

XXXIII IAHS – Systemic transformation

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Abstract

Modern day South Africa is faced with major housing related issues. Created by the historical past of the country, these issues need urgent attention and some degree of resolving. The only way these problems can be faced would be if investment, in projects, can be promoted for the township and rural areas of South Africa. Also, that these projects get given adequate funding, since many projects are abandoned before completion.

Another problem that needs more attention is the mindset of the people that have authority over the urban planning decisions in this country. It is one thing to come up with solutions for the problems facing the sprawling townships, but it is a complete other issue trying to sell these ideas to those who are in the positions, which enables them, to make a difference.

What we also need is a shift in the planning of urban spaces, especially in the township areas. Instead of focusing on new developments, which simply add themselves to the already existing sprawl, the focus should be on regenerating the spaces within townships as well as densifying the existing landscape. Thus, focusing on bettering the existing urban fabric of these townships and, in turn, promote densification of housing in the 'suburban' areas.

In the following paper I will attempt to address how these issues can be approached, and how systems can be set up in places that are dealing with similar issues as found in Soshanguve, a township North-West of Pretoria.

1 Introduction

For any city to be able to function well it needs to be able to perform well at a pedestrian level. This can not be more applicable to the situation that we are faced with in the towns and cities of South Africa, especially in the townships, since, in these townships, the majority of people do not own private transport. For a city to function well at pedestrian level, the city needs to take on a compact form which functions in such a way that the inhabitant of a specific area has all necessary amenities reachable by foot.

This, I found completely lacking in Soshanguve, which is a township North-West of Pretoria. Soshanguve is yet another badly planned, left-over from the political history of South Africa. A past that structured these places not as living, functioning, independent machines, but rather upon, amongst others, the following criteria that Pauline Morris, an Urban Specialist sets out in a book she authored: *A history of black housing in South Africa* (Johannesburg: South Africa Foundation, 1981). These are:

- township sites should be at adequate distances from white cities
- these sites should, preferably border the township of the next town, thereby not increasing the number of black areas
- they should be separated from the white towns by a buffer zone which is an industrial buffer or is being planned for industries
- they also need to be given adequate space for growth away from the town or city
- they need to be at adequate distances from the city or town for purpose of transport, rather by train than by road
- they need a connecting road to the city or town, these roads should preferably run through the industrial area
- these township need an open buffer zone surrounding them, the breadth of these buffer zones are determined by whether the township borders onto a densely or sparsely occupied white town or city
- use of main or national roads should be totally discouraged, therefore townships should be at adequate distances from these roads.

These actions led to townships that are now, in major need of being upgraded to self sustainable environments that are able to generate growth and opportunities within themselves. With an income as low as a person living in these townships, it is sad to think that most of this income has to be spent on transport costs to get to and from job opportunities located in the cities. Thus, when compacting these townships spontaneous growth should be encouraged for these places to generate a working urban setup.

2 Compacting the urban fabric

Across the globe, and even in some places in South Africa, compact urban forms have proven to function far more efficiently than the current situations with which we are faced in the sprawling townships all over the country. It is of utter importance that these places are densified and where possible regenerated so as to use and re-use the land already occupied by the built environment, since we can not continue to cover our environment bit by bit. Compaction in these places as well as in our cities and towns should take place more often and to the maximum possible degree.

Densification holds a great amount of advantages for improving an urban environment. Some of these advantages, as set out by D. Dewar and R.S. Uytendogaart in the book: *South African cities: a*

manifesto for change(Cape Town: Problems Research Unit, University of Cape Town, 1991), are:

- promoting of overlapped and shared activities and amenities
- creation of economic opportunities
- increase of social activities and services
- more commercial services
- physically compact market = economic efficiency: distribution distance shortened, thus distribution cost lowered. This has a greater effect for small businesses than large retail businesses.
- mixing of activities
- pedestrian friendly to a larger degree
- promotes a better public transportation system
- minimizes the rate at which land is covered with development
- environmentally conscious

2.1 **Densification and Regeneration processes**

There are currently many densification and regeneration processes taking shape in and around our cities all over South Africa. These interventions have already shown to improve the current situations in our cities, and they have also given rise to a reaction of developments around them. Many examples can be seen in Johannesburg alone.

Some of these are the upgrading and regenerating of 44 Stanley avenue and the Newtown Cultural Precinct.

Although the Stanley avenue development aims at a higher income group, the lesson to be learnt is applicable to the issues being faced in townships like Soshanguve. There is a need to return to mixed-use, multi-functional spaces and building, and instead of moving to the city periphery and starting new developments, gaps are filled within the dormant spaces of the city, for example, the Refinery which was a once derelict warehouse building but now sophisticated apartments.

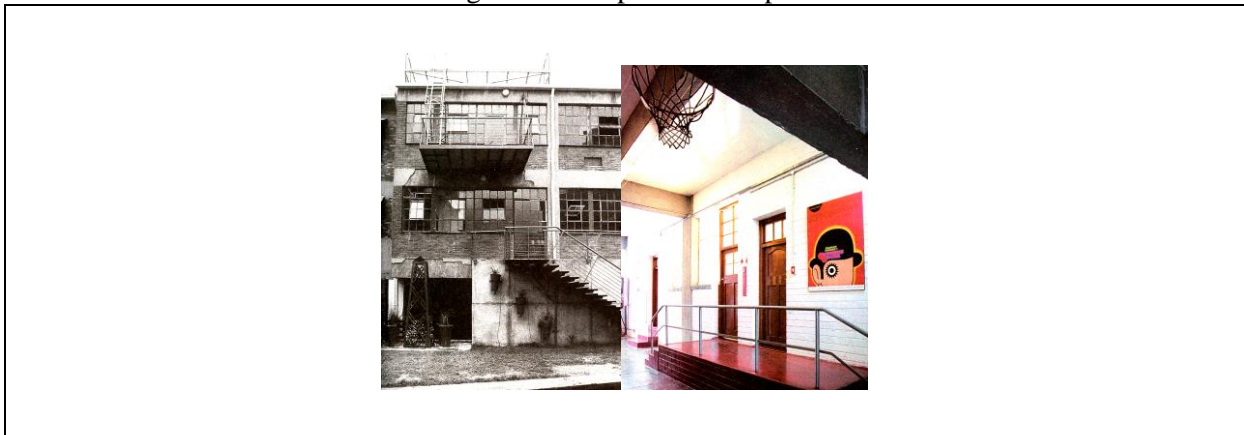


Figure 1: 44 Stanley avenue. The Refinery: Old warehouse now regenerated into apartments.

In Newtown, Blue IQ initiated a series of initial rehabilitation processes in order to create an inner city cultural hub. The one major key to this boom in Newtown, was the construction of the Nelson Mandela Bridge, connecting Newtown with Braamfontein, thus giving people easy and direct access into the precinct. It is clear that the energy invested into Newtown has already surfaced a series of

reactions in the area. For example, as seen in figure 2, the Brickfields Housing project, the clearing out of the Turbine Hall, the Metro Taxi Rank, as well as the increase in retail and entertainment venues. This all just proves how one, well planned action, can give rise to, and direct many other successful reactions.



Figure 2: Newtown Cultural precinct. Left: Nelson Mandela Bridge. Middle: Brickfields Housing Project. Right: Metro Taxi Rank

2.2 Empty land pockets

It should be kept in mind that densification should not be applied everywhere and anywhere. Careful consideration should go into deciding where intervention should take place. There is however an access of empty pockets of land within the cities of today, which are simply not being used purposefully, at all.

These empty patches hold many disadvantages. These spaces are usually, as D. Dewar and R.S. Uytendogaart sets out in the same book: *South African cities: a manifesto for change* (Cape Town: Problems Research Unit, University of Cape Town, 1991) a result of one of the following:

- historically implemented buffer strips, in which developments have started taking place, but not significantly enough to make much of a difference
- oversized spaces, reserved for roads, especially in places where it is very unlikely for that road to ever be built
- left-over parcels of land which results from inefficient planning
- over-sized public spaces and parks: with insufficient maintenance these spaces become unsafe, useless and featureless
- vast spaces of institutionally-governed land parcels

2.3 Sub-division

One of the major problems with the: one house, one plot per family, initiative, is the size of the plots that are being allocated to the people. The sizes of these plots are not a commodity to the owners, but an ever increasing burden. In situations where providing ones family with the bare necessities, a well

maintained ‘garden’ is to be the last thing on the list of priorities. Therefore, the result is a monotonous, bare landscape covered with boxes. Not only is it a waste of precious land, but it also adds to the inefficiency of the settlement at pedestrian level, since there is increased distance between all points of interest. Large plot sizes = greater road distances, thus services increase and problems of funding arise.

Also, in these sprawling urban setups, public service management institutions need to concentrate on larger areas which means less maintenance, to those specific areas.

In places like Soshanguve, a strong consideration to the authorities should be the subdivision of oversized plots. This would, at least, give people the opportunity to utilize un-used land, thus, the people will be more conscious of planning of their individual plots more efficiently. If plots are spatially well used, as seen below in figure 3, these plots can at later stages be partially sold by subdividing the plot.



Figure 3: Development of a house through phases, in order to use the 20m x 15m plot to its full potential.

2.4 Community Sharing

It is important to note that the poorer the community, the greater the need for communal sharing and living. Human interaction forms a large part of human development, understanding of others’ needs and compassion with people in similar situations.

It is then safe to assume that these communities are open to sharing amenities amongst the community. This can have a great impact on design procedures when creating a more compact environment. By promoting the sharing of amenities, there is automatically a decrease in over provision of amenities. This, in turn decreases the phenomena of services and amenities being left derelict. For example; a primary school and a high school should be positioned such that the two schools can make use of the

same sports fields, administration buildings and assembly halls. This would have a positive effect on the construction costs of projects such as these.

2.5 Urbanization

A major reason for the inefficiency in function of the townships of this country is the amount of over design that go into the urban planning of these places. Instead of allowing spontaneous reactions and layering of the urban fabric to develop, the approach in the township layout is rather one of 'total control'.

In order to create a layered and rich urban context in places such as Soshanguve, activity routes need to be established. Along these activity routes larger institutions need to be carefully positioned as to create movement tensions between them. These could be institutions like schools, hospitals, libraries, etc. In turn, the valuable tension between these functions creates the opportunity for local actors to respond to. It is then within these routes, that points of commercial activity can develop. Only then, when there is such a visible rise in the value of land will investment be promoted and encouraged. It is of extreme importance that these patterns of response created by the local actors are not to be ignored. These physical patterns are of extreme value in developing that specific urban layout and a step backward towards 'total control' over such an area must be avoided.

This is one way of developing an urban layout. Here, transportation routes gives rise to and direct development along them instead of transportation routes simply connecting points of established interest, and leaving the 'in-between' without the layers necessary for a rich urban fabric. This however, is the case in Soshanguve and many other townships. All these places have established points of interest and these are connected in various ways, but the way in which the people are reacting to these empty, 'in-between' spaces are being ignored and a system of total control still prevails.

There is a complexity in urban systems, which emerges from the way in which people react to an environment, that should not be ignored. It is this complexity that gives a specific environment its richness and ability to accommodate human life within it. This complexity can be seen in cities and towns across the world. It is those layers, which are visible in so many places across the globe, that are missing in Soshanguve, and in need of formation.

3 Conclusion

There are too many spaces in our townships, towns and cities going to waste and adding to an, already sprawled urban settlements. These, make it all the more difficult for our urban spaces to function at pedestrian level. It has also come to my attention, while doing a site analysis on Soshanguve, along with fellow students of the University of Pretoria, that a great obstacle in creating successful urban 'machine' is not the methods of how these urban setups can be achieved, since there are already centuries of experimentation and theories behind us, but rather, convincing those who are in positions to make the difference. Also I found that there is far less investment that goes into the townships that hold less tourism opportunities than those who do. Tourism is a great mechanism that initiates development, but there are far too many townships in need of development and we can't count on tourism and other similar methods to bring or initiate development. This is not fare, and might never happen. It is extremely important that development is sparked off in these places and allowed to grow. The shift from commodity to community in housing can't be weighted enough, and is an issue that needs much attention, especially in the consumer driven society we face today. More efficiently

functioning urban settlements won't solve society related issues, but will, however, have a great effect on them, since these places play a great role in how people view their country, themselves and more importantly, their community.

Reference

- [1] Dewar, D and Uytenbogaart, R.S. 1991. South African Cities: a manifesto for change. Cape Town: Urban Problems Research Unit, University of Cape Town

- [2] Morris, P. 1981. A History of Black Housing in South Africa. Johannesburg: South Africa Foundation.

- [3] Moudon, A.V. 1987. Public Streets for Public Use. New York: Van Nostrand Reinhold Company.

- [4] Selman, P. 1996. Local Sustainability. London: Paul Chapman Publishing Ltd.