Normative Planning and Urban Restructuring in South Africa: The Case of Cape Town

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The paper reviews in the last seven decades of spatial planning in South Africa. It explains how the evolution of settlements over the six decades preceding 1994 has been dominated by two ideologies: the planning, ideology of modernism and the political ideology of apartheid or separate development. These ideologies, which are discussed, in combination resulted in spatial patterns which, above all others, were dominated by patterns of sprawl, fragmentation and separation and these patterns, in turn, underpinned a wide variety of serious social, economic and environmental problems. In 1995, following the collapse of apartheid and the introduction of the Government of National Unity, new legislation was introduced which placed a set of normative values central to the planning system. The paper discusses the main spatial principles (which include the need for greater urban compaction, integration, equity and sustainability - in short, almost precisely the opposite of those spatial tenets which underpinned the urban model of modernism). It then reviews the impacts of this change 10 years on, and examines some of the reasons for its limited impact. Finally, it uses a case study, the Municipal Spatial Development Framework for the City of Cape Town (2000), to show how the normative planning system can be used to promote radical urban restructuring over long periods of time.
1. INTRODUCTION

The paper reviews the spatial evolution of South African urban settlements over the last seven decades. It is structured into three sections. In the first, the ideas underpinning the dominant spatial ideologies of modernism and apartheid, which moulded the development of towns and cities from the 1930’s through to 1995, and their impacts, are discussed. The second describes the introduction of a new normative based planning system in 1995, reviews its impacts since that time and discusses some of the reasons for its inability to bring about substantial urban restructuring, which was its intention. The third outlines a case study which illustrates how the intentions of the new system can be realised.

Section 1: the 1930’s to 1995

For six decades prior to 1995, the growth of South African urban settlements has been dominated by two ideologies. The first has been the spatial ideology of modernism: the central precepts of the urban modernist movement, ushered in the Athens Charter of the International Congress of Modern Architecture (1933) has been deeply entrenched in the practices and instruments of town planning in South Africa, as they have been in many parts of the world. The second is the political ideology of apartheid or separate development. Each will be briefly examined in turn.

Modernism

The introduction of modernism marked an extraordinary moment. For the first time, professionals believed they had the key to the ‘good urban life’: they turned their backs on, and consciously rejected, centuries of traditions of settlement-making to create a brave new world. This conception was based on a number of key ideas:

A strongly anti-urban or suburban ethos. The single free-standing dwelling on its own plot was entrenched as the image of the ‘good urban life’, even in the case of the lowest income communities: for economic reasons, erf sizes have been continually cut, to the extent that there is very little ‘house’ and almost no green, but the model itself is seldom questioned.

An emphasis on the separation of the major activities of life (live, work, play, movement) to avoid ‘conflict’.

A rational comprehensive approach to settlement-making which is largely quantitatively or programmatically determined (capacities are calculated, thresholds of different facilities are determined to derive a ‘menu’ or programme of elements, and planning becomes the more or less efficient assembly of the parts, without particular concern for a framework which holds the whole together). In this sense, settlements are built from the bottom-up: from the part to the whole.

The promotion of the concept of the neighbourhood unit: residential dwellings are clustered into discrete ‘cells’ or neighbourhoods which focus inwardly onto community facilities at their centres in the (naive) belief that this promotes a sense of community. The cells are not integrated into broader urban systems but are simply linked by movement infrastructure.

The domination of concerns about technological efficiency to the virtual exclusion of social
or environmental considerations. A particularly prevalent concern is freedom of vehicular movement. The private vehicle is seen as the primary mode of movement and settlements are scaled to the motor car, despite the fact the an increasing majority of households will never own a car because of high levels pf poverty.

An increasing concern with mobility, as opposed to accessibility, and the elevation of the technology of the freeway, which effectively builds great barriers across the urban fabric. This significantly changed patterns of access. Unlike the arterial, where access is taken directly off the route, leading to mixed-use corridors, with the freeway access is taken infrequently and off the route, at points of access and egress. This has led inevitably to new kinds of technologies, such as introverted shopping centres, office parks, theme parks and the like.

**Apartheid**

The concept of the spatial separation of different race groups had been informally applied in South Africa, as in many other places, since colonial occupation. However, it was formalised with the advent to power of the National Party in 1948 and received its clearest form with the introduction of the Group Areas Act in 1966. (Act 66 of 1966). This Act introduced racial zoning: it became a criminal offence for persons of a designated race group to live in an area demarcated for other races. The social precepts of apartheid accorded fairly neatly with those of modernism: apartheid embraced, and then grotesquely distorted, these. Three dimensions of the modernist model, in particular, were exaggerated.

Firstly, as stated, the concept of use separation was extended to include ‘race’: different race groups were uprooted and relocated in racially exclusive enclaves. Since there was, and is, a direct correlation between race and class in South Africa, it was the poorest people who were moved to the periphery of urban settlements, often involving considerable distances - distances of 60 - 70 kilometres from urban opportunities were not uncommon.

The second distorted concept was that of the neighbourhood unit or cell. On the one hand, under apartheid, the open spaces which surrounded these cells were not seen as positive spaces, providing people with access to nature, but as buffer strips. On the other, the limited points of access and eggress from these cells proved useful from a security perspective in times of social unrest.

The third distorted concept was that of movement. The entire system of apartheid was dependent on high speed routes linking the fragment parts of the city together. These routes were seen as ‘space-bridgers’, not space integrators: their sole purpose was to move large numbers of people from one destination to another as rapidly as possible. The emphasis was almost entirely on mobility, as opposed to increasing access and convenience.

**Spatial Outcomes and their Consequences**

The repetitive applications of these processes and patterns has resulted in three spatial patterns which, above all others, describe South Africa’s towns and cities. The first is sprawl - the lateral spread of settlements increases daily in a seemingly haphazard manner. The second is fragmentation. The grain of settlements is coarse and scaled primarily to the motor car. Settlements consist of a collection of discrete elements and parts, rather than cohesive entities. The third is separation: urban elements, race groups, income groups and land uses are all
separated to the greatest degree possible.

These amalgamated patterns underpin a wide range of environmental and spatial problems:

They are resulting in massive destruction of valuable agricultural land and land of high amenity;

They generate huge amounts of vehicular movement with associated, and worrying, increases in congestion, in air and water pollution and in energy depletion;

They mitigate against the achievement of efficient and viable public transportation systems;

They are resulting in environments which are highly inconvenient and expensive places in which to live and which, in aggregate, are increasing poverty and inequality, since it is the poor who are most affected. They are impositionary environments, since they reduce people’s choices about how their time and money should be spent;

They are resulting in inefficiencies in terms of investments in social infrastructure. There is little co-ordination between investments in social infrastructure and other elements of urban structure, particularly public transport. Accordingly, as available resources shrink relation to the scale of demand, there are increasingly winners and losers and inherent social tensions are aggravated;

The system generates limited opportunities for small business generation, largely because of diffuse and diluted thresholds. However, increasingly numbers of people globally will have no options but to generate their own livelihoods and South Africa is no exception to this;

The quality of the spatial environment is almost ubiquitously poor. These environments degrade people’s dignity and are increasingly difficult and expensive to maintain;

Urban practices are failing to meet adequately new sets of urban needs (aids orphans, the keeping of livestock, initiation and so on). Thinking is based on a historical standard menu of needs which is not being critically and creatively retested and reviewed. In short, the primary problems facing South African towns and cities are structural: they inevitably result from the ideological models which have historically shaped the development of these settlements


In 1994, after a protracted period of struggle (including populist strategies to make the urban areas ungovernable) and negotiations, the policy of apartheid was officially abolished and the first inclusive democratic elections were held to usher in a Government of National Unity. In the rush of legislation which followed, one Act, the Development Facilitation Act (Act 67 of 1995), potentially fundamentally changed the land planning system in South Africa in two ways.

Firstly, it enthusiastically embraced an urban, as opposed to a suburban, model of development. This meant a reversal of some of the central tenets of modernism:
- compaction, as opposed to sprawl
- integration, as opposed to fragmentation and separation
- equity, as opposed to increasing inequality
- sustainability, as opposed to inefficiency and waste

Secondly, it placed a set of norms or values central to the planning system: it defined a defined set of outcomes against which all land-based decisions should be measured. The principles related to spatial development, public participations, capacity building, facilitating developer interaction with government and speeding up development, administrative fairness, security of tenure, promoting competition, conflict resolution, security of tenure and achieving sustainable development practices. The primary principles relating to spatial development were strongly informed by the work of researchers at the University of Cape Town (Dewar and Uytenbogaardt(1991 and 1995). They included:

“3(i) (a) Policy and administrative practice and laws should provide for urban and rural land development and should facilitate the development of formal and informal existing and new settlements

3(ii) (b) Policy, administrative practices and laws should discourage the illegal occupation of land with due recognition of informal land management processes.

3(iii) (c) Policy, administrative practices and laws should promote efficient and integrated land development in that they -

(i) promote integration of the social, institutional and physical aspects of land development;
(ii) promote integrated land development in rural and urban areas in support of each other;
(iii) promote the availability of residential and employment opportunities in close proximity to, or integrated with, each other;
(iv) Optimise the use of existing resources including such resources relating to agriculture, land minerals, bulk infrastructure, road transportation and social facilities;
(v) promote a diverse combination of land uses, also at the level of individual erven or subdivisions of land;
(vi) discourage the phenomenon of urban sprawl in urban areas and contribute to the development of more compact towns and cities;
(vii) contribute to the correction of historically distorted spatial patterns of settlement in the Republic and to the optimum use of existing infrastructure in excess of current needs;
(viii) encourage environmentally sustainable land development practices and processes”

A notable omission from the principles was any reference to spatial quality and to the significance of this in promoting human dignity.
Evaluation

Despite the clear intention to restructure South African towns and cities radically, in practice little has changed in the subsequent nine years. The dominant spatial tendencies remain sprawl, fragmentation and separation and new developments tend to aggravate, rather than ameliorate these. There are a number of interrelated reasons for this lack of progress.

Substantial change requires a radically different mindset and many officials and professionals in the field of the built environment are unable or unwilling to accommodate this.

The Chapter 1 principles of the DFA appear, to many, to be vague and even contradictory. Although they have been recast and regrouped in subsequent legislation, an education campaign is required to gain their widespread acceptance and this has not occurred.

There is limited capacity at all spheres of government to enforce change. Capacity has radically diminished in recent times and the principles are an ‘unfunded mandate’.

Although the intention of the law has changed, the instruments relating to land management (zoning, by-laws and the like) have not: the instruments are geared to promote a very different model:

There is a considerable amount of NIMBY syndrome (not in my backyard) amongst more wealthy groups in relation to lower income development and these groups still wield very considerable clout.

While the law entrenches a social mandate, in reality, along with most other parts of the world, the general climate relating to land development is becoming increasingly driven by developer desires and these frequently are opposed to the social mandate.

Importantly, land value patterns mitigate against greater integration. There is a failure on the part of policy-makers to recognise that land value right-down is a vital instrument for change to occur.

Perhaps most importantly however, is the failure on the part of planning and design professionals to recognise that the principles effectively introduced a new form of planning - argumentative planning as opposed to professional opinion. In effect, the principles define desired outcomes: it is the role of planning to determine ways of achieving these, as opposed to the historical system in which planning defines the outcomes.

Section 3: The Municipal Spatial Development Framework for the City of Cape Town (2000)

This case provides an example of how this new approach to planning can be used to achieve radical, but achievable, urban restructuring.

In 1999 this author was appointed core consultant to head up a small group of city officials to develop a ‘Spatial Framework for the City of Cape Town’, then the largest of six municipalities making up the metropolitan area of Greater Cape Town.
A number of key realizations underpinned the approach to the plan:
There are no ‘big bang’ solutions to the city's problems. Positive change needs to occur incrementally, mainly through a series of relatively small actions that need to be co-ordinated and integrated. This means that the framework needs to identify the beginnings of things, rather than end-state outcomes.

Public investment is the key. A major problem underpinning inequalities in spatial investment patterns has been a lack of investor confidence in poorer areas. It is therefore necessary to lead with public investment, in order to create economic opportunities, particularly for small business, in these areas.

It is not possible to solve every problem facing the city. The challenge is to identify appropriate forms of investment.

Similarly, it is not possible to invest everywhere. Given the scale of need relative to the available resources, the city represents a bottomless pit, if investment is spread too widely. It is necessary to concentrate on a limited number of places in order to make a discernable difference.

The approach to investment cannot be simply based on opinion, nor can it be politically determined through conflictive competitive political processes. It requires an argument. There are two reasons for this:

- No plan can, or should try to, deal with all eventualities. An argument is necessary to define a point of departure for thinking when faced with the unexpected;
- In situations of scarce resources relative to demand, public finance is potentially highly divisive, both socially and politically: an argument is required so that fiscal decisions can be rationally defended.

The starting point for the argument must be the required urban performance qualities, particularly compaction, equity, integration, sustainability and dignity.

The Argument

In simplified form, the argument which emerged goes like this:

The concept of broadly equitable access is central to making spatially equitable, integrated and sustainable cities. All South African cities, including Cape Town, are non-equitable, non-integrated and non-sustainable precisely because people do not have even remotely equitable access to the natural and urban opportunities which they offer. Equity does not mean that all parts should be the same. This is neither possible nor desirable, for choice is central. Equity does mean, however, that all people should have easy access to broadly similar opportunities, facilities, special places and events.

This poses two challenges:
(i) To make existing opportunities more accessible to the majority of inhabitants;
(ii) To create a new pattern of agglomerated (clustered) opportunities.
and special places closer to the places where the majority of people live.

The term ‘ease of access’ requires refinement. If the concept of equity is taken seriously, the starting point for thinking about access and convenience is movement on foot. This describes the reality of a large number of Cape Town’s citizens. The most equitable situation pertains when people can engage in most daily activities on foot.

Once the possible cycle of movement on foot is broken, the next most equitable situation is when people have easy access to public transportation. Cheap, efficient, and viable transportation is essential if convenience, and therefore the quality of life of all, is to be improved.

Based on these starting points, the core concept can best be explained as a logical sequence of steps.

(i) Creating a hierarchical system of opportunities requires differential thinking about space: it is necessary to define a hierarchical system of relative accessibility. To determine how many levels should be in the hierarchy, it is necessary to balance two potentially conflictive dynamics: the need to increase convenience and the need to maximise the use of limited public resources.

In the case of Cape Town, it was found that a three-tiered system most closely balanced these requirements. In order to activate the system, a notional three-tiered hierarchical grid of higher access points was established across the city.

(ii) In terms of public transportation systems, the most equitable systems are the ones where people can switch direction, as well as modes of movement, as quickly and as easily as possible. Where this is possible, the system provides ‘access to access’ rather than being primarily reactive to existing patterns of opportunities. To activate this, the notional system of access points is now conceptualised as a system of transportation interchange points. In the case of Cape Town, modes of public transportation are brought into play in different combinations: taxis, taxi/bus, taxi/train, taxi/bus/train. The notional points of access were then adjusted while maintaining the original logic of the hierarchical relationships, to accommodate the realities of the existing movement system (places of connection between important continuous road routes and between road and rail-based systems). Figure 1 shows this adjusted pattern.

(iii) By definition, transportation interchange points generate and attract large numbers of people. In every case, therefore, the interchange point is expanded to include a pleasant landscaped public space, which always accommodates a market for small traders. This concept generates a city-wide ‘peoples places and markets programme’. This point is seminal. In positive environments, public space is the primary form of social infrastructure. How it is made impacts fundamentally on the dignity of people. Figure 2 illustrates the cumulative process.

(iv) The markets and special places increase the attraction of the place: their high accessibility makes ideal places for government and service providers of all types to reach the people with the services they provide. Accordingly, clusters of social facilities (public kits of parts’) are associated with the interchange points (figure 3). The precise make up of the ‘kit’ will vary with the hierarchical level of the interchange point. There are three reasons why this clustering is important:
- it facilitates multi-purpose trips and therefore convenience;
- it promotes the sharing of facilities, particularly between schools and the broader community. This in turn, increases levels of utilization and thus sustainability;
- it significantly improves operational efficiency and brings about a sensible balance between operational and capital costs.

(v) The activities associated with these places also make them ideal for retailing, commercial and small manufacturing enterprises, as well as for high-density housing, which reinforces the attractive power of the place. In this way, the original interchange point is translated into a 'high activity' urban centre, which is a special place environmentally and which enables all people to engage in informal social activity with dignity.

(vi) Finally, as the city increasingly engages with urban renewal, the housing areas around these centres should become the focus of urban renewal programmes, thereby increasing the 'special place' quality of the area to the benefit of all.

(vii) The need for equity of access does not only apply to urban opportunities - it is just as important to provide access to nature and to places of escape. Some of the natural assets are fixed in space - their attraction derives from their intrinsic qualities which should be conserved. Other opportunities, however, can and should be created. The concern with equality requires that all people should have broadly equivalent access to a hierarchical range of created green pace types. Three levels were proposed:

Large multi-purpose regional parks accommodating activities, such as formal sports facilities, places for passive recreation such as walking or jogging, large nurseries, ensuring the future supply of trees for the city, places for cultural ceremonies such as initiation, the
production of traditional medicines, opportunities for small scale subsistence and commercial agricultural and so on.

Collective sports fields set in small parks.
Collective sports fields.

These opportunities are always closely associated with transport interchange points.

(viii) Finally, the ordering system is not only point related. The more continuous transport routes which connect a number of local areas, particularly those which carry public transportation and allow stopping along their length, represent important energy flows in cities. The plan encourages more intensive activities (those activities which service, and thus are supported by, the public) to locate along these routes, thereby increasing convenience, efficiency and sustainability (figure 4). These routes are viewed as frameworks of interlinked and continuously intensifying activity systems or urban corridors. Figure 5 shows how the hierarchical systems of centres and corridors are brought into association.

Similarly, a green web or interconnected green network linking the parks and primeval landscapes (thereby promoting habitat biodiversity and creating migration corridors for animals and birds, productive small scale farming opportunities and opportunities for recreation), forms an important part of the green concept.

In this way, it is hoped that, a cohesive system of nodes (urban centres and parks) and an interconnected network of linear elements (green space and activity corridors) will systematically evolve over time, generating much greater integration, equity and sustainability, as well as greater convenience, choice and a far wider range of opportunities for historically disadvantaged individuals and communities than currently exists.
Conclusion

South African urban settlements are still dominated by the scars of apartheid and modernism almost 10 years after liberation. Embryonic seeds to their healing, however, are perhaps contained in the normatively-based planning system introduced in 1995, if professionals and policy-makers master ways to work creatively with that system. The onus for achieving change rests heavily on the creativity of the professionals concerned with the built environment.
References

Dewar, D, R.S Uytenbogaardt (1991), *South African Cities: A Manifesto For Change*, Urban Problems Research Unit, University of Cape Town. pp113