouping has become the basis of successful school building and school planning. In the same way [...] it will have to form the basis for any attempt towards the development of Urban Bantu Authorities"* (Pelzer, 1966: 135). While it was to be planned directly into the new townships, ethnic grouping would be achieved through the allocation of housing in the older townships. Anticipating a reaction from administrators, the DNA Circular which introduced the policy as fiat detailed the benefits of ethnically based representation, all of which were expected to facilitate the link between the urban areas and the Bantustans and impose internal discipline. Mother-tongue education, tribal discipline and the application of customary law would, it was believed, promote a "healthy nationalism". The DNA also pointed to the greater pool of human resources available through ethnic grouping, from appointment of a superintendent with fluency in at least one African language to the staffing of clerical and policing positions within an area with members of the same group (Bantu, May 1956: 39). The hope that self-policing would take root in the townships was expressed repeatedly by urban administrators. Verwoerd declared that,

> the desire of the Native communities to discipline themselves finds expression in the formation of vigilance committees which have arisen spontaneously but which have sometimes unfortunately developed in a wrong way. They must be used for building up a sound communal order (Pelzer, 1966: 84).[97]

The DNA was particularly emphatic that police stations in the townships eventually be staffed by Africans (Survey 1951-52: 78). The powers of arrest of the "municipal Bantu police" were, of course, limited to their role as assistants to the superintendent (IANEA Record 1956: 43).

97In spite of this, the request of the Joint Advisory Boards that a civilian guard be established to assist the police in the townships was denied (by government notice).

an important element of the Bantu Authorities Bill were the Bantu Courts. Mathewson argued that *"only a body of men of one and the same race can mete out absolute justice to defaulter of their kith and kin"* (Bantu July 1955: 25).

Bantu Education in the neighbourhood unit

The centrality of the school in the spatial model for the township sheds light on the significance of modern planning for the implementability of apartheid. Bantu Education was the outcome of the urban crisis and an integral part of the township concept as a policy response to that crisis. The consideration that youth was particularly susceptible to destabilising and insurrectionist forces had been prevalent in government discourse for decades. The school provided a key to the problem of juvenile delinquency and the perceived subsequent disintegration of the moral and social fabric of African communities. Hyslop aptly assesses the importance of schooling:

> Just as the building of vast townships in the 1950s was not only a defeat of dwellers in inner-city slums in their battles to hold on to their locations, but also an attempt to contain the pressures of mass squatter movements and attendant discontents, so Bantu Education was not only about the crushing of ideological diversity in the schools, but also part of an attempt to contain the potentially explosive needs of urban youth and the educational aspirations of parents (Hyslop, 1992: 395).

While Bantu Education has been studied as an ideological apparatus, its role as a significant element of the township concept is much less clear. As a project for the production of a disciplined community, the township would not have been complete without the school.[98] Deference to authority was of the utmost importance if artificially-established "tribal" structures were to survive. The discipline of the classroom was expected to instill young Africans with a respect for authority which could go a long way in manufacturing consent for the policy of *"separate development"*. The recognition that an educated and urbanised African population already existed and was mobilising around the Communist Party and the ANC Youth League, and the need to co-opt this group through structures which would be perceived as legitimate, was urgent. The school was to generate consent from the mass of township residents who had not been co-opted by either "tribal" structures or advisory boards, and absorb the youth into the system. This triad of institutions for the generation of consent through legitimated structures of traditional authority, representative politics and mass socialisation characterised the essence of township administration as it was articulated in the early 1950s.

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98 Hyslop records how the introduction of mass education for the urban African population was received with enthusiasm by the majority of township residents. According to inspectors' estimates for 1952, approximately two-thirds of children of school-going age were not in school at the time (Hyslop, 1992: 396). In 1955 alone (the first year of the Bantu Education Act), and between 1955 and 1965, the number of school-going children doubled from one to two million (op cit: 400). If these figures are to be believed, the school did assume as central position in township life.

Moreover, an overlapping of membership in the various governmental bodies of the township could consolidate the authority puppet figures. The appointment of advisory board members on school committees and school boards would allow the Board to penetrate the ethnically divided community and thereby serve as a *"barometer for local Native public opinion"* (IANEA Record 1958: 46). A proportion of members on school board committees were to be elected by parents, while school boards, composed of representatives from several schools, would be appointed by "traditional authorities". The DNA thus expected to create the conditions for a reliable and conservative base in the education system, one which would replace the generation of activist mission-school educated teachers and de-radicalise the teaching profession.

Regarding the school as a governing mechanism allowed the state to co-opt teachers, parents, and "elders", thereby providing a "material substratum" (Hyslop, 1992). Resistance to the primary school was dissipated by the multiple advantages which it offered township residents. According to a former teacher, *"it appeared that the changes meant you could pursue any education you desired _ It is only those who knew education, and what it must consist of, who knew that it was a destruction coming in"* (Hyslop, 1992: 406). As Z.K. Matthews noted, the discipline of the school was desired by the parents themselves (Matthews, 1983), who were anxious for their children's safety while they were at work.

The school functioned as the point of initiation into the industrial arena. As a reservoir of labour for the urban areas, an autonomous township would contain the means of preparing Africans for the type of work for which they were needed. The shortage of semi-skilled labour and the differentiation between rural and urban labour in wages and skill required that the non-reducible urban labour pool provide for more skilled jobs. *"The machine operator,"* Hyslop writes, *"emerges as a new kind of labourer - the semi-skilled worker who requires skills of literacy and numeracy and an internalised work discipline"* (Hyslop, 1992: 401). Primary school education was all that was needed, and the spatial model of the township was ideally suited to that. While local authorities were to finance the whole cost of African lower primary schools, upper primary and secondary schools were to be established only in the cities, and only where half the cost would be covered by the African community (Hyslop, 1992). Yet even for primary schools, the costs were still covered by the communities themselves, since four-fifths of taxes would go towards education, with R13m being provided by the state.

> [...] social life [in the urban areas] is vitiated by loose morals, the incidence of illegitimacy is very high, parental control is ineffective [...] what is lacking is the steadying influence of a happy home life, strong family units and a healthy community spirit, factors which played such an important part in the tribal life of the Bantu (Survey 1956-57: 52).

The institution of a tribal African identity which could be denigrated through contact with Europeans served as an open stage for the introduction of ethnicised structures of authority. This identity clearly marked off the boundaries between what was acceptable for the European and what was acceptable for the African, suggesting that European living conditions were superfluous to African needs.

"Tribal" rule was intended as a link between the townships and the Reserves, nourishing and solidifying the *tribal* identity of the African. Nevertheless, in the consideration that an urban middle stratum of educated workers would be required for semi-skilled positions for some time to come, the urban African was to be maintained as transitional and differentiated from the rural African. In accordance with neighbourhood principles, the primary school was the focal point of the township, ironically constituting both a space of social transformation and a conservative institutional setting for the entrenchment of a semi-skilled urban African *elite.*

Chapter six: Concluding remarks

The discussion of the township concept was introduced with three questions: why housing was so important to the exercise of control over the African population, why scientific forms of housing were necessary, and how these forms functioned as part of a larger strategy to govern a racial state. Each chapter, while attempting to deal with one of these questions, has raised several others. Any attempt to summarise the arguments or resolve these questions in the space of the next few pages would necessarily fail, due partly to the eternal constraints of space and time and partly to the recognition that the debate over the nature of power is and must remain continuous. In conclusion, therefore, I will simply summarise my arguments as cues for further theoretical research.

Housing was identified as a possible field for state intervention in the period following the First World War, with the realisation that state control over public and private space was necessary for the regeneration of a socially and physically healthy society. In this period, contradictions in urban policy reveal housing strategy to have been a fragmented and ill-defined approach to the urban crisis. The major obstacle to the adoption of a concerted and comprehensive urban areas policy for the African population was the state's vacillation over the issue of residential rights for Africans. Torn between a shortage of semi-skilled labour and a sense of moral duty to 'civilise' the urban African, and a perceived sense of obligation to preserve the whiteness of the cities and the industrial colour bar, policy-makers failed to reach a compromise on African residential rights before the Second World War.

The dramatic shift in patterns of settlement in the 1930s and 1940s alerted the authorities to a situation which was increasingly threatening to the regime of racial segregation. The disintegration of the Reserve economy, the boom in manufacturing in major urban centres, and the total inadequacy of urban housing for Africans (in terms of both the possible housing alternatives which were legally and illegally available and the number of houses built by the local authority), tilted the balance in favour of the African working class. While the need for labour during and immediately after the war effort led to a relaxation of the pass laws, and as South Africa's participation in the war on the side of the Allies may arguably have generated an increasing awareness of the need to democratise the system of racial hegemony, the growth of the African presence, particularly in the Witwatersrand, was generally viewed with alarm. The authorities were finally spawned to action with the squatter movements in the Rand, which demonstrated a hitherto untapped source of resistance.

The squatter movements brought the issue of housing provision to a head. Introduced within the discourse of health and a concern with the productivity of the workforce, housing provision in the interwar years had not been aimed at the regulation of movement, nor had it been aimed at the regulation of African behaviour. The housing strategy within the Urban Areas Act had focused, rather, on the differentiation of the African population to provide for the needs of the various industrial sectors. This differentiation left the issue of actual *housing provision* unresolved. Making the African an economic entity was perceived in terms of increased production and not necessarily in terms of decreased costs and amenities provided by the state. Urban resistance in the 1940s, particularly as it was spatially manifested, rendered the provision of housing a question of security and control over the movements and activities of the African population. The post-Victorian concern with health and industrial efficiency thus merged with more blatant forms of control through enclosed spaces and observation.

Having recognised the urgency of resolving the housing shortage of the 1940s, the state and local authorities - to whom responsibility fell for the provision of housing - proceeded to negotiate a solution. Chapter Three has looked at the intellectual context within which that solution was developed. I have argued that the introduction of empirical research in processes of governance constructed a scientific understanding of the urban problem, encompassing urbanisation, resistance, and the spatial constraints which spawned that resistance, to constitute an *urban crisis*. The intellectual construction of an *urban crisis* - in other words, the articulation of a series of urban phenomena as a problem requiring a rational and methodical solution - was a thoroughly modern exercise.

The township concept was launched from a modernist platform. Modernism in architecture and town planning, while participating in the wider modern project of knowledge-accumulation for a re-evaluation of the human condition, introduced three areas for the imposition of power through spatial practices. The first of these was the concept of *minimum standards*. Minimum standards of accommodation were conceived as an integral part of the democratisation of urban space. In South Africa, the National Building and Research Institute produced its own report on minimum standards in 1949. Judged by the Department of Native Affairs to be lavish and inconsiderate of the budgetary constraints of the state with regard to the African population, the standards were reduced significantly in the following years.

The second area of intervention introduced by urban modernist discourse was the rationalisation of space and the standardisation of resource provision. The state's unwillingness to extend its resources to housing the African population had been demonstrated by the deplorable record of

local authorities in providing sub-economic housing and the failure of the state and municipal actors to cover the gap between the cost of the house and the rent that urban Africans were capable of paying (Chapter Two). The Modern Movement's glorification of mass production and the philosophy of efficiency which the Movement espoused (arguably generated by the capitalisation of space in the post-industrial era) were particularly convenient for the intentions of the state. The reduction of the cost of housing for urban Africans was a three-year project which exhausted the possibilities for the exploitation of human and technological resources, to arrive at a successful conclusion by 1954.

The third area for the imposition of power through spatial practices, identified in Chapter Three as having been a significant feature of modernism in architecture and town planning, was the use of spatial models which could transform human behaviour. The manipulation of human actions through spatial practices was, in many ways, the essence of modernism. Technological innovations based on empirical *'discoveries'* broadened the field of the *possible*. While the naive expectations that architecture could liberate the urban subject from the constraints of everyday life were tempered by the more reflective and critical approach of the1940s and 1950s, the belief in the spatial manipulation of the human condition was inherent to modern urban models. The neighbourhood unit, taken up by the South African profession as the most appropriate model for African housing, was amongst these.

The neighbourhood unit was chosen as a basis for the spatial model of the township of the 1950s for several reasons. These become clear in the examination of three different scales of township space in Chapter Four. At the largest scale, the township was a satellite formation, located at a specified distance to the white urban centre and to industry. Physically isolated by strips of vacant land or natural barriers, the township was originally intended as an autonomous community.[100] Two concerns were most evident in the location of the township at the periphery of the urban core: cost and security. While the reduction of costs fell under the particular expertise of the planning profession, the concern over policing of the African population was expressed in the form of regulations, issued by the Department of Native Affairs, on the dimensions of the buffer strips surrounding the township, the location of the police station, etc.

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[100]This vision obviously did not materialise as the commercial and industrial ties to the white city were, in actual fact, strengethened by its continued dependence on the urban core. The *intentions* behind the spatial model, however, have been more of a concern to this discussion and to the examination of the *township concept*, as it was constructed in the 1940s and 1950s.

The second scale of township space identified in Chapter Four is the internal structure of the township. At this scale, the use of neighbourhood planning principles becomes apparent. The unit combined a limitation on the size of the residential area to be occupied with an internal structural division conducive to ethnic grouping. The school - the central structural component of the unit - defined both the size and the status of the community (as one brought together by the educational requirements of modern urban society).

The single-storey family house has been identified as the third scale of township space. The most widely remarked upon aspect of the modern township, the uniformity and repetitiveness of the landscape as a result of the unconditional use of the house as a form of accommodation (with the exception of hostels, which have not been discussed as part of the township concept), was indicative of the force with which the state imposed its presence. In terms of state security, the house localised Africans and facilitated the identification of specific sources of resistance.

The spatial model for the township served, to an extent, as an administrative model. Some of the issues already touched upon in Chapter Four have therefore been re-examined in Chapter Five. This final has chapter looked at the administrative model for the township, as this was developed in piece-meal and relatively random fashion through the early 1950s. In the discussion, the vision behind township administration has been dissected in two parts. The first part deals with strategies by which the African was to be fixed in space. For the state, regionalism in urban planning was an efficient and effective method of reforming the system of labour distribution. Urban administrators argued that the location of townships on a regional basis would diffuse the congestion of the major urban centres and provide for the labour requirements of the periphery. Regionalism was thus grasped as a means of re-locating urban Africans who were not absorbed by the industries of the city, to areas with labour shortages.

Site-and-service schemes, introduced by the Johannesburg City Council in the1940s (see Chapter Two), were taken over by the Nationalist Party as a basis for the resolution of the housing crisis. Through the provision of a site to each African family qualified to remain in the urban areas, the state attempted, after 1948, to expel surplus labour. In so doing, it attempted to fix the space of the urban African population by *'planting'* individual families (seen as units of production and reproduction) within the gaze of the authorities.

The site-and-service scheme allowed the authorities to record the number of Africans present in the urban areas and the numbers which could realistically be provided with housing and which were therefore to remain in legal employment in the city. This physical confinement within the

borders of the urban sphere was to be guarded by a social and psychological confinement. Characteristic of the contestation over urban administration was the retention of the Advisory Board system of old with the intented institution of a new system of *tribal* administration. While the Advisory Board system was judged to be a grossly inefficient institution, the Urban Bantu Authorities were rejected by municipal officials and therefore failed to materialise.

Postscript

Amongst the questions raised in the discussion is the extent to which the spatial imposition of power was inherent in the town planning discourse. The driving force behind suburban models such as the neighbourhood unit was actually the same force that guided the segregationist initiatives of the local state. For administrators, African urbanisation, like the workers movements in post-industrial Europe, was an explosive force which had to be managed. Town planners saw the answer to the problem of control over this sweltering mass of people as lying in the re-organisation of the urban order and the establishment of new sites of control. Yet in the international discourse, architecture and planning were receptive to the needs of a pluralist society. Louis Mumford expressed the egalitarian and integrationist qualities of modernism. In a phrase that was particularly relevant to South Africa, Mumford noted that,

> different races, different nations, different regions, different temperaments and occupations, all have many minor differences in their needs: who would doubt it? But there is also in every age a common ideal of personality which represents the goal of living toward which everyone is more or less set. To the extent that an individual shares this personality, he is in harmony with his fellows and capable of making the fullest use of their common culture (179).

Mumford's integrationist approach to the objectives of planning was shared by Klabber and Bauer, who cautioned against social and economic segregation in the city. For Bauer, *"the broader and more dynamic implication"* of the approach to modern architecture and planning included *"class and race relations in a democracy"* (Dahir, 1947: 42). Over half a century later, it is hoped that this approach will finally take root in the post-apartheid urban landscape.

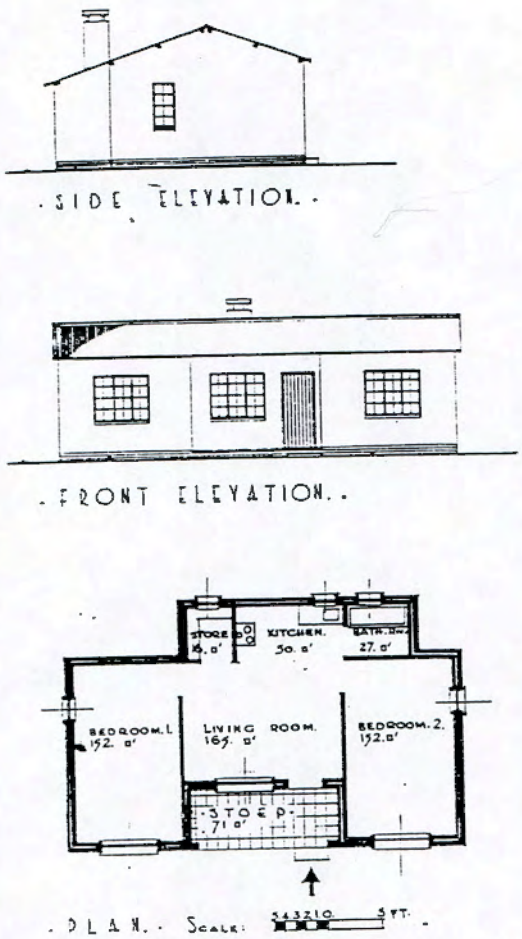


Fig. 5. Type plan built in Orlando Native Housing Scheme, Johannesburg.

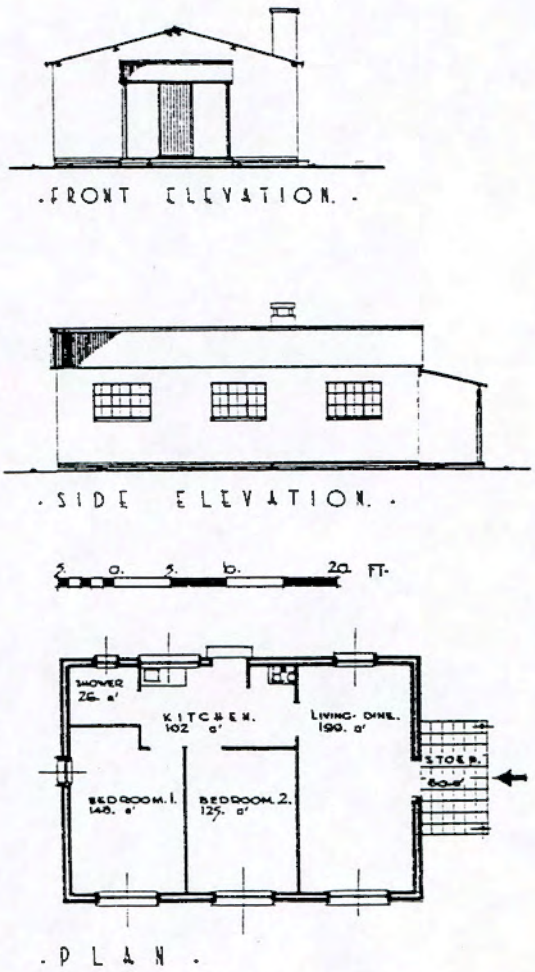


Fig. 6. Type plan built in Orlando Native Housing Scheme, Johannesburg.

Figure 5: One of the house types from Johannesburg's Native housing scheme, shows three large rooms with a covered stoep, but is so arranged that the circulation and functions of sleeping, bathing, living and cooking are very badly planned. The total area of this house is 765.5 *sq. ft.* which, when compared with the standard house plans developed in 1951. is a very wasteful plan.

Figure 6: Another house plan from the Orlando scheme, shows not only the bad planning of having every room opening off the kitchen but also the difficulty of obtaining a satisfactory aesthetic solution to the plan. The area of this unit is 766 *sq. ft.*

Appendix A: The "model" townships of the interwar years. Calderwood, D.M. *Native Housing in South Africa*. Published Phd. Diss. University of the Witwatersrand: Johannesburg, 1953. pp: 18.

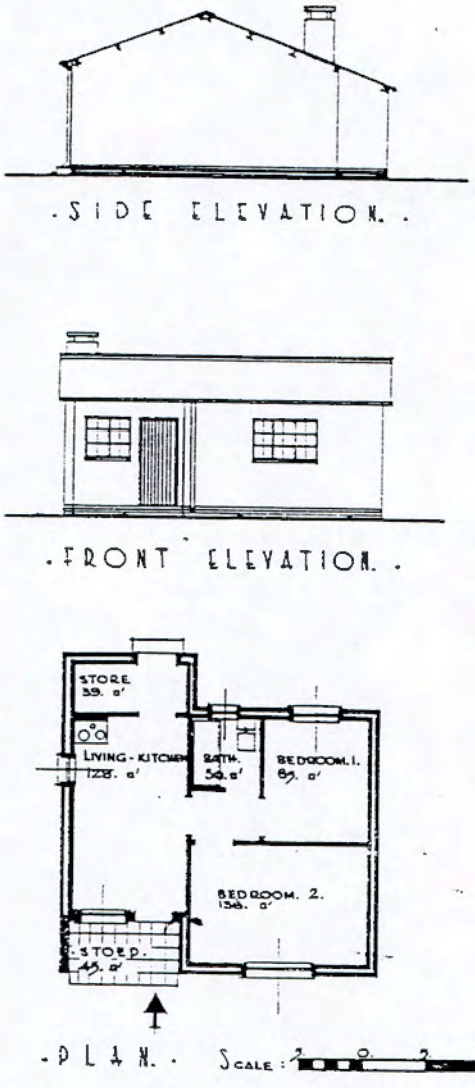


Fig. 7. Type plan built in Atteridgeville, Pretoria.

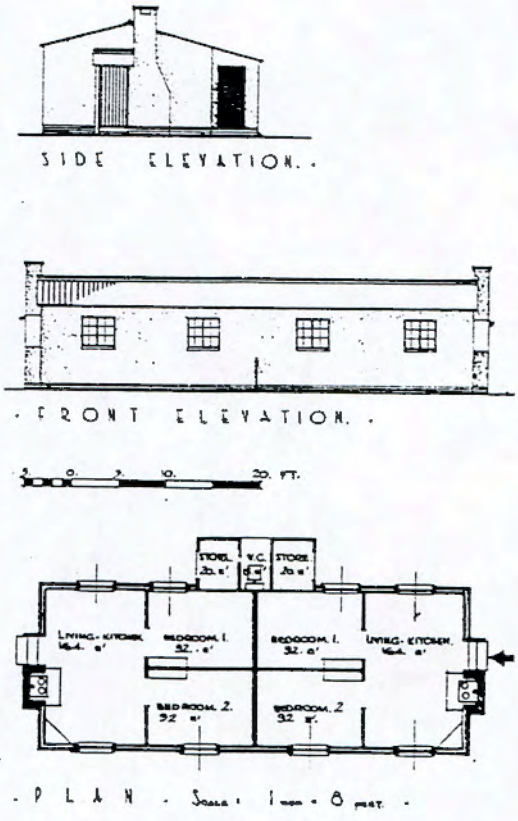


Fig. 8. Type plan built in McNamee Village, Port Elizabeth.

Figure 7 is one of the plan types of Pretoria's housing scheme at Atteridgeville. This is an improved plan in comparison to the first two examples as it provides for separate sleeping and, by the bathroom arrangement, gives the bedrooms a certain amount of seclusion. It is necessary in this plan to ask if the provision of the stoep is worth the space and cost when the cooking and living functions are accommodated in one room. The area of the plan is 580 *sq. ft.*

Figure 8 is a plan type taken from Port Elizabeth's McNamee Village and shows a complete disregard of planning for family living. No real seclusion is offered to sleeping rooms, and once again the living and cooking functions are combined. The common w.c. to two units is not a satisfactory solution. The area of one unit is 442 *sq. ft.* which is economical when space standards are considered but it is doubtful whether full family living is encouraged in such a house. The layout of the house groups is, however, interesting as can be seen from Figure 9 and ought to provide an economical solution to the problem of service costs. The drawback of the layout is the facing of certain houses on to the street which will cause them to become isolated from the group of houses planned about the small closes.

Appendix B: The "model" townships of the interwar years. Calderwood, D.M. *Native Housing in South Africa*. Published Phd. Diss. University of the Witwatersrand: Johannesburg, 1953. pp: 19.

TABLE XIII

The recommended standards of the Minimum Standards of Accommodation Committees: 1949

Number of persons accommodated	Type of dwelling	Room areas in square feet*			
		Main bedroom	Other bedrooms	Dining kitchen	Living room
2 persons	1 Bedroomed unit	125	—	110	100
4 persons	2 Bedroomed unit	125	100	120	100
6 persons	3 Bedroomed unit	125	100	140	110
8 persons	4 Bedroomed unit	125	100	150	120
10 persons	5 Bedroomed unit	125	100	156	124
2 persons (aged couples and childless couples)	1 Bedroomed unit	Total area 180 sq. ft. with screen between bed-sitting area and kitchenette.			

Remarks: Single bedrooms not provided in low-cost housing.

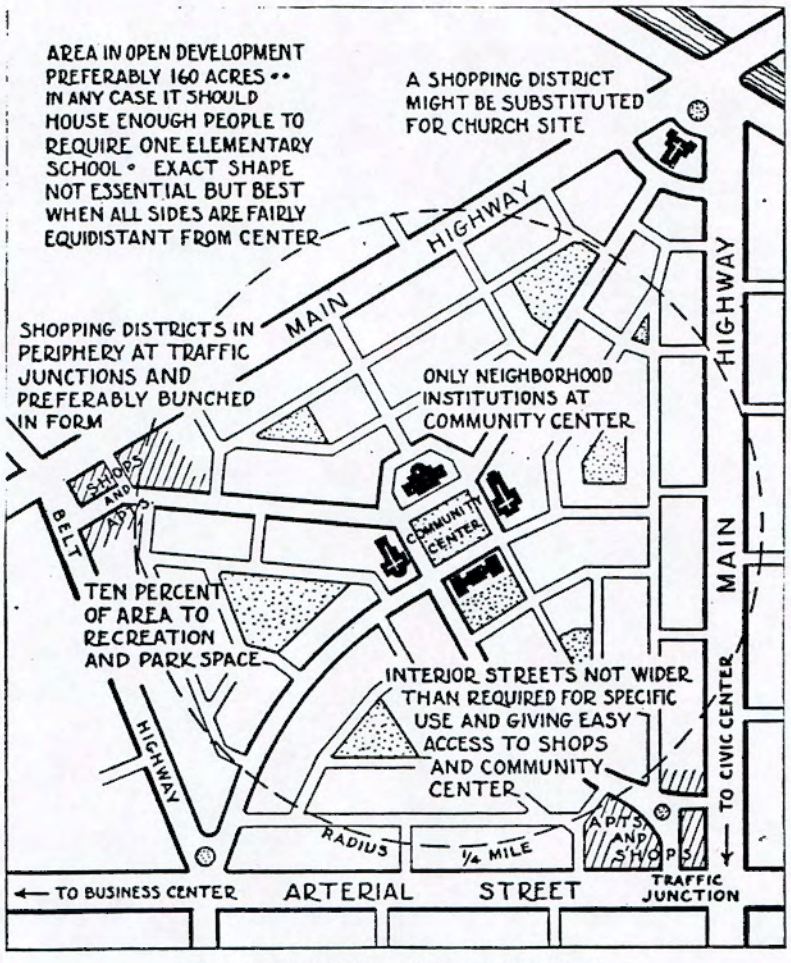
TABLE XIV

Minimum standards of housing accommodation for non-Europeans, 1951, revised by Joint Interdepartmental Committee

Number of persons accommodated	Type of dwelling	Room areas in square feet*			
		Main bedroom	Other bedrooms	Dining kitchen	Living room
2–3 persons	1 Room unit	—	—	70	118
4–5 persons	2 Room unit	118	—	80	115
6–7 persons	3 Room unit	118	94	90	120
8–9 persons	4 Room unit	118	94	100	125
10–11 persons	5 Room unit	118	94	110	130
2 (aged) persons	1 Room unit	—	—	70	110

* An average ceiling height of 8 ft. 6 in. is assumed.

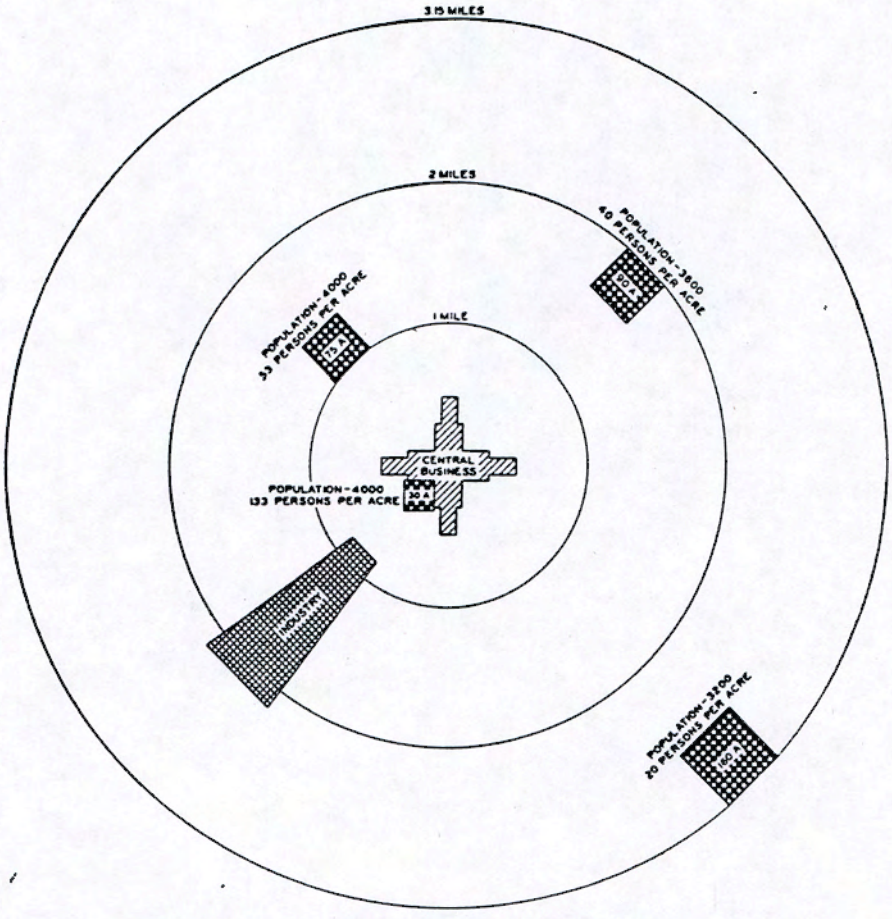
Appendix C: Minimum Standards of Accommodation. Calderwood, D.M. *Native Housing in South Africa*. Published Phd. Diss. University of the Witwatersrand: Johannesburg, 1953. pp: 26.



NEIGHBORHOOD UNIT PRINCIPLES

Reproduced from New York Regional Plan, volume 7

Appendix D: The Neighbourhood Unit. Perry, Clarence A. *Housing for the Machine Age*. Russell Sage: New York, 1939. pp: 75.



NEIGHBORHOOD UNIT SCHEME APPLIED TO
A CITY OF 200,000 POPULATION
SIZE AS AFFECTED BY DENSITY AND LOCATION

SCALE IN FEET

REGIONAL PLAN ASSOCIATION, INC., NEW YORK CITY

Appendix E: The Neighbourhood Unit. Perry, Clarence A. *Housing for the Machine Age*. Russell Sage: New York, 1939. p: 54.

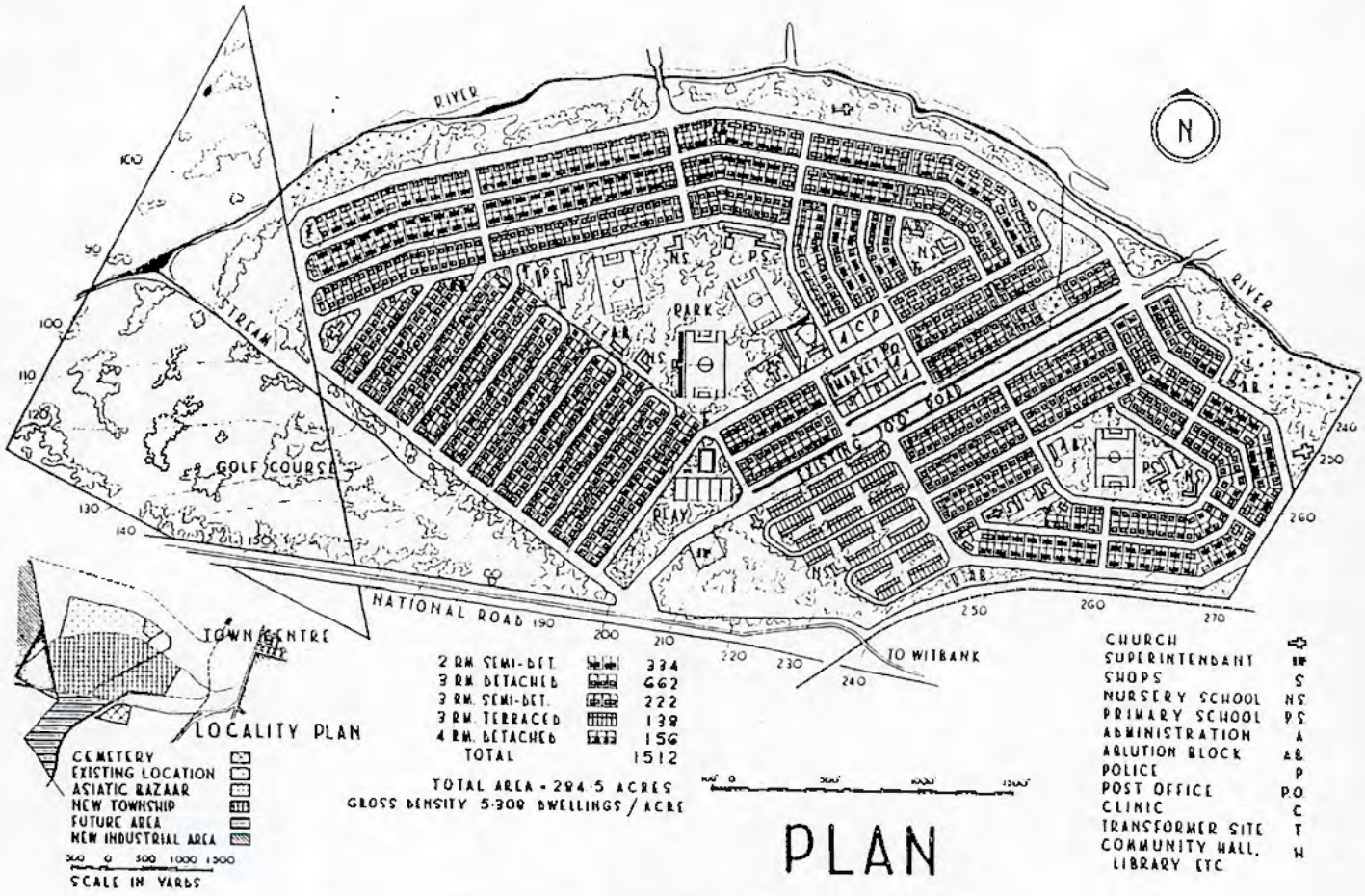
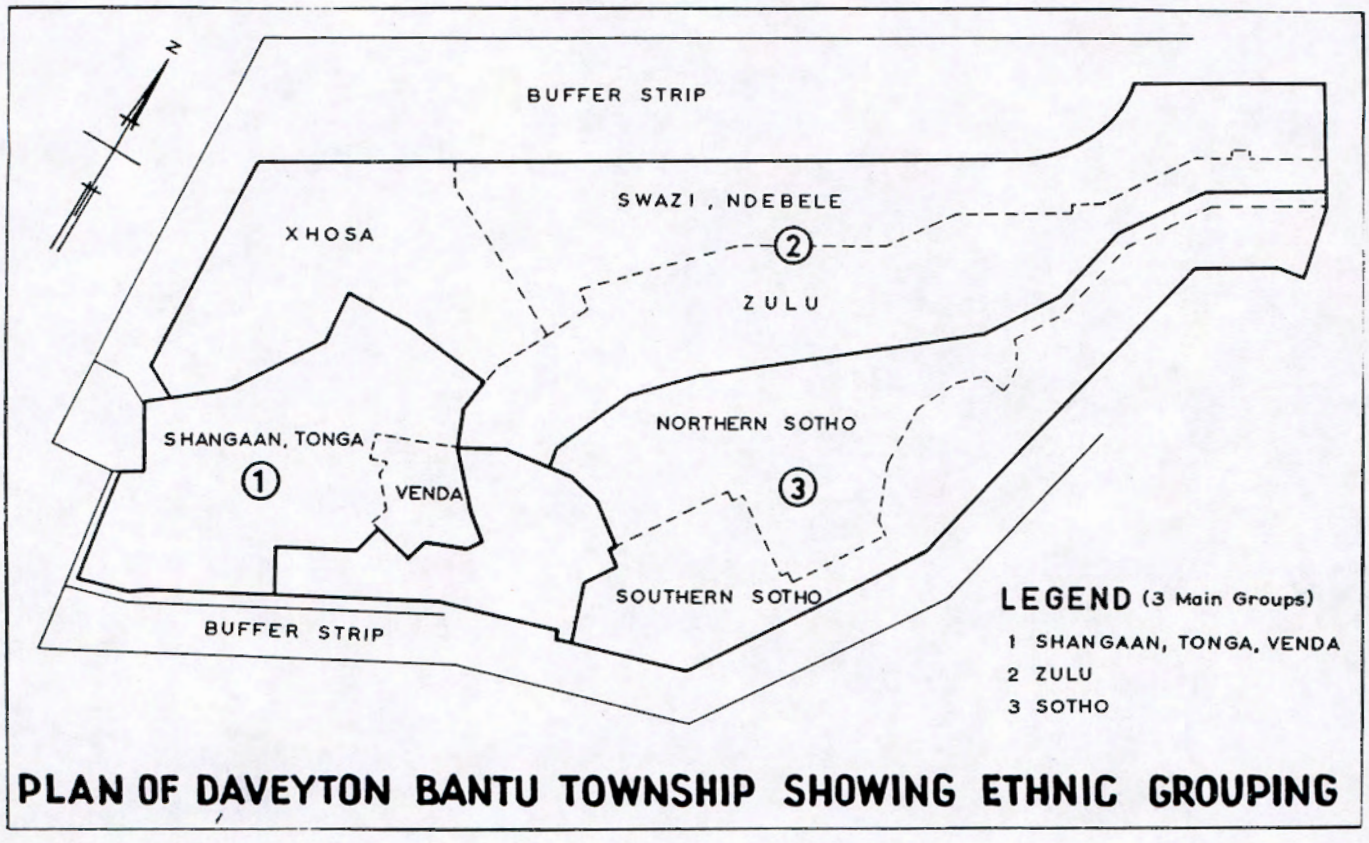
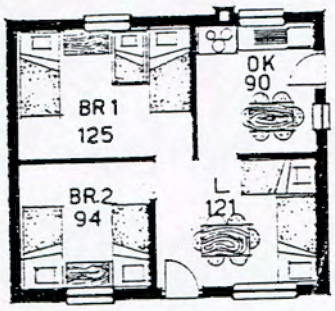


Diagram 3. Final layout of Witbank's new Native township.

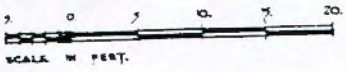
Appendix F: The experiment for the modern township. Calderwood, D.M. *Native Housing in South Africa*. Published Phd. Diss. University of the Witwatersrand: Johannesburg, 1953. p: 123.



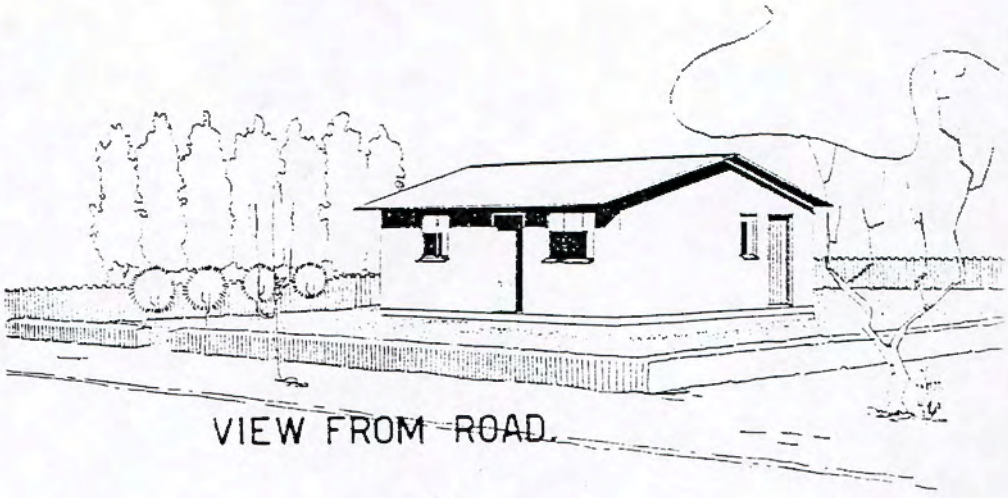
Appendix G: Daveyton: a model for the modern township. Mathewson, J.E. *The Establishment of an Urban Bantu Township*. J.L. van Schaik: Pretoria, 1957. Annex F.



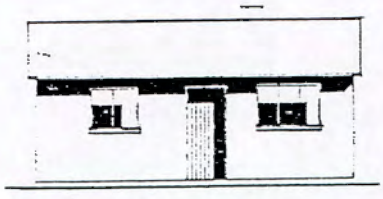
PLAN



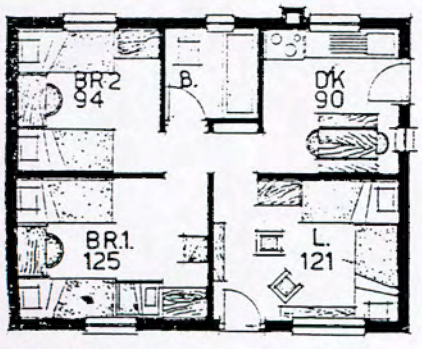
3 ROOMED HOUSE.
NE 51/6.



VIEW FROM ROAD.

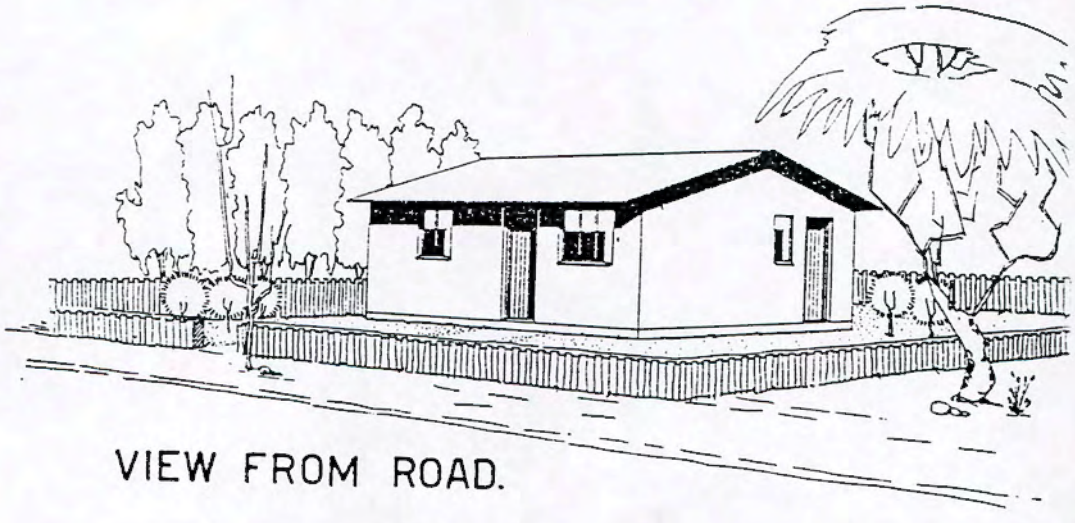


ELEVATION

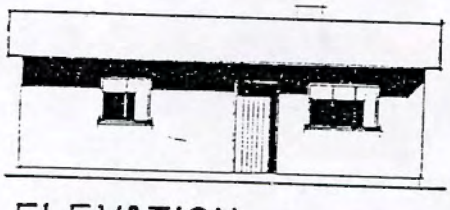


PLAN

3 ROOMED HOUSE.
NE 51/9.

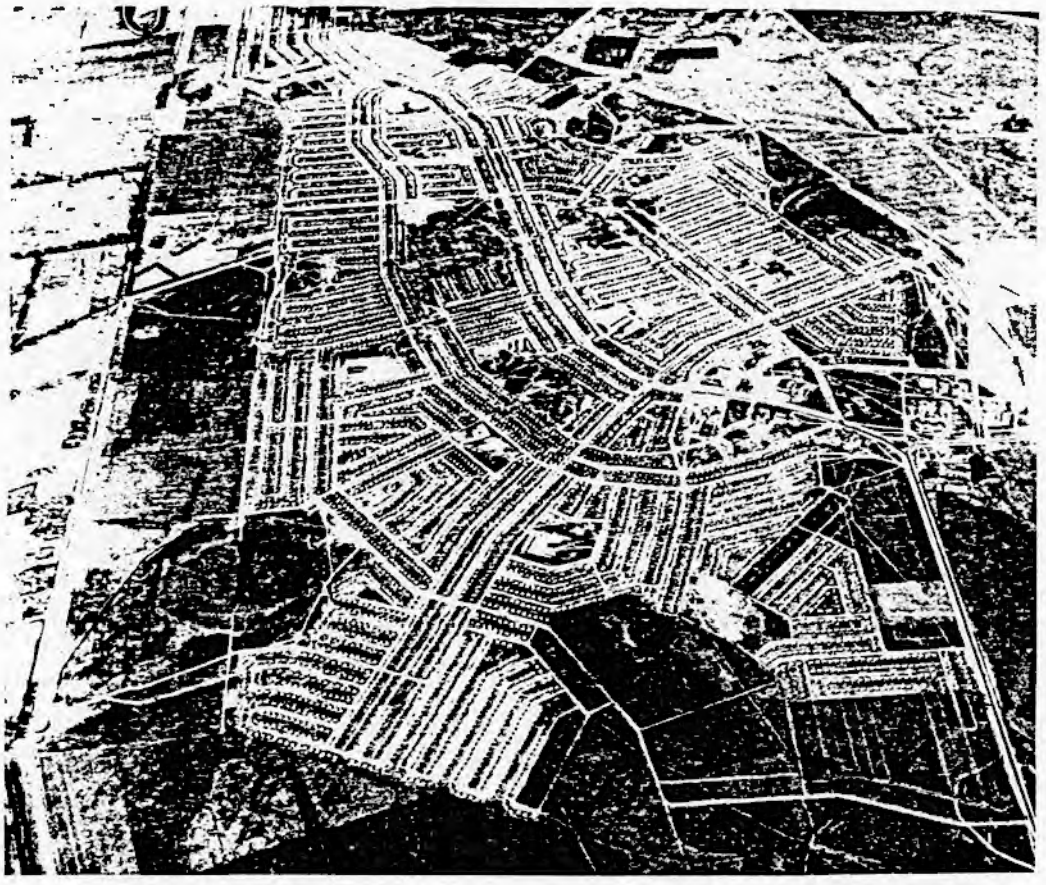


VIEW FROM ROAD.

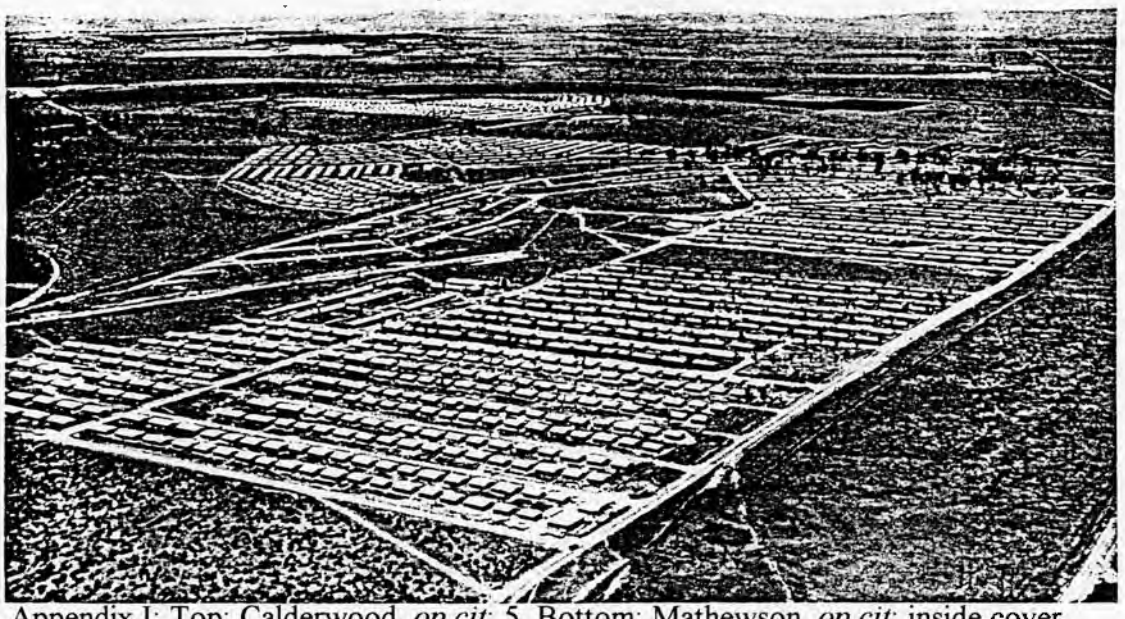


ELEVATION

Appendix H: The house, centred on its site. Calderwood, D.M. *Native Housing in South Africa*. Published Phd. Diss. University of the Witwatersrand: Johannesburg, 1953. pp: 23 (top), 31.



Aerial View of Daveyton taken two years and two months after commencement.



Appendix I: Top: Calderwood, *op cit*: 5. Bottom: Mathewson, *op cit*: inside cover.
Photo. 1. Aerial view of Kwa-Thema new Native township, Springs.

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