Design as instrument in transformation : settlement as empowerment opportunity for socio-economic development.

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Abstract

As the physical manifestation of a set of power relations, space represents perhaps, the greatest legacy of the apartheid state. The Afrikaner nationalist government's policy of '*setting apart'* contributed in constructing a built environment that was characterised by both segregation and a concomitant absence of diversity. State agencies, such as the [NBRI] National Building Research Institute, produced impoverished dwelling environments which conflicted with the culture and practices of local/black people.

Originating in a desire for justice and democracy, the 9th statement of the Freedom Charter, '*there shall be housing, security and comfort'*; aspires toward a more equitable society in which difference comfortably co-exists. Despite the claims embedded in various policy driven initiatives of the post apartheid African National Congress government, the current delivery of housing in South Africa remains a quantitative and reductive endeavour. The approach privileges a policy driven, economic-quantitative housing model and realises impoverished living environments for poor communities.

Currently, contemporary society is faced with multiple contradictions. Whereas globalisation elevates a singular purpose of economic utility, [re]claiming local practice may afford a basis for both a redress of past injustice and the reconstructing of civil society. As the imperative to deliver vast numbers of houses grows by the day, the interpretation of traditional values becomes increasingly threatened. Contemporary projects that mediate these pervasive extremes have enabled the design of hybrid housing solutions which simultaneously attend to the contingencies of local dwelling practice and the strictures of economic necessity.

This paper will examine the enabling capacity of [architectural] design in attending to the conflicting rationalities of economic utilitarianism and the social practice[s] of dwelling. The research will critically examine selected 'non-mainstream' housing interventions where design has significantly contributed toward the production of socio-economic opportunity. Through an analysis of spatial configuration, it is intended to contribute knowledge to current debate on the role of design and experimentation, and broaden government's agenda of constructing HOMES; '*human settlement'* as opposed to HOUSES through delivery.

1   Introduction

South Africa has a 'backlog' of approximately 2.4 mil houses. Despite the aggressive stance of the post apartheid ANC lead government this number is growing. This may be accounted to a number of factors not the least of them being the current condition of globalization combined with the radical disparities inherited from the apartheid regime. One of these disparities lies in the racialisation of poverty and the concomitant growth in the extremes of the economic inequalities.

Historically, housing policy has been one instrument through which governments address these problems. From the onset of apartheid we can identify perhaps three policy era's that have informed housing delivery in South Africa. State housing characterised the Apartheid era, with government being supplier and deliverer of [rental] housing stock. The NBRI [National Building Research Institute] became the agency dedicated to apartheid's ambitious spatial agenda. Design, as a scientific and qualitative pursuit, became the research agenda for apartheid policies, and oversaw the implementation of the townships and their NE51/9's. This situation operated from the 50's until the late 70's.
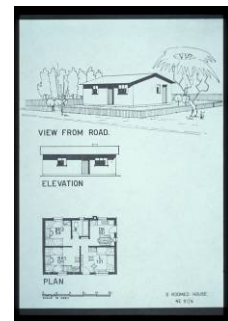
FIG : Atteridgeville Pretoria/Tswane. [Image - Mo Phala]   **NE 51/9** [Image - NBRI]

The late 70's realised a shift from state provision toward and the introduction of neo-liberal ideology as propogated by the primary informers of global financial economic policy, such as the WB and IMF. In South Africa this saw the 'invention' of the Urban Foundation, as a new and necessary agency, to facilitate the shifting housing policy. Housing, in the context of an emergent urbanization, saw a rise in the dereliction of social responsibility and an emphasis on the owner-occupant contribution. User participation through 'sweat-equity' translated through site and service schemes, with tenure, as opposed to rental options, further devolved state responsibility.

Today, and since the mid-90's, a more neo-liberal regime predominates. The emphasis is on public-private partnerships, supported by a qualified subsidy [offering opportunity as opposed to houses] to individuals. Despite the fact that these subsidies may now be consolidated, this policy has promoted a '1-house, 1-site' approach to housing. The contemporary RDP [Reconstruction and Development Program Houses] landscape is familiar to all South Africans. The result has been the fragmentation and compartmentalization of a reductive design and delivery process and the concomitant loss of community which has resulted in human settlement making 'by numbers only'.

Despite the evidence of policy and strategic government shifts, we have also witnessed the production of sameness, with a predominance of similar forms in the resultant housing and urban environment products. However, there always exist aberrations to 'norms' and we may observe a growing body of projects where constructive difference has emerged. This 'difference' is obvious where design mediates policy and delivery, and acts as enabler of local need. These aberrations are not peculiar to

any policy regime, but rather, are identifiable by the role that 'design' has played in interpreting the specificity of everyday practices as evident in pre-existent conditions of community need.

2   Design as instrument of socio-economic transformation

Space is ubiquitous, it is a primary medium for human existence. As one of the primary legacies of the apartheid era, its [re-]configuration should be fundamental to transformation. One result of spatial inequality has been racialised poverty. Consequently, the prospect of transformation and development in South Africa is directly linked to attacking the levels of poverty that have been inherited from the practice of apartheid. Poverty is at the centre of our problems and the provision of housing needs to be located within this understanding. It is, however, impossible to launch a campaign against poverty without an economic agenda. Housing can not simply be conceived of in quantitative terms, but rather through qualitative dimensions that can bring added value to users as member of families, communities and society at large. Design is a qualitative action which is applied through discrimination, with either negative or positive consequences. Applied constructively, its re-ordering potential may provide an interface between economic utilitarianism and social expression, and thereby add substantial value to the project of housing.

Considering the exigencies of poverty and rapid urbanization, housing policy should be further developed to include opportunity whereby economic advantage can be transferred to both developer and recipients. Space and design are resources whose dispersal can assist or detract in the accrual of human and economic capital. This is where purposeful design can play a significant role. Insightful design, when creatively practiced, can enfold multiple agendas. It is not impossible that the imperatives of attending to rapid delivery and densification, to home-economics and socialisation, and to transportation and pedestrianisation, within temporal and permanent conditions may be enacted through thoughtful design. Design imagination in the service of dwelling should afford real choice for the diversity of [individual] needs that characterise the emergent South African citizen. In this way settlement planning can construct community, and houses may become homes.

3   Observations from the ground

The autonomy of the single dwelling unit on its single plot consumes space. It constructs a negative economic impact through reasons of its incapacity to produce [seamless] interfaces between the larger order of cultural production. Within the current paradigms, built form generally 'occupies space' and the 'left-over' is rendered unusable. The building envelope does not productively foresee the changing circumstances of occupants. Both its internal and external properties preclude the temporal dimensions of dwelling and community. However, whereas this perception of autonomy in the 'NE 51/9 – RDP' type individual housing units predominates in the SA housing landscape, numerous counter examples are evident. The existence of such phenomenon owe their existence to numerous small offerings that originate in design responses to the peculiarities of specific conditions. These vary and may be understood within the situational dynamics that prefigure design and implementation, eg. ia.;

> *siting and recognition of pre-existent context;*
> *the culture of community; its organisational capacity and associational needs;*
> *the longer term and temporal needs of society within in the context of sustainability,*
>   *development and scarcity of resources.*

FIG :

Consequently, it is not possible that any single idealized housing scheme exists. Rather, it is useful to identify and examine qualitative 'design attributes' in terms of the locality that produced the value of their individuality.

3.1   Economic Utility

In considering the scale and thrust of contemporary urbanisation, one of the primary possibilities is the consideration of the home as an economic entity. This entails identifying design opportunities within the constraints of limited budgets that realistically [and economically] contribute toward empowering user need.

HOME|WORK

3.1.1   Elangeni, Albert Street Social Housing, Johannesburg
Architect | Savage + Dodd Architects cc; Client | Johannesburg Housing Company, JHC.
design - 2002 | implementation - 2004.
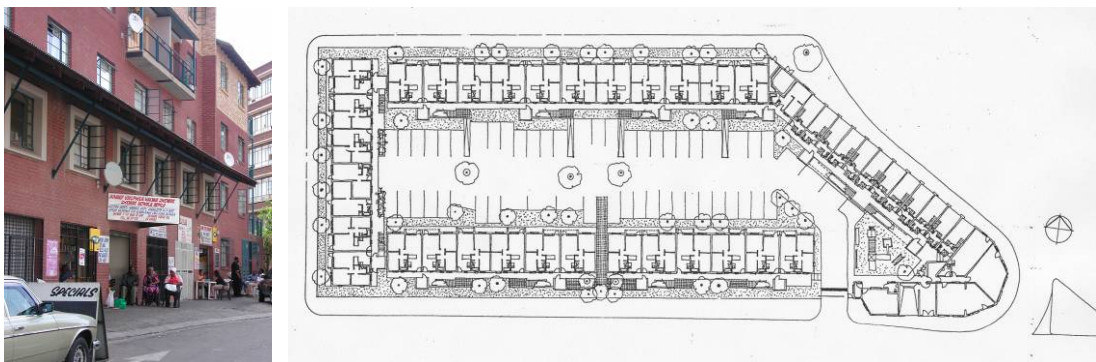
**FIG : Elangeni, Albert Road** [Image – Savage and Dodd]

The Elangeni housing project is the result of a social housing initiative. It presents a workable example of the integration of living and working that compliments current urban and social conditionalities.
As a mixed-use, urban infil, medium rise building it manages to achieve both diversity and densification. This affords a number of real opportunities and choices that benefit occupant and the greater city alike. Organising space vertically it suggests a contemporary interpretation of the 'victorian row buildings' that characterise the typical main road *laissez faire* development of colonial SA cities. When the home becomes an extention of the work place, economic and social advantage are leveraged for poor communities. Travel, the needs of the elderly and children, chores, etc all become folded within one envelope, and Time and Money savings are immediately and realistically measurable.
A further development of this design, by the same architects, at Brickfields in downtown Johannesburg, suggests the potential to mix and match spaces. Individual units will be constructs by initial purchasers and their flexibility provides opportunity thereby to trade space and reconfigure title deeds in the future.

3.1.2   Mansel Road, Durban
Architects and Planners | Harber, Masson and Associates;
Client | Durban City Council
design - 1993 | implementation - 1994
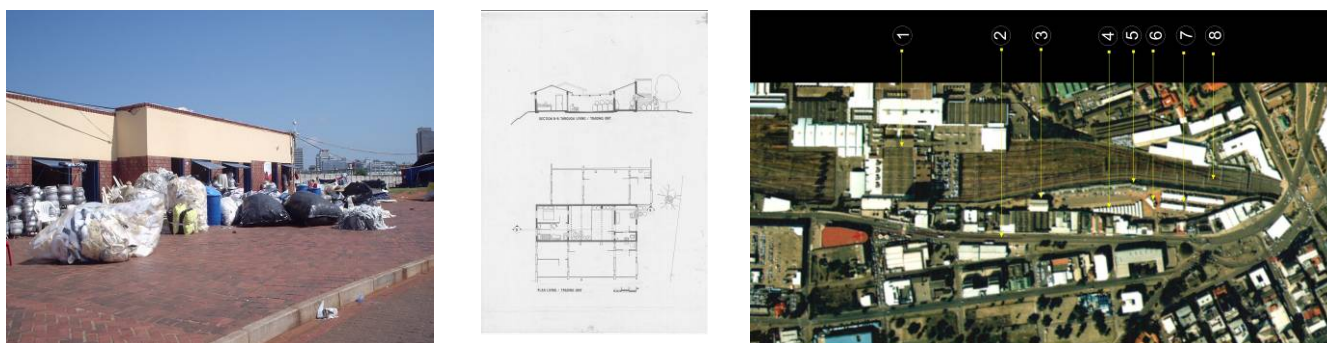
FIG : Mansel Road, Durban [Images – Harber, masson & Ass]

Rodney Harber and his architectural practice represent a singular force in the architectural profession where there exists a consistent attempt to engage the project of transformation through all dimensions of architectural production. This endeavor has been realised through persistence and a dedication to the social dimension of architecture that appropriates the exigencies of the everyday in a productive and imaginative way. [Re-]building community is at the centre of his design endeavour, and the result has been an oeuvre of problematic projects that are dis-eased with the difficulty of operating in this manner.

The Mansel Road project is a response to pressure from the influx of chartered busses of rural shoppers who had begun to establish semi-permanent sidewalk homes for their weekend shopping sprees. This project is rich in appropriate design responses and innovative arrangements that are evident in the cross programming of public bathhouse with a commercial shop, and the shopping|dwelling units with their interior courtyard to mediate public and private life of the family.

* Bathhouse; with self-flushing, unblockable toilets.
* Accommodation for 44 drum ladies; with a small commercial outlet and plumbing, separated from two bedrooms by a courtyard with a pergola.
* Carboot sales people; for operators on beachfront parking lots at night
* Open sheds; were created for pinafore ladies to sell their wares.
* Transitional housing; was proposed on the site for the convenience of drivers and itinerant traders.

The Mansel Road project interprets the opportunities inherent in urban problems, particularly in relation to empowering marginalised people and providing viable inner city housing for poor families. The ingenuity of the courtyard house provides a spatial configuration that mediates rural and urban life, and yet may develop through time into a veritable and resilient urban typology.

By re-using waste land urban renewal has generated activity for both dwelling and trade. Despite its formal and design resolution the process can be hijacked when the Local Authorities opt out of facilitating management for these new structures. Mansel Road demonstrates the possibilities of recognising and redirecting urban conditions unique to African Cities, however, it is evident that the process needs to be firmly managed.

3.1.3 N2 Gateway Housing Project
Kruger|Roos Architects and Urban Designers; designed - 2005

FIG

This project represents a 'yet to be implemented' speculation for new housing to resettle occupants of the N2 corridor upgrading in Cape Town. The design ingenuity lies in the location of ablutions as a mediator between interior and exterior rooms. This configuration sets up the possibility for interesting public and private relations. Not dissimilar to Harber Masson's Mansel Road housing scheme, it utilizes a courtyard to afford opportunity for a commercial face. In this instance the ablutions become shared, located in the mediating courtyard and providing potential for separation at the critical interface between the public and private. Diverse economic potential is embedded in this configuration by virtue of the possibility for rental accommodation, an extended family or even the subdivision of the stand into two dwellings.

3.2 Temporal Dimensions of Settlement; incremental implementation

3.2.1 Weltevrede Valley Low Income Housing Scheme
Architect/Client | PAWC - Department of Housing, Provincial Administration of the Western Cape.
design - 1999 | implementation – 2000

**FIG : Weltevrede Valley, Cape Town** [Image PAWC / Brian Verwey]

This small greenfields insertion in Weltevrede Valley on the Cape Flats represents a thoughtful and informed experiment in housing design. Diverting from standard regulations it presents a dense living environment where motor vehicles have been marginalised to the benefit of pedestrians and local inhabitants. It relies on two complimentary strategies that contest traditional approaches; a reconfigured urban layout and a multi-expandable core dwelling unit.

The removal of vehicles to the periphery provides for an interior pedestrian friendly environment where children, the elderly, families and the general user might find comfort in their everyday living. The individual dwellings are arranged in attached rows, and consist of duplex units that have potential to expand both vertically and horizontally. The fixing of the front edge establishes intimate street|walkways with kitchens fronting on public|play areas.

The project builds from work undertaken by the Delta Group in Missionvale, Port Elizabeth, and is not only successful for its contestation of the autonomy of the RDP / NE 51-9 type approach. More significantly, in breaking with conventional practice, it suggests an approach of models or pilots that produce new knowledge and may incrementally inform and transform housing practice for the poor. The fact that the project was initiated and produced from within a provincial Government Housing Department demonstrates what inherent capacity latently exist, but require more aggressive support.

3.2.2 SHAC | Stellenbosch Housing Action Committee
Architect/Client | DAG Development Action Group [Iain Low, Mario Bonadei], Cape Town.
design - 1990 | implementation/State demolition - 1 May 1990
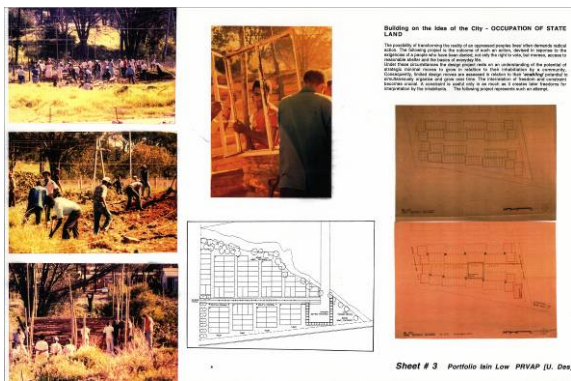
FIG : Building Community / Occupation of State land, Stellenbosch, 1990. [Image - Iain Low]

This project is a project of resistance. It represents an occupation of state land in the Western Cape, in direct response to the frustrations of negotiating with the opacity of the latter days apartheid regime.
Despite that the activists were arrested and the settlement demolished, it represented a victory in the demand for land, and presents an innovative approach to rapid land settlement or orderly occupation of state land. The occupation was undertaken at the instigation of a community that DAG had been assisting at the time with housing through education and negotiation with the local authority.
Whereas the design of land configuration related to the necessity of rapid occupation, its in between and communal spaces foresaw incremental upgrade of the settlement as a whole. Similarly the individual dwelling units, although built from donated and found materials, were located so as to enhance incremental build out as well as the overall integrity of settlement.

This manner of implementation predates the subsidy system. It utilizes design to establish the parameters for incremental growth within a minimalist design approach that foresees the formalization of informality. In '*preparing land for occupation*' it presents a realistic option to accommodate the pressing need for the increased delivery of land and housing, whilst simultaneously building community and therefore potential sustainable human settlement.

3.2.3   RLDP | Rapid Land Development Project
Architect/Client | CDBE – Centre for the Development of the Built Environment; Dept of Architecture, University of Witwatersrand [Iain Low, Lone Poulsen]; GJTMC | Greater Johannesburg Transitional Metropolitan Council.
design - 1998 | implementation – blocked by DA Councillors
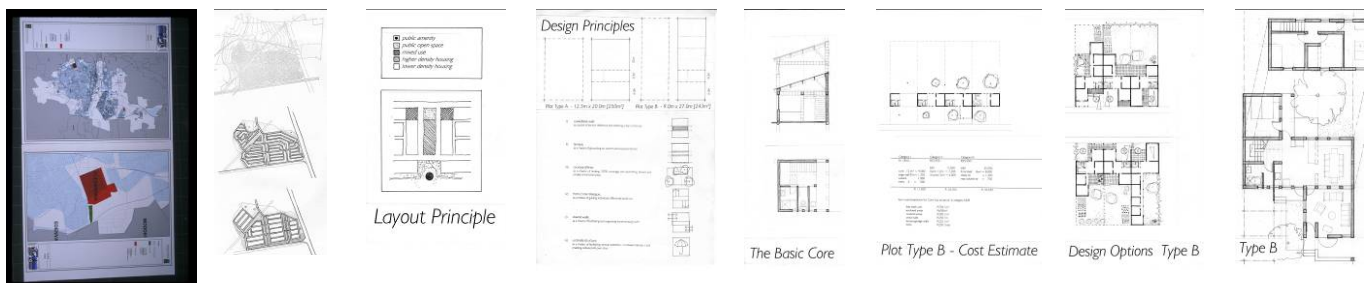
FIG : RLDP Comprehensive design strategy to maximise development [Images – Iain Low, Lone Poulsen]

This project originates in the early post apartheid days prior to the sedimentation and consolidation of power by the ANC. It suggests a means of intervening in a fractured urban environment that is scarred by the events that lead to democracy. Designed to relocate traumatized communities it sought also to contest the racial segregation that characterizes apartheid space and urbanism.

It comprising a series of strategically located and pre-identified greenfield infil sites it speculates on a means of intervening with limited means. Utilising the subsidy system, the design approach is to insert seeds that may grow in response to the diversity of user demands. Consequently this approach identifies the resolution of economic and social need through incremental growth that foresees the possibility of;

vertical and horizontal expansion
rental and extended family accommodation
further densification through site subdivision
shared infrastructure
healthy environments

The anticipated result is one wherein choice is not only maximized, but is realizable in that it may be related to the comfort needs and affordability of both local authority and individual inhabitant. In this manner it is anticipated that a rich and diverse environment may be produced through time, allowing for democracy to excel through the meaningful co-existence of difference.

Conclusion

Space is a resource which when imaginatively configured can be deployed in the interest of both economic and social benefit. Architectural design is an instrument whereby to untap this resource, but it requires a shift in policy and values. These approaches to design practice and agency are predominantly evident in mature societies where culture is genuinely recognised and supported for its potential to construct critical difference. Nevertheless there are signs of an emerging recognition of this sensibility as is evident across a range of housing projects through out South Africa.

If the apartheid state had 'space' as a centre of its agenda, then the 'new' South Africa and the project of democratic transformation requires a similar counterstrategy. Design has a central and pivotal role in instrumentalising toward that end. Within the realm of Housing, design has a unique and innovative role to play by incorporating socio-economic opportunities and contributing toward turning Houses into Homes and Settlements into Communities.

This approach suggests a possible humane and practice based approach to housing delivery that surplants the predominance of the developer and acts to mediate between grassroots and government. As with apartheid, new forms of agency are required. However, unlike apartheid's NBRI, these should transcend traditional divides and directly confront technocratic and developer driven utilitarianism. Housing policy should aggressively move from the comfort of the familiar and into the realm of genuine community.

Acknowledgements

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