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OF HONEYPOTS AND SPIDER WEBS

The design of a major urban component as an element of extended capital web

PEDRO VAN WYK ROOS

A dissertation submitted to the Faculty of Architecture, University of the Witwatersrand, Johannesburg, in partial fulfillment of the requirements for the degree of Master of Urban Design

Johannesburg 1990

FOR SKYE

who made me laugh when I needed it most

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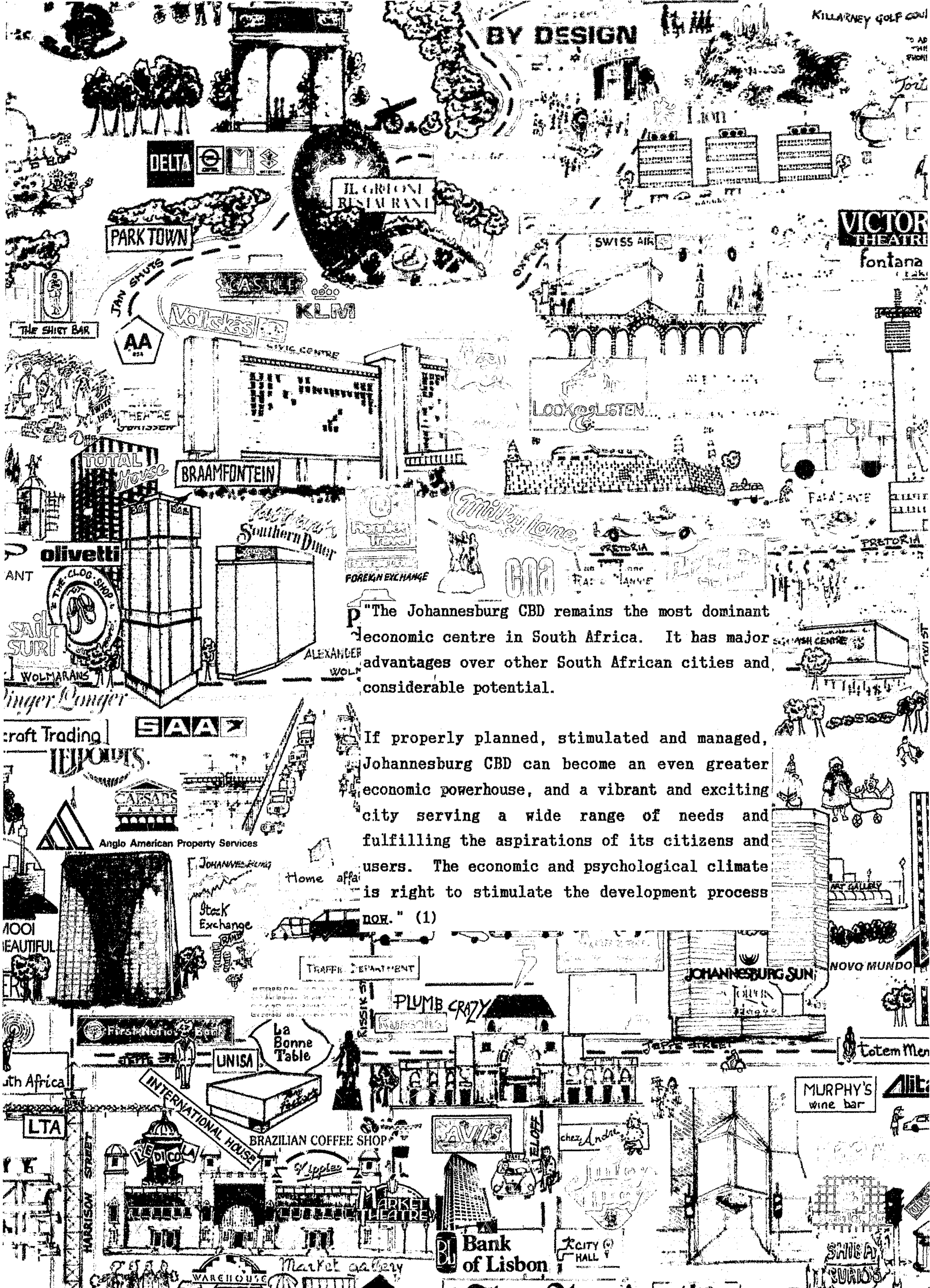
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"The Johannesburg CBD remains the most dominant economic centre in South Africa. It has major advantages over other South African cities and considerable potential.

If properly planned, stimulated and managed, Johannesburg CBD can become an even greater economic powerhouse, and a vibrant and exciting city serving a wide range of needs and fulfilling the aspirations of its citizens and users. The economic and psychological climate is right to stimulate the development process now." (1)

INTRODUCTION

Despite the ample and willing capital investments available to the city, the city remains impoverished.

An analysis of the ills currently plaguing Johannesburg reveals that there is little or no trickle-down of positive investment spin-offs which would enhance the city qualitatively.

This document is based on the deep-seated conviction that cities are complex, life-enhancing and extremely dynamic organisms subject to myriad forces that constantly alter their character. It is, however, these dynamic forces which hold the clues for breaking the status quo within which the city stagnates today.

The forces themselves are changeable and forever being remoulded by positive and negative pressures. The challenge is, first, to identify the forces of consequence with their respective pressures, then to establish which pressures should be enhanced or eliminated. Design imperatives capable of manipulating the pressures must then be devised and the forces directed towards the achievement of the Dynamic City.

The subsequent challenge entails establishing which of the design imperatives will have the furthest reaching effect on current shortcomings in the local context.

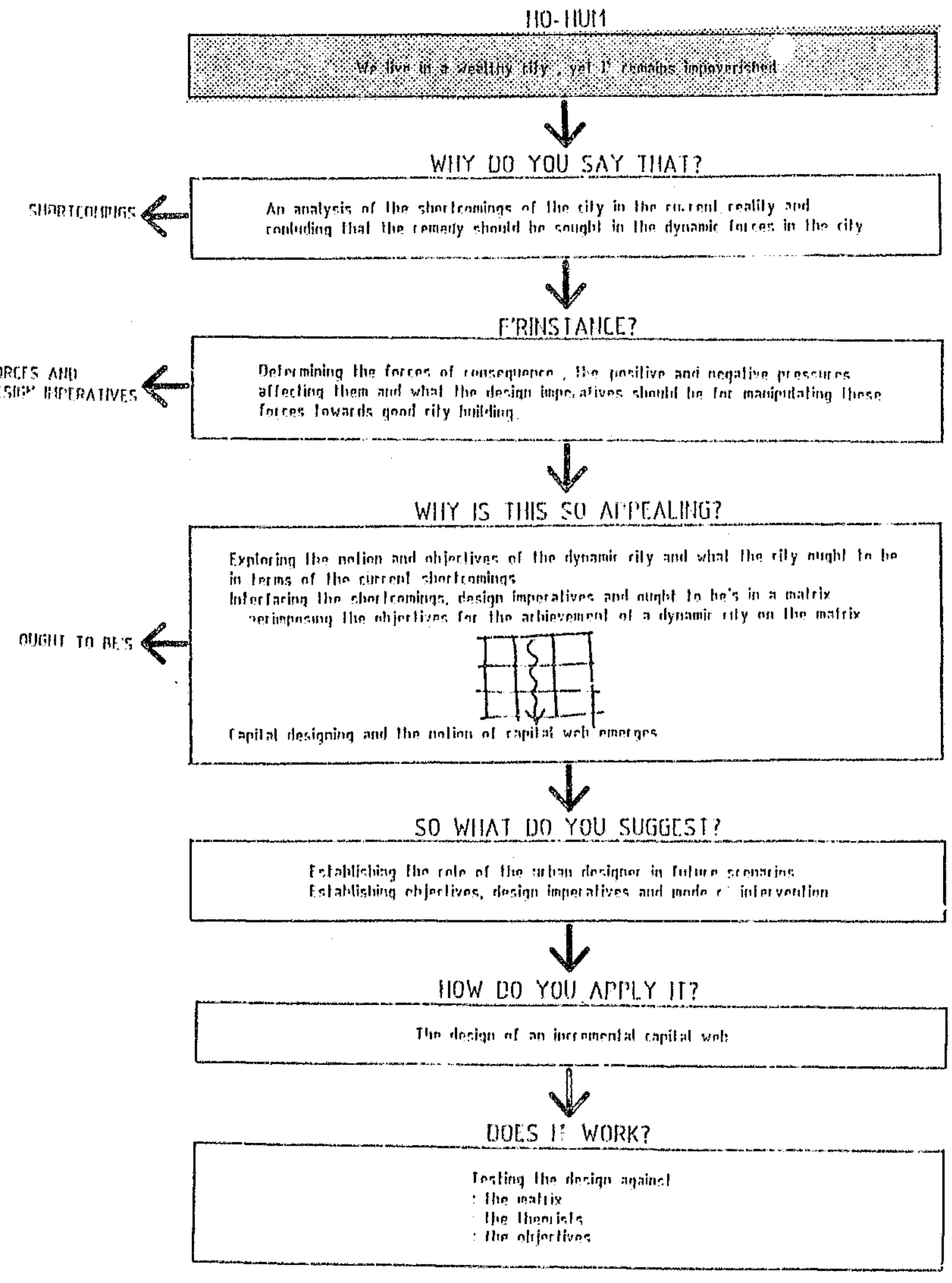
Through a matrix interfacing the shortcomings of the current reality with what the city ought to be and the related design imperatives, Capital Designing emerges clearly as the golden thread from which all other interventions can be hung.

Although this conclusion is not surprising, the challenge remains as to how to strategise implementation of the Capital Web. By "deconstructing" what would have been a major urban installation or "honeypot" into a series of smaller installations linked by a network of routes like a "spider web", it is intended to maximise the spin-offs of a major investment which becomes strung across the city, establishing vital linkages in an incremental manner in its wake.

This document does not imply that such intervention will be the panacea for all ills, but it does offer a glimpse of how a set of established circumstances can be manipulated incrementally at a small scale to benefit the dynamics of the city as a whole.

CHAPTER 1

THE HO-HUM STATEMENT



We live in a city...

THE CITY IN TRANSITION

Cities are timeless, marvelously complex, life-sustaining organisms; constantly evolving, responding to change and adapting to circumstance. No single scenario or ideal end-state, for city form, is possible. Instead scenarios emerge and disappear as changing realities introduce continually new frames of reference, and a forever exciting, kaleidoscopic medium with which to work.

This sweeping statement is aptly applied to Johannesburg, perhaps now more than ever, as its turbulent history teeters on the brink of change caused by major transitions at physical, social, political and economical levels.

Hopefully, however, Johannesburg and particularly the CBD and its environs, has over its short but vigorous history and numerous forecasts of peril, weathered enormous change and proven itself adaptable to changing circumstances.

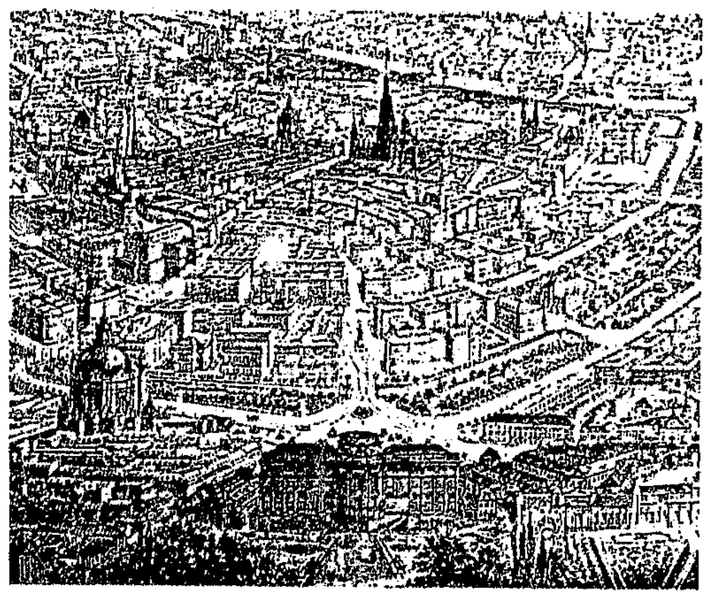
The perpetual enforced mutation of the past few decades, arising from the grand political ideologies of Central Government, has however succeeded in having a negative effect on the inherently dynamic nature of the city. Growth, adaptation and the energy of modulation have been slowed to the point of stagnation, albeit a stagnation brewing with the suppressed pressures of urbanisation and imminent socio-political reform. The city finds itself hanging heavily in the timeless process of its development, ripe for the opportunity to break the status quo and release the unprecedented energies of primary forces currently at play, heralding a return towards the Dynamic City.

If these opportunities are not seized at this auspicious moment and capitalised upon as a matter of urgency, the city might well slip into deeper stagnation. Existing shortcomings are already manifest as a result of procrastination in dealing with the artificially held-back pressures and these will only be exacerbated. The state of affairs will become irreversible.

The uncertainties of change, coupled with a fundamental belief and delight in the dynamic nature of the city, demand a "visionary" rather than a "predictionist" attitude. Partnership between the private sector, local government, city users and design professionals, will facilitate realisation of our visions and a striving for a self-supporting vital city.



Lynch, K. The Image of the City



Gideon, S. Space, Time and Architecture



Lynch, K. The Image of the City

LAND-USE PATTERNS AND URBAN FORM IN THE JOHANNESBURG METROPOLITAN AREA

Myriad general theories of urban land-use patterns and urban form have been proposed. These theories do not predict or explain the finer detail of land-use patterns but provide us instead with a framework for understanding overall urban patterns. Johannesburg, as the effective economic powerhouse of South Africa since its inception makes it appropriate to limit the theories of the spatial arrangement of urban land-use to those with an economic base.

Levy (2) identifies two general categories in this regard, both applicable to the development patterns of the Johannesburg Metropolitan Area:

Urban Ecology Theory: Explaining the Two-Dimensional Development of Plan

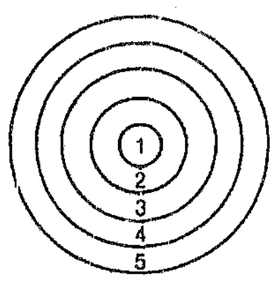
Developed some 40 to 50 years ago, Burgess' Concentric Zone model, Hoyt's Sectoral model and Harris & Ullman's Multiple Nuclei model epitomise urban ecology theory. As a group they have been criticised on several fronts, particularly for failure to reflect current situations, absence of a strong theory base and ignorance of the social, political and economic realities of the city. They have endured, however, because they provide simple and useful generalisations about land use.

Each of these models can be successfully superimposed on a land-use plan of Johannesburg, indicating that the principles of urban ecology are relevant to the city. Notable, however, is that the most obvious discrepancies between theory and fact are the physical forms of apartheid such as the isolated, separate and separated townships of Soweto.

Neo-Classical Land Value Theory: The Third and Fourth Dimensions

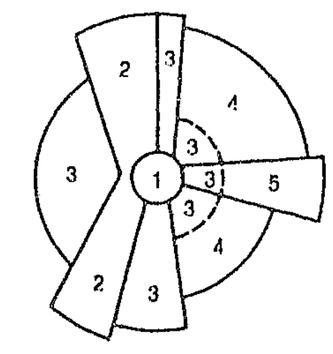
This theory states that urban land uses are primarily a function of urban land values. Land values, in turn, are largely determined by transportation costs. On this basis, Alonso developed the notion of the bid-rent curve, indicating the distribution of land values and the resultant land use patterns.

(a)
Burgess Concentric Zone Model



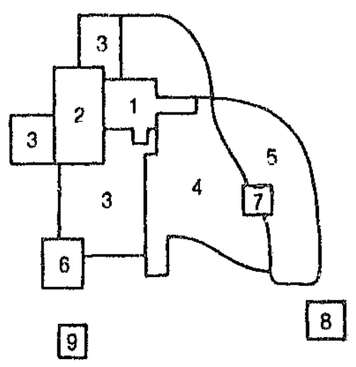
1 = CBD;
2 = wholesale and light manufacturing; lower-income residential;
3 = working-class residential;
4 = middle-class residential;
5 = commuter zone

(b)
Hoyt Sectoral Model



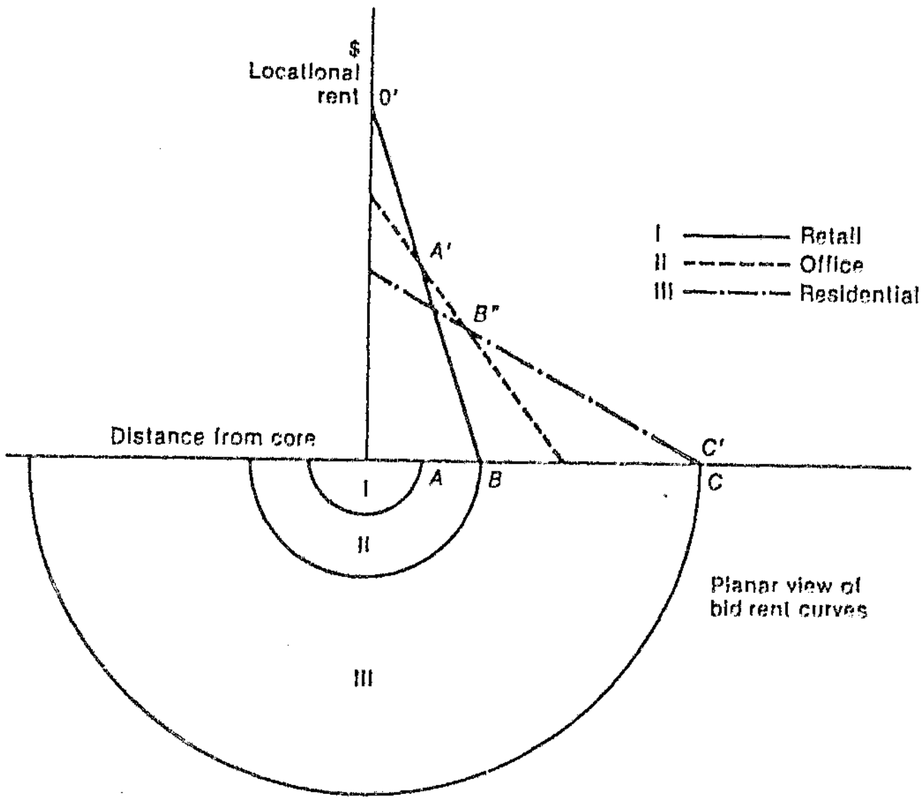
1 = CBD;
2 = wholesale and light manufacturing;
3 = lower-class residential;
4 = middle-class residential;
5 = upper-class residential

(c)
Harris and Ullman Multiple Nuclei Model



1 = CBD;
2 = wholesale and light manufacturing;
3 = lower-class residential;
4 = middle-class residential;
5 = upper-class residential;
6 = heavy manufacturing;
7 = outlying business district;
8 = dormitory suburb;
9 = industrial suburb

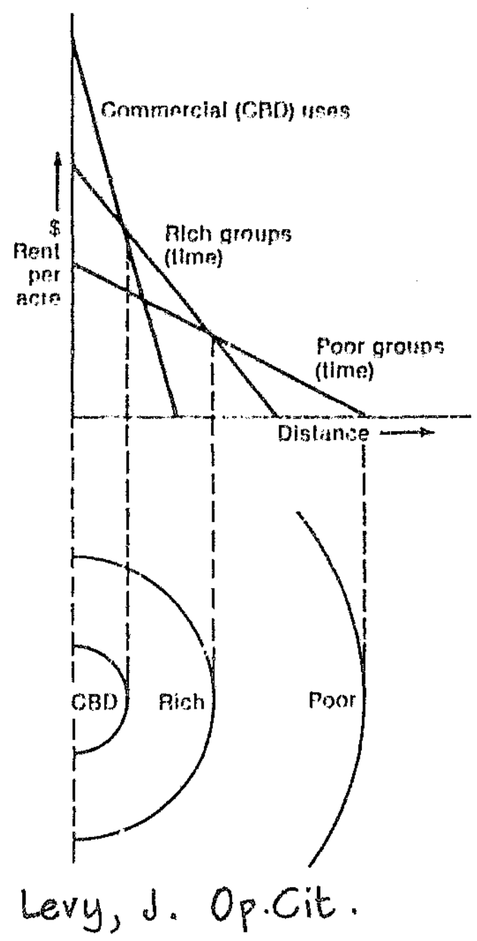
Levy, J. Urban and Metropolitan Economics



Levy, J. Op.Cit.

In terms of Alonso's model, the lower-income groups of Metropolitan Johannesburg are disadvantaged from a distance/time point of view, the result of the fragmented city structure arising from Grand Apartheid Policy. With pressing urbanisation and socio-political reforms, the distance/time element needs to be reduced to re-enfranchise these groups effectively.

The challenge to tackle is the urgent identification of appropriate and affordable inner city land resources to accommodate the disadvantaged and help establish an equilibrium of land values and opportunities in the city.



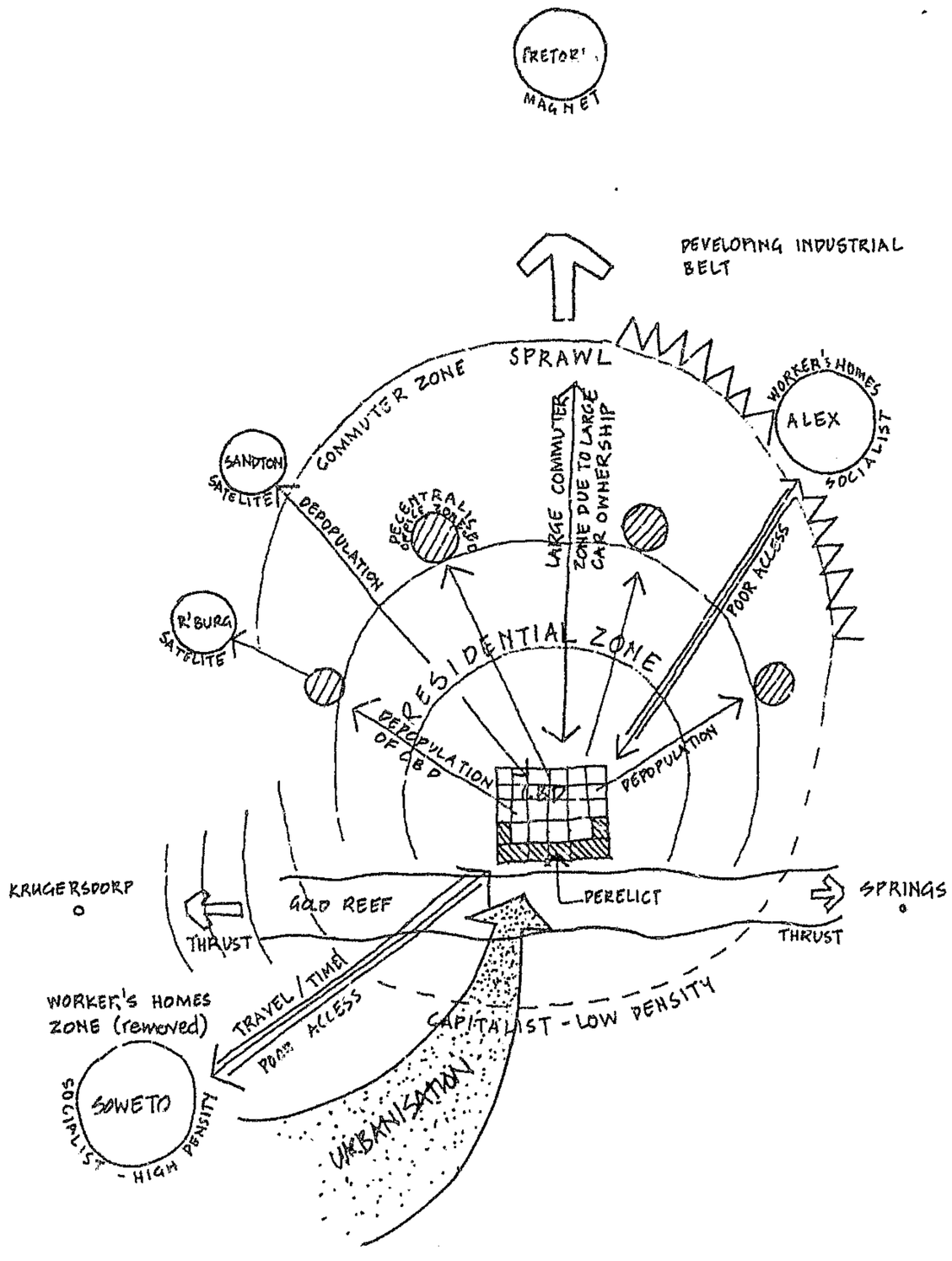
Levy, J. Op.Cit.

THE DYNAMIC NATURE OF THE CENTRAL AREA

The past fifteen years have seen major changes wrought in the central area, caused primarily by the phenomenon of "decentralisation". Specific sectors of both the shopping and office components have moved spontaneously to satellite centres such as Sandton, Rosebank and Bedfordview, while the decentralisation of industries to peripheral "homeland" - border areas has been brought about by Central Government policy. The exponential influx of the black population into the central area has, in spite of official attitudes, had another profound effect on the city's character.

Nevertheless, it appears as if the above forces, particularly decentralisation, have now stabilised to a large degree. While no longer declining economically, the Central Area is however observed to be deteriorating in qualitative terms.

In addition, Johannesburg is presently experiencing the explosive pressures of urbanisation, population growth, unemployment, social and political change, deterioration of security and extreme uncertainty about the future. All of these factors, intensified in concert, affect the physical form and well-being of the city, superseding the single force of economic dynamics which alone brought about the changes of the past.



LAND-USE PATTERNS AND URBAN FORM IN THE CENTRAL AREA

Today the Johannesburg Central Area is a multi nucleated zone of 614 ha in extent, which includes the CBD, Braamfontein, Hillbrow and Civic Hill. These major nuclei are held within a framework of transitional zones made up of New Doornfontein, Troyeville, Village Deep, Selby, City West, Fordsburg and Vrededorp.



City of Jhb, CBD report

The following broad land use patterns describe the CBD and its surrounds:

* a well defined zone of strong retail activity

* an extensive office component overlapping the retail

* two zones of old housing stock, both richly diverse and vibrant

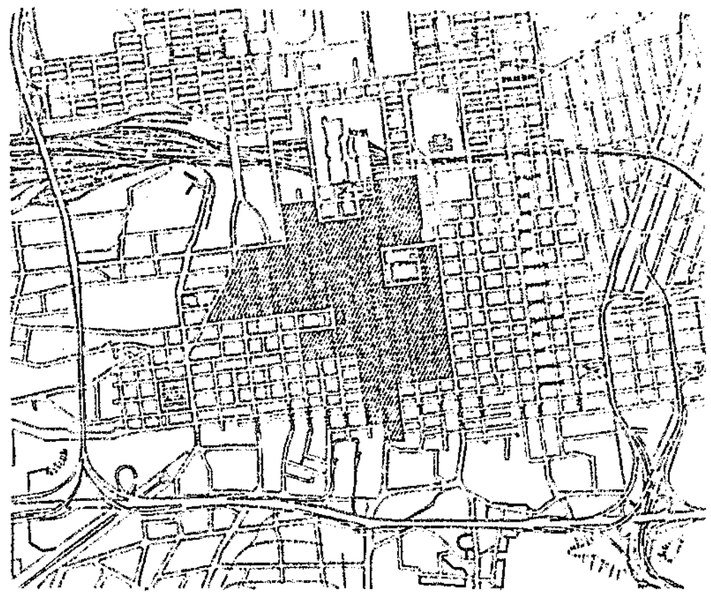
* a general periphery accommodating service industries, economically marginal urban activities and a certain amount of derelict land that is either underdeveloped or vacant

* the encapsulating transitional zones which, despite being separated from the CBD by strongly defined physical edges such as the elevated motorway systems of the west, south and eastern boundaries, represent definite positive forces contributing to the cohesion and general well-being of the city.

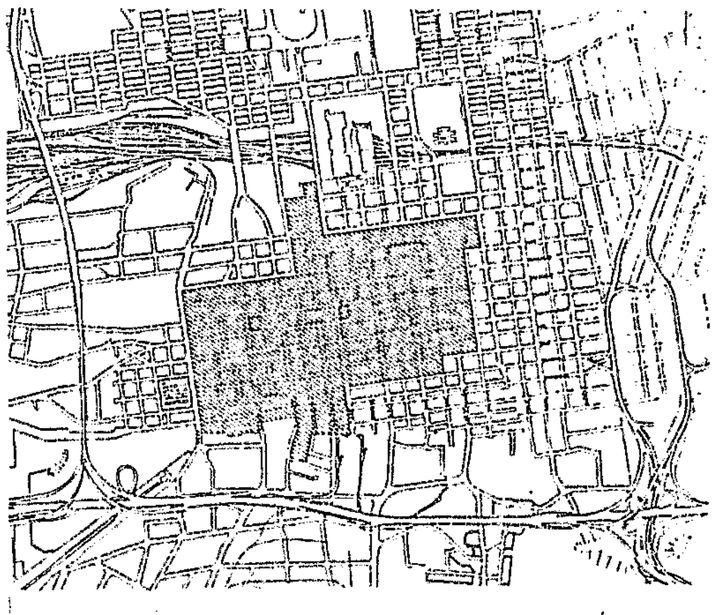
Although possessed of several physical shortcomings, the areas complement one another functionally to ensure a diverse base, capable of being nurtured in the endeavour of creating a dynamic, responsive city. They also form an integrated economic unit, reinforcing the CBD's firm influential position as the structuring element of the national economy.

The CBD, itself one of several nuclei within the Central Area, is by far the most important and powerful zone in the metropolitan area. There is therefore merit in a strategy of mutual support aimed at forging stronger physical links between the various components of the Central Area, the transitional zones and the residential hinterland, with the hope that this would promote improvements in the functional performances of both, and of the CBD in particular. Better defined transportation links to the self-contained entities of Hillbrow and Braamfontein will contribute to the Central Area's unified performance as a "super-CBD". Similarly, the development of the Ellis Park/Doornfontein area as a recreational/educational centre will be promoted. The Central Area will also benefit by the emergence of a high density residential environment in the Fordsburg/Pageview area. These developments will, in turn, strengthen the CBD's links to its supporting hinterland.

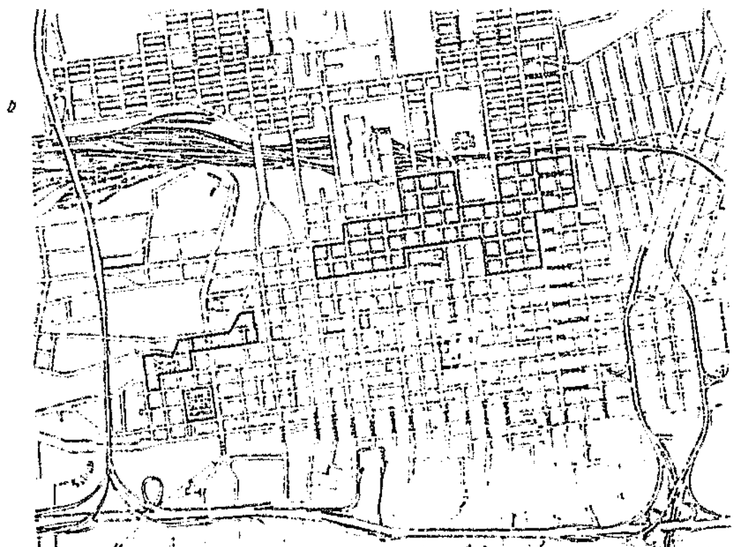
The application of Berry's Land-Value Cone(3) to the Central Area shows clearly that there are areas with rather low land values related to the bid-rent peaks



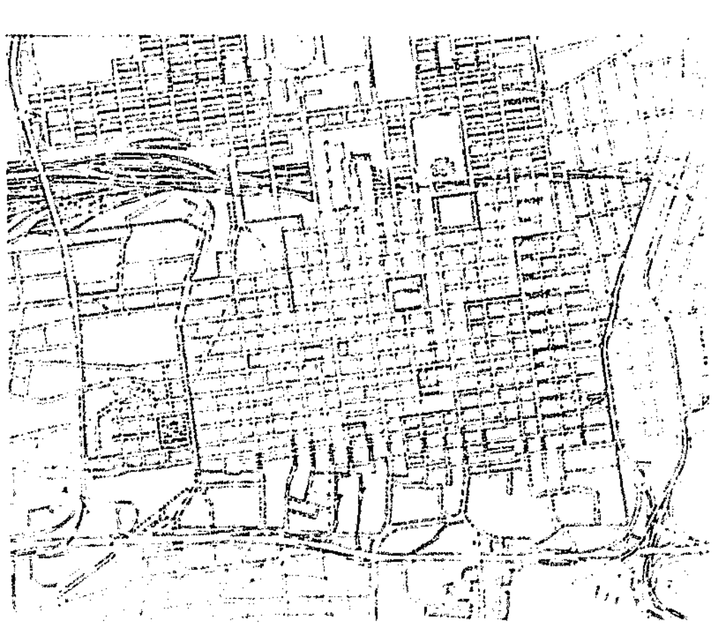
THE RETAIL ZONE



THE OFFICE ZONE



THE RESIDENTIAL ZONE



THE PERIPHERY

City of Jhb, Op. cit.

in the peripheral and transitional zones. The reason for this is the severe inner city blight and dereliction caused by the Central Government's decentralisation and racial removal policies. The areas thus represent the soft underbelly or points of puncture for inner city intervention. **The limited economic means of the non-corporate private sector, in partnership with the public sector, are capable of making an impact on these areas.**

The Periphery

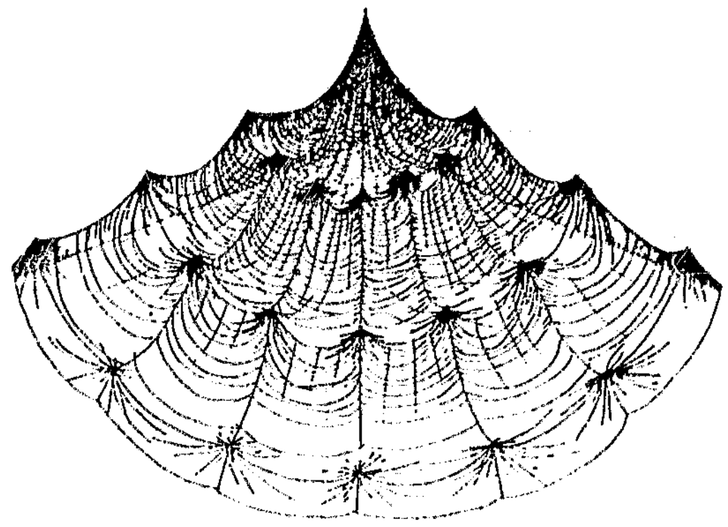
The peripheral zone is in a constant and unsettling state of flux and transition as economic opportunities and development pressures come and go. It constitutes a buffer between the Central Area, the surrounding transitional zone of opportunities and the hinterland beyond.

Four general sectors are identified within the periphery.

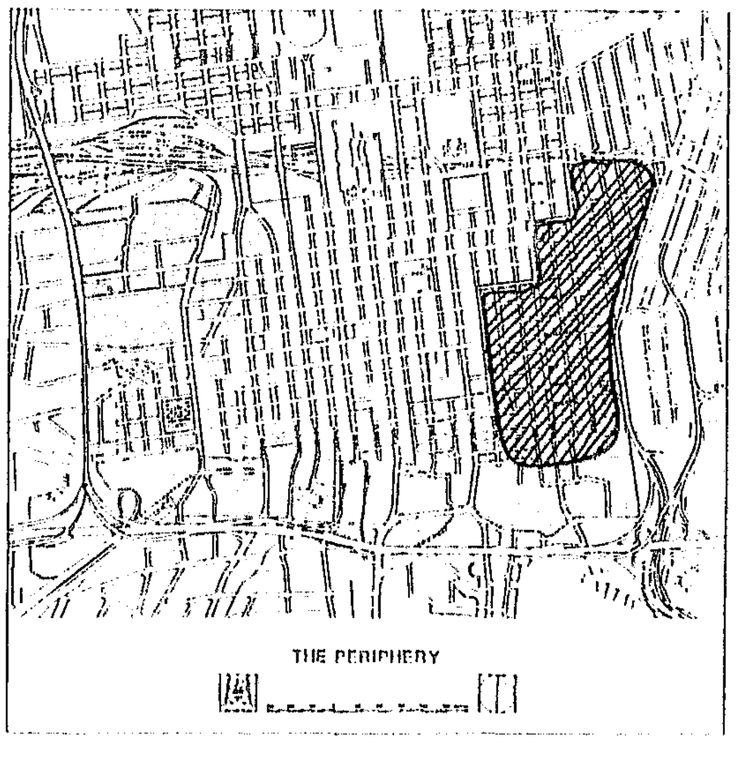
* The eastern sector comprises fairly low rise, extensive developments of low intensity, lacking an identifiable core area. It is typically stable and comparatively static in its growth rate. Uses include showrooms, factories, warehouses, workshops and storage yards, contrasted with prominent high rise offices scattered around. A minor trend towards squatting is evident in marginal areas.

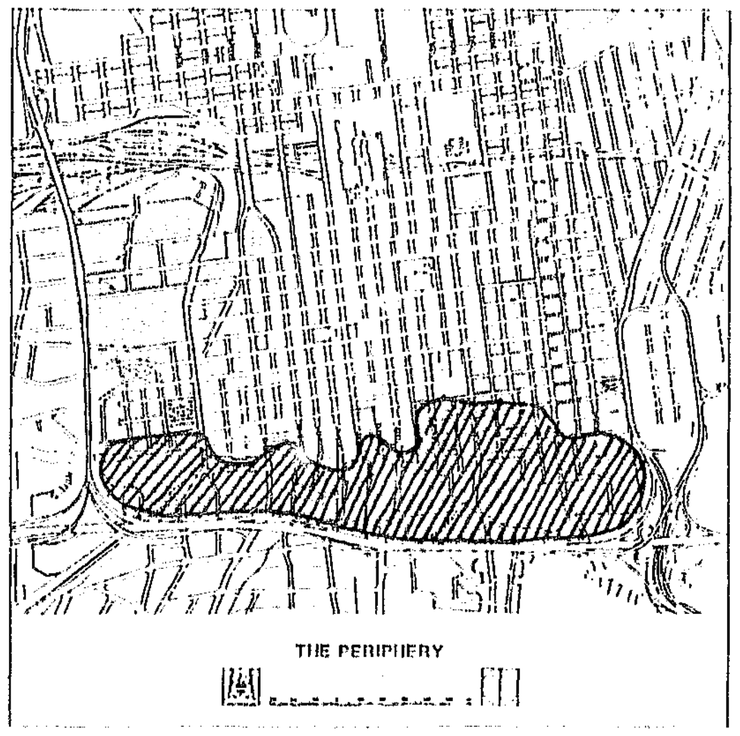
* The area along the southern fringe of the CBD has been limited in its development potential because of undermining and its accompanying regulations. Advanced ground engineering has allowed some major developments to have occurred, but the cost of ground stablisation remains such that the land is rendered marginal as a development option. The zone is accordingly largely in limbo until such time as the economics of land stabilisation prove viable.

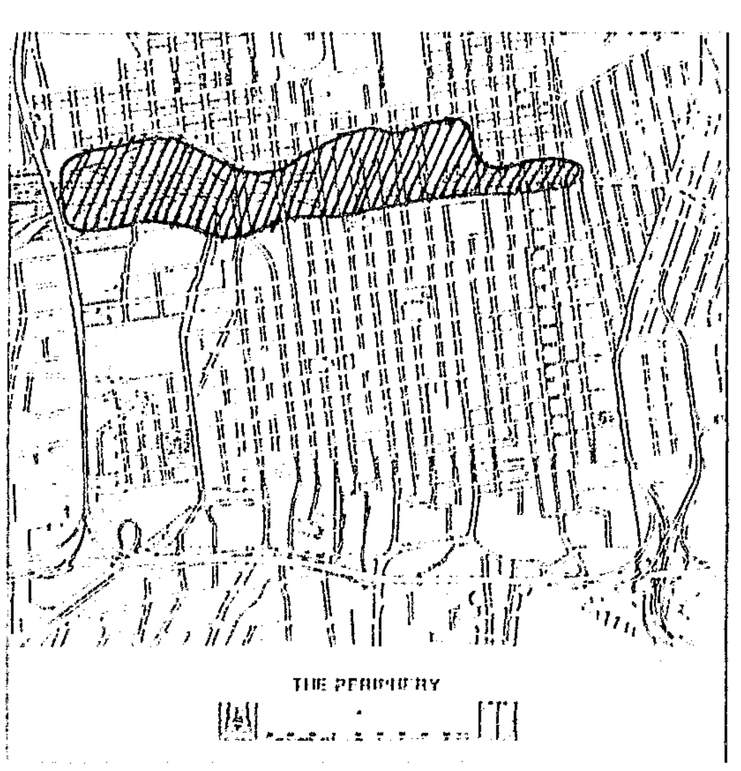
* The northern periphery is also a sector of latent opportunities, held back by the costs of decking the railway line in order to exploit air rights. In addition, legal aspects of such action remain unresolved. Until these problems are solved, this zone exists as an impenetrable barrier in the city, the railway tracks acting like barbed wire to practically isolate Braamfontein and Hillbrow from the CBD. In terms of potential, however, this strip is more favourably placed than any of the others.



Land-value cone for metropolitan areas. Land value declines away from the CBD in the manner described by Alonso. Ridges correspond to major urban arterial routes, while the secondary peaks occur at the intersection of these arterial routes and major crosstown streets. (*Brian J. L. Berry*, Commercial Structure and Commercial Blight, *University of Chicago, Department of Geography, Research Paper No. 85, Chicago, 1963, p. 35.*)







City of Jhb, Op.cit.

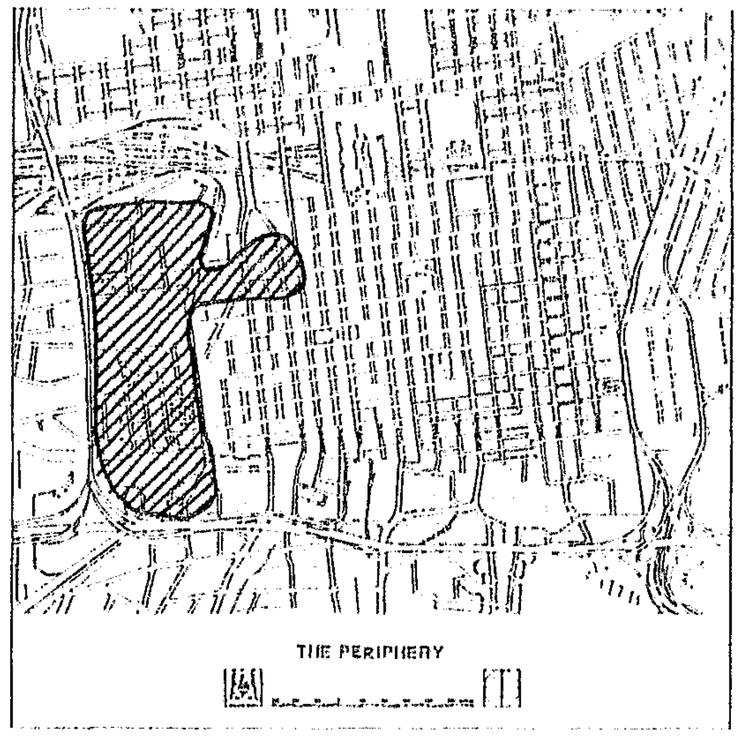
* The western sector of the city is largely vacant, underdeveloped or, in some cases, derelict. This is primarily the result of large-scale installations such as the abbatoir, fresh produce market and old power station becoming redundant, while the land itself remains vested in the local authority.

The resiting of the Johannesburg Stock Exchange to this zone precipitated a shift in the financial core of the CBD. It also acted as a stimulus for interest in the redevelopment potential of this area and a general westward expansion of the city's office component.

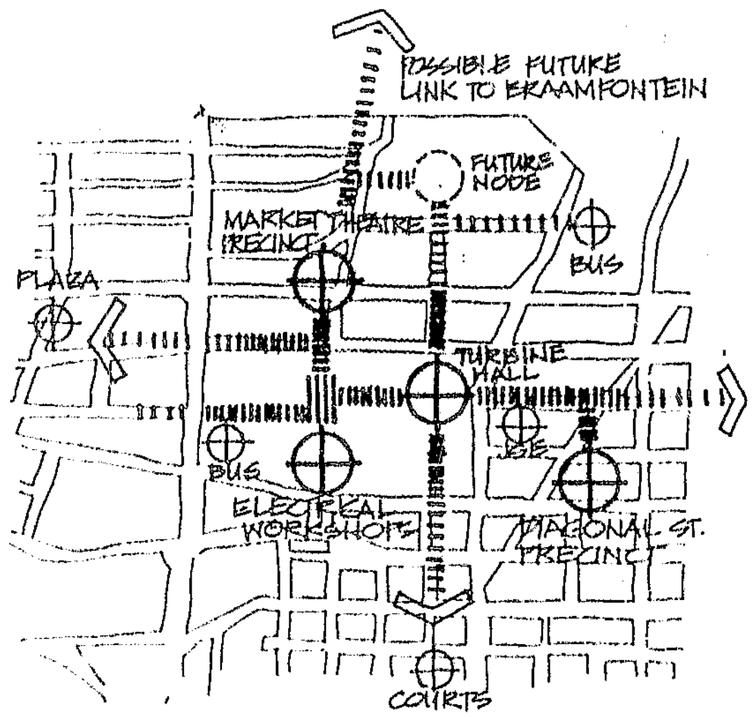
In addition to the financial presence in this sector is the cultural node focused on the Market Theatre and the precinct which cups it, as well as the hardy heritage of small, delightfully intimate retail and market stalls found originally in Diagonal Street and replicated more recently at the Saturday Market held on Mary Fitzgerald Square.

Another major dynamic element is the existing circulation and activity patterns channeled through the West Street "gateway" via the Putco bus terminus and minibus taxi routes into the city proper, heralded by informal markets.

The Newtown Urban Design Competition encouraged investigation into various alternatives for the revitalisation of this sector. The GAPS winning proposal suggests a "fragile thread" approach in which a "thread" of public capital is used to weave a structure on which other more robust uses are developed by the private sector.



City of Jhb, Op. Cit.

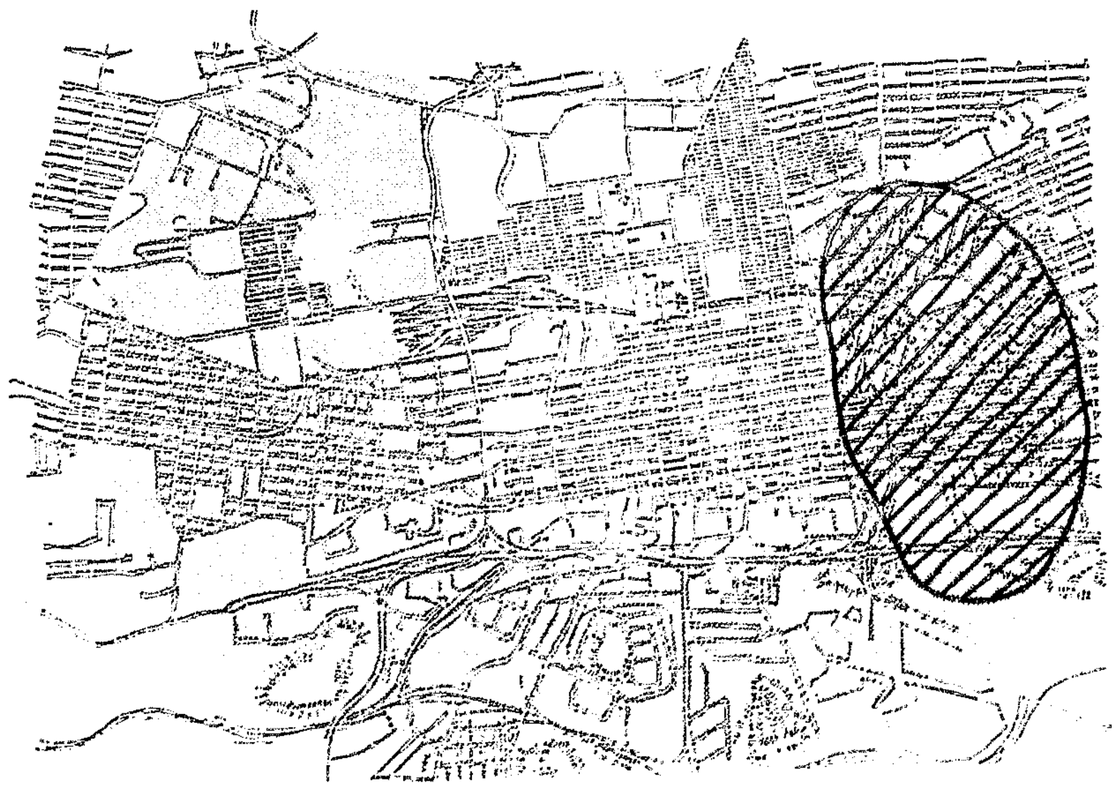


GAPS, Newtown Report

The Transitional Zone

The transitional zones of New Doornfontein, Doornfontein, Troyeville, Village Deep, Selby, City West, Fordsburg and Vrededorp form a framework encapsulating Johannesburg's Central Area. Clockwise movement round the city highlights a variety of characteristics in the zone.

To the east major capital interventions typify Doornfontein's office sector, whilst Troyeville languishes as a derelict residential zone stirred only by the first signs of gentrification. Jeppestown is fairly low rise, low intensity development, static in its rate of change. It includes factories, workshops, warehouses and a retail component supported particularly by the pedestrian traffic generated by Jeppe Station.

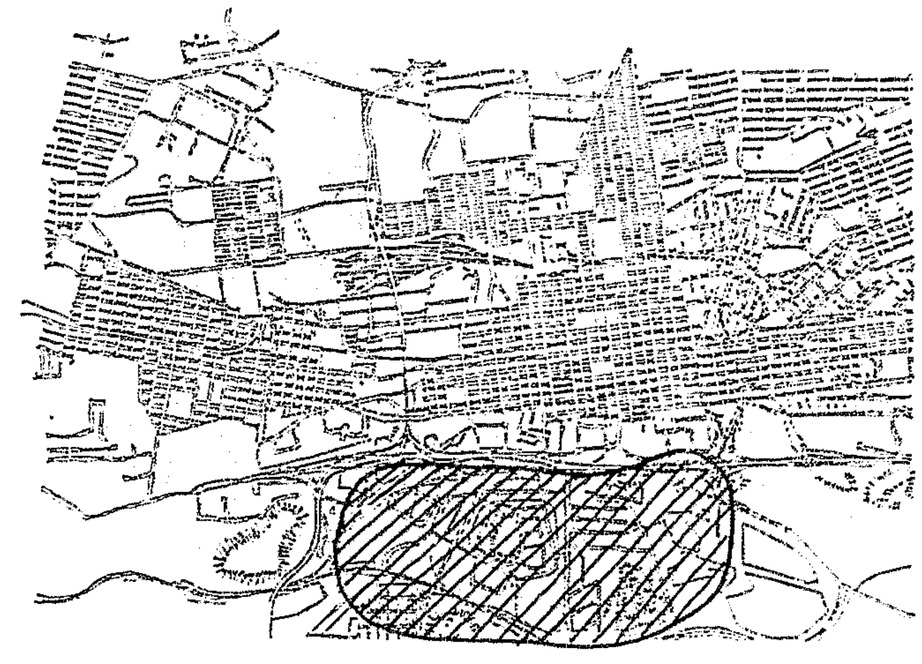


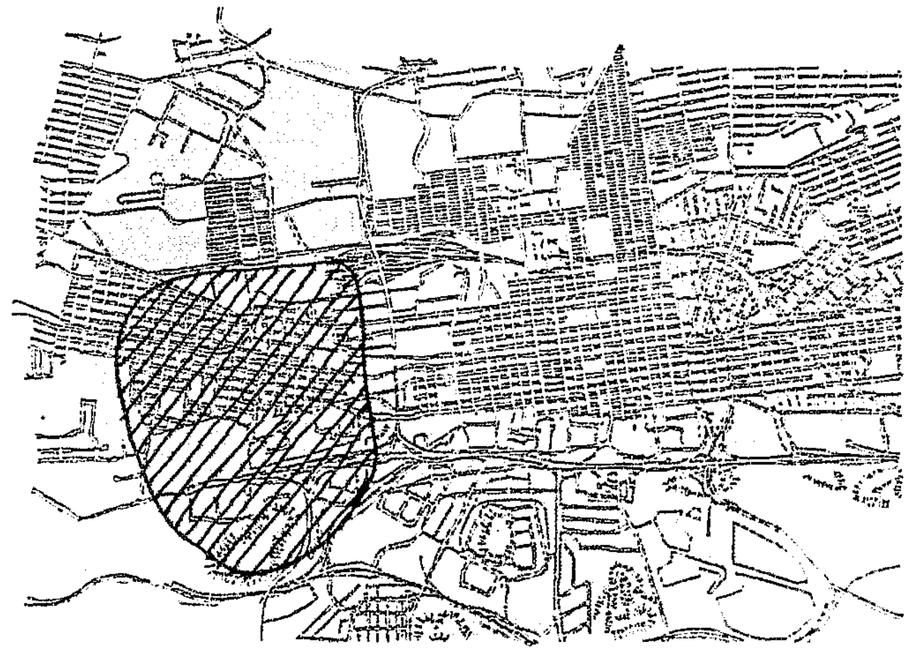
To the south a thriving industrial component lies amongst the remnants of mined-out land and the heirlooms of railway activities. It is well-served by railway stations and provides access to extensive employment opportunities therefore linking it physically and economically to the CBD.

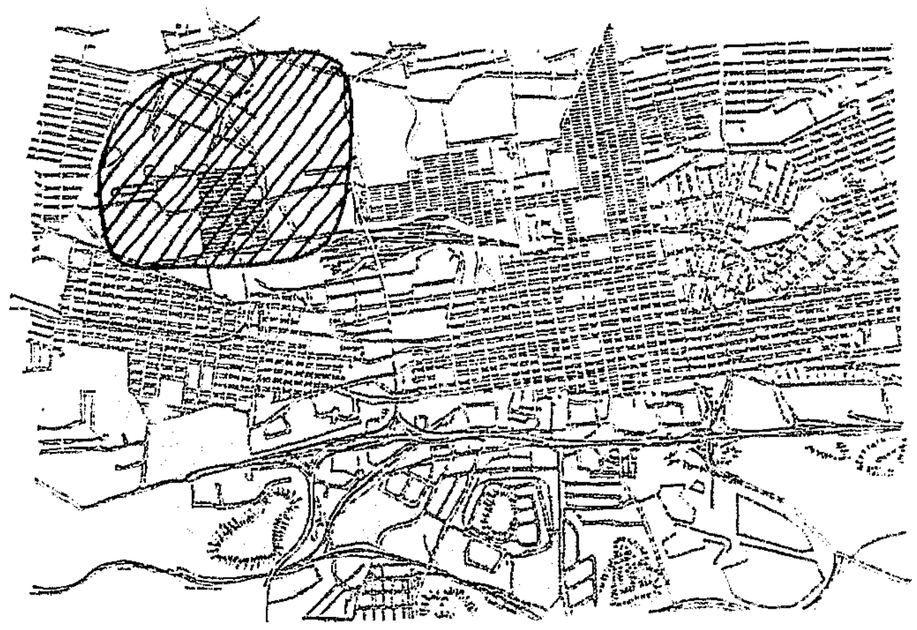
To the west the Indian quarter is regaining its force (albeit, at this stage still with caution) in the form of Fordsburg, which accommodates the major retail node of the Oriental Plaza and its peripheral spin-offs which penetrate Burghersdorp. Despite some low intensity capital interventions, a derelict aura still shrouds a large portion of the area. The reinstated economic strength of the Indian community is rather more manifest in Mayfair, east of Fordsburg, an area correspondingly plagued by socio-political tension.

North-east of Fordsburg lies Vrededorp, ridden with poverty and decay as a result of government intervention and enforcement of the Group Areas Act. An entire, thriving Indian community was relocated, its homes bull-dozed and the land left under developed. Vrededorp now provides a spill-over zone for lower income white groups from adjacent suburbs such as Brixton, made inaffordable by gentrification. Scattered single storey low-cost housing developments, provided primarily by public institutions are typical. The growth of the area is negative with large tracts of open land.

The remainder of this western sector of the transitional area consists of railway shunting yards (causing a major edge), the Braamfontein and Brixton cemeteries (another physical barrier) and the redundant gas works.

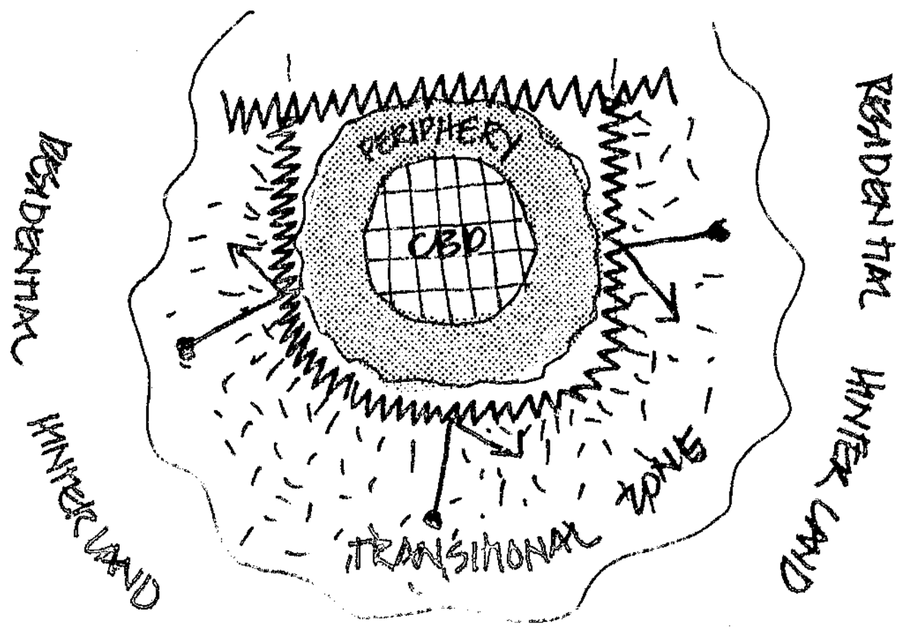






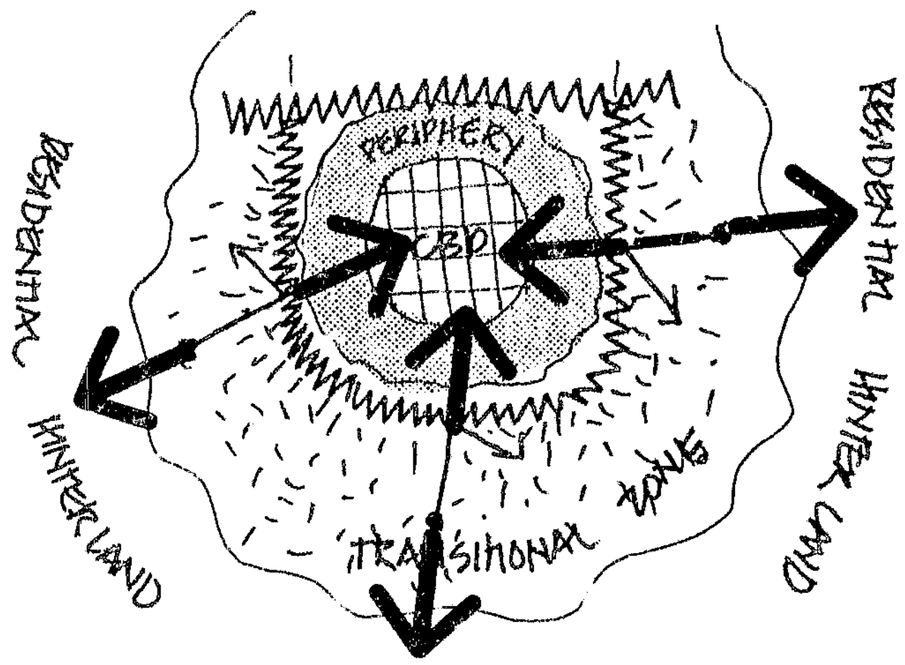
The Interaction of the Zones

It therefore appears that the unopened honeypot of the economically sound, but qualitatively deteriorating CBD is isolated by a buffer (in the shape of the derelict, blighted and underdeveloped peripheral areas on the one hand and strong physical barriers in the form of the freeway system and the railway line on the other hand) from a transitional zone bulging with energy and opportunities in the socio-political as well as the economic realm. The transitional zone also accommodates a very healthy variety of uses different and complementary to those in the CBD.



A major opportunity therefore exists to harness and redirect the energy and forces of the transitional area to transcend the buffer of the peripheral zone. Valuable life lines could be tied back into the CBD, to the benefit of the peripheral zone on the one hand and the CBD which will have obtained a positive interface between itself and the suburban residential hinterland.

Capitalising on the opportunities of the transitional zone could therefore ensure the removal of the tourniquet of the peripheral zone, ensure the reinforcement and support of the well-being of the CBD, the nation and the country.

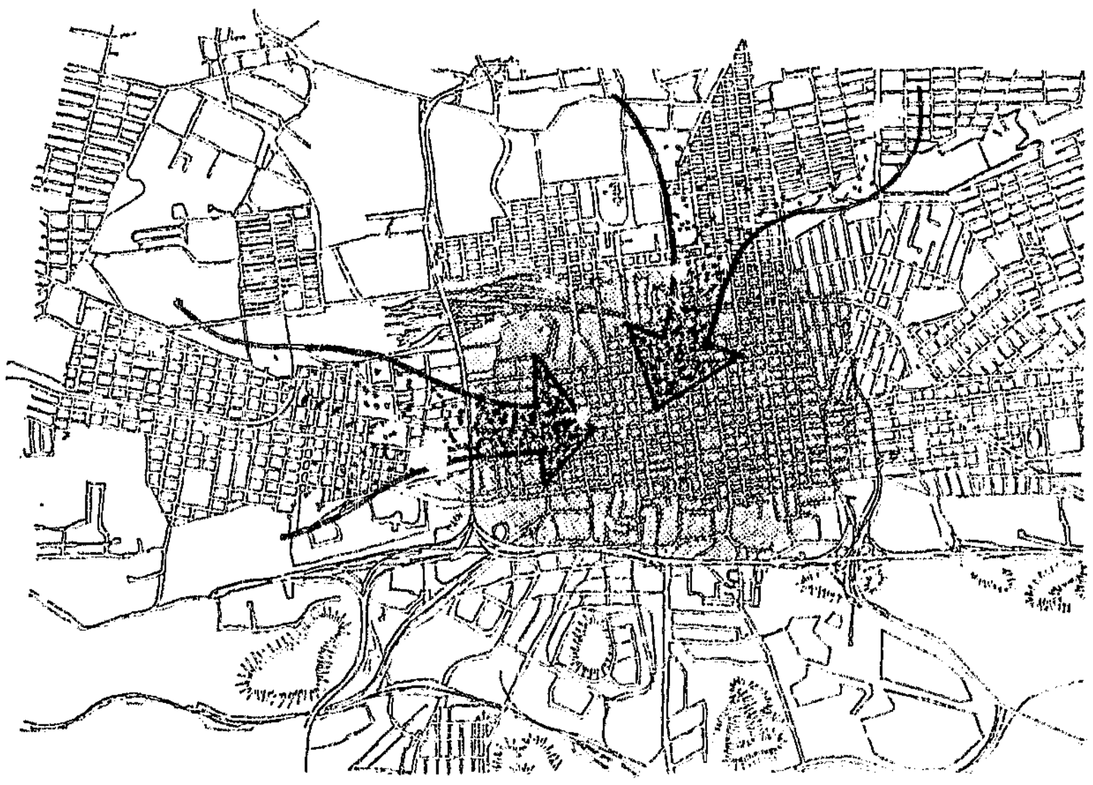


Housing as an Objective in the Process of Urbanisation

Housing is almost always the consequence of other urban activity and a positive attitude to inner city housing will assist in smoothing over the urban transformation. In view of the pressing housing problems accompanying urbanisation and considering the areas of depressed land values, identified earlier in the exploration of the land-value cone model, together with the physical character of the peripheral and transitional zones, one can hone in more accurately on the "points of puncture" or bridgeheads for connection of the CBD to a wider hinterland to promote and facilitate a more prominent residential component in the Central Area. Two soft areas emerge: one to the north-east, related to Hillbrow and one to the west, related to Fordsburg.

The most extreme pressures come from the north-eastern sector in the form of Hillbrow, Berea and Yeoville, but is inhibited to a certain extent by the bottleneck effect caused by the railway barrier at this point of puncture.

The other prominent pressure is the thrust from the west from Brixton, Mayfair etc., via Fordsburg. This seems to be a less constricted point of puncture which, with the correct strategy, can become the key area for intervention.



The next challenge would be to determine what the most suitable and appropriate intervention would be, given the current forces and shortcomings of the city to promote the spontaneous development of an inner city housing component as a spin-off.

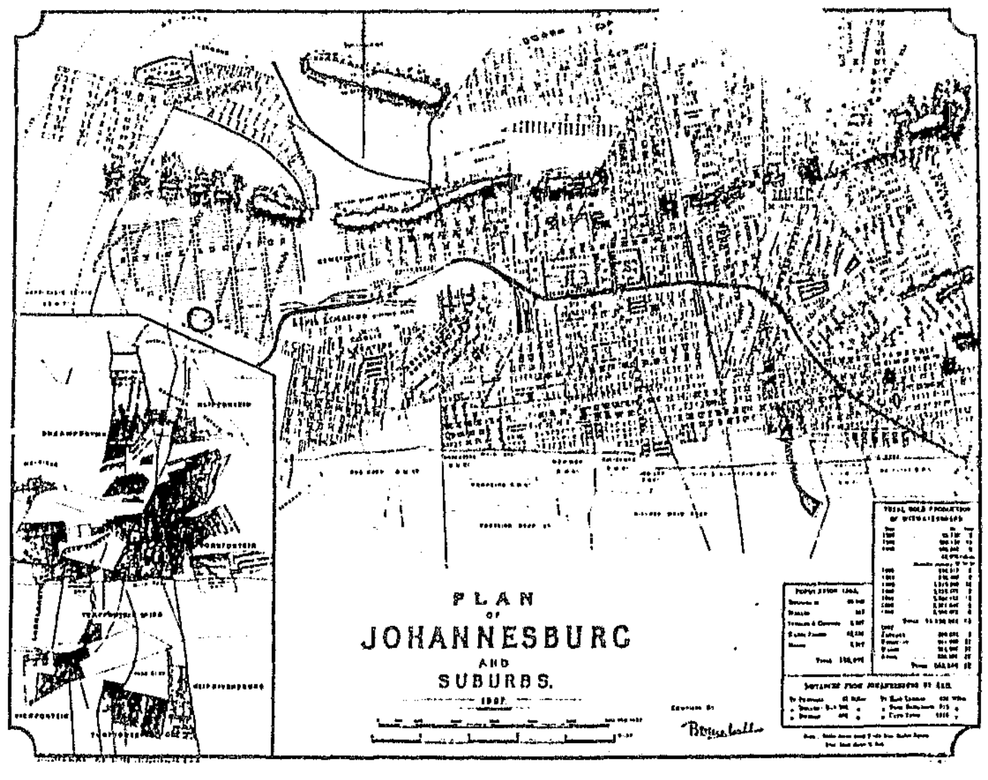
... a rich city with major
capital interventions...

THE BIRTH OF A WEALTHY CITY

Large scale gold deposits in the South African Republic and the advent of intensive gold mining on the Witwatersrand in 1886, generated hitherto unknown economic activity in South Africa. Markets for food, goods and services on the Witwatersrand grew rapidly, fed by the profits of the gold deposits.

From the outset, effective exploitation of the Witwatersrand ore deposits necessitated large-scale capital investment, while at the same time dictating labour-intensive methods of extraction. In turn, this created forward and backward linkages, and soon industries serving the gold mines flourished on the Witwatersrand. By the turn of the century, Johannesburg had the largest urban population in the country.

The gold mining industry rapidly became the dominant growth force of the South African economy, ultimately supporting Johannesburg and the whole Witwatersrand. By 1897 Johannesburg was an established town with a total population of 102 078 complete with a railroad, central business district, suburbs and, of course, segregated settlement areas for Blacks and Indians.



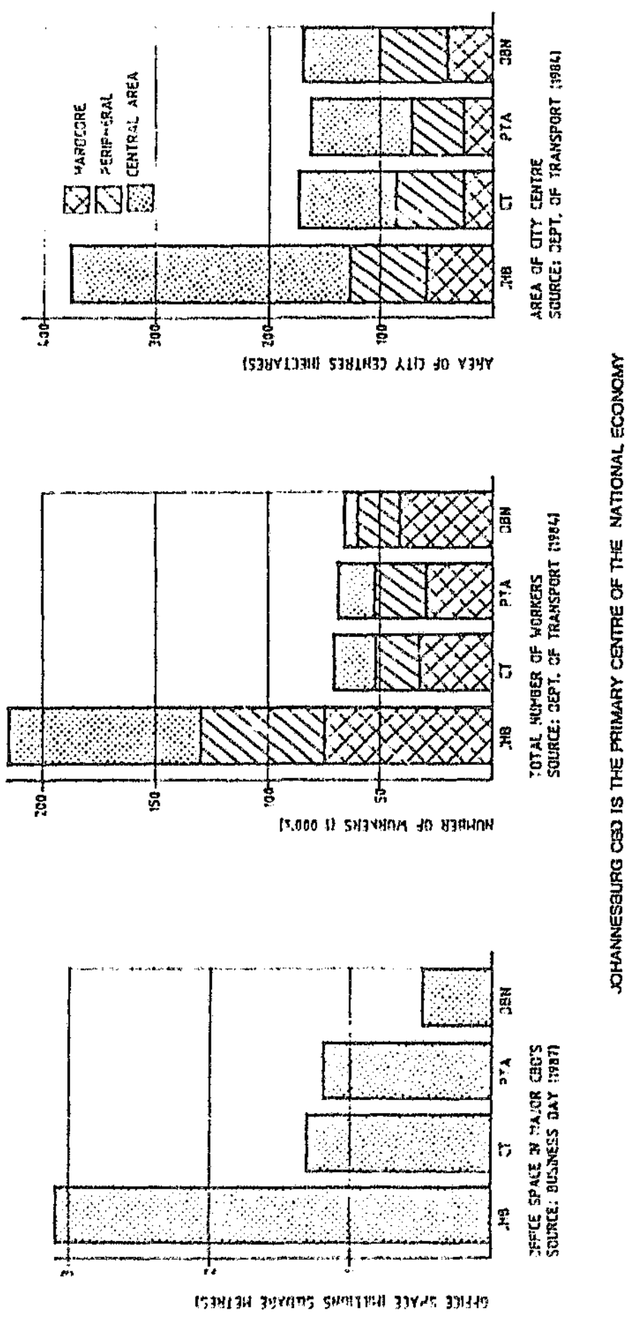
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CURRENT LEVELS OF OPTIMISM IN THE CITY

Having weathered the forecasts of doom of the 1970's, Johannesburg's Central Area remains unparalleled in its dominance as the prime activity and economic node of the metropolis, region and country. Apart from surviving, it has now found the resilience to fight back, with investors realising that the economic, social and cultural investments of the past are too valuable to let fall by the wayside.

"It is cities that contribute to the wealth of nations and are the life-blood of their economies. Cities are mankind's most important asset." (4)

Although the decentralisation of certain components from the CBD to satellite areas is often viewed as detrimental to the CBD, particularly because of the competition it implies, there is an increasing awareness of the symbiotic relationship between the centres, and to the CBD, to the overall benefit of the metropolitan area.



City of Jhb, Op. Cit.

In these terms, the CBD provides a strong heart for the metropolitan economy in which the satellite centres thrive, and in turn, relieve a certain amount of pressure on the CBD. Although the character of the CBD is changing it appears to be fundamentally and economically sound. More office floor space was constructed in the Johannesburg CBD than any other centre in the region between 1978 and 1985.

There is currently a general feeling of economic well-being in the country (albeit of uncertain duration) and indications are that the time is ripe for investment in property. Furthermore, the energy, resources and initiative for investment, possibly on a hitherto unprecedented scale, exist and can be harnessed.

CONFIDENCE OF THE PRIVATE SECTOR IN THE CITY

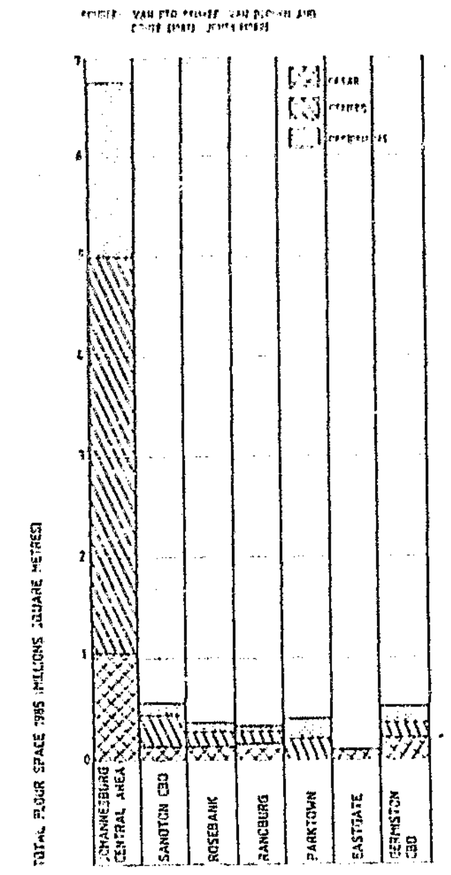
In an Analytical Investigation of the CBD by a team of consultants, appointed by the Management Committee of the City of Johannesburg (October 1987), one of the most encouraging findings from interviews and questionnaires was the "level of optimism with regard to the potential of the CBD and the positive role which virtually all the major developers and investors believe that the CBD can play in the future of the city" (5).

Over the past five years this confidence has manifested itself in the emergence of many large-scale and far-reaching redevelopment proposals, the addition of new building stock and a healthy rate of refurbishment of existing buildings. As a result we see major projects underway with many parts of the city moving into significant levels of urban revitalisation.

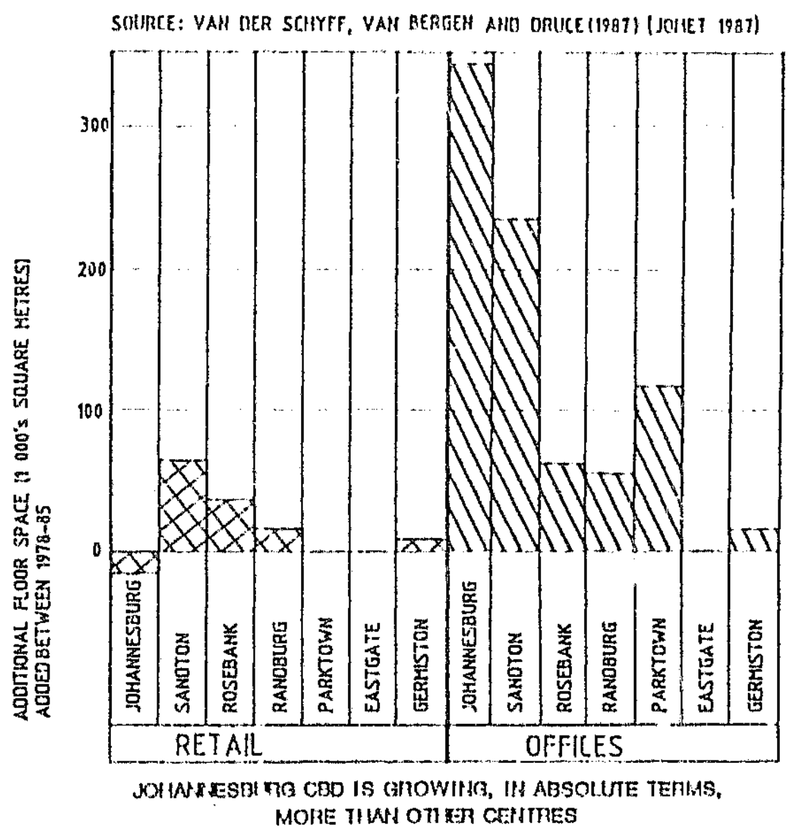
Major pressures and development initiatives identified show an active interest in investment in the CBD towards its qualitative upgrading:

* Northward extensions of the Smal Street mall system to Joubert Park and southwards towards the Carlton Centre Sky Rink.

* The Centre Plan proposals for the major redevelopment of Eloff, Pritchard, Kerk and Von Brandis Streets into a pedestrian precinct, aimed at re-establishing the traditional shopping precinct and the inherent link of Park Station to the CBD.



City of Jhb , Op.Cit.



City of Jhb , Op. cit.

* Air right proposals and enabling policies being formulated by SATS and the City Council to bridge the rail lines.

* A SATS study to rationalise Park Station into a major modal interchange with mixed uses.

* The redevelopment of the Kerk Street precinct between Eloff and Diagonal Streets.

* The redevelopment of Newtown.

* Specialised developments along the southern fringe of the CBD on undermined land.

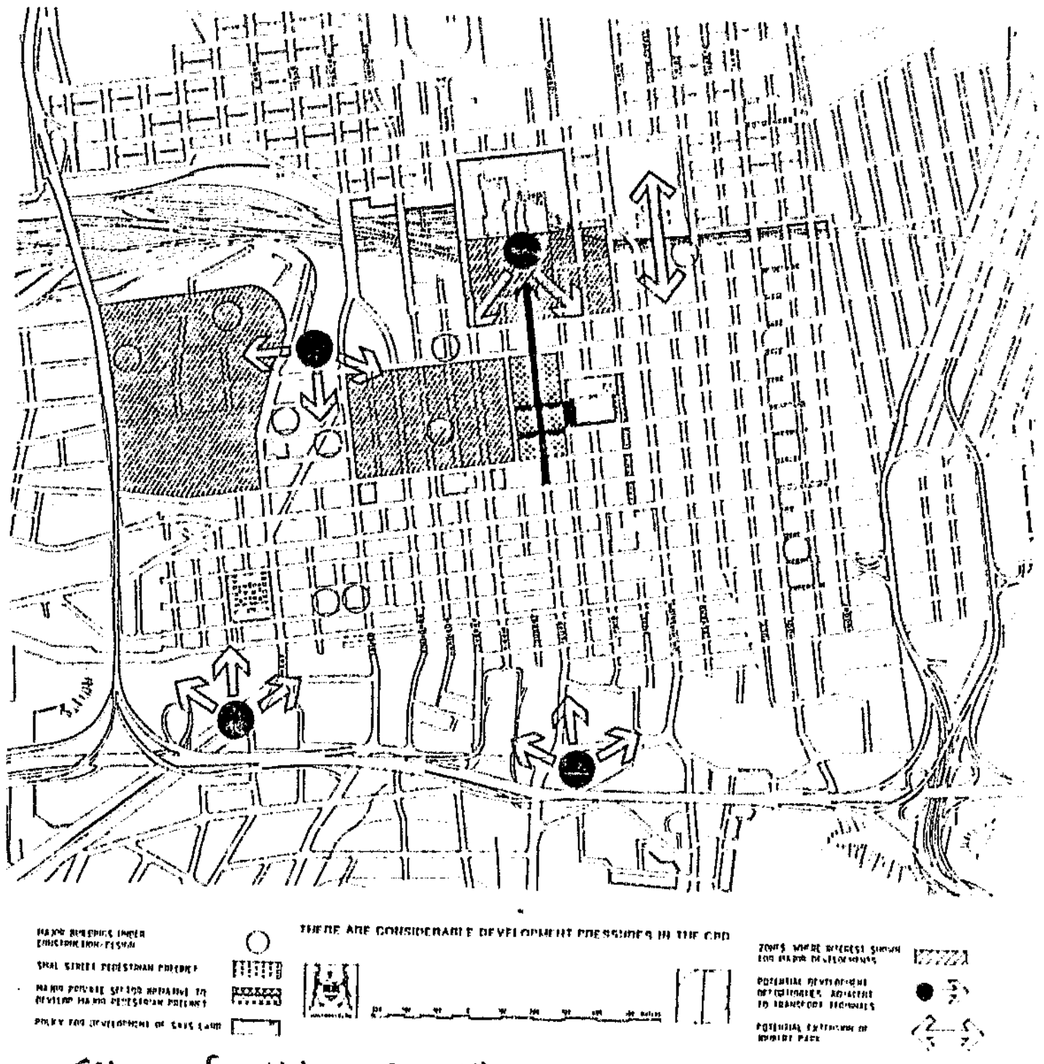
* Increased refurbishment of existing buildings.

* Current and firm proposals for major urban installations, e.g. BankCity and Genmin Headquarters.

In the absence of a clear overall vision and a workable development framework, however, these proposals have had to be dealt with in an ad hoc manner. This raised concern amongst the incredibly strong First World private sector of the city, about the feasibility of major capital investments in the CBD in the absence of a comprehensive development strategy.

The informal CBD development programme that has emerged since, has removed some obstacles worrying developers and investors. In order to ripen the CBD for the major capital interventions that can lead to its Renaissance of the city, the local authority does nevertheless need to commit itself more concretely to a vision and related objectives and strategies for the future.

Regardless of the lack of communication between the public and private sector and the current shortcomings in the city, one fact stands clear, there is an abundance of financial wealth in the city, both in past investments and in current proposals and negotiations by the private sector.



City of Jhb, Op. Cit.

... and yet the city remains impoverished!

CHAPTER 1 : BIBLIOGRAPHY

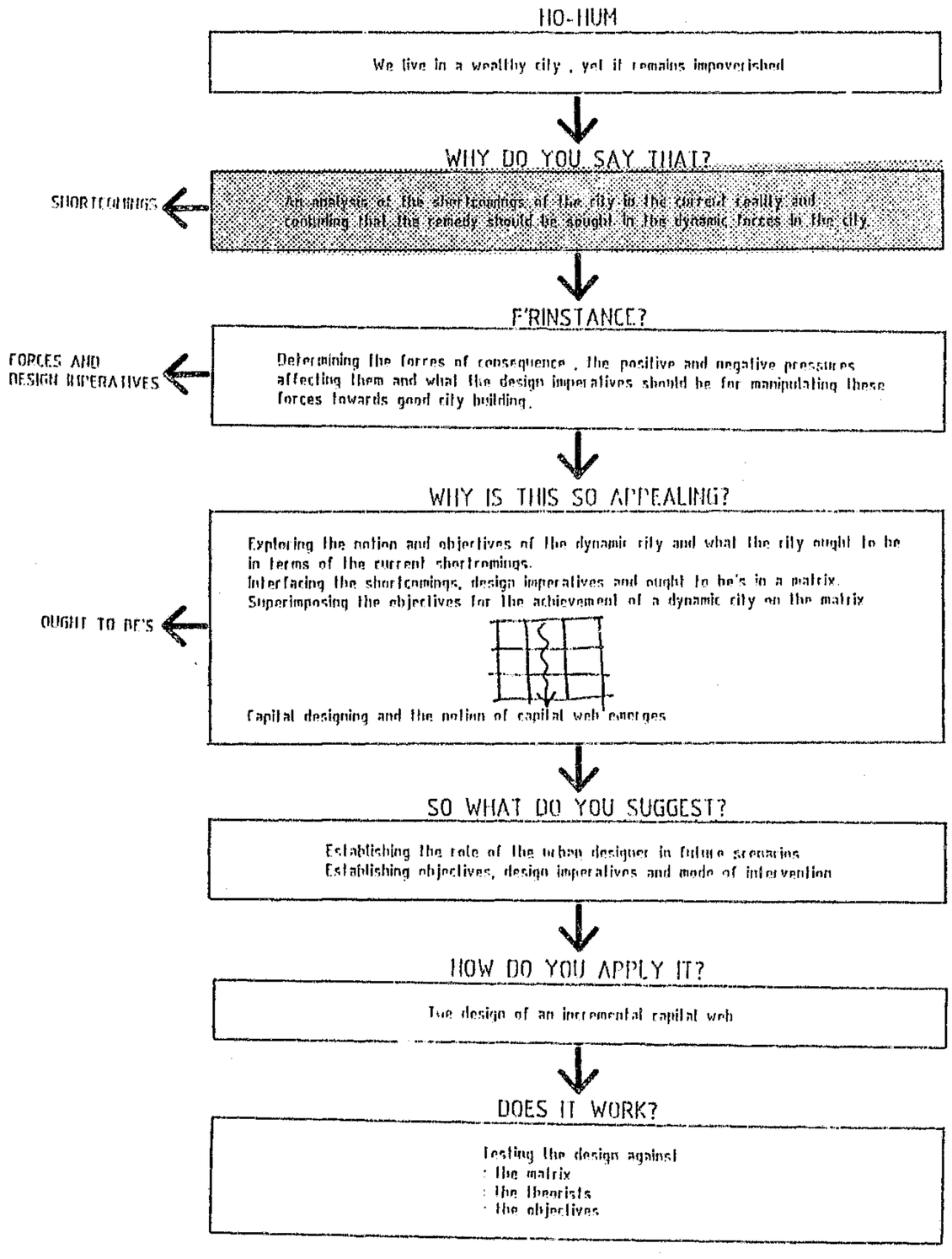
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4. Jacobs, J., Cities and the Wealth of Nations, Penguin Publishers, New York, 1984

CHAPTER 2
WHY DO YOU SAY THAT?



Even historically there is little
foundation for rich city building...

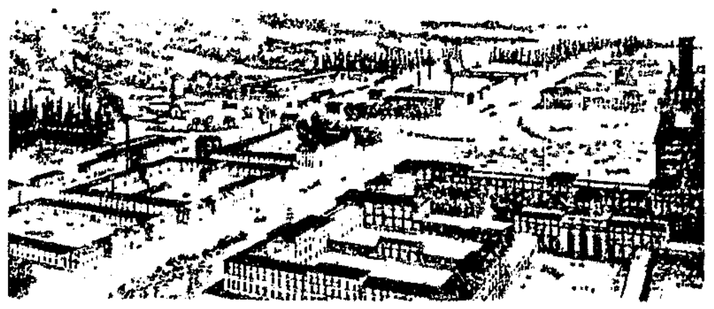
COLONIALISM

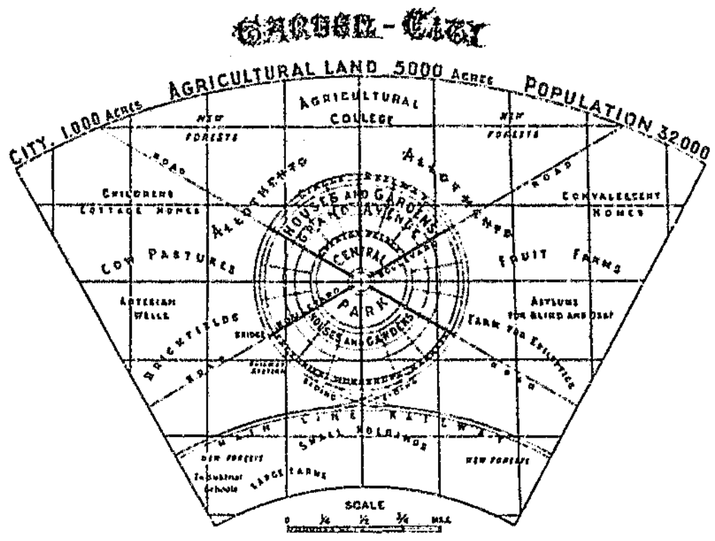
The settlements resulting from colonialism in Southern Africa were nothing more than expedient support structures for the supply lines required by global trade, mere by-products in the exploitation of the region by remote colonial powers. First the Portuguese explorers destroyed the trade lines established between tribes to the north, and with it many of the settlements that resulted from the local economy, evident from 1100 onward. Subsequent investment from the colonial powers towards the establishment of new permanent settlements in the far away colonies was thereafter sparse and hardly adequate.

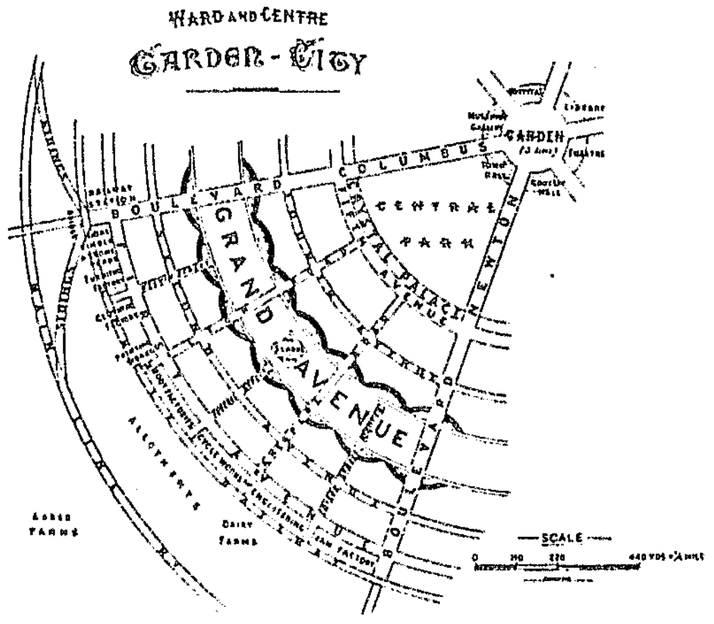
The Dutch and British colonists (those who did not already see city life as anathema by virtue of their farming background) were revelling in the abundance of space, something only vast fortunes could buy in the over-crowded and squalid conditions of Europe. The spacious settlements that evolved as a result of the cheap and abundant land with low levels of yield represented the colonists' "escape" from their cramped mother-cities and their distaste for urbanity as they had known it. This anti-city psyche fuelled the "garden city" aspirations of future generations of city dwellers further.

INDUSTRIALISATION

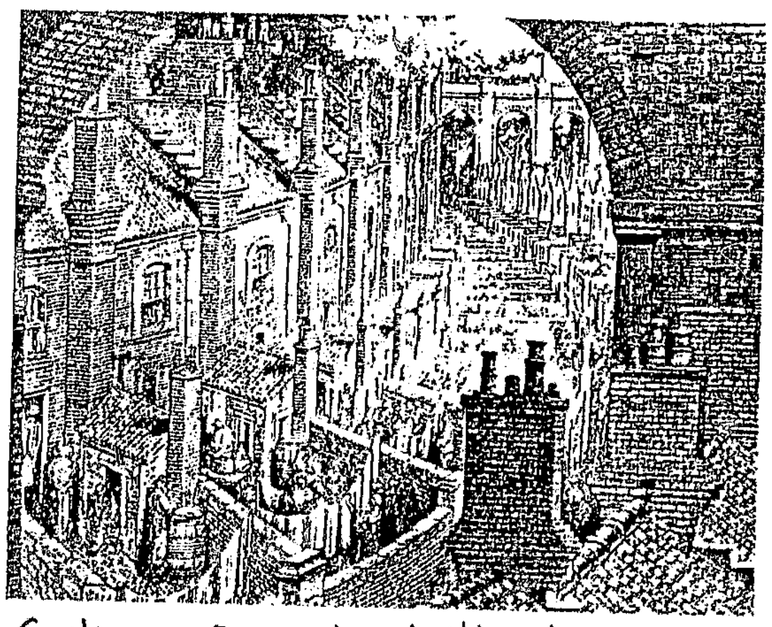
Industrialisation further tainted the image of the city as a worthwhile social organism. The boom and bust ethic of the mining contingent and their transitory mining camp mentality was no basis for permanence (1). The industrial cities tended to become repositories for redundant populations who could not survive elsewhere. This included the poverty stricken Cape Malays, the extended families of indentured Indian labourers unable to be supported by cane farming in Natal and the rural immigrants crippled by the depression. With the anti-city mind in place, and garden city precedence elsewhere, those who could afford it, moved to the periphery. Suburbia was born.







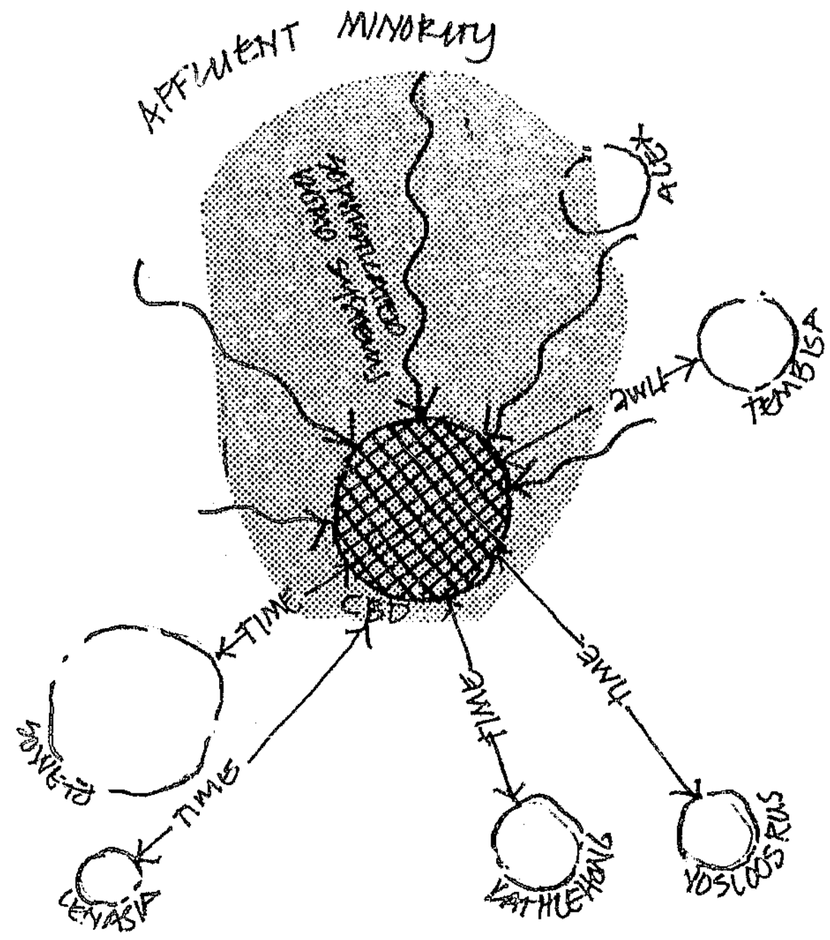
Lynch, K. The Image of the City



Gosling, D. and Maitland, B,
Concept of Urban Design

THE APARTHEID ERA

This ideological phenomenon had by far the most profound effect on our cities physically, socially and economically over the past forty years. The classification of land beyond land use on racial grounds has fragmented the city into a low-density capitalist system. The cities pander to the needs and aspirations of a mobile affluent minority who are surrounded by high density dormitory satellites on the urban fringe to which the majority of the population, with little disposable income on the one hand, and a high level of dependency on public transport on the other, have been relegated.



This disjointed, politically imposed structure resulted in inappropriate travel times to places of opportunity and a totally energy-inefficient city, both in terms of consumption and man-power. The majority of the city's population are therefore not integrated into a cohesive and supportive city structure and feel understandably at odds with the notion of the city as a valuable social organism.

The persistent government policy of suppressing city growth in favour of deconcentration to suppressed regions is directly in contrast with the notion that cities contribute to the wealth of nations (2). Intensifying the city is our only hope for actively dealing with rapid urbanisation, the exponential population growth and the resultant increasing demand for jobs, products and services.

... reinforcing the current
shortcomings of the city...

JOHANNESBURG'S LACK OF URBANITY

The city is a place of opportunity. It is the place of potential fame and fortune, of freedom, education and excitement, and an opportunity for fulfilling aspirations and achieving self-actualisation. To enable the city to perform, it is essential that its opportunities are maximised by enhancing and emphasizing those qualities which accentuate its sense of urbanity.

Urbanity, according to Victor Gruen (3), is characterised by three main features:

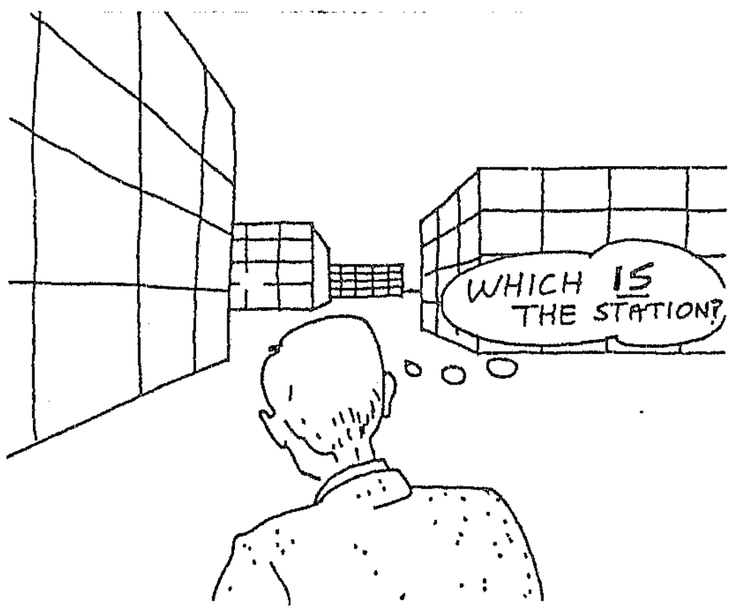
- the opportunity for direct (face to face) human contact and communication
- the opportunity for free exchange of goods and ideas
- the opportunity for human freedom as expressed in multiplicity of choice

Nouvel (4) sees urbanity as consisting of urban complexities, unexpected meetings, streets teeming with life, specific cultural character and personalised use of space.

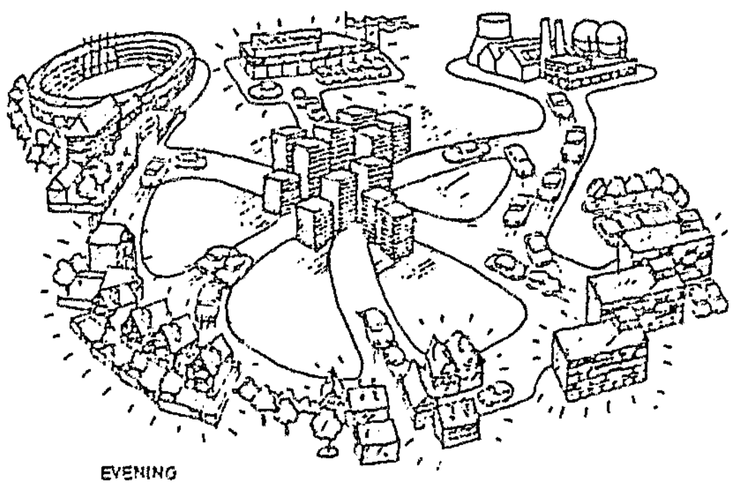
Dewar, Uyjtenbogaardt et al (5) argue that urbanity is the generic term for the positive qualities which exist in rich urban environments as opposed to urban agglomerations and suburbia. The level of urbanity will be affected by the folklore, habits, struggles and sociability through generations of inhabitants of the city.

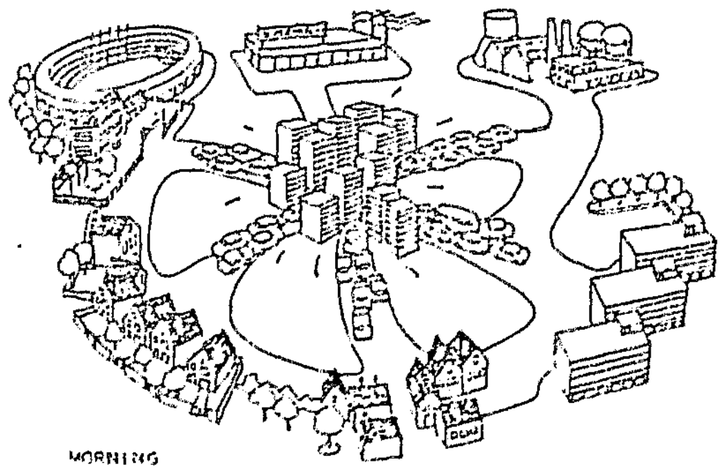
In Johannesburg, as in most modern cities, the lack of urbanity is fuelled by today's technical realities such as the individually owned car, large scale industry, mass communication as well as single use zoning practices and the devastating damage brought about by post-war uncontained sprawl. The absence of large scale clarity and the lack of density destroys the possibilities of a cohesive, imageable community identity. This is exacerbated by the inferior undirected quality of the public transport system.

Johannesburg has furthermore favoured economic growth at the expense of the preservation of buildings of architectural and historical value, resulting in simplistic environments. This is reinforced by the fragmentation of the city brought about by political ideologies in the local context, expressing segregation along economic, sociological, racial and functional boundaries. As a result Johannesburg can



Bentley et al, Responsive Environments





Bentley et al, Op. Cit.

be perceived as the anti-city, a city with a sad lack of the primary pre-conditions suggested earlier for creating urbanity.

In addition to all the above aspects negating urbanity, public space allocation in the city is insufficient and inappropriate for the establishment of a decent platform for the development of urbanity on a scale large enough to start penetrating the rest of the city. Without urbanity the soul of the city flounders.

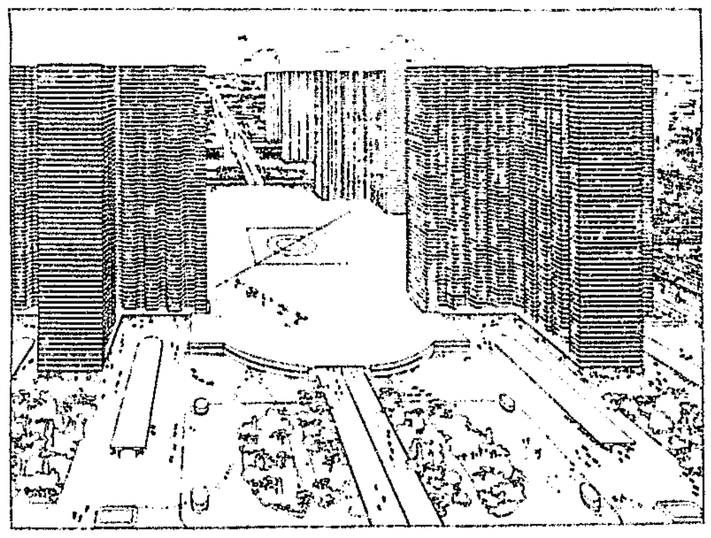
POOR QUALITY IN THE PUBLIC REALM

In her epic work "The Death and Life of Great American Cities" Jane Jacobs (11) said that "A city sidewalk by itself is nothing. It is an abstraction. It means something only in conjunction with the buildings and other uses which border it... Streets and their sidewalks, the main public spaces of the city, are its most vital organs".

The public environment of the Johannesburg CBD is either ordinary or extremely poor. The city is being transformed from a city of collective spaces to a city of private icons. The continuities of streets are broken by ill-placed buildings, height ordinances are frequently violated, and varied materials and facade treatments compete stridently for attention. The city has become a showpiece for the private ego at the expense of the public realm.

Competition between a fragmented system of government decision-making, bureaucratic regulations, community participation and private money, has made a shambles of the harmonious interrelationship of the city's buildings, open spaces and circulation routes and is in no way used to enhance the image of the city.

The public environment has become a passive element, responding to functional demands in a reactive manner rather than acting as a dynamic integrating device to pro-actively participate in the development of a "sense of place" for the city and the achievement of a balance between privacy and security, social contact and interaction.



Lynch, K. The Image of the City

AN ABUNDANCE OF BARRIERS IN THE CITY

The city fabric is profusely scarred by various barriers, inhibiting healthy city growth and spatial integration.

Johannesburg evolved as a linear city in an east-west direction based on the mining belt, and was connected by the railway line. Ideally, the most intense development in the city should have occurred along this corridor of maximum accessibility. Instead, the railway reserve has become an impenetrable gash in the city fabric, particularly in the central business district, and fails to act as an integrating seam.

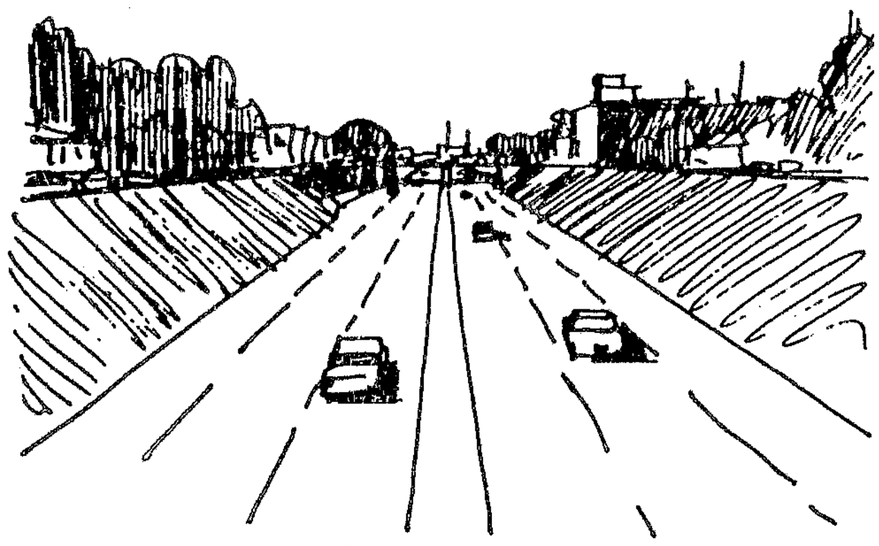
Although there is a perception that the freeway system forms a penetrable symbolic edge to the city, it is in reality permeable only in very limited (and neglected) areas. The system constitutes a rather harsh impenetrable barrier over the majority of its length, containing the CBD positively on the one hand, but preventing life-giving connections into the hinterland on the other.

To the south of the CBD the mining belt imposes another barrier further inhibiting spatial integration of the Central Business District to the South. This results from undermining and associated regulations imposed by the Mining Commissioner. The depth of undermining as well as the numerous slimes dams in this zone repress viable development.

Even though the floundering peripheral zone, as discussed in Chapter 1, provides numerous rich opportunities for positive intervention, it still constitutes a psychological barrier, encircling the central business district.

Two large grave yards to the west of the central business district create minor but still significant barriers in terms of localised spatial integration and connections.

Lastly, there are the intangible political and cultural barriers emerging very strongly especially in the transitional zones as a result of the defiance of the Group Areas Act by disenfranchised majorities seeking closer location to places of work. These newly constituted barriers are more difficult than any of the physical barriers to bridge as they are in constant flux because of vague government policies.



Spreiregen, P. The Architecture of Towns and Cities

THE MISSED OPPORTUNITY OF STREET SPACE

Gosling (6) argues that the patterns of circulation sustaining the city's activities have always been the most explicit generators of public space. With the growth of the industrial metropolis and the advent of more intricate mechanical systems to sustain them, these circulation systems have become more remote from their generative function.



Bentley et al, Op. cit.

There is currently no hierarchy in the inner city street system of Johannesburg. All forms of movement including through-traffic, circulating traffic, public transport (buses and taxis) and pedestrians make competing demands on the city's street-space. The ability to meet these demands is severely compromised by on-street parking and loading, short city blocks, and the correspondingly high number of busy intersections.

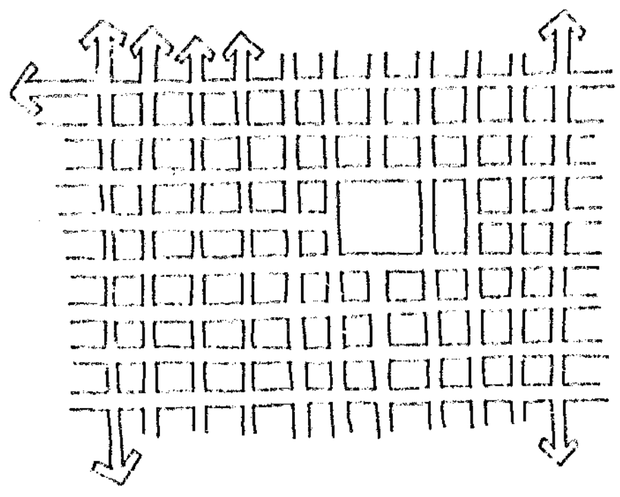
There is a lack of direct pedestrian connection between key elements in the CBD, while the quality of the street environment and the convenience, safety and freedom from noise and fumes afforded pedestrians is generally very poor. The existing street grid disperses pedestrian movement along a system that is designed for vehicles rather than pedestrians and is moreover aesthetically disappointing. The character of these routes are functionally and environmentally very similar, resulting in a bland system with no legibility and no distinguishing hierarchy.

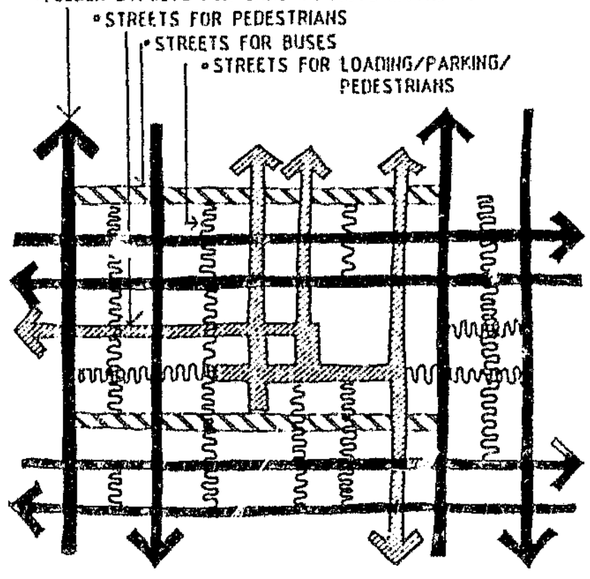
Kahn (7) said that the street is probably the first institution of man; a meeting hall without a roof. For Kahn, a street is "a room by agreement : a community room, the walls of which belong to the donors, dedicated to the city for its common use. Its ceiling is the sky". We cannot therefore separate a building, particularly its exterior walls, from its surrounding context and thus the street. This opportunity for the architect or developer to contribute towards the public realm of the city has often been disregarded. Our buildings have become introverted and self-contained. We have become a walled city and, ironically, all the more susceptible to crime because of it. These buildings are turning our streets and public spaces into a no-man's land and our spirit of public-mindedness, or sense of community into a faded memory.

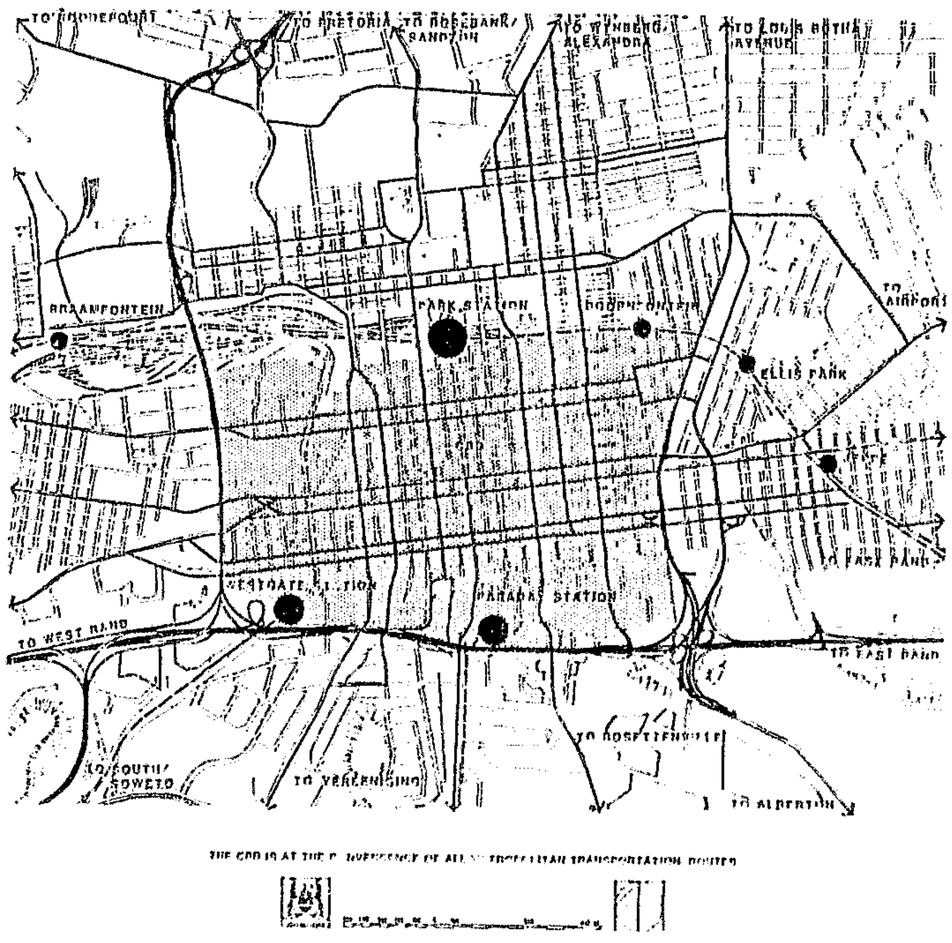
POOR PUBLIC TRANSPORT AND RESTRICTIVE PARKING POLICY

The CBD is the convergence of all metropolitan transportation routes providing maximum accessibility for all modes of transport.

The objective of the restrictive parking policy as exercised by the authorities in the CBD is to restrict the use of low occupancy private vehicles as a mode of transport, in favour of public transport systems. Although well served by all forms of public transport the city's public transport is of such poor quality, inconvenience, infrequency and so badly managed that the validity of this restrictive policy is questioned.





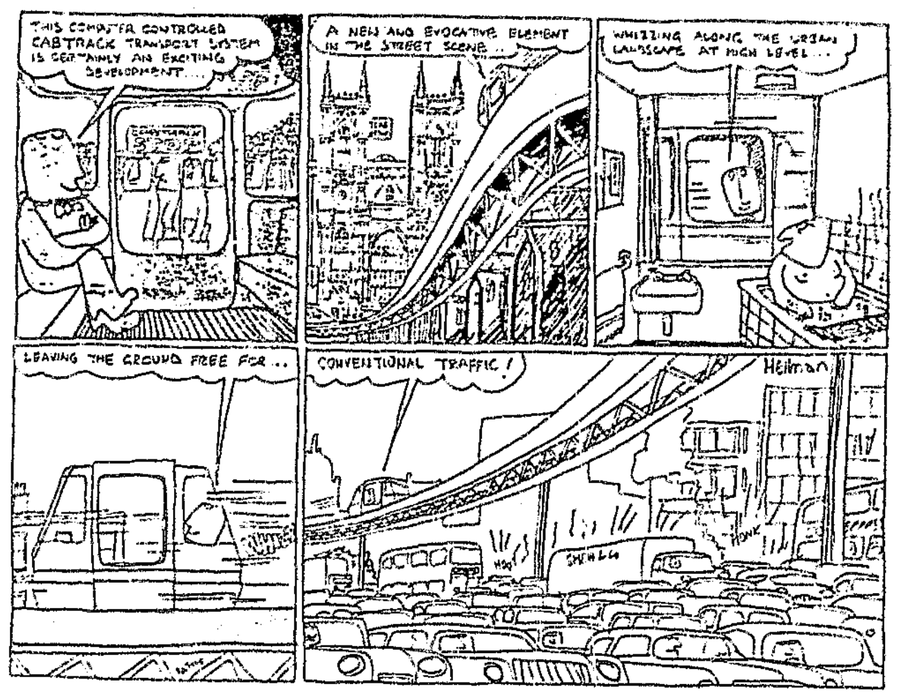


THE CBD IS AT THE CONVERGENCE OF ALL METROPOLITAN TRANSPORTATION ROUTES

City of Jhb , CBD report

To implement a rapid mass transit system will, on the other hand, burden the authorities with exorbitant financial implications. The lack of on-site parking therefore merely succeeds in increasing the on-street roving of private motor vehicles in search of parking, congesting and impoverishing the street environment further.

The public transport system is further compromised by the fragmented nature of the apartheid-city - the majority of the city's population has to be shuttled backwards and forwards on a daily basis, resulting in energy inefficiency.



Hellman, L. Architecture for Beginners

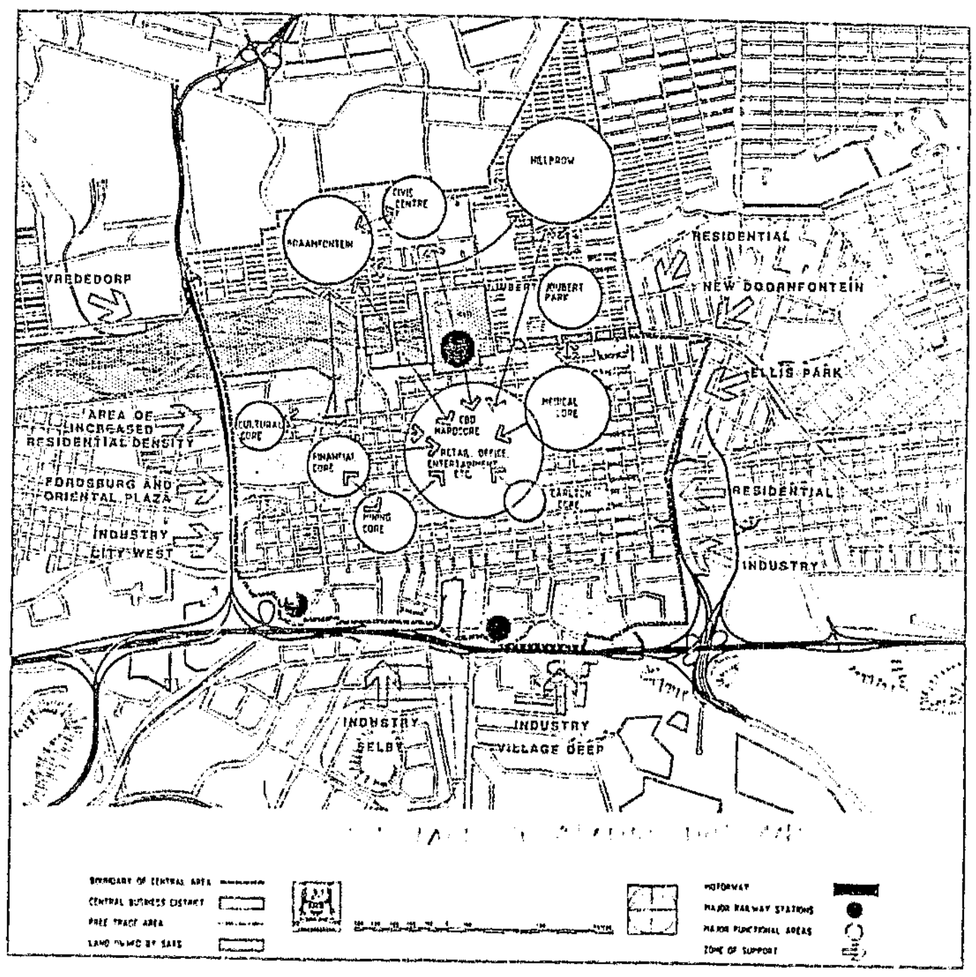
ZONING LEGISLATION AND THE LACK OF A RESIDENTIAL COMPONENT IN THE INNER CITY

Zoning legislation had the effect of separating functions that have often been "naturally" integrated. Abstract notions of compatible uses have created urban areas that no longer accommodate physical or social diversity, and that therefore are no longer truly urban. "Zoning substituted functional for spatial order and failed to recognise the importance of spatial order to social function" (8).

The residential component, being the lowest in the hierarchy of income generating uses has been squeezed out to such an extent that it is dwindling as a whole in the inner city. Meanwhile the office and retail components are thriving.

Although the CBD is well supported in the wider Central Area by strong residential components in Hillbrow, Berea and Joubert Park, the two specific residential zones in the CBD identified earlier, are dwindling as a result of insufficient tieback into a supporting hinterland (suffocated by the peripheral anti-space) and the losing battle against office and retail space as money-spinners for developers.

There is no doubt that the diversity, vitality and defensibility of the CBD will be greatly enhanced if a stronger residential component was encouraged. It would also improve access opportunities for groups with low car ownership without their having to rely on public transport.

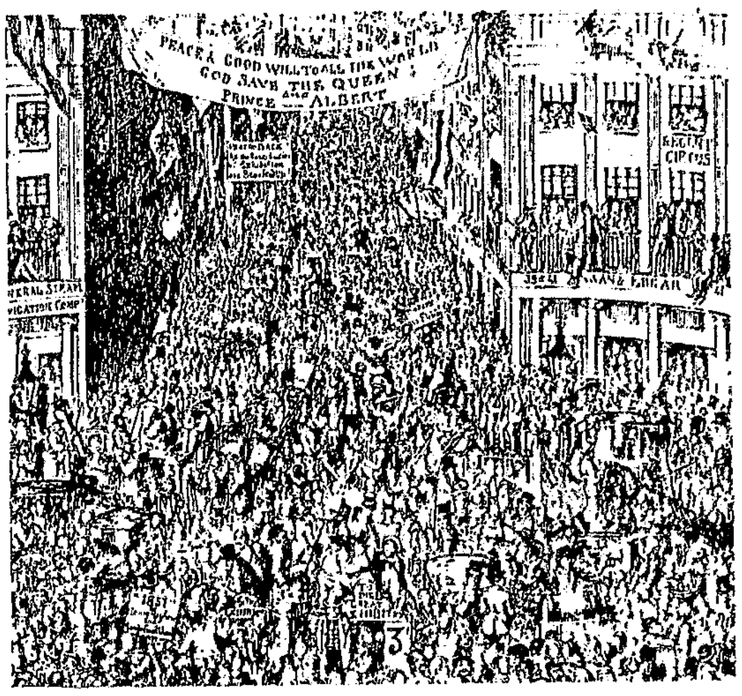


City of Jhb, Op.cit.

THE LACK OF DENSITY

Hand-in-hand with the lack of an inner city residential component goes the problem of too low a population density for Greater Johannesburg. Our city is predominantly suburban and sprawling in character. In comparison, Mexico City accommodates five times the population in approximately 20 percent less area, while Cairo accommodates two and a half times the population in about half the area.

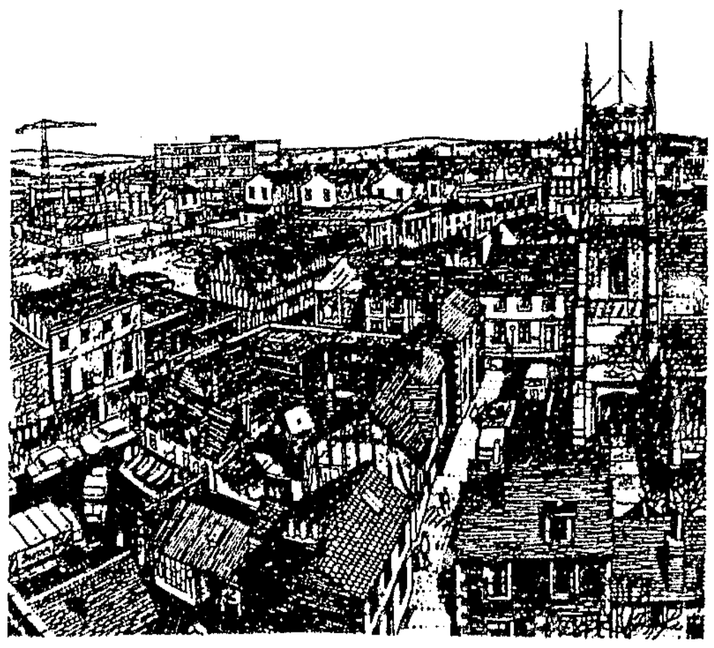
Johannesburg's low population density and de-concentrated people has resulted in the dispersal of energies, activities and resources. The complexity, density and intensity of activities that create vital urban environments has been diluted. The lower density also has a detrimental effect on the viability of public transport, which is compromised by high running costs.



Bentley et al · Responsive Environments

THE LACK OF STRUCTURED OPEN SPACE

In order to make memorable places, a city needs urban space. Johannesburg has a sad lack of significant urban space, and the little we had has been eroded or usurped by pressures, for example, from parking requirements such as Marshall Square and Mary Fitzgerald Square. Other remaining structured open space in the inner city has become so overcrowded that it no longer serves its original purpose as place of relief from the crowded streets of the city. The saddest lack of all is the extremely poor, dislocated civic space unrelated to the new civic offices of the city. In contrast, its predecessor featured a rare configuration of public open space and fine old buildings.

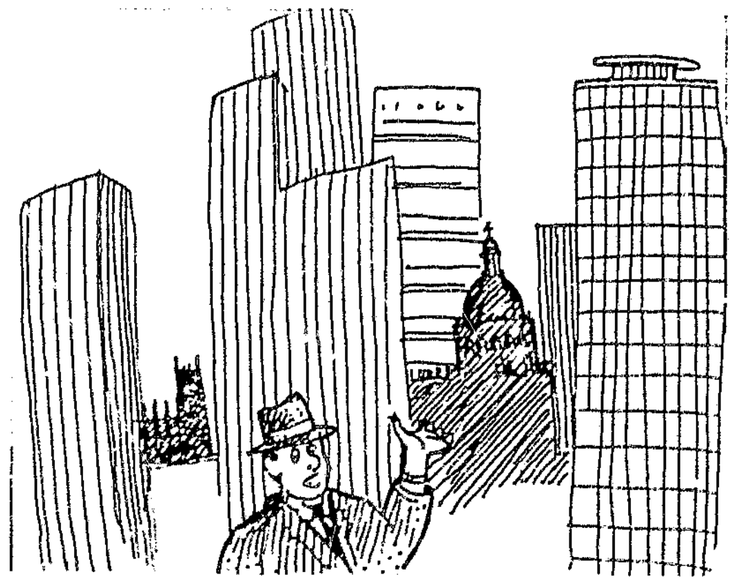


Bentley et al. Op.Cit.

THE LACK OF A MEMORABLE ENVIRONMENT

Italo Calvino (9) argues that a city without historical buildings is like an old man without a memory. The Johannesburg CBD was structured on a uniquely small grid, maximizing the potential of corner responses. The care with which these corners used to be celebrated with specific architectural responses has, however, been lost over the years.

The city still has many fine examples of historical buildings but they are dwindling and the current configuration of the public environment takes no cognisance of them and fails to offset them in any special way. The boom and bust mining mentality on which Johannesburg was built is still a very prevalent phenomenon in the city's psyche.

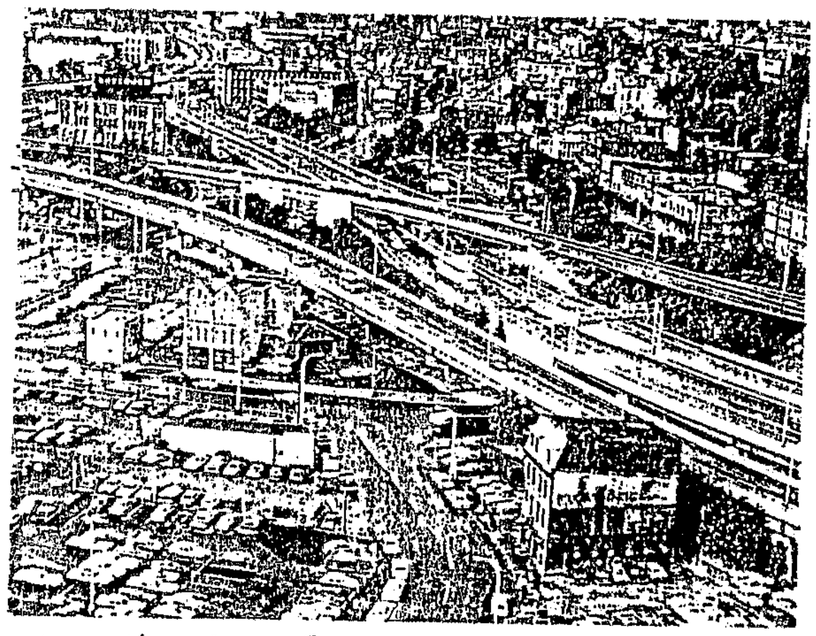


Bentley et al. Op.Cit.

Historical buildings of less importance are pushed aside for bigger, better and more profitable modern developments, and with them is lost the long-standing social and cultural investments in the city. Even attempts to recreate a historical component with new buildings (e.g. BankCity) ring hollow and fall short of achieving either the visual richness or the sturdy technology of its predecessors. The essential socio-economic spirit of the area, obliterated tc make way for new development, has also evaporated.

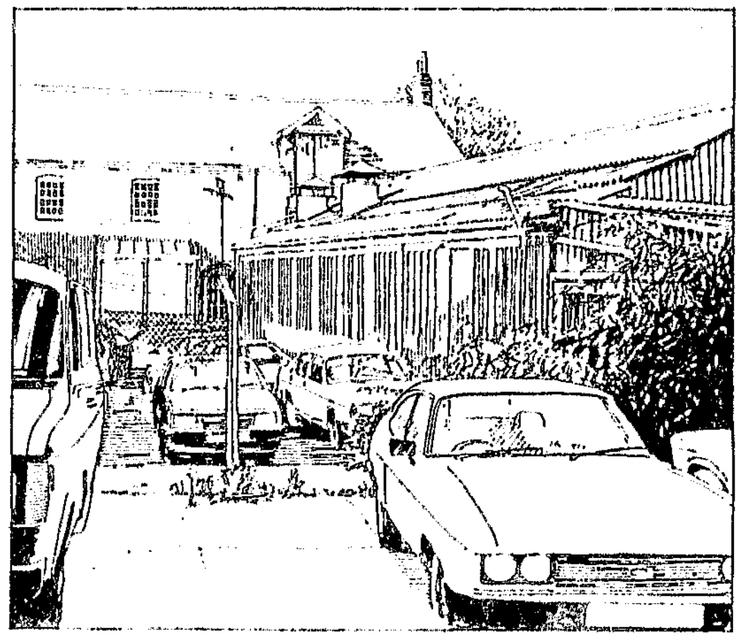
AN EXCESS OF LOST SPACE

Lost space, Trancik (10) argues, is the "left-over unstructured landscape" at the base of high rise towers, or the unused sunken plazas away from the flow of pedestrian activity. Lost space is also the surface parking lots in the peripheral zone of the CBD, the no-man's land along edges and under freeways that nobody maintains, abandoned waterfronts and train yards, and vacated industrial complexes falling into dereliction. It is the vacant blighted clearance sites that for a multitude of reasons were never developed and the derelict sites vested in local authorities that remain vacant as a result of the lack of initiative, resources or vision on the part of the council.



Trancik, R. Finding Lost Space

Generally speaking then, lost spaces are the undesirable urban spaces that cry out for incorporation into the city fabric - anti-spaces, making no positive contribution to their surroundings or users. They are normally ill-defined and fail to connect urban elements in any coherent way. The integrity of the inner city of Johannesburg is destroyed by an excess of lost space:



Bentley et al. Responsive Environments

* The peripheral space and space below the freeway system which cuts through the urban fabric on the eastern and western boundaries.

* Modernist-inspired plazas around freestanding pavillion-type buildings, destroying the street edge, the concept of urban rooms and the continuity of urban life. They provide the city with an unwanted collection of poorly designed, ill-used wind-swept plains.

* Bald surface parking lots for cars and buses in the peripheral belt, the results of land in wait to council urban renewal projects.

* Urban renewal projects in the western transitional zone of the city which responded to a concern for social hygiene resulted in the existing old-town network of street level and street related spaces being wiped out, and with it the community. The land has been left abandoned and derelict.

* The city is riddled with abandoned warehouses and factories as a result of industrial decentralisation. Innovation too has resulted in obsolete transporation facilities in the form of abandoned railway sidings. Acres of under-developed and derelict open land held by the council also lies fallow as a result of changes in use and the bureaucratic pace of development.

THE LACK OF SECURITY

Security in the inner city is a political consequence on the one hand, in the shape of bombs planted in public places, and a socio-economic consequence on the other in the shape of muggings. Every major development in the city has some form of security patrol and alarm system. As a result the city has become an alienating, quasi-police state.

For security reasons also, new buildings do not interact or communicate with the public environment at all. There is no easy transition from public to private domain, seriously compromising and impoverishing the public realm.

A FRAGMENTED MANAGEMENT STRATEGY

Successful major urban redevelopments elsewhere in the world are characterised by active full-time management bodies, steering them along the correct course of growth.

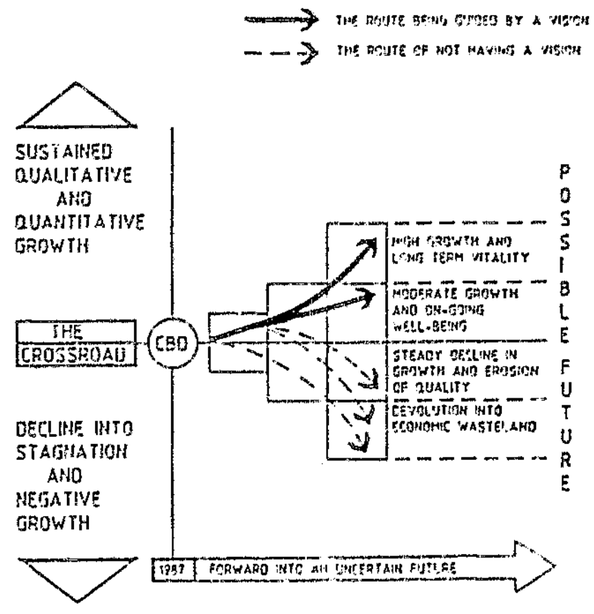
Because individual departments of the local authority in Johannesburg take care of their respective tasks to the best of their abilities, the attention and input into the overall management of the city is fragmented and compromised as opposed to a fulltime involvement of a broadly based management body. The latter management structure could provide a more focused and co-ordinated management framework which would improve the communication between private and public sector for one.



Hellman, L. Architecture for Beginners

THE LACK OF AN OVERALL VISION FOR THE CITY

The fragmented nature of the management framework results in an equally fuzzy vision capable of acting as a directive for future city growth. This inhibits the confidence of major investors keen to actively participate in remedial capital interventions in the city as expressed in the recent analytical report on the CBD of Johannesburg (12).



THE NEED FOR A VISION

City of Jhb . Op. cit.

... which are not due to a lack of resources...

INVESTMENTS SHOULD PAY DIVIDENDS

It is clear that the impoverished character of the city is not a result of a lack of capital or other resources. Despite the ample and willing capital investments available to the city, there is still little or no trickle-down in the form of positive spin-offs for the city as a whole. The investment made over the past twenty years or so should be paying much better dividends by now, both quantitively and qualitatively.

Without direction the shortcomings and maladies of the current state of affairs will intensify and become more profound. The direction to pursue for the metamorphosis of the stagnant city into a dynamic city must be found in the major anticipated pressures in the city.



... there are, however, forces
currently at work in the city
which must be manipulated
in the search for a solution.

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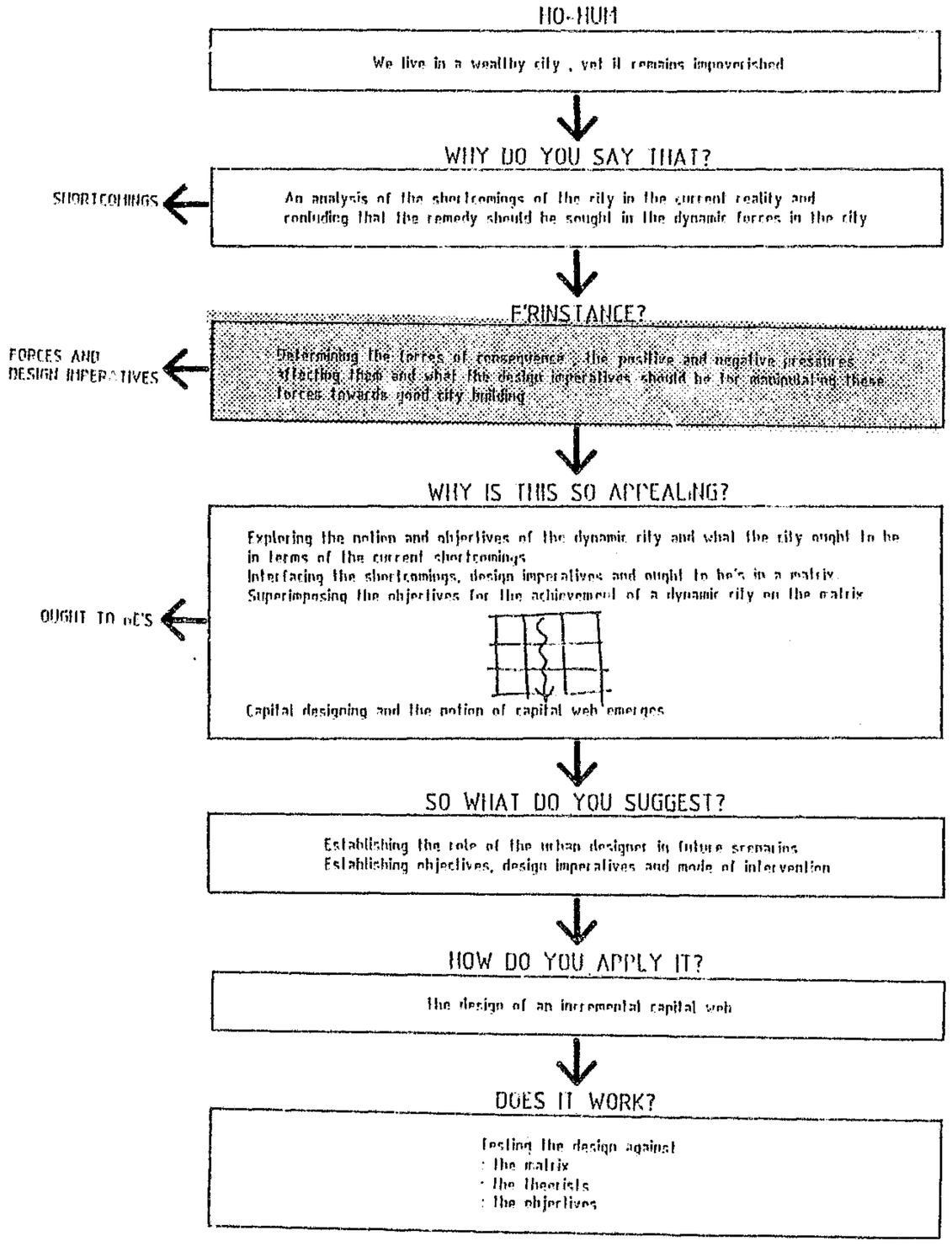
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CHAPTER 3
F'RINSTANCE?



Cities change...

CITY FORM CANNOT BE PREDICTED

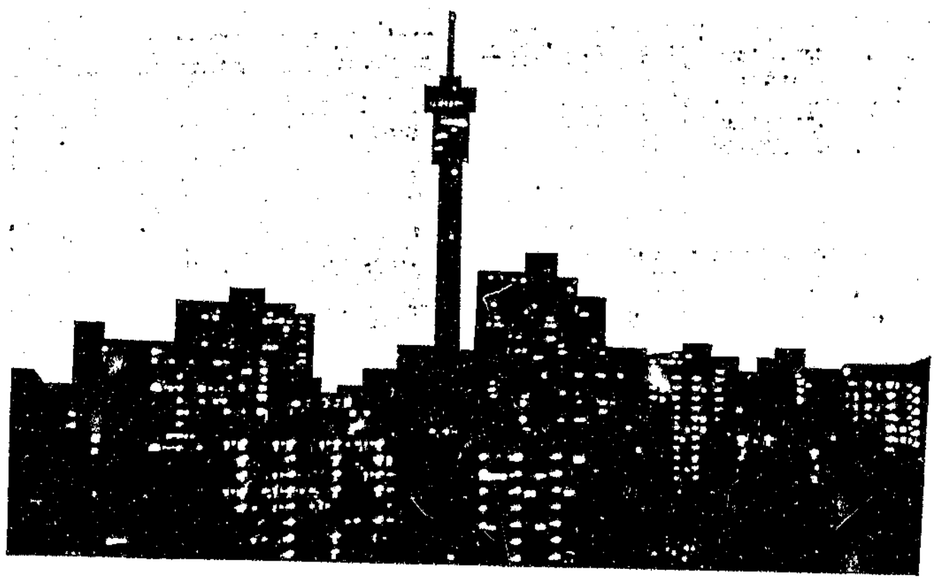
The most prominent aspect of any city at any time, is its ever-changing nature at all levels - physically, culturally, economically, environmentally and, especially in the local context, socially and politically. With the exponential development of technology since the Industrial Revolution, the rate of change in cities has increased rapidly to an almost uncontrollable and unpredictable force.

It is therefore naive to assume that the city's form and nature can be predicted by giving some form of tangible ideal end-state with firm guarantees. It is impossible to know what the future holds and what precisely will emerge once the processes that shape the city are freed up. Ideal end-state scenarios are riddled with pot-holes and are contrary to the nature of city dynamics.

> "... a non-model perspective of the city can contain many visions of the city because it is organic and dynamic in its intentions. It responds to life and changing social and political conditions. The urbanism of constancy, of spatial composition, can tolerate no vision but its own dead stereotype of an ideal state." (1)

JOHANNESBURG - A ROBUST CITY

Some cities, however, adapt to changing circumstances and the accelerating rate of change over the years more successiully than others. Johannesburg has proven itself over its short history to be a robust organism, able to weather extreme change. With the country sitting at a cross-roads, views of the future range from the one extreme of, "change at all costs", to the other extreme of "never any change", and a continuum of forces operating inbetween. Whichever way the pendulum swings, Johannesburg is at a point of major change at all levels in what is essentially a timeless process of adaptation.

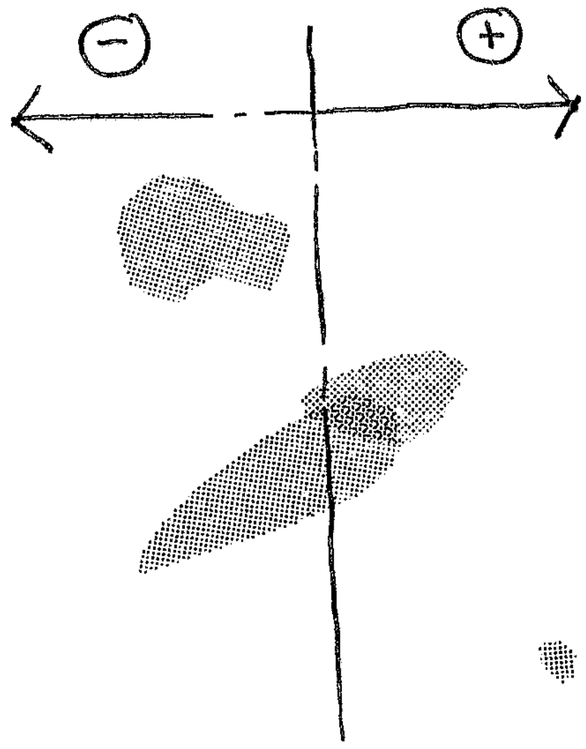


... as a result of
dynamic forces...

THE CONTINUUM OF VIEWS

The dynamic nature of the city is largely, if not entirely, the result of myriad forces and processes constantly at work in major and minor ways. These forces and processes are all interdependent and interrelated, volatile yet malleable, and difficult to analyse in simplistic terms. The nature and impact of forces change from context to context.

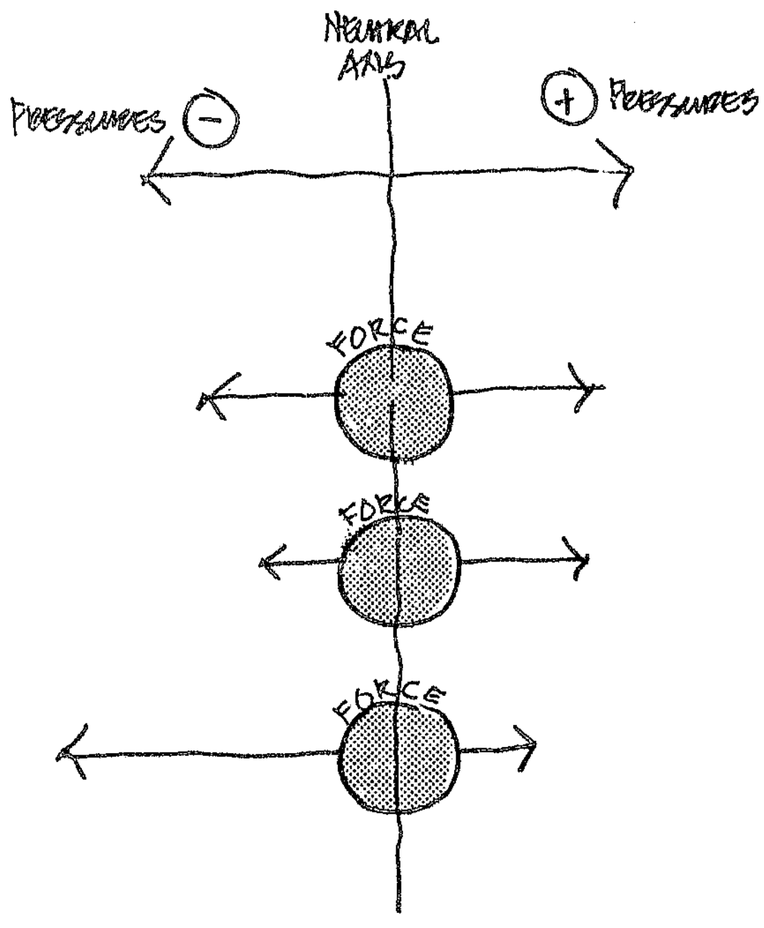
Depending on one's position along the continuum of views for the future of the city, some forces will have a positive impact while others will be detrimental. It can be argued that some forces allowed to run rampant will end in anarchy or, alternatively, are sure to lead to stagnation. In the local context most views are politically inspired, even if concealed behind social and economical facades.



AN OBJECTIVE APPROACH

The intention of this exercise, however, is to assist objectively in the endeavour to reinforce the dynamics that make cities life-sustaining places and to enhance them as our "primary assets" (2). Nevertheless despite the neutral aim, political and socio-economic pressures still loom.

The approach will therefore entail the identification of commonalities in the plethora of dynamic urban forces, to establish neutral forces and to evaluate them in terms of current pressures exercised on them, be they of economic, social, cultural or political origin. This will provide us with an indication as to which of these pressures should be enhanced or negated to unlock their energies and channel them into the achievement of a viable dynamic city.



... which in the current
local context...

THE PREDOMINANT FORCES IN THE CITY

In this time of increasing pressures of urbanisation, population growth, growing unemployment, social and political change and extreme uncertainty about the future, certain forces and processes have become more predominant than others in the shaping of our cities.

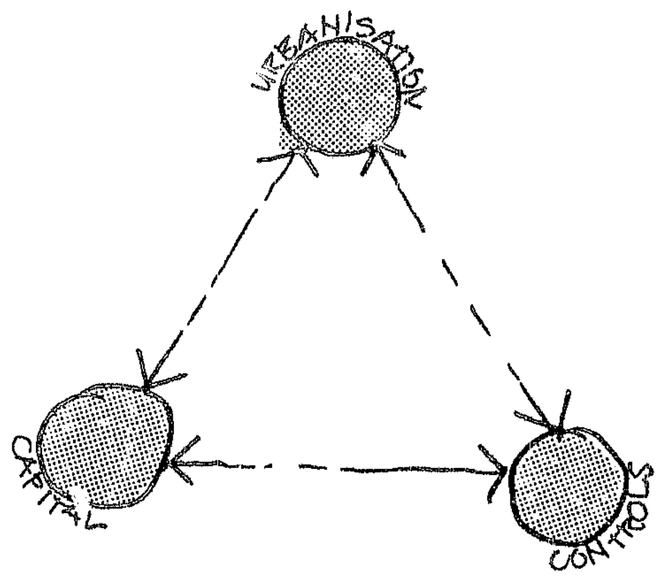
These predominant forces do not exist in isolation but are all related to and affected by each other, as well as by the myriad of lesser forces at play. The impetus of these forces will furthermore change over time as a result of changing circumstances. For instance, whereas in the past, the changes in the Johannesburg CBD were largely as responses to the economic dynamics of the city, the choices now are concerned with adapting to the more complex social, economic and political processes of contemporary South Africa.

From the plethora of currently active forces in Johannesburg, three predominant forces with major potential impact on the future city form emerge as common.

* Urbanisation - the undeniable and rapid influx and attitude of the disenfranchised majority

* Capital Investment - a much required, available and powerful commodity in the hands of the enfranchised private sector

* Development Controls - a far-reaching device controlled by the local government



These forces are highly interdependent in the current circumstances and any kind of manipulation of the one, will have a direct effect on the others. Each one will be discussed in terms of the current reality and then how things ought to be to maximise the spin-offs in the endeavour to achieve a city of dynamic nature.

URBANISATION IN SOUTH AFRICA

Urbanisation is a phenomenon that no nation, civilisation or city escapes in its process of development. Cities are the products of urbanisation.

"The urbanisation of a country is said to be completed when about 80% of its population is accommodated in its cities" (3). In these terms, South African cities are still actively subject to the process of urbanisation.

South Africa has a very short history of urbanisation. The history of city building in South Africa, as discussed in Chapter 2, has imbued negative attitudes towards urbanisation in the population, deeply inculcated our consciousness. The centuries-long tradition of sub-Saharan, semi-nomadic life, combined with colonists who see city life as anathema by virtue of their farming background and others who have realised the suburban aspiration, are all set against a background of urban blacks who for years have been made to feel at odds with the city. It is not an easy task to turn these negative attitudes into belief in our cities as worthwhile entities which should be encouraged to grow.

Urbanisation, however, is not an unprecedented phenomenon in South Africa. The effects of different waves of urbanisation manifest themselves in our cities. Dewar et al (4) note that the tendency to overlook the well established precedents of the early part of this century. The depression years and, more recently, the post-war boom of the 1950's and 1960's saw large-scale urbanisation as a result of the "poor white" problem.

Black migrant labour policy catalysed another form of urbanisation. This supposedly short-term option, meant to last only as long as the earning power of the migrants was needed to feed cash, and thus development, back into the rural communities, making them ultimately self-sustaining, failed with the realisation that the migrant workers' dependence on the city became absolute and permanent.

Although housed on a "temporary" basis in compounds by the mines, this influx of rural people constituted in reality another wave of urbanisation, albeit at a lower and more superficial level.

Currently, only half of South Africa's population is urbanised. Seen in context, the process of urbanisation continues to be an inevitable reality.

Despite official attitudes and legislation, urbanisation in South Africa today is an undeniable force which is proceeding regardlessly, having a profound influence on the nature of our cities. From this point of view it is important to push the process of urban transformation through actively, and to accommodate it, rather than attempting to arrest or reverse it, which will directly oppose the notion of dynamic city building.



Source Unknown

"Our position in South Africa is not unique at all, but absolutely normal: we are simply going through the most critical stage of urbanisation that every developed country has to go through on its way to maturity." (5)

URBANISATION - THE CURRENT REALITY

Currently, government policies persist in suppressing the growth of cities in favour of deconcentrated development in depressed regions. This occurs in spite of a growing realisation that in order to ensure that cities become the lifeblood of the national economy, they should be encouraged and allowed to grow. In the face of the escalating demands for jobs, products and services in the local context, it becomes imperative that the role of the city as an enabling organism is understood.

> "Only in cities can the economics of proximity, scale and location be optimised and... increased benefits fuel a permanent, on-going process of adoption and intervention.... The bigger the city, the bigger the attraction. The bigger the city, the greater, wider and deeper the demand for labour of all kinds." (6)

Even though specific influx control has been dismantled, it is too soon to have any significant influence and, in any event, a network of restrictive legislation remains, inhibiting the natural urbanisation process. Whether current government reforms will remove these controls remains to be seen and as of now, there are no cogent official strategies in place for coping with the accelerated rate of urbanisation.

> ".... concensus appears to be that (a) we are going deeper into a time of extreme uncertainty, (b) resolution is necessary and something has got to give and (c) the process is unlikely to be easy." (7)

It has become imperative to address the issue of urbanisation as a matter of urgency, as a host of maladies in the city such as housing shortfalls, needs for facilities and provision and creation of economic opportunity, are already emerging as a result of the procrastination pending resolution in other areas.

URBANISATION - THE OBJECTIVES TO BE ACHIEVED IN TERMS OF DYNAMIC CITY BUILDING

The main objective in the manipulation of the urbanisation force towards the achievement of a dynamic city would be to encourage the city to intensify and grow. The success of world cities today testifies to the desirability of the urbanisation process in bringing people from the land, integrating them into the economy of the city and freeing up rural areas for more productive purposes.

Under local conditions of an urbanising population with limited economic means and a low level of mobility, the most appropriate strategy would be to intensify the city towards "compact city" form (8). To achieve the growth of the compact city the predictive and prescriptive stance taken by the urban management bodies must be abandoned in favour of urban growth managed on an incremental basis of selecting stimuli and catalysts to guide and inform developmental responses.

URBANISATION - THE NEGATIVE PRESSURES AT WORK

The primary negative pressures feeding off the city's status quo and currently preventing the positive channeling of the energies of urbanisation are:

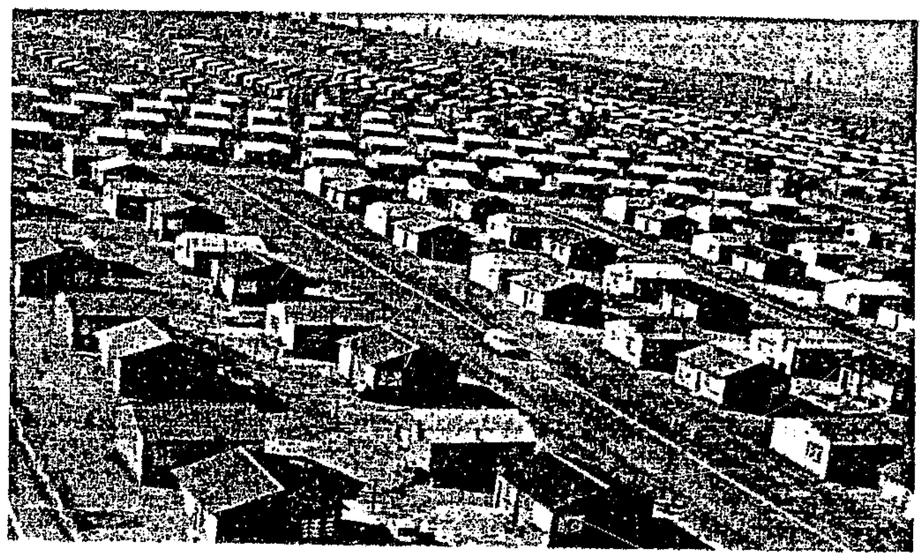
* Grand Apartheid - deconcentrating population and decentralising economic activity to the resultant dispersed settlements.

* Group Areas Act - assembled low-income housing stock on the periphery of the city, denying people of low mobility and low economic competence access to opportunity.

* The current land value and economics pattern compete for the highest bid - rent land in the CBD, discouraging an affordable inner city residential component.

* The system of vested interests in the status quo of the city and the economic and political power structure they represent.

* The logic of urban sprawl generated by aspirations to low-intensity suburbia by the highly mobile enfranchised minority.



Planning 100 Nov 88

URBANISATION - THE POSITIVE PRESSURES AT WORK

Positive pressures towards the intensification of the city are:

* The basic desire on the part of city dwellers to overcome distance and achieve propinquity between themselves and the things in the city that are meaningful to them, i.e. institutions, work place etc. This desire is fundamental to the nature of human settlement and has been present at some stage of every city's development.

* The peripheral dormitory zones, to which the disenfranchised majority have been displaced, have become "waiting rooms" (9) for the urbanisation of "non-whites". The fact is however, that a large proportion of those vacating the "waiting rooms" on the urban fringe to occupy the city are already urbanised. They will undergo a process of re-urbanisation which will speed up the typically long transformation process.

* As these people vacate existing available housing stock on the periphery of the city, space becomes available to receive new immigrants which will assist in the distribution of the urbanisation process into the urban system at a manageable rate.

* Current socio-economic and political reforms proposed both by the central and the local government. The declaration of the Johannesburg CBD and, more recently, the entire metropolitan area as a free trade area, is an important commitment towards the restoration of confidence in the city.

* The exponential growth potential and lifting of restrictions on the informal market sector makes the city a more viable proposition and attractive for many.

* Westernised cultural and socio-economic aspirations of a long-deprived majority which can only come to fruition in an urban environment.

* Our cities are small by world standards and have a huge latent potential for growth which can be managed according to clues and principles from international precedents.



Source Unknown

URBANISATION - DESIGN IMPERATIVES

The successful manipulation of the urbanisation force towards a dynamic city by the reinforcement of current positive pressures will depend on the implementation of specific design imperatives and planning strategies:

* The abolition of the Group Areas Act, Separate Amenities Act and Grand Apartheid as a whole.

* The encouragement of city growth and a sound management strategy for urbanisation i.e. an incremental intervention approach to cater for immediate needs, as and when capital becomes available and to enable the planners to re-assess and adjust strategies at regular intervals.

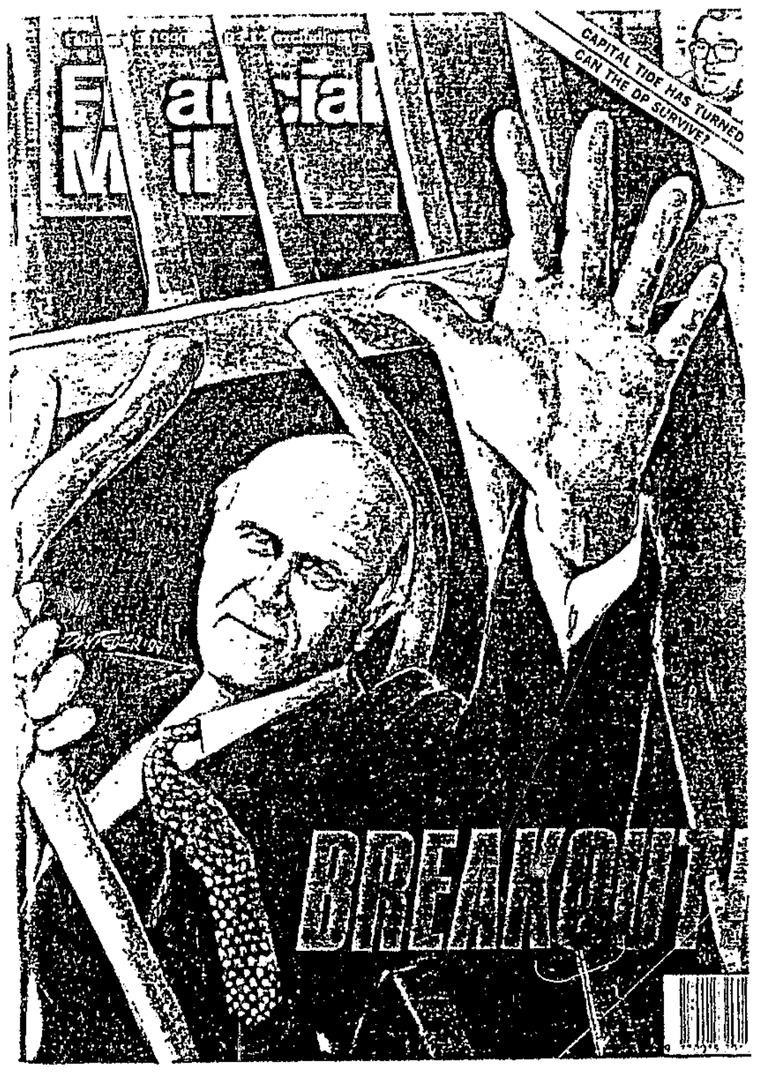
* An increase in the residential component in the inner city at affordable rates. Tax and bulk incentives and land value control can play a major role in the achievement thereof through the private sector. This will assist in the quick and positive assimilation of urbanisation.

* A reversal of the decentralisation policy adopted by government and the active implementation of centralisation strategies.

* The promotion of the image of the city as a worthwhile place for opportunity for all.

* Upgrading the public transport system to improve the access to opportunity for the majority. This will only become a viable proposition if the population densities in the city are significantly increased.

* Deregulation and dezoning to make the city a viable and attractive proposition for those with limited economic means, but with an abundance of creativity and ingenuity.



Financial Mail Feb 1990

CAPITAL INVESTMENT AS AN URBAN FORCE

One of the most daunting aspects of the urban process is the urban economy viz-a-viz national and world economies and all the complex philosophies, theories, and imponderables that go with it. Interacting from a household scale to a global scale, it would be an impossible task to address this issue comprehensively in the limited space available in this document. As Harvey says (10):

> "for this reason I believe it is very important to accept the notion that any urban system is in a permanent state of differential disequilibrium (by which I mean that the different parts of it are approaching equilibrium at different rates)".

I therefore attempt to deal purely with capital investment in the city as a force in the process of city building. For purposes of simplification, all the undercurrents and ramifications implicit in urban economics as a whole are set aside.

All feasible building and urban design proposals are obliged to recognise the power of economic forces. The economic context provides crucial parameters both in squatter settlements and sophisticated metropolises. It is the economic forces in the city particularly that inspire the realisation that the city is dynamic without a predictable physical end state. Gosling (11) notes in this regard:

> "Individual urban design proposals which are then seen as containers or channels for flux of economic activity thus tend to be preoccupied with change, with the patterns which future growth may adopt and with stimulating activity in preferred configurations."

It is therefore the economic force in the city that can be manipulated by the correct parties to the maximum benefit and efficiency for a specific context.

CITIES AND THE NATIONAL ECONOMY

Jacobs (12) notes that the wealth of nations is directly related to the cities that drive the national economy. Cities as complex, diverse organisms thrive on growth. They are our primary asset in alleviating the otherwise unmitigated pressure on rural land where no-longer viable communities languish without any prospects other than the following month's remittance from migrant labour in distant city regions.

It is clear in this regard that the South African national economy is overwhelmingly structured upon the PWV region and particularly on the Johannesburg CBD. With the country facing all the implications of rapid urbanisation, urban poverty, population growth and unemployment, it becomes imperative for the CBD to continue to expand economically now more than ever.

To put it another way, the rate of economic growth of the Johannesburg CBD will determine the extent to which the country will be able to meet demands for jobs, housing, transportation and facilities. The Johannesburg CBD is the only growth centre in the country in a position to face this challenge effectively.

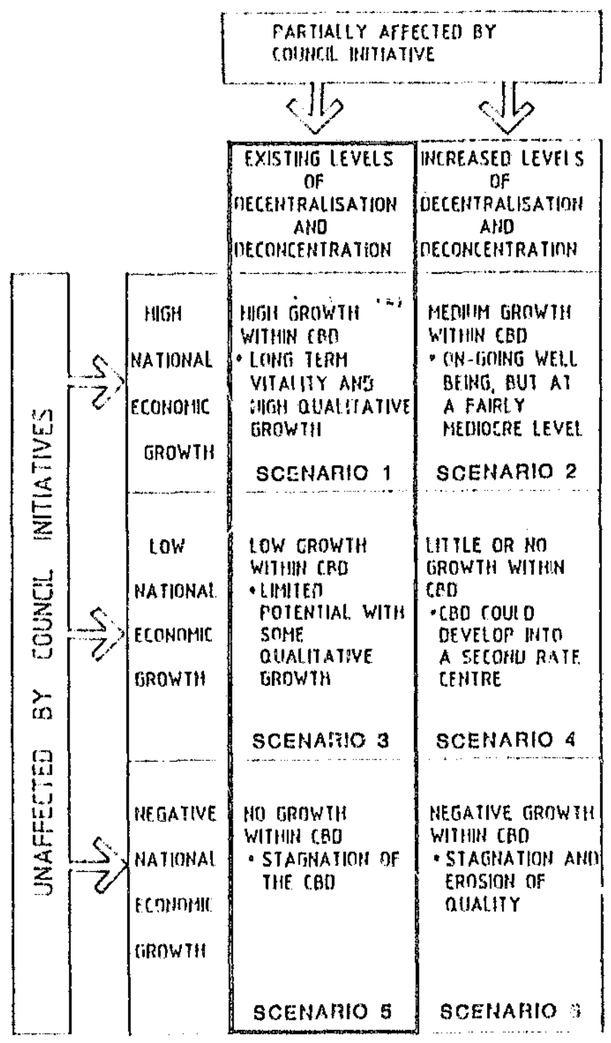
CAPITAL INVESTMENT - THE CURRENT REALITY

The consultants appointed in 1987 to analyse the Johannesburg CBD (13) found that the possibilities facing the CBD cover six broad scenarios. They argued that the well-being of the CBD revolves around two key uncertainties, over which the city as a whole has no direct control:

* the level of economic growth in the national economy in the future

* the extent to which decentralisation (as a market led process) and deconcentration (as a matter of government policy) will deplete inner city development in the future

From the diagram it is clear that scenario 1 is the best option as far as the CBD is concerned. This scenario could be bettered if the levels of decentralisation and deconcentration are decreased. Although this is beyond the power of the city, the situation can be improved by active promotion and betterment of the CBD as a dynamic environment. If Central Government is wise in their policies towards urbanisation, it would in any event be in the interest of the national economy to institute centralisation and concentration policies as a matter of policy.



GROWTH OF THE CBD IS INFLUENCED BY ECONOMIC GROWTH AND DECENTRALISATION.

City of Jhb - CBD report

As far as direct capital investment from the private sector in the CBD goes, there seems to be a degree of hesitance. Although there is a general feeling that an upturn in the economy is imminent (positive political reform attitudes by the central government will reinforce this notion) and that the time is ripe for investment in property, concern is expressed because of the absence of a development strategy or long-term vision for the future.

Another problem which needs to be addressed in a more direct manner by local government, is the lack of trickle-down of major capital investments made thus far by the private sector. The latter half of the last decade, in particular, saw a major resurgence in development investment in the CBD as major corporations sought to consolidate their positions.

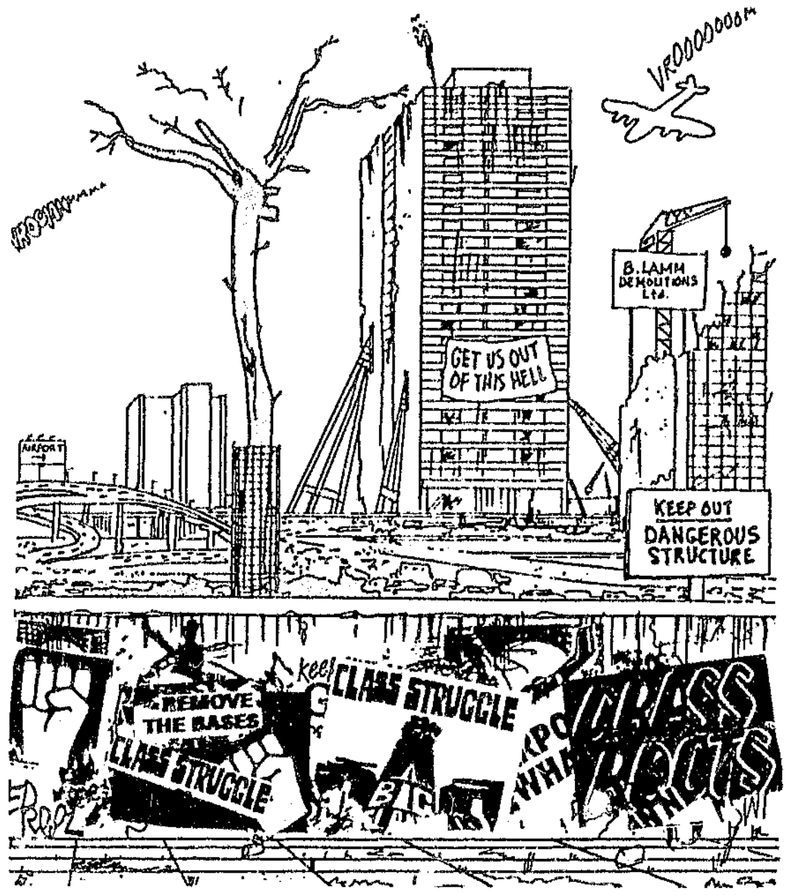
The Standard Bank Superblock, JCI, Anglo Vaal, Goldfields, the Johannesburg Sun, Smal Street, the Carlton Centre refurbishment and BankCity are cases in point.

The question that needs to be asked is, why, with the seemingly ample resources available, is there such a limited trickle-down of positive spin-offs? In other words, with these kinds of investments the city should get a much better return, both qualitatively and quantitively. To answer this question it is necessary to look at factors influencing the ways in which capital investments have been made in the CBD to date.

* In a capitalist environment, Harvey (14) suggests that the private sector tends to under-invest in the built environment at the same time as they tend to over-accumulate. Investment in the built environment takes place primarily for financial rather than use-value reasons - investors are looking for a steady and secure rate of return on their capital, without concern for the specific context.

* Capital is not place-bound. Investments are made for profit and the minute they are threatened they are cold-bloodedly moved, taking the path of least resistance without any consideration of the side-effects left in its wake.

* Capital investments from the private and public sectors differ fundamentally and, working in an uncoordinated manner in isolation from each other, have a profound effect on the city. Instead of the symbiotic interaction to the benefit of the city, investments are concentrated in certain areas in an ad hoc fashion, leading to the polarisation of developments. The result is that the CBD consists of a series of honeypots with beneficial spin-offs directly related to them, attracting further development like bees, without taking cognisance of neighbouring honeypots and the possible advantages that overlap and maximisation of these spin-offs to the city, as a whole, would have.



Hellman, L. Architecture for Beginners

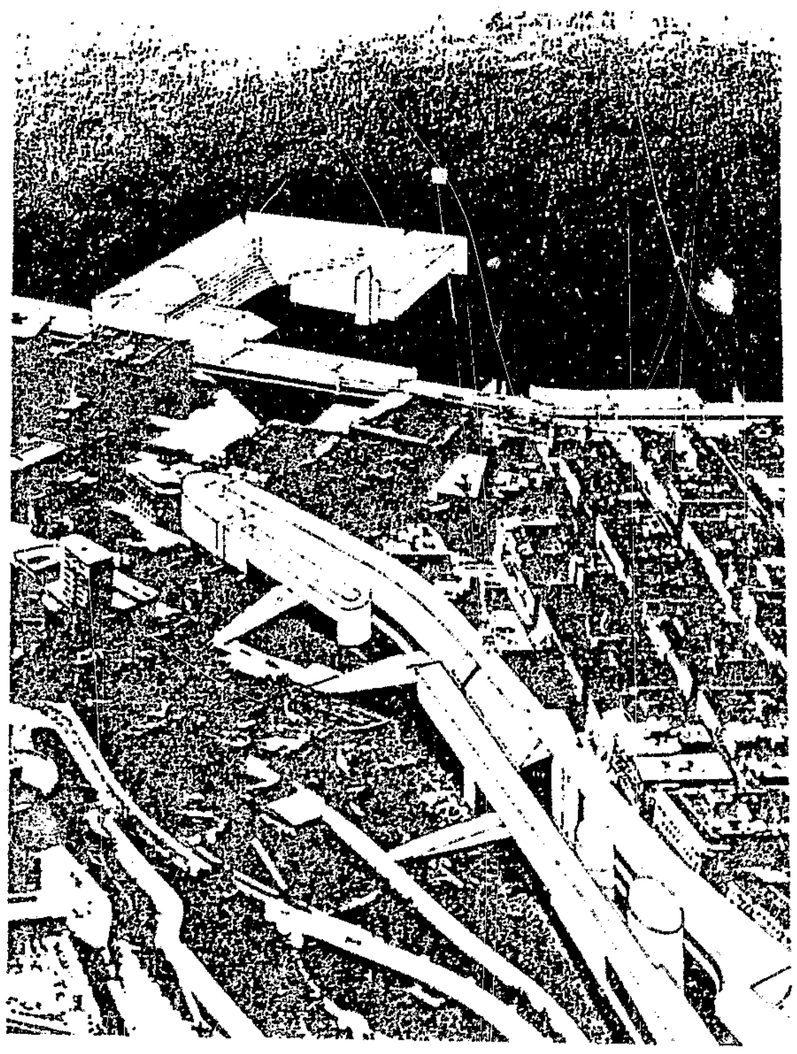
The fundamental differences between the nature of public sector and private sector investments are:

PRIVATE	PUBLIC
Normally goes to the economically "right" place	Investments are politically driven (both legitimately and ill-igitimately) and do not necessarily go to the most viable place
Strategic installations	Often based on the expedence of ground assembly
No communication with other private companies or with public sector	Poor communication with the private sector and ad hoc planning methods for major installations
Mostly fast-track projects with little consideration for anything but a quick return	Time is not of the essence and development is out of synch with the private sector
Usually self-centered, profit seeking and in competition with other institutions	Non-profitable interventions with public money (an opportunity missed for "seeding" installations with regenerative qualities)

Encouragingly, the trend emerging in the 80's is one of understanding and acknowledgment of the possibility to link strategic installations in the city, albeit in a retro-active manner. The aim of linking the "honeypots" and their respective spin-offs by means of a "web" has become an important design tool in the search for the latent dynamic qualities of the CBD.

CAPITAL INVESTMENT - THE OBJECTIVES TO BE ACHIEVED IN TERMS OF DYNAMIC CITY BUILDING

It is this last observation that brings us to the main objective in the manipulation of capital investment in the city. Rather than the installation of large urban components as independent islands or "honeypots" in the city fabric, the energies and spin-offs that such components generate must be identified, analysed and evaluated, and pro-actively directed and channeled to the maximum benefit of the city.



Lotus International Feb 1981

This implies that there will be a correlation between the city's requirements and the physical response of the installation. It can only b achieved if there is a close partnership between public and private sector to allow the investment of private money to provide pointers to the investment of public money and vice versa. The Smal Street Mall shows the beginnings of this principle.

In other words, rather than having a series of "honeypots" with unrelated polarised uni-directional spin-offs, consider the advantages of a "spider web" linking existing "honeypots", trapping new capital investments in a coherent and co-ordinated way and thus generating and stringing together orchestrated and harmonised spin-offs in a regenerative fashion.

Other benefits derived from this notion are:

* the ability to control the flow of capital

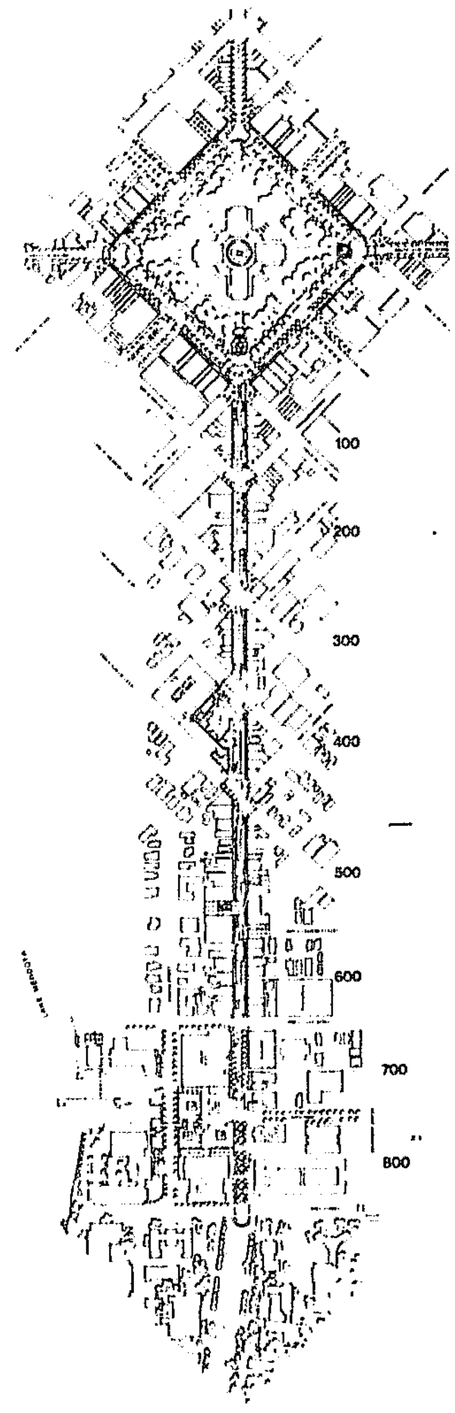
* keeping existing land value patterns intact

* maintaining the urban fabric

* addition of value to existing city stock

* the possibility to use an installation as a stitching device across barriers and as a prompting device in static zones

Another important objective would be to reinstate economic confidence in the CBD amongst the private sector by the active promotion of the CBD by local government as a sound basis for investment. The private sector may simultaneously be encouraged by incentives to become actively involved in the provision of an inner city residential component.



Burns, J. Connections

CAPITAL INVESTMENT - THE NEGATIVE PRESSURES AT WORK

There are, however, negative pressures at work threatening the continued economic well-being of the CBD:

* The government's persistent policy of deconcentration of economic activity away from established urban environments and the discouragement of industrial development in central areas. This negative pressure has been countered to a certain extent by the development of the secondary, tertiary and quaternary economic sectors in the city.

* The continuing office and shopping decentralisation as experienced over the past 10-15 years. Although this notion has largely stabilised, the outlying centres are attracting new developments which might otherwise have been accommodated in the city.

* The possibility of Greater Soweto getting its own CBD commercial satellites. The shopping component in the CBD of Johannesburg is currently primarily supported by the residents of Soweto, and any large scale shopping centres around or in Soweto will draw heavily on this patronage.

* The declining CBD rates base caused by decreasing investment in the CBD on the part of the private sector, resulting in declining quality and diminished property values.

* The increasing specialisation and institutionalisation of the CBD resulting in a simplistic use base with a limited range of economic opportunities. There are currently only the beginnings of the acknowledgment of the importance of the informal sector as a component of the CBD's economy.

* The lack of confidence on the private sector's part as a result of the absence of a development framework to accommodate proposed development initiatives. In other words, there is no vision for the future of the CBD.

* The historical "boom-and-bust" ethic of Johannesburg's mining past is still inherent to the psyche of the private sector. This affects attitudes towards investment.

* The increasing level of unemployment is becoming a millstone around the city's neck.



Hellman, L. Op.cit.

CAPITAL INVESTMENT - THE POSITIVE PRESSURES AT WORK

The positive pressures related to the flow of capital on the other hand are:

* The willingness on the part of the private sector to invest in the CBD. Major investors and developers are ready to launch big projects in the CBD, provided they can be assured of the Council's co-operation for rapid implementation and the establishment of a long-term vision for the CBD.

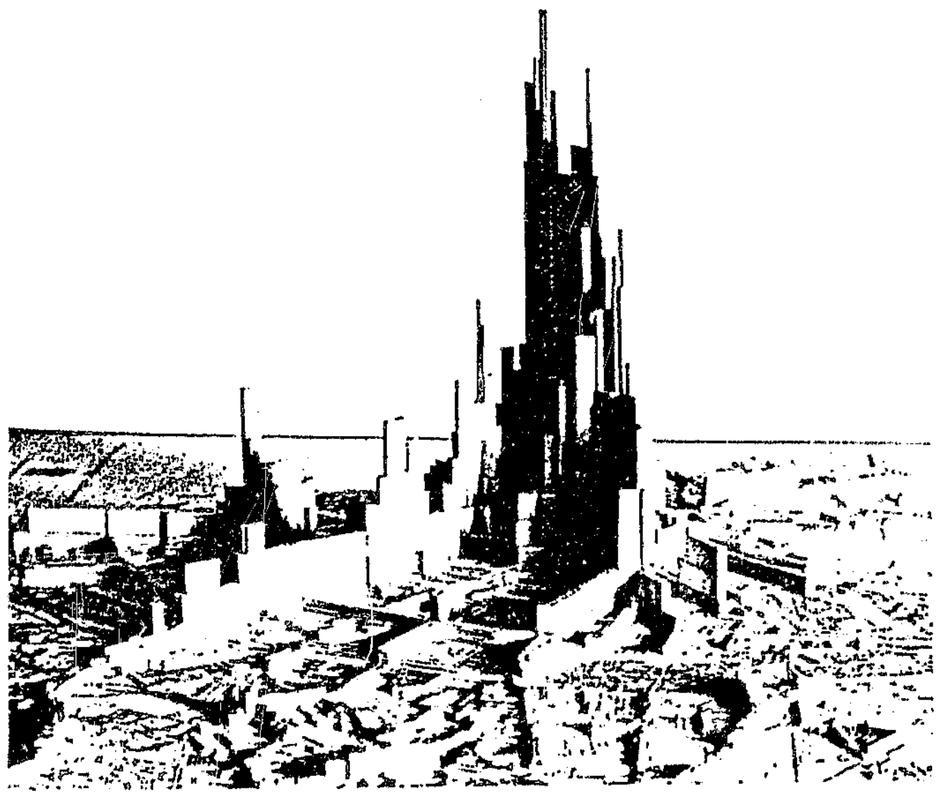
* There is a level of interest and optimism in the CBD amongst the private sector which emerged in the Council's analytical report of the Johannesburg CBD.

* The general feeling is that the economy is at the beginning of an upturn and that the time is psychologically ripe for investment in property. Positive political reforms envisaged will reinforce this view.

* Pressures for development in all economic sectors and new capital becoming available from the black market resulting from the "free trade area" announcement and the accompanying economic aspirations.

* The growth potential and accompanying power of the informal market sector as a key player in the city economy.

* On a more indirect level, the private sector take-over bid of the public transport will benefit the influx of capital to the city, both by means of private sector key investments and increased buying power resulting from higher levels of access to opportunity.



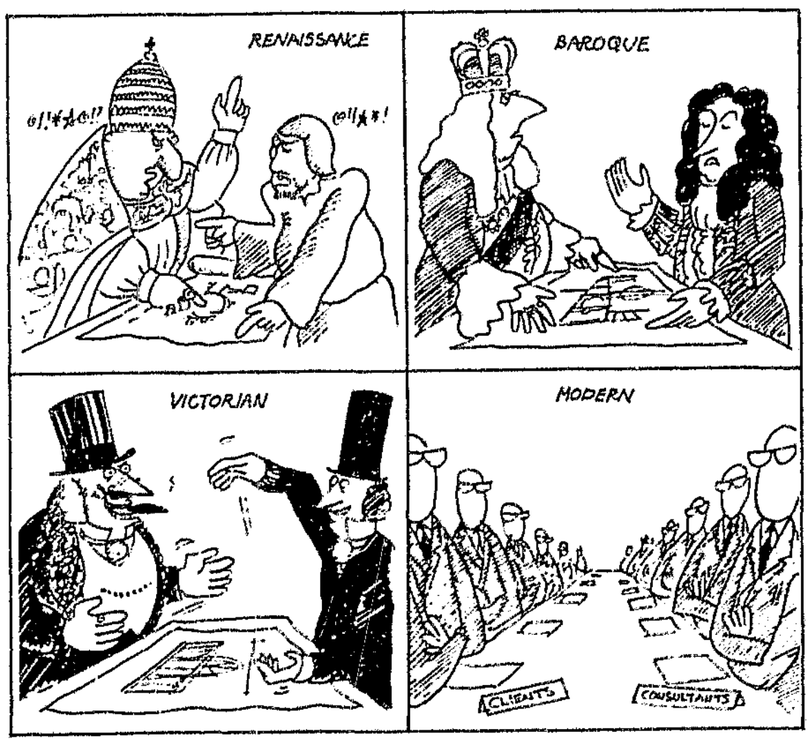
Gosling, D. and Maitland, B. Concepts of Urban Design

CAPITAL INVESTMENT - DESIGN IMPERATIVES

The design imperatives that follow for the achievement of the stated primary objectives through reinforcement of the positive pressures are:

* The brainstorming of a long-term vision as a basis for a future planning framework is vital. The consultants on the CBD report (15) suggest a vision of sustained qualitative and quantitative growth. It is important that the council commit themselves to this vision which, in short, states "... a belief in the future of the CBD, specifically planned and managed to be a worthwhile and memorable place".

* Establish a partnership between and amongst the public and private sector to improve communication and co-operation in projects to the benefit of the city. This must be achieved by an active role on the part of the council, for example, by initiating projects through "capital design", i.e. using public money to set up catalysts and directives.



Hellman, L. op. cit.

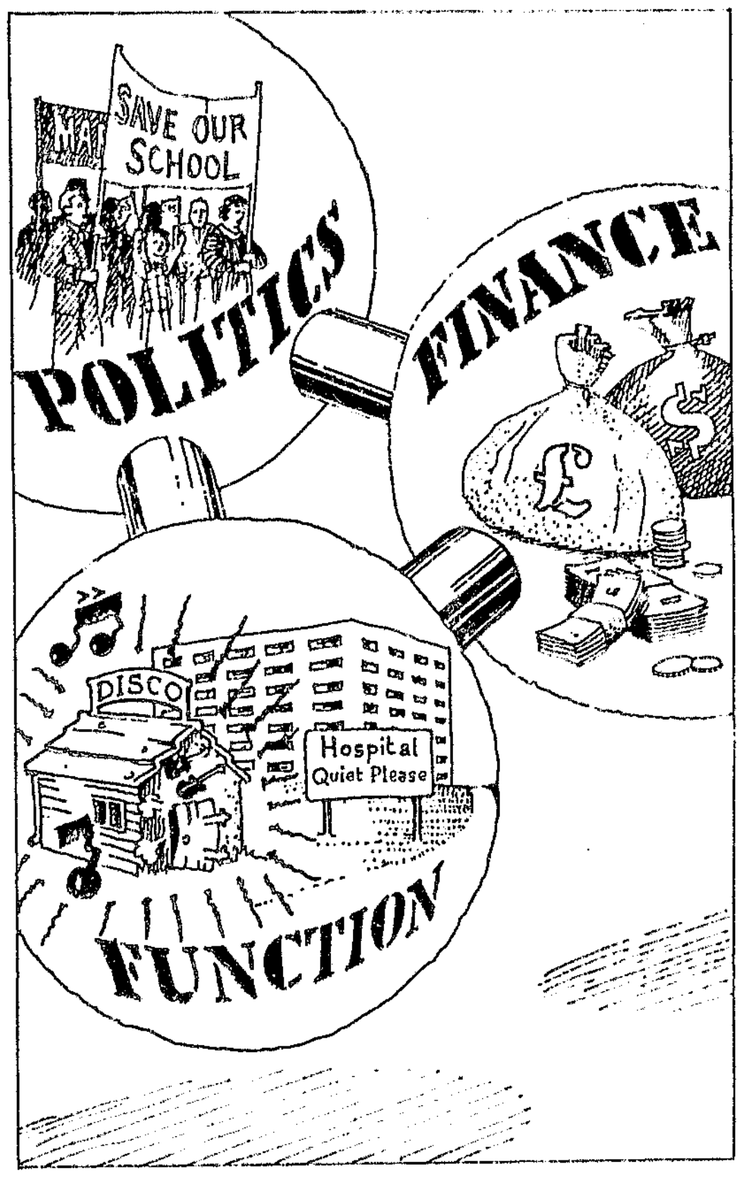
* Creative urban design guidelines set-up for response by the private sector towards encouraging a "spider web" of investments rather than a series of un-related "honeypots".

* The abolition of Central Government's decentralisation and deconcentration policies to be replaced by active commitment to the intensification of the CBD.

* The introduction of mixed use zoning, deregulation and zones of free enterprise in a flexible manner so as to free up the energies of the secondary and tertiary sectors of the economy, thus creating employment opportunities. This would also require an increase of inner city housing stock to counter forces of specialisation and increase the disposable income of households eased by minimised transport costs.

* The upgrading of the viability of the public transport system via privatisation.

* Ensure the suitable and efficient appropriation of public money by monitoring the situation and spending money only as and when it becomes available in a regenerative way.



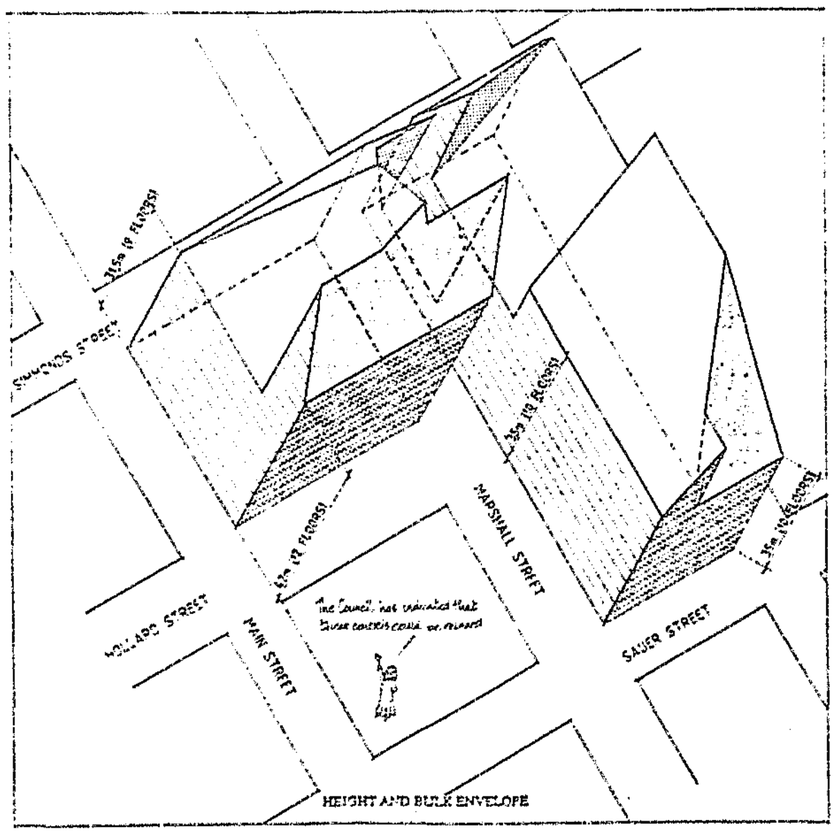
Bentley et al op. cit.

DEVELOPMENT CONTROLS

Whilst this last force is more simplistic and tangible in nature than the previous two, the successful manipulation of the urbanisation and capital investment forces is highly reliant on the city's attitude to development controls. These controls are instrumental in the enforcement of regulations which can either enhance or stagnate the positive spin-offs of the other two forces. It is, in other words, the most important device in the council's hands to channel and direct the energies of the city's private sector.

Development controls in the form of general zoning provisions, bulk control etc., have an effect on the physical form of the city. They also effect the quality of urbanity in the city. There are basically two types of controls:

* controls regulating what people can and cannot do - these controls should be minimised to ensure the vitality of the city



GAPS. Genmin report

* controls to protect peoples' health and well-being - these controls should be reviewed and updated to the benefit of city form

DEVELOPMENT CONTROLS IN SOUTH AFRICA

In the South African context, controls have gone beyond mere devices for the control of city form and the assurance of a safe and hygienic environment. Driven by political ideologies with race as a basis controls have had a profound effect on the physical form of our cities. Ironically intense capitalist nodes of opportunity co-exist with socialist-in-appearance dormitory cities on their peripheries.

Rigid and outdated development controls, on the other hand, are stagnating and smothering our cities in an era of new visions and attitudes. Although it seems as if the local authorities prefer to follow private enterprise, they encroach upon and effect private design in a large number of obscure ways. The discredited cult of freestanding modernist architecture, still apparent in development frameworks to the peril of our cities, shows a typical example of outdated aesthetic biases.

As I M Pei noted:

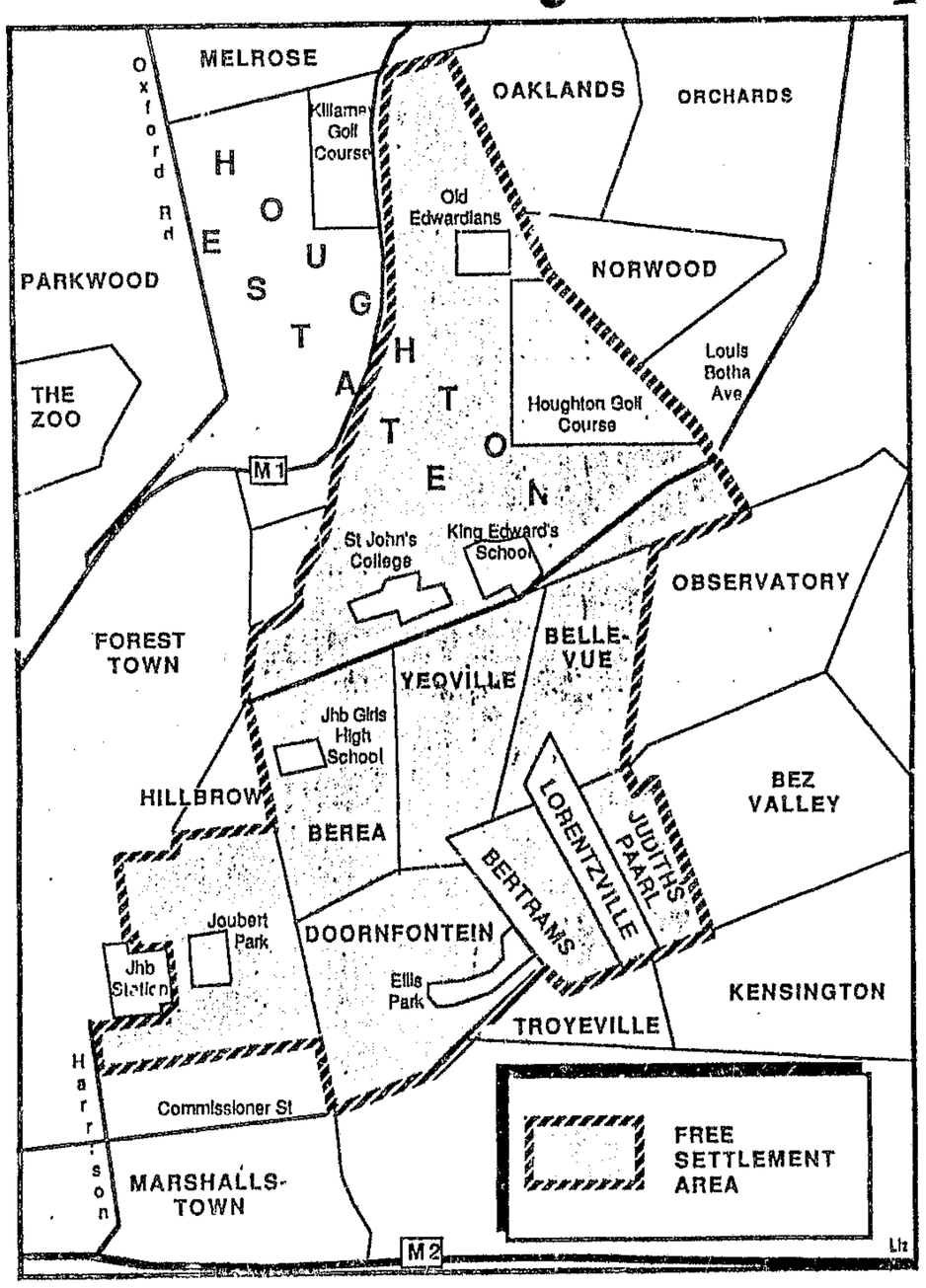
> "... the price tag, the density specification, and the required write-down, all design the project long before the designer has even heard of it. (These) are the poison that will shape the city of the future." (16)

The most profound effect that development controls have had on Johannesburg, both in terms of its physical form and vitality, is the result of the zoning provisions that lead to the exclusion of a comprehensive residential component in the CBD. Racial controls exercised by the Central Government further excacerbate this shortcoming in the city.

Strict and rigid land-use controls have resulted in blighted inner city areas where, as a result of the government policy of decentralisation, thousands of factories and warehouses have been abandoned and allowed to deteriorate. By "dezoning" these areas existing structure and infrastructure can be recycled and revitalised for other uses, such as controlled spontaneous settlement, which are of immediate urgency.

a, Yeoville, Houghton 'racial dogleg'

burbs may be o



The Star, Feb 23 1990

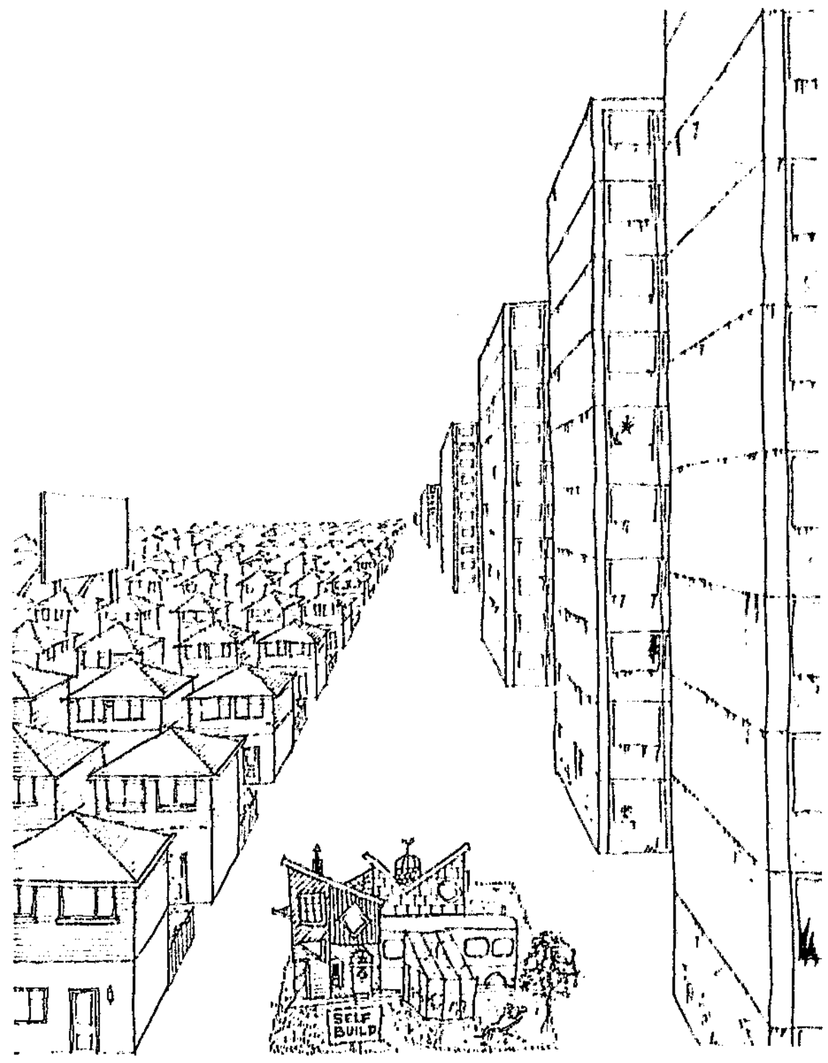
DEVELOPMENT CONTROLS - NEGATIVE PRESSURES AT WORK

With the strong emergence of social and political change in the city, resulting from the unstoppable force of urbanisation, the council has clearly an understanding that entrenched development controls have to be reviewed and adapted. There are, however, a few negative pressures:

* Even though the Council is in the process of implementing bulk and tax incentives, these cannot come to fruition without a high level of communication and partnership between the public and private sector, and confidence in investment on the part of the private sector.

* The further enforcement of grand political ideologies of deconcentration and decentralisation are directly in contrast to the objectives stated above.

* Changing existing regulations in favour of those in line with the achievement of the said objectives, might be too slow compared to the rapid rate of urbanisation experienced and might come too late to ensure orderly change.



Hellman, L. Op. cit.

DEVELOPMENT CONTROLS - POSITIVE PRESSURES AT WORK

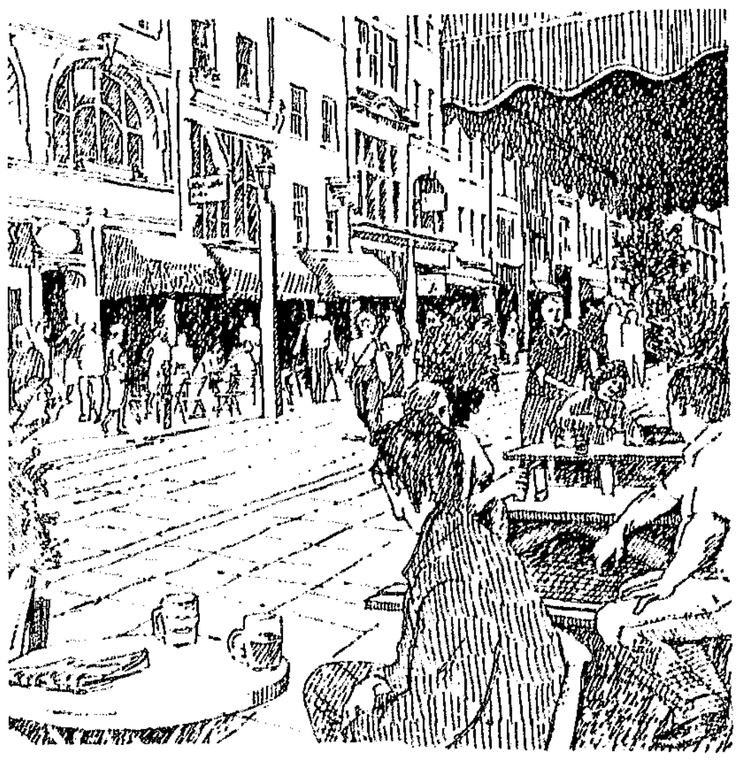
On the positive side, the pressures already affecting this force are:

* New attitudes towards the achievement of the dynamic city in reaction to the stagnating controls brought about by modernist views.

* Pressure and growth potential of the informal market sector which has to be accommodated as a key player in the future economic scenario of the city.

* The urge of the majority of the city's population, previously relegated to dormitory cities outside the CBD, to become fully urbanised and locate themselves near their place of work.

* The key role of the Council and its ability to influence development in consultation with state or quasi-state agencies as well as private initiatives through development controls.



Bentley et al. Op. cit.

DEVELOPMENT CONTROLS - OBJECTIVES

The declaration of the Johannesburg Metropolitan area as a "free trade zone" and deregulation to accommodate the informal sector in certain areas are steps in the right direction as far as accommodating rapid urbanisation and its accompanying problems of unemployment goes. This is vital in stimulating growth and strengthening the economic base of the city.

Not only must land uses and activities capable of strengthening the economic base be encouraged, but complementary rating, licensing and taxation should also be reviewed to stimulate these uses and activities, especially in respect of small businesses and the informal sector.

Development controls currently in force should be reviewed with the following primary objectives:

* development should be balanced in a way that the activity, access and human comfort needs of uses are met

* development must take place on a new scale and order in which all sectors of the economy can find opportunity and possibility

* an improved quality of the environment with a wider choice in the range of activities and facilities

* to develop and reinforce new views on development controls away from the modernist ethic

* to actively address the inner city derelict areas through renewed attitudes towards development controls

* to stimulate economic and physical growth of the CBD

It is essential that the regulatory aspect of city building be taken charge of, re-evaluated and positively applied to set the dynamic energies of the city free.



Source Unknown

DEVELOPMENT CONTROLS - DESIGN IMPERATIVES

To enable one to achieve the objectives in terms of development controls, taking the positive and negative pressures into account, the following design imperatives can be deduced:

* The introduction of mixed use zoning, especially with regard to the residential component, to ensure around-the-clock vitality of the city and a world in which work opportunities, residence and leisure are integrated enabling the urbanising population.

* Deregulation and the creation of "zones of free enterprise" to reinforce the informal market sector for the benefit of the city economy. This will also create opportunities and enhance the sense of urbanity in the city.

* Dezoning of existing derelict industrial zones and the introduction of flexible controls to assist in the recycling of existing structures for new, more pressing uses.

* A new financial strategy for the CBD should be developed to help stimulate growth, whilst ensuring that financial returns from the CBD are secure. This can be achieved by new approaches to, inter alia, rating, rates and tax holidays, parking tariffs, license fees, development contributions/endowments, incentive zoning, services, levies and privatisation.

* The communication between private and public sector must be improved to be able to apply tax and bulk incentives creatively and co-operatively.

* The introduction of special zoning areas and zoning incentives to ensure the preservation of historical buildings and other aspects of the city to enhance a sense of place.

* The abolition of the Group Areas and Separate Amenities Acts to eliminate the negative physical aspects brought about by controls based on race.



Bentley et al. Op. cit.

As Barnett (17) notes:

> "The existence of controls thus represents a very valuable card in the hand of those seeking to improve the design and planning of towns and cities. If you can modify existing regulations

to improve development, without raising the cost to the developer, you have a far better chance of success than if you seek to impose new controls that have not been part of the rules up to now."

THE ROLE OF FORCES IN THE ESTABLISHMENT OF SCENARIOS

The manipulation of the primary forces, the positive and negative pressures influencing them and the direction of their spin-offs become an integral part in the development of long-term visions, objectives and scenarios, which are important priming tools for intervention.

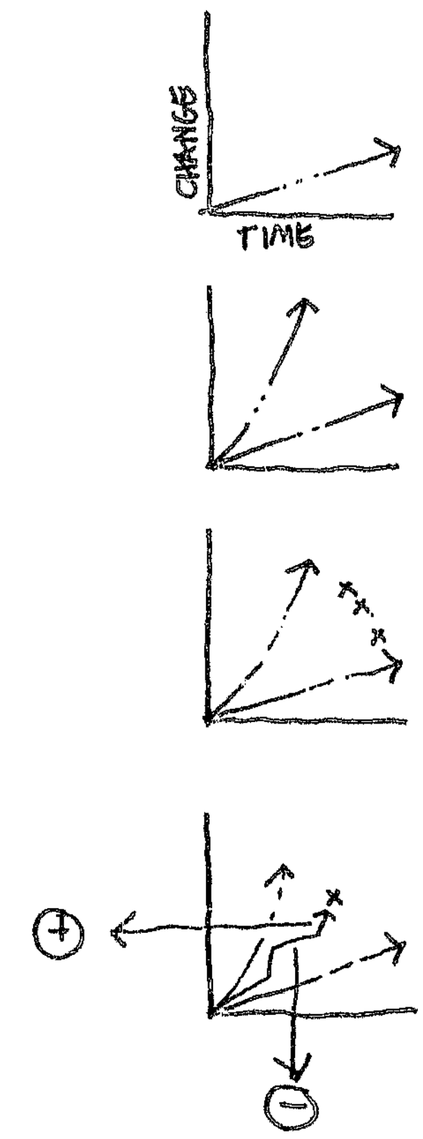
Based on the "process scenario" method developed by Ackoff and Ozbekahn (18), the impact of the positive and negative pressures and forces on the achievement of a specific range of objectives, can be explained graphically. It consists of the following steps:

1. Develop a reference projection which shows how the system will look "X" number of years from the present, under the assumption that no new plans or actions are undertaken.

2. Develop a projection which shows what the other end of the scale, in other words a revolutionary perspective, will bring.

3. Establish a range of acceptable visions between these two curves to determine a range of long-term objectives.

4. From this establish a strategy of how the positive and negative forces can be manipulated towards the preferred objective.



... provide us with clues
for dealing with the
shortcomings of the city.

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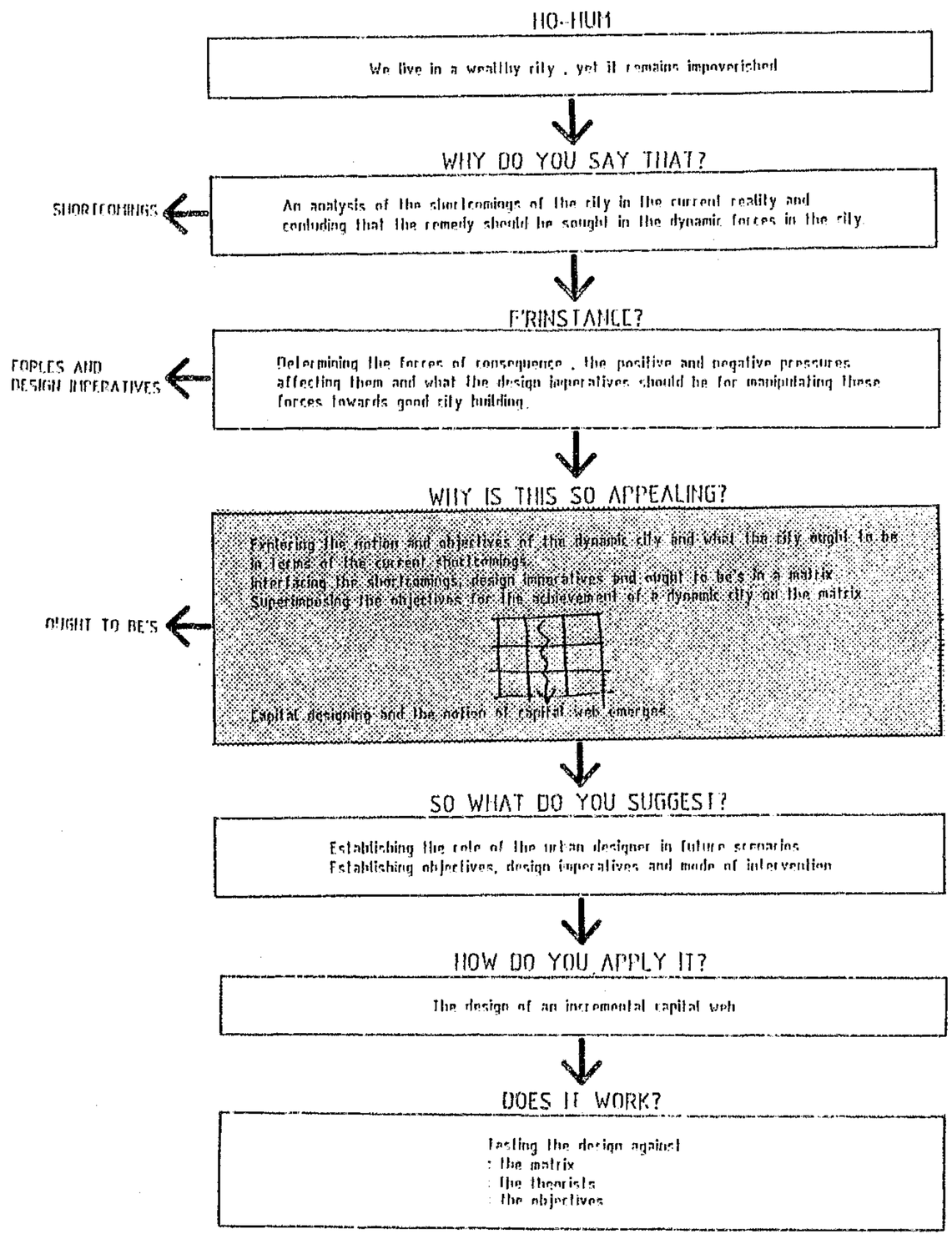
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CHAPTER 4
WHY IS THIS SO APPEALING?



Cities are essentially
dynamic in nature...

Towards an approach for achieving the Dynamic City

To break out of the stagnant status quo in which Johannesburg is currently trapped, it is important to use the clues, provided by the three universal forces at work in the city, to establish design imperatives - not as mechanical devices, but as a basis for the establishment of an attitude towards the Dynamic City.

What do we mean by the term "Dynamic City"?

It will be necessary to look briefly at the theorists view on this notion and their objectives towards achieving it. This will enable us firstly to establish what the city "ought-to-be" in terms of the shortcomings identified earlier, then to apply the design imperatives derived from the above forces and finally to establish it from the most appropriate and far-reaching interventions for the specific context.

The notion of the Dynamic City

The multi-dimensional forms of cities are not to be epitomised in some static "ideal end-state" scenario as they are the ever-changing product of the myriad forces, processes and energies that shape cities. To adopt a "predictionist" stance towards these timeless organisms which are constantly evolving, responding to change and adapting to circumstance would be fatal. It is however important to maintain a long-term vision towards which city building should strive.

This argument is particularly applicable to South African cities, deep in the throes of rapid urbanisation and population growth and floundering amidst vague and uncertain government policies and their resultant political turmoil: "..... many scenarios emerge, focus and dissolve as changing realities bring yet another scenario to the fore." (1)

... and the objectives towards
achieving the dynamic city...

The Concept of the Dynamic City is Widely Upheld Today, and has Two Primary Champions

David Crane

David Crane (2) developed a theory of city-form and structure around what he called "the dynamic city". His concern arose in response to the rapid, and accelerating, change and growth that he foresaw for the contemporary city. His view was similar to Turner's (3) notion that we cannot possibly hope to finance, design and control all aspects of our manmade environment.

Crane (4) argues that the Dynamic City idea comes from three basic truths about the modern city:

* rapid and accelerating change in city life and unequal physical progress

* interdependence of life and structures over great space-time scales

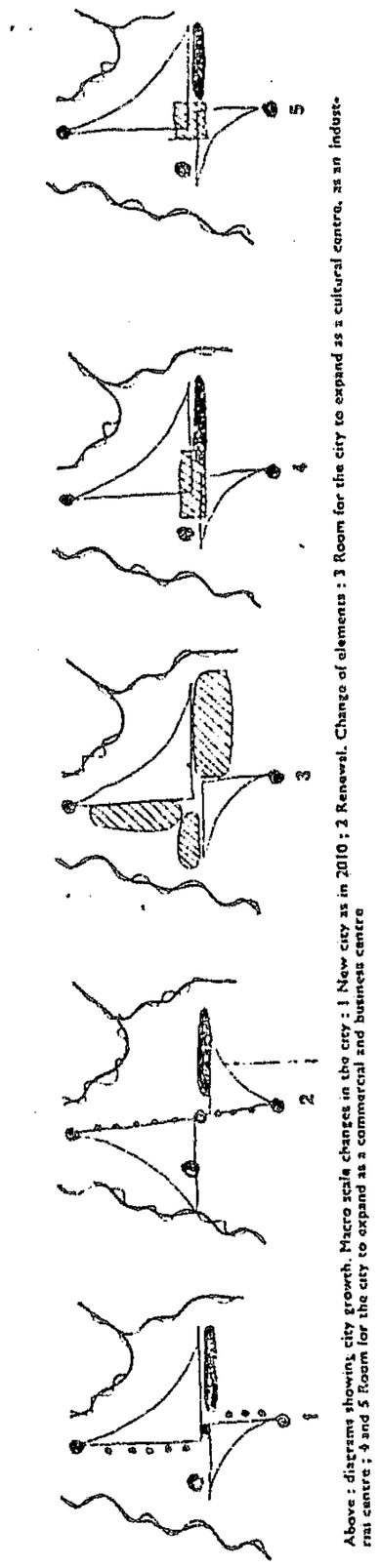
* the complexity, multiplicity and power of the city of a Thousand Designers

On this basis Crane introduced the critical fourth dimension of time as an aspect of city design by relating time to space. With the time dimension comes the aspect of the dynamics of change. The change in cities resulting from advances in technology, exponential population growths, poverty and unemployment etc., is happening in increasingly shorter periods of time, and yet, our predictive apparatus has not developed at the same rate.

Crane argues: "Sequence of actions becomes more important than actual dates; opportunities, escapes and administrative choices must be arranged in advance without knowing precisely which of several courses may be chosen." (5)

It therefore becomes necessary for the Urban Designer, especially in the local context, to have a flexible and informed view of what might eventuate and to establish a whole range of long-term objectives and be aware of eventualities based on the short-term realities of existing circumstances.

In order to accommodate the rapid rate of change in city life, it is essential that the city and its structures are adaptable and able to ... "fit new people to existing structures or existing people to structures elsewhere." (6)



Above : diagrams showing city growth. Macro scale changes in the city : 1 New city as in 2010 ; 2 Renewal. Change of elements : 3 Room for the city to expand as rial centre ; 4 and 5 Room for the city to expand as a commercial and business centre

Crane, D., The Dynamic City

Another inhibiting factor against the harmonious achievement of a City of a Thousand Designers, argues Crane, is the zoning and other obscure land control regulations imposed by local governments which interfere with the private design of private facilities. Nevertheless, there exists hereby a marvellous opportunity for the local authority to step in as positive co-ordinator and enabler of private enterprise.

Crane (7) suggests the following objectives in search of the Dynamic City.

1. The city should be a giant message system, providing the citizen with a simple succession of perceptible information for utilitarian concerns.

2. One should strive to achieve an "image" (8) for the city taking cognisance of and reflecting the grand scale and disjointedness of the modern city. All intervention should therefore start at the metro scale.

3. There must be a reflection of environmental morality and man's historical dependence on nature.

4. The city should have an organised capacity for change and an intrinsic permanence of structure for continuity.

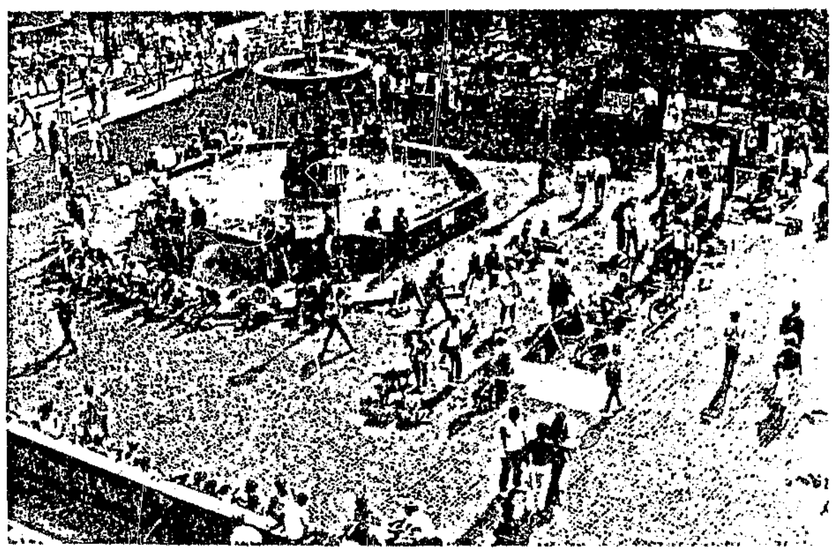
5. More concrete and demonstrable processes of making public city-form decisions should be devised.

6. An ordered freedom for private city building should exist.

7. A legislative structure capable of to permitting choice and flexibility of individual usages must exist.

8. The city form should contain successive layers and scales of parts where change and stability seduce and sweeten each other.

The Dynamic City is dependent therefore on generality and flexibility of parts, strong and permanent locational rhythms, less permanent superimpositions and a dynamic balance of mass for its dynamism.



Edward Bacon

A second theorist to firmly believe in the dynamic properties of the city is Edward Bacon (9). He argues that the city is an act of will and that the form of the city is historically an indicator of the state of a nation.

Because of the dynamic nature of the city, the human will can be effectively exercised by applying at any one time the multiple wills and decisions of the people who live in it. The character of the city can thus change substantially over a particular historical era.

Like Crane, Bacon introduces the concept of time as a fourth dimension in design by relating it to space. He sees the main objective in life as being a continuous flow of harmonious experiences. Designing the relationship of spaces as experienced over time thus becomes increasingly difficult.

".....he (the designer) conceives forms as pulsating expressions or organic vitality flowing through the structure of the city, and he brings to the mind of the community the significance and meaning of the evolving forms in the flow of the total development." (10)

Bacon furthermore relates space to movement, introducing another dynamic dimension into design. For a design to be successful, the impressions it produces of a person moving through a series of linked spaces must be continuous and harmonious although of different quality.

Bacon also believes that a deeply rooted understanding of the community and their objectives is essential in any design (11). The function of the designer is to conceive an idea, implant it and nurture its growth in the collective mind of the community to engender their involvement.

Although it is impossible to predict the eventual form of the city due to its dynamic nature, Bacon sees the development of an adequate hypothesis, or vision, of a "design idea" as of major importance. This vision is particularly important to the involvement of the inhabitants of the city since it provides the people with something substantive to which they can react.

To Bacon the city is a dynamic work of art, coming to fruition by the interaction between the designer and the community in the process of planning.

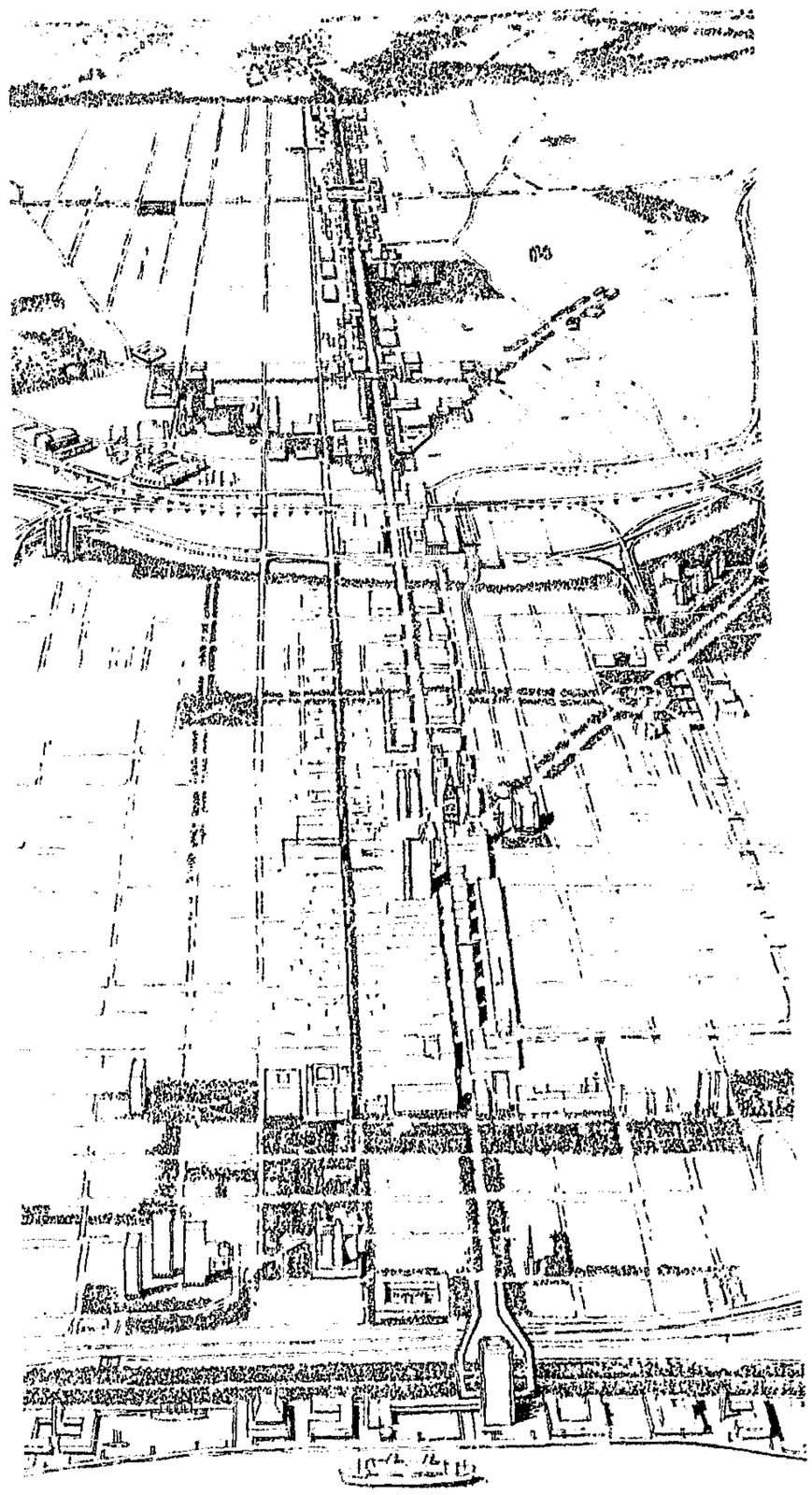
From Bacon's theories the following deductions can be made in terms of the objectives towards a Dynamic City and added to those of Crane:

9. There must be a framework in place to allow the inhabitants of a city to exercise their will and decisions on the character of the city.

10. Space between buildings and the relationship thereof with mass, time and movement should play a dominant role ir the design of a city rather than simply the architectural form.

11. The city is a people's art, a shared experience. An overall hypothesis or vision of a design idea is essential to inform, and draw reaction from, the community.

12. The designer must have a clear concept of design processes to set in motion the involved process of city building capable of influencing growth. Any design used for part of the city should be able to be modified and extended into an everwidening area and even the whole metropolitan scale.



Bacon, E. Design of Cities

Christopher Alexander

Unlike the previous theorists who underwrite the dynamic characteristics of the city, Alexander argues for the principle of "generativity". This implies that a building can be generated from a set of rules (12) as a structural principle of natural creation rather than as a mechanical technique.

Alexander's theories are relevant to this thesis as they have many points in common with the theories on the Dynamic City. His work has been characterised by a gradual but intensely persistent honing-in on the very heart of the creative process in what appears to be the search for a "generative theory of architecture".

This account takes the form of several basic facts:

* the actual substance of which the environment is made consists of patterns rather than things and the environment is generated from systems called "pattern languages"

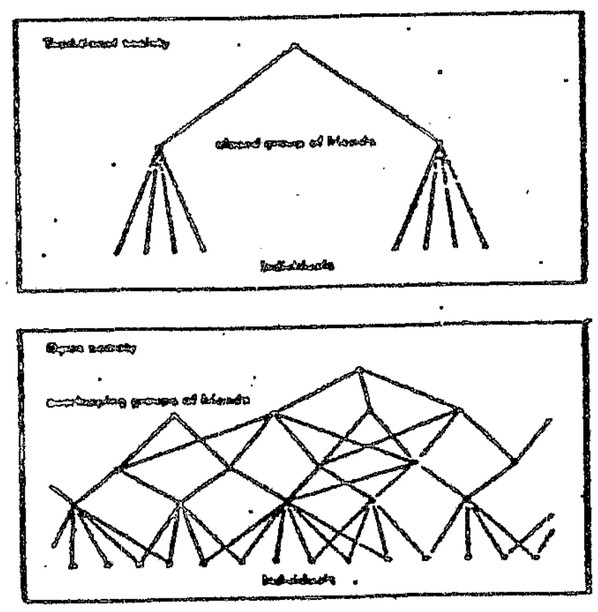
* the distinction between good and bad patterns is not arbitrary but can be arrived at objectively

* its successful adaptation to a complex system requires an enormous amount of minute local adaptations which insist tha large numbers of people are engaged in the process

* the environment properly constituted has an objectively definable morphology, with specific geometric properties that must be present if it is to be beautiful.

Alexander argues furthermore that the problem of designing cities today lies in the inability to mentally visualise the overlapping of physical, social and economic patterns into a single mental construct (13). He suggests that by means of grouping and categorisation, the overlapping systems are reduced and simplified into easily understood mental pictures.

He further relates the structure of overlap to the complexity of a semi-lattice and the structure of non-overlap to the hierarchy of a tree (14). The semi-lattice structures are typical of those groupings of activities that occur around intersections, public places and mixed use zones, as opposed to the suburban neighbourhood where overlap is virtually non-existent apart from that which occurs between similar adjacent neighbourhoods. The overlap and concentration of functions enhances access to facilities within easy reach. The resultant patterns reflect the quality of an urban as opposed to suburban environment.



Alexander, C., The City is not a tree

The hierarchial model of the simplified tree-like structure has been increasingly applied to modern city centres, to the detriment of urban life. The complex overlap of urban patterns is crucial to a healthy, just and beneficial environment:

> "The city is a receptacle of life. If the receptacle severs the overlap of the strands of life within it, because it is a tree, it will be like a bowl full of razor blades on edge, ready to cut up whatever is entrusted to it. In such a receptacle life will be cut to pieces. If we make cities which are trees, they will cut our life within to pieces." (15)

Although Alexander's approach to city building is more of a generative nature rather than the Dynamic City approach of Crane, Bacon and Turner there are certain strong correlations in their objectives for good city building. In addition to these mutual aims the following objectives with specific relevance to the Dynamic City concept can be deduced from Alexander's writings:

13. There must be a complex and diverse overlap of systems to provide structure and to ensure choice, vitality and equality of access and adaptability (semi-lattice structure rather than a tree-like structure).

14. There must be a clear differentiation between public, semi-public, semi-private and private domains with the overlap from one to the other being the most important area from a design point of view.

15. Patterns of behaviour of the user group and patterns of space must be taken into equal consideration.

16. Implementation should be loose and voluntary, based on social responsibility rather than legislation, and implemented gradually without a masterplan to encourage the growth of networks.

... can become a barometer
against which an attempt to
address the specific
shortcomings can be tested...

Establishing a method for cross reference of the various points

In order to address the shortcomings and maladies of the local context in specific terms, and relate them back to the generic theories of the Dynamic City, an attempt will be made to:

(a) establish a set of principles of what ought to be, to compare with the current reality and the broad, yet specific design imperatives so as to work towards the "ought-to-be's". By analysing each shortcoming and malady identified in Chapter 2 in terms of what the situation should be, an idea of the magnitude, interdependence and interrelation of the specific design imperatives required can be reached

(b) feed the resultant conclusions into a matrix to establish what the most effective intervention or design imperative would be in terms of the whole, and

(c) relate the specific design imperatives and their zones of reach back to the objectives for the Dynamic City in order to establish to what extent they can be achieved.

WHAT OUGHT TO BE

THE LACK OF URBANITY

The concept of urbanity is a complex one, consisting of and sustained by an endless series of interrelated and interdependent variants, overlapping and interacting at different scales and levels. Urbanity (or the lack of it) permeates the whole city. It cannot be created, planned or enforced. It is not a device. It can only be encouraged and can only be spontaneous.

Without embarking on a detailed analysis of this complex concept, one can home in on the following selection of pre-requisites essential for the makings of urbanity, from the writings of various theorists (16). It will be noted that a large number of the problems as discussed in Chapter 2 of the current reality, bears a direct relationship with the lack of the following ingredients for urbanity in our city.

* Uniqueness of place

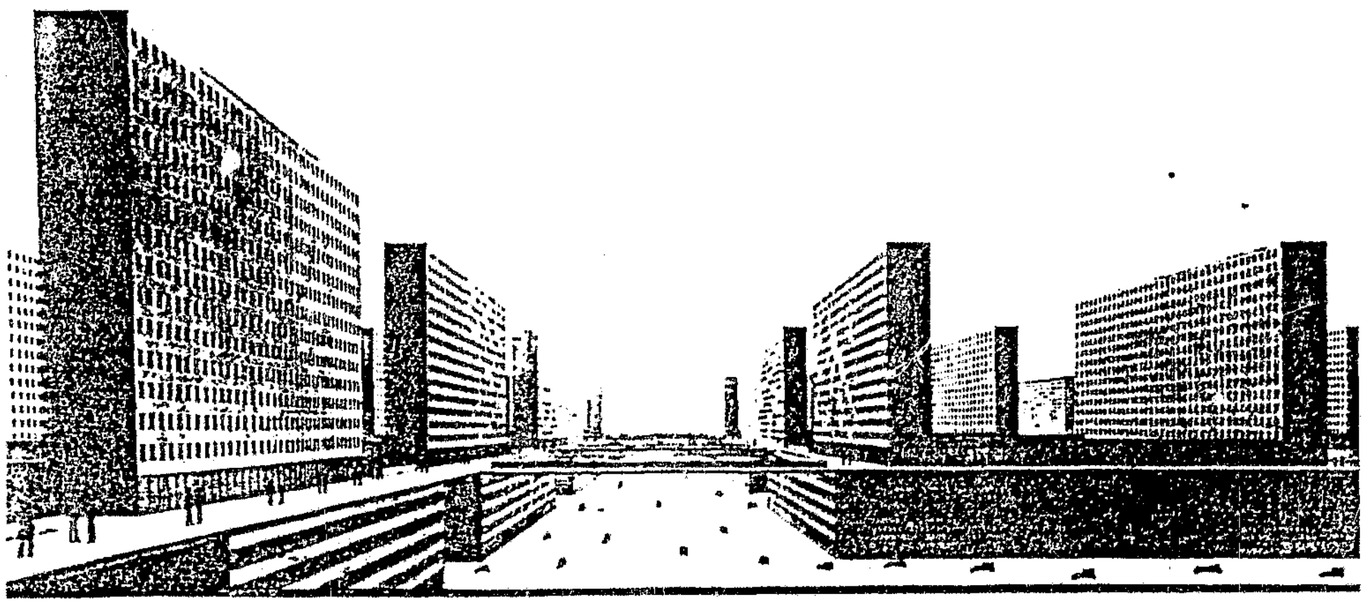
A place with a specific cultural/historical character, individual identity, sense of place, coherence, a sense that the spontaneous ingenuity and creativity of the people contributed to the making of a spirit of freedom of soul.

DESIGN IMPERATIVES

* Creation of responsive environment as a stage for the inhabitants of the city to participate spontaneously

* Capital web installation - city of 1000 designers
* Reinforcement of a cultural precinct
* Create special zoning areas
* Preservation incentives
* Mixed use zoning/primary use diversity

WHAT OUGHT TO BE	DESIGN IMPERATIVES
* Integration Co-ordinated integration of uses and activities, supporting facilities, creating and enriching diversity, continuity of fabric and prevention of fragmentation, integration of uses generating twenty four hour-a-day activity, integration into the larger metropolitan area through logical spontaneous development. Integration in the political sense of the word.	* Increased residential component in the inner city * Promoting and encouraging urbanisation * Mixed use zoning/primary use diversity * Establish needs of community by community participation * Land value control * Small grain intervention * Incremental intervention taking care of immediate needs but with long-term vision and objectives * Capital web connection into zones of opportunity * Deregulated trade areas * Establish zone of enterprise * Abolition of Group Areas Act
* Density Sufficient population density to support the activities, buildings of large variety to be close-grained to accommodate various activities and supporting population.	* Deregulation * Allow and encourage city growth and urbanisation * Increased residential component in inner city * Government centralisation policy * Mixed use zoning * Smaller scale developments/anti-superblock * Creative urban design parameters and frameworks * Enhance public environment as part of a capital web system
* Accessibility Unrestricted and easy accessibility to locals and strangers alike at all times from all other places of opportunity, activity and resource, diversity of access and choice of transport mode, equality of access to different groups, multi-directional movement structures (grid) catering for both vehicular and pedestrian.	* Increased residential component * Upgrade public transport system to be more efficient and viable * Achieve legibility and permeability through capital web design * Abolition of group areas and separate amenities * Upgrade traffic management * Encourage urbanisation and intensification of the city * Introduce hierarchy in existing grid



Trancik, R. Finding Lost Space

WHAT OUGHT TO BE	DESIGN IMPERATIVES
* Community Identity A spirit of sharing and participation, platform for human face to face communication, harmonious overtone, relationship orientated, sufficient vitality, spirit resulting from common struggles, habits and folklore.	* Capital web installation to promote sense of community and defensibility * Zones of privacy * Street relation of buildings through urban design framework * Hierarchy of movement systems * Reinforcing cultural precincts * Prevention of inaffordable land values * Mixed use zoning * Increased residential component in inner city * Community participation * Abolition of Group Areas Act
* Memorability Buildings must have a qualitative influence on their surroundings, specific visual or aesthetic character, sufficient open public space, legible landmarks and nodes, rich stimuli all for senses (noise, colour, odours) sufficient animation and a theatrical aspect (celebrations, receptions).	* Building preservation policy through bulk and tax incentives * Creative and sympathetic urban design framework * Capital web installation linking public space and incorporating historical landmarks * Special zoning areas
* Diversity Primary use diversity (offices, shops, residential and recreational) attracting and promoting population density as a result of their integration. Secondary use diversity to encourage people to use the public environment at different times, building diversity, heterogeneous and unpredictable activities, individual freedom and choice.	* Mixed use zoning * Deregulation and dezoning * Capital web installation linking uses and providing qualitative public environment * Small grain intervention and land parcels/anti-superblock * Preservation incentives * Land value control/anti-corporate conglomerations and accretions * Abolition of Group Areas and Separate Amenities Acts * Centralisation policy * Increased residential component in the inner city * Introduction of an hierarchy in the city grid

WHAT OUGHT TO BE

* Flexibility

  Accommodation change over time, different cultures, generations and technologies to be accommodated, change of usage of space over time.

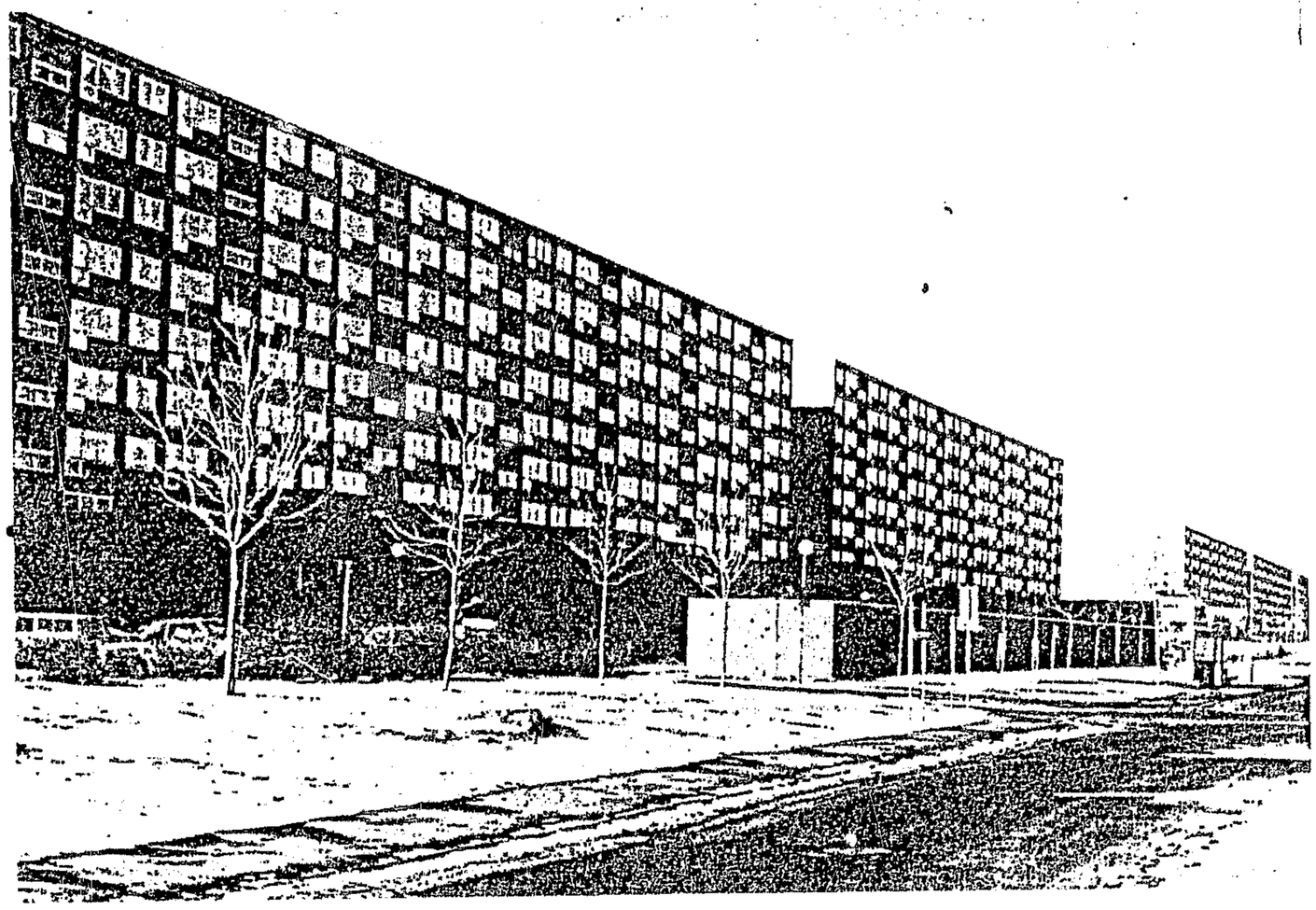
* Complexity

  Ambiguity, overlapping of usage, multiplicity of use and opportunity, vernacular quality, spontaneous quality, ordered disorder, harmonious cultural and political interface, "semi-lattice" organisation rather than "tree" organisation as per Alexander (17).

Urbanity will not be achieved by merely putting these elements together in an additive way. They all contribute at different intensities and levels towards a whole.

DESIGN IMPERATIVES

* Urban design framework with short-term interventions catering for immediate needs but with long-term vision
* Capital web to be robust
* Flexible zoning regulations and development controls
* Dezoning, deregulation and the establishment of zones of enterprise
* Promotion of the informal market sector
* Deregulation
* Capital web installation in order to establish a forum for interface
* Mixed use zoning
* Reinforcement of cultural precincts
* Dezoning existing structures for recycling
* Abolition of group areas and separate amenities acts
* Special zoning areas
* Encourage urbanisation and city growth
* Introduce an hierarchy in the city grid



Trancik, R. Op. cit.

WHAT OUGHT TO BE

DESIGN IMPERATIVES

THE MISSED OPPORTUNITY OF STREET SPACE

The city streets have a potential role of economic and social opportunity as places to spend time in rather than just as spaces to move through. Jane Jacobs (18) argues, that a city street must have three qualities in order to deal with strangers and to make it safe.

* The sidewalk must have users on it fairly continuously

  To achieve this the street must have some form of attraction (formal or informal), it must be well designed and it must be safe. A mix of uses and activities at ground floor level and above would generate a lot of activity at different times of the day and night, assuring a steady stream of different users.

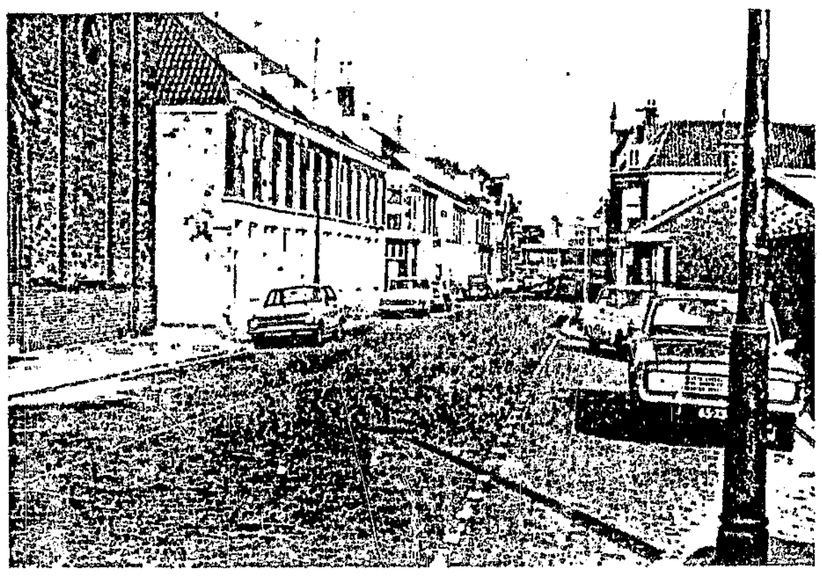
  * Capital web installation to link places of interest
  * Mixed use zoning
  * Street orientated developments through a creative urban design framework
  * Enhance a sense of community and defensibility
  * Increase residential component in the inner city
  * Deregulation to promote the informal sector

* There must be surveillance of the street by the occupants of the buildings which border it

  In order to provide surveillance of the street, one has to be able to look out over the street (i.e. windows, doors and shopfronts), feel some direct contact with it (i.e. opening sections), and some sense of responsibility (i.e. territoriality or pride). This means that the design of the actual buildings facing onto the street should be less introverted and self-contained.

  * Small grain intervention
  * Enhance a sense of community
  * Creative urban design framework to achieve street related buildings
  * Design for defensible space
  * Increased residential component in the inner city

BEFORE



AFTER



Gehl, J. Life Between Buildings.

WHAT OUGHT TO BE

* There must be a clear demarcation between what is public and what private space

Private space would be personal space that one would want to defend - "defensible space". Rather than relying on real barriers such as fences, walls, dogs, alarms and security guards to the point where we are almost in a state of siege. Designers ought to consider traditional symbolic mechanisms for achieving defensible space (19) such as building configurations, gateways, changes of level, positioning of openings, visually permeable fences and walls. This would improve street contact and incorporate the communal street space into the defensible realm.

In addition to Jacobs' more romantic views Bacon has a functional premise related to "simultaneous movement systems" (20). He argues that the designer should have an understanding of:

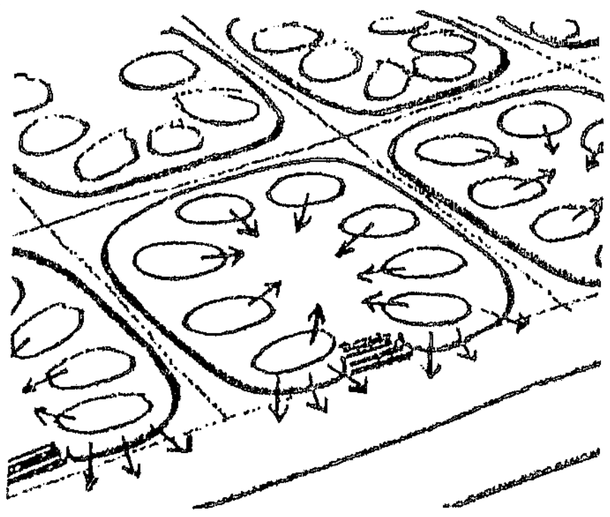
* The relationship of mass and space

The dominance of the space and the movement within this space between buildings. In other words movement channels should be designed and used as generators and catalysts rather than be the consequence of the built environment.

DESIGN IMPERATIVES

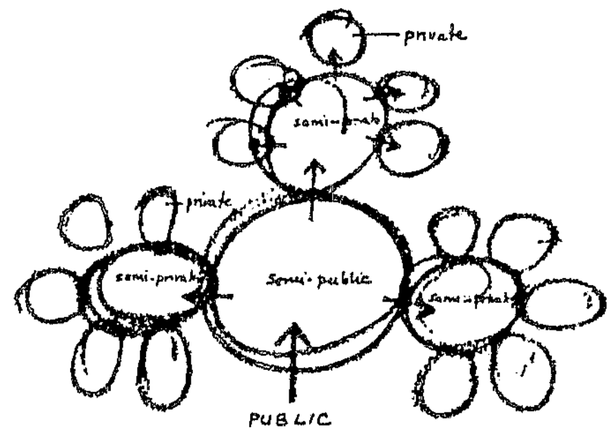
* Capital web design to ensure successful interface between public and private realms
* Creative urban design framework
* Enhance the sense of community
* Community participation

* Capital web installation - generator and catalyst for built environment
* Creative urban design framework to respond to the Capital Web
* Introduce an hierarchy in the city grid

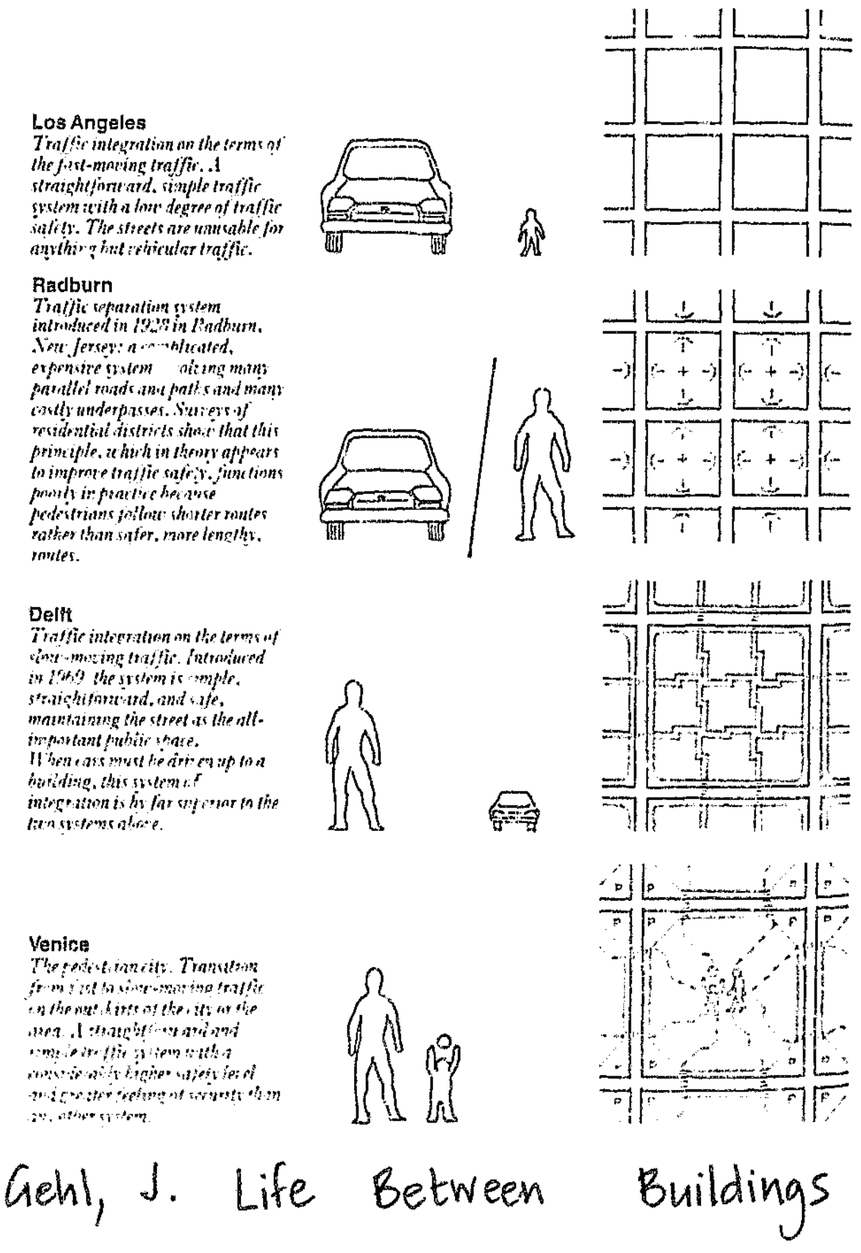


Newman, O. Defensible Space

Hierarchical organization of residential area with clearly marked transitions between private and shared spaces.



WHAT OUGHT TO BE	DESIGN IMPERATIVES
* Continuity of experience Areas adjacent to the movement channel should be designed to produce a continuous flow of harmonic experience as the individual moves through that track in space. The movement systems must be used to emphasise, dignify or give meaning to buildings and foci that have special significance in the community.	* Capital web design - tie public buildings together and accentuate landmarks and foci * Creative urban design framework to ensure contained street space
* Simultaneous continuity The continuity of space experic.. must be seen as a series of movement systems based on different modes of movement and different rates of speed, all interrelated. In other words, there should be an inherent hierarchy in the different movement channels of the city.	* Development of a traffic management system * Introduce an hierarchy in the city grid
The city ought to embark on a traffic management system taking cognisance of all modes of transport and parking within the existing fabric, as proposed by Barnett (21) to enhance such an hierarchial movement system.	* Capital web design to connect different zones * Traffic management strategy * Introduce an hierarchy in the city grid
The movement systems of the city should also provide stronger linkages and connections to different zones of opportunity within the city as well as through the inhibiting peripheral zone into the ripe transitional zone and the residential hinterland beyond.	



Gehl, J. Life Between Buildings

WHAT OUGHT TO BE

THE POOR PUBLIC TRANSPORT SYSTEM

The modal split between private and public commuting to the CBD is currently in the order of 30% private and 70% public. This is a favourable ratio and is heavily based on the existing railway network. Further development should take cognisance of the advantages of capitalising on the existing infrastructure which would allow new public capital to be invested in upgrading the existing systems.

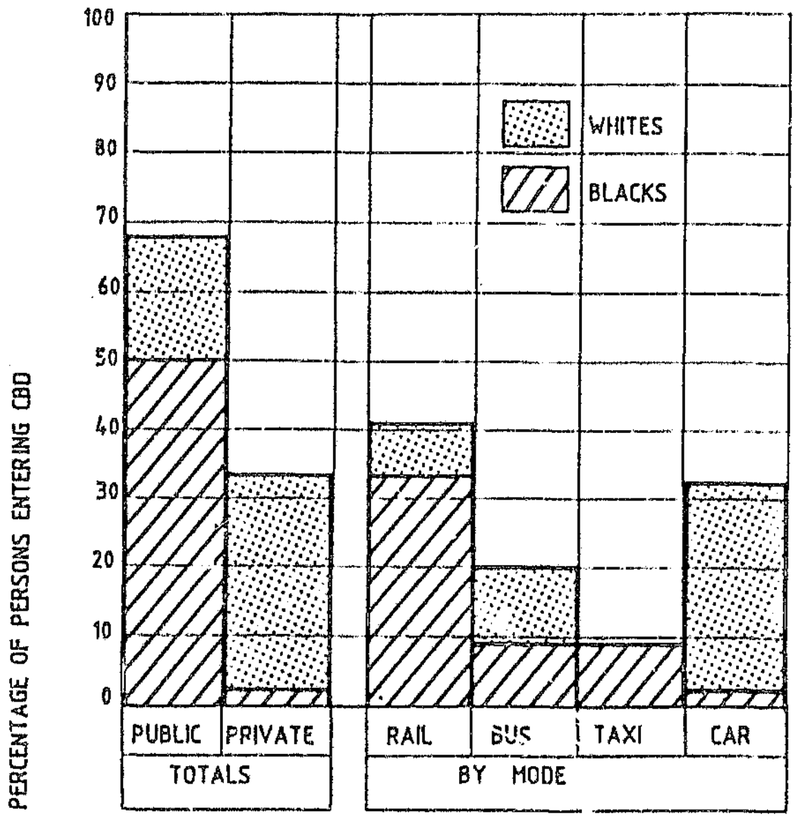
The commuter bus network must recognise the hierarchy of inner city movement systems by the creation of special bus streets and loops, and connections at regular intervals into the outer zones of the city and the supporting hinterland. This network must be flexible to accommodate future growth and mass transit facilities.

The public transport system should be made more viable by allowing the city to densify. This would make the city more accessible to the low car-ownership less income groups, thereby extending their range of opportunities and thus enhancing a life-giving force in the city.

DESIGN IMPERATIVES

* Appropriation of public money to public transport
* Traffic management strategy
* Capital web - interface with bus routes to provide bus/pedestrian symbiosis
* Introduce hierarchy in the city grid
* Allow city to grow and densify
* Abolition of Group Areas Act
* CBD a zone of enterprise
* Increased residential component
* Relax strict parking policy
* Central government centralisation policy
* Traffic management strategy

SOURCE: ESTIMATES BASED ON SCOTT AND DE WAAL (1987) 1, SCOTT AND DE WAAL (1987) 2, VAN WYK AND LOUW (1985) JOHANNESBURG CITY COUNCIL (1978-86)



THE MAJORITY OF COMMUTERS ENTERING THE CBD IN MORNING PEAK DO SO BY PUBLIC TRANSPORT

City of Jhb, CBD report

WHAT OUGHT TO BE

ZONING LEGISLATION AND THE LACK OF AN INNER CITY RESIDENTIAL COMPONENT

It is essential to include as wide a range of uses in the inner city as possible to encourage people in the pluralistic society of the local context to pursue activities that reflect their character as individuals or groups.

Dezoning would increase the level of diversity, choice, accessibility and opportunity in the city which will enhance the level of urbanity. By creating a zone of enterprise, the spontaneous informal and formal market can exist side by side in a symbiotic manner. This intervention is already under way by the declaration of the CBD as a "free trade area".

From the residential point of view, the CBD has the potential to accommodate housing that can capitalise on the existing infrastructure, which is normally a major cost consideration in the development of new housing schemes, and the savings can then be applied to an improved public environment.

Inner city housing can also eliminate the time/travel aspect by bringing places of residence closer to places of work. This will provide the CBD with a more balanced existence, extending its patterns of usage to nights and over weekends. A wider range of housing types must be accommodated to generate a greater variety of lifestyles.

Other spin-offs would be the densification of the city with its impact on energy efficiency both in terms of manpower and transport, making the city a more viable economic entity. It will also have a positive effect on the public transport system as discussed above.

DESIGN IMPERATIVES

* Dezoning and deregulation to encourage a variety of uses and users
* Create zone of enterprise
* Capital web - create enabling structure for informal market sector
* Mixed use zoning
* Abolition of Group Areas and Separate Amenities Acts encourages urbanisation

* Capital web installation - improve public realm with savings afforded by capitalising on existing infrastructure

* Mixed-use zoning
* Relax stringent parking policies
* Abolish Group Areas Act
* Encourage urbanisation
* Centralisation policy
* Enhance sense of community and defensibility through design

* Encourage residential component by tax and bulk incentives, housing subsidies, mass-subsidisation of the residential components by office and retail components



Housing in Southern Africa , Aug 1989

WHAT OUGHT TO BE

DESIGN IMPERATIVES

THE LACK OF DENSITY

Further development at existing population densities poses a major problem if our rate of population growth and urbanisation continues as predicted. Cities are very efficient organisations for assimilating large numbers of people, their skills and energies to the benefit of the economy of the city and country. It is therefore essential that the present city densifies and a radical re-think as to how the city will grow and what form it will assume is necessary.

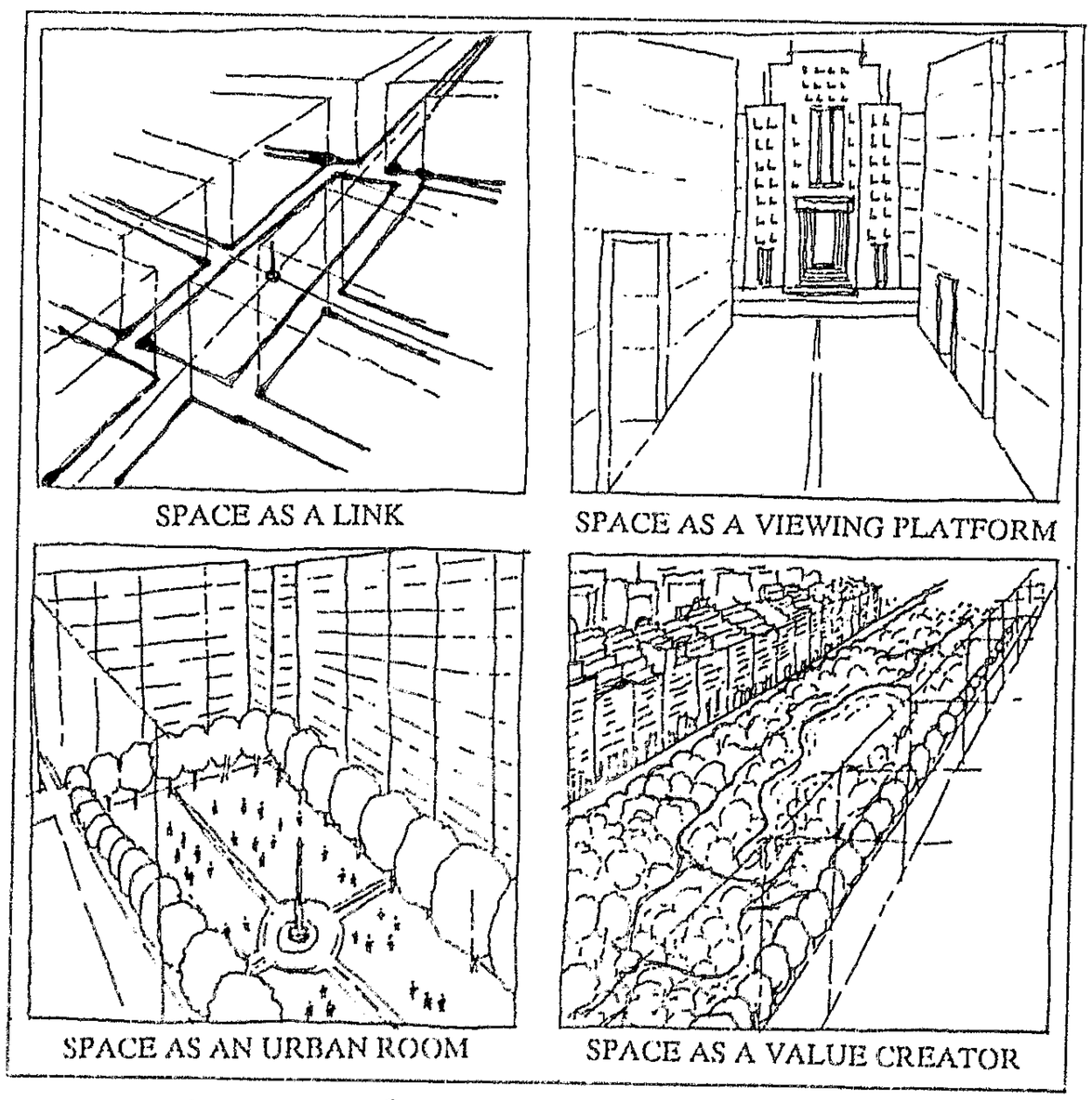
Increased densities that should result from the freedom of choice of location and the encouragement of a stronger residential component in the inner city will revitalise the city through concentration, mixed use and extended hours. It will also make the public transport system more necessary and viable.

* Abolition of Group Areas Act
* Mixed use zoning
* Public transport strategy
* Encourage larger residential component
* Dezone derelict industrial areas for residential use
* Capital web - housing as a spin-off
* Land value control to ensure affordability
* Intensification of existing and identifying new nodes of activity towards the "compact city" concept (22)
* Centralisation policy
* Tax and bulk incentives to cross-subsidise a residential component from retail and office uses
* Participation of all interest groups
* Design for enhanced sense of community and defensibility

THE LACK OF STRUCTURED OPEN SPACE

In a city with very limited structured open space and a high inner city land value, it is impossible to create new open space. There is however an abundance of "lost space" (23) scattered through the city fabric. By developing and linking these and other existing structured open space with public capital, a series of open space can be created along a linear route to act as a continuous and connected relief space in the urban fabric.

* Capital web installation - link limited public open space into a series of spaces
* Creative application of public money
* Identify and develop "lost space" as public open space through a capital web
* Special zoning areas
* Community involvement in the upgrading of existing facilities
* Land value control to avoid development pressure on existing facilities
* Enhance public and private sector communication to create new open space through tax and bulk incentives



GAPS, Genmin Report

WHAT OUGHT TO BE

DESIGN IMPERATIVES

THE LACK OF A MEMORABLE ENVIRONMENT

We, as custodians of the past, must cultivate a conservation ethic for future generations (24).

The public environment should become an active participant in the emphasis of landmarks and buildings of note, incorporating them in the movement experience and setting them off in a special way, in order to develop a "sense of place".

Buildings with sound historical value must be protected, preserved and incorporated in such a way in the public environment as to enhance the visual richness of the city, without being subject to "preservation neurosis" (25). In other words some new projects might have many positive features that might override the merits of preserving an old building. A mixture of "old" and "new" will comply to both aesthetic and economic requirements (26).

* Capital web installation to set off nodes, landmarks and historical buildings in a special way
* Structure hierarchy in existing city grid to emphasise landmarks and define special environmental areas within the supergrid
* Create special zoning areas and historic districts
* Creative tax incentive strategies to preserve and re-use old buildings by adaption
* Reinforce cultural and other precincts

THE LACK OF SECURITY

Although a special police task force concentrating solely on the prevention of muggings operates in the city in addition to privately sponsored security patrols in semi-public spaces the public environment should be designed in such a way as to ensure defensibility of the public realm. This could be achieved by observing Alexander's (27) principle of public and private domains and the transition from the one to the other. This will ensure the partial integration of the public environment into the private domain.

* An urban design framework to ensure defensible space
* The installation of a capital web to nurture territoriality, pride and a sense of community, observing the transition from public to private
* Mixed use zoning to ensure intense activity patterns at all times
* Increased inner city residential component



: ELEVATION TO HOYT ST :

: ELEVATION TO JOHN ST :

Architecture S.A, Oct 1988

THE EXCESS OF LOST SPACE

Lost spaces, as defined by Trancik (28), offer a tremendous opportunity to the designer for urban redevelopment and creative infill and for rediscovering the many hidden resources of the city.

Infill and recycling can incorporate such residual areas into the public environment of the city. Existing public plazas, streets and parking lots that are presently disfunctional and incompatible with their contexts can be transformed into viable open spaces and workable links between precincts.

Further lost space residues must be countered by designing buildings that define exterior space rather than displace it.

* Council intervention and interest to be stimulated by interest groups
* Capital web installation - incorporate lost space positively into the public environment and improve linkages
* The Council must introduce strong policies for spatial design through urban design frameworks

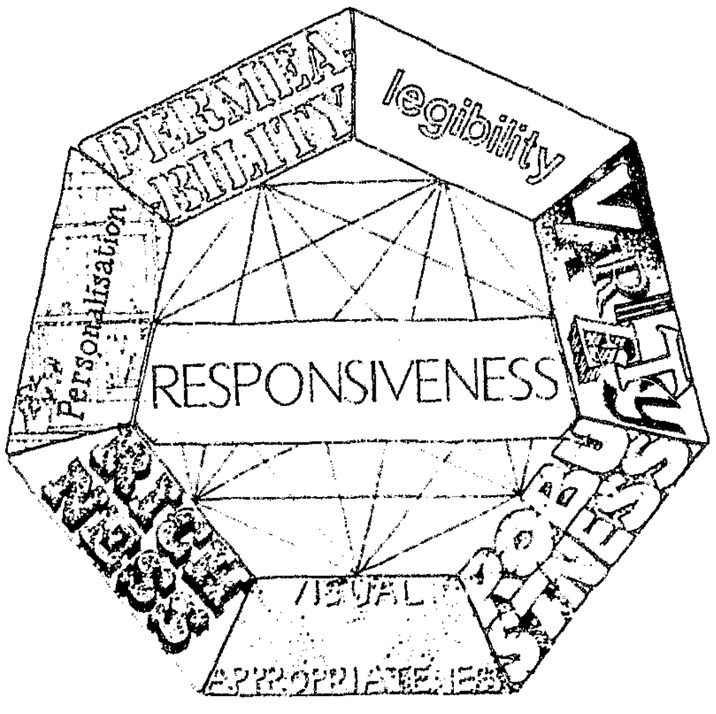
THE POOR QUALITY OF THE PUBLIC REALM

The quality of the public realm has specifically to do with the level of responsiveness of the soft-negative-fabric of space weaving between the hard-built-positive components in the city and their facades which face these public spaces.

Bentley, Alcock et al (29) argue that the level of responsiveness of an environment is largely determined by the degree of <u>choice</u> offered by it. The choices made available in such an environment are influenced by, amongst others, the following important aspects:

* permeability - where people can or cannot go (physically), the degree of ease of movement from one point to another

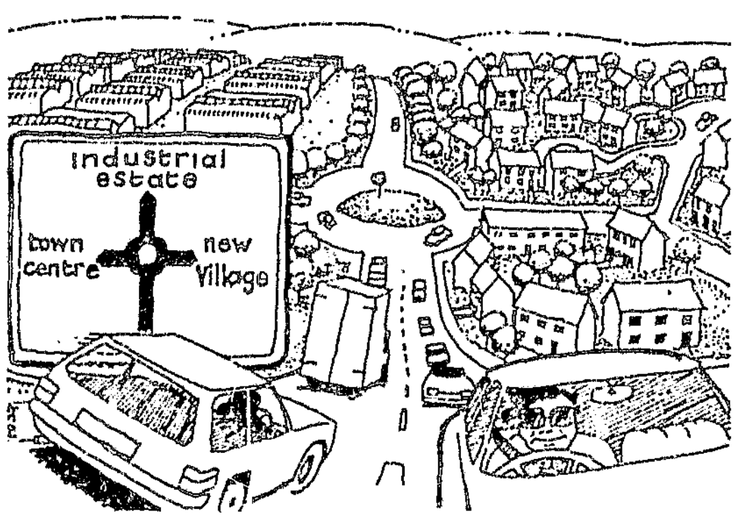
* Upgrade public transport
* Capital web installation - link through barriers
* Traffic management
* Introduce hierarchy in the city grid
* Urban design framework to cater for arcades, colonnades etc.



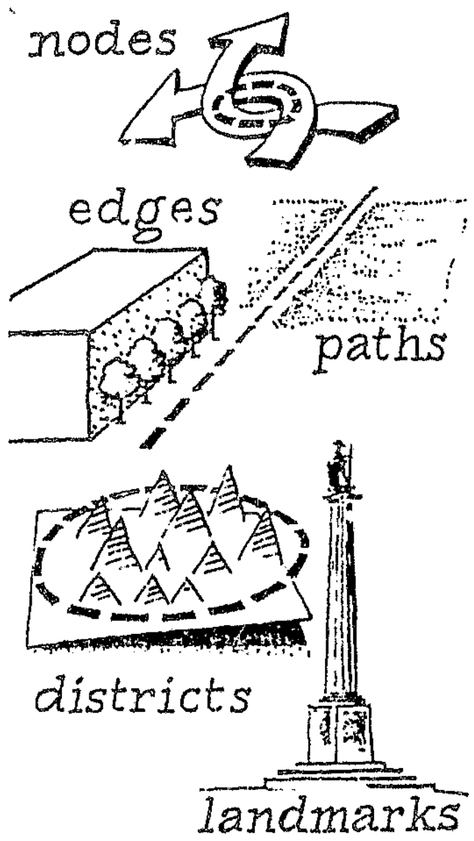
Bentley et al. Responsive Environments

WHAT OUGHT TO BE		DESIGN IMPERATIVES
* variety-	the range of uses available to people - attracting various people at various times, the same place has different meanings for different people	* Mixed use zoning * Dezoning and deregulation * Increased residential component
* legibility -	the ease with which people can understand the opportunities offered at an overall scale by both physical form and activity pattern levels - the presence of some of Lynch's key physical features to relate to, i.e. nodes, edges, paths, districts and landmarks (30)	* Capital web design to incorporate, enhance and create nodes, edges, paths, districts and landmarks * Special zoning areas * Introduce an hierarchy in the city grid
* robustness -	the degree to which people can use a place for different purposes and how a space lends itself for adaptive use - non specialised space, internal and external	* Capital web design to be flexible * Mixed use zoning * Deregulation and dezoning * Introduction of a zone of enterprise * Creative urban design framework
* visual appropriateness -	the degree to which the detailed appearance makes people aware of the devices available - small scale legibility to support interpretation and responsiveness	* Appropriate urban design framework * Reinforcement of cultural and other precincts

VARIETY



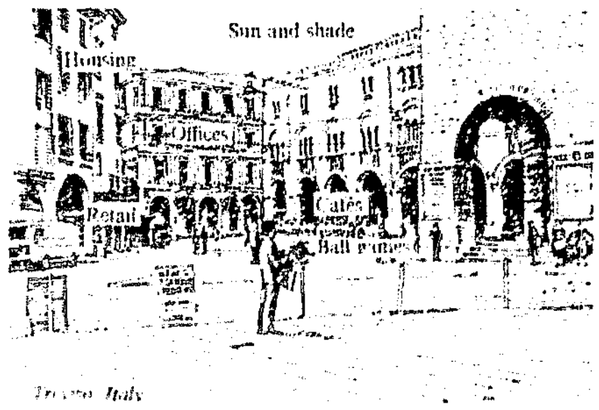
LEGIBILITY



VISUAL APPROPRIATENESS



ROBUSTNESS

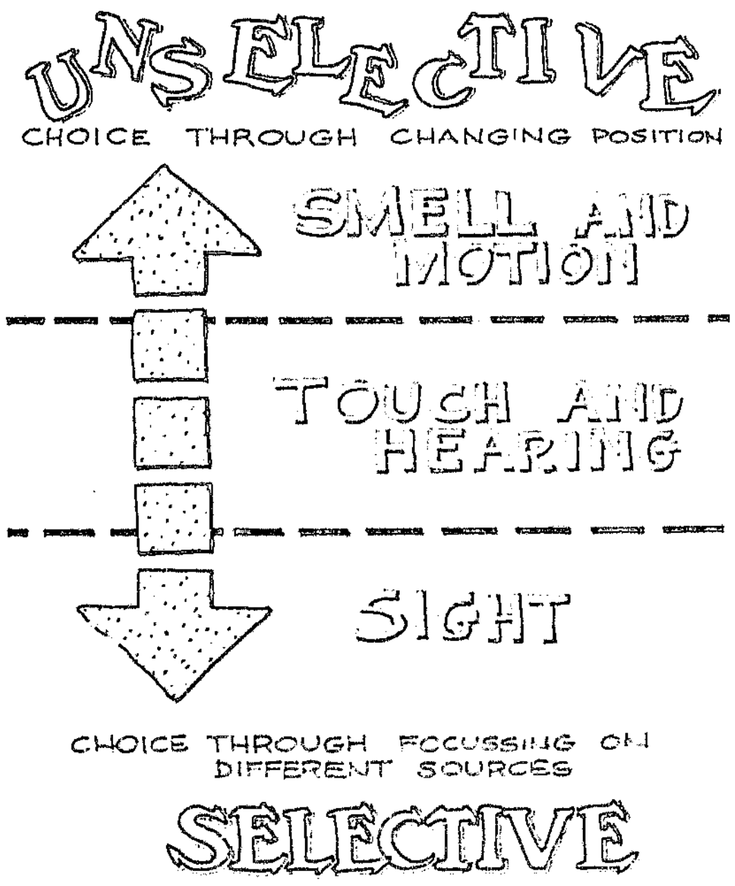


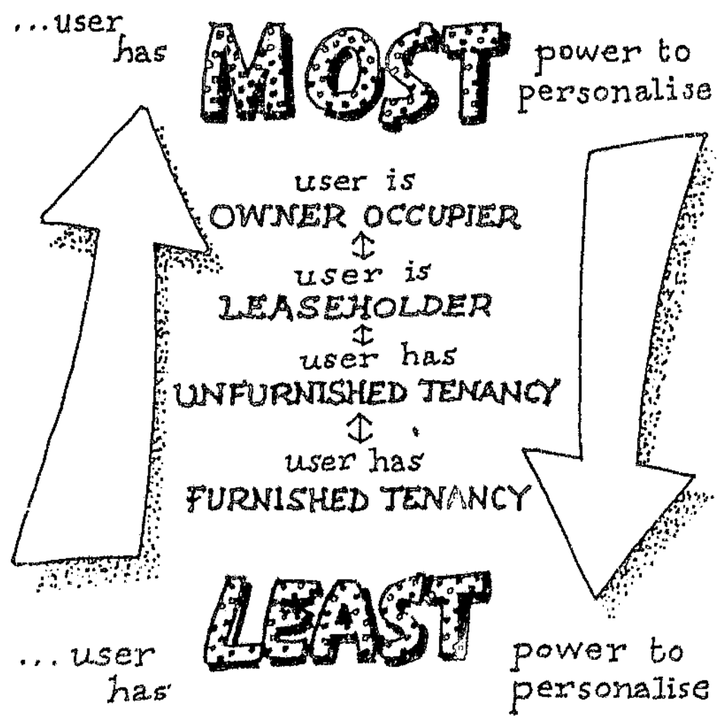
Bentley et al. Responsive Environments

WHAT OUGHT TO BE		DESIGN IMPERATIVES
* personalisation -	the extent to which people are allowed to put their stamp on the existing environment, supporting visual appropriateness	* Community participation * Mixed use zoning * Appropriate urban design framework * Design for sense of community/defensibility * Increased residential component * Deregulation/dezoning * Reinforce cultural precincts * Small grain intervention
* richness -	the amount of choice offered in terms of sensory experience - sense of perception, motion, smell, hearing and touch - by changing position or focusing on different sources	* Historical presentation strategy * Mixed use zoning * Deregulation and dezoning * Capital web - creative manipulation of existing objects and space * Densification strategy * Reinforcement of cultural precincts * Special zoning areas * Small grain intervention * Increased residential component

In the local pluralistic context, the following aspects will have an effect on the democracy of a space and therefore influence its level of responsiveness:

* access -	which group has access and freedom of movement by legislative measures - for the maximum benefit of the city it should ideally be a free choice	* Abolition of Group Areas and Separate Amenities Acts * Community participation strategy
* control -	towards which cultural group the social control gravitates in mixed environments	* Community participation strategy * Reinforcement of cultural precincts





Bentley et al. Op. cit.

WHAT OUGHT TO BE

The above list is not exhaustive, nor is it a recipe for achieving responsiveness. Many of the above aspects are interrelated with further ingredients for the making of urbanity and they merely cover the key issues contributing to the responsive quality of an environment. Without a responsive environment, spontaneous participation giving rise to urbanity and a high quality of the public environment cannot be achieved.

THE FRAGMENTED MANAGEMENT STRATEGY

Various approaches for the management of a CBD exist, depending on circumstances. However, certain principles are applicable throughout to ensure a focused and co-ordinated management framework (31).

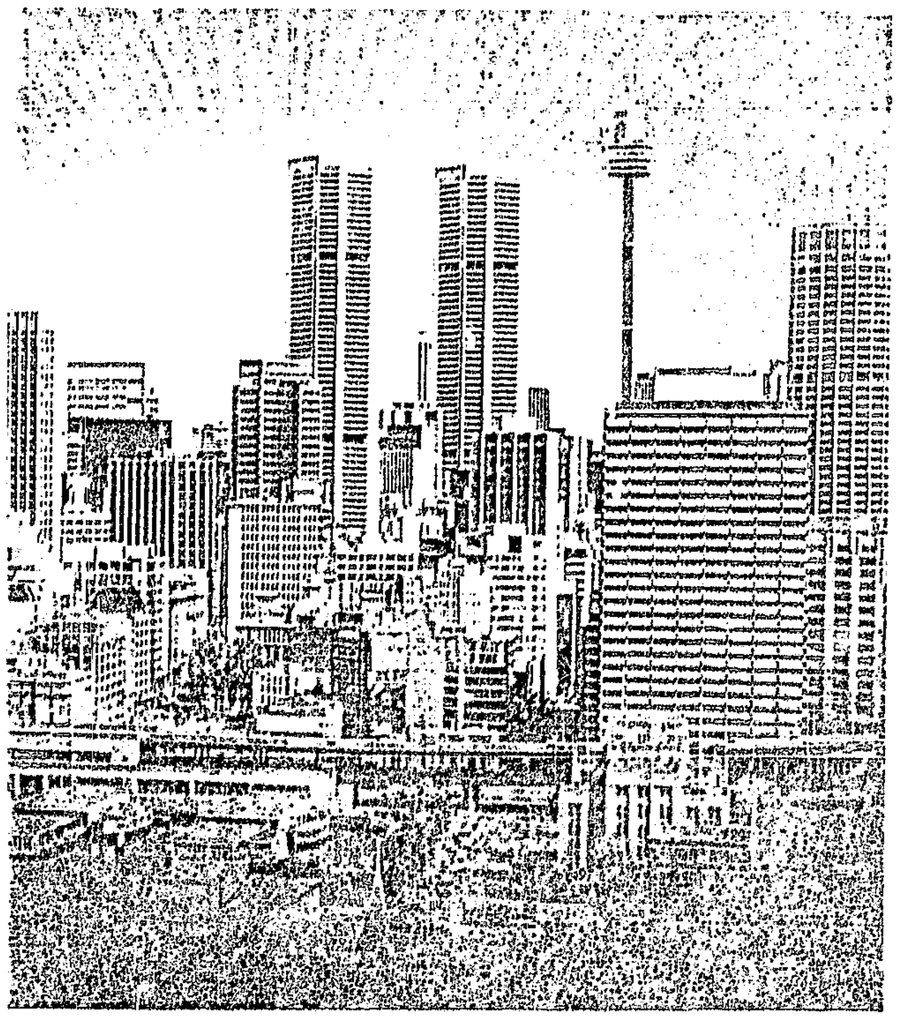
* There must be a strong and unanimous belief in the ability of the CBD to perform.

* The management should be broadly based, involving various interest groups, even though the management process is the responsibility of the local authority.

* Private enterprise needs to be intimately involved. A partnership should be struck up between the private enterprise and the public body.

DESIGN IMPERATIVES

* Involve all interest groups in planning and design methodology
* Reinforce lines of communication between public and private bodies
* Promote the image of the city as a worthwhile place



Planning 103 , May 1989

WHAT OUGHT TO BE

THE LACK OF AN OVERALL VISION FOR THE CITY

By eliminating the fragmented nature of the management strategy, the city will already move closer to an overall vision for the city. Commitment to a vision will be a positive step towards instilling confidence, establishing directions and preparing a management framework for future city growth in quantitative and qualitative terms.

The vision suggested by the team of consultants appointed to investigate and identify directions for the future of the Johannesburg CBD (32) is more one of attitudes:

"THAT:

* the CBD must be seen and believed in as the fundamental powerhouse of the urban economy

* it must be encouraged to grow

* by proper management, the inherent energy in the development process has the potential to effect remarkable changes in the CBD

* the CBD need not be hampered by the stigma of a place without a soul, or a city that has never matured beyond the raw energy of its mining camp origins

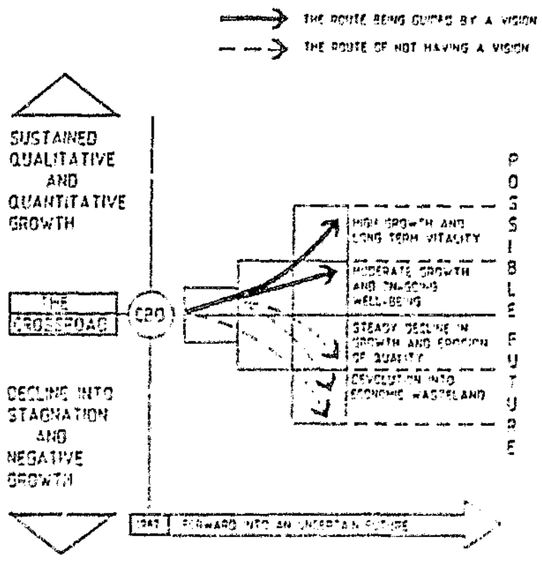
* the CBD has an inherent potential that must be allowed to flourish

* the CBD is a place for all, where needs are met and the quality of life is enhanced."

This vision does not pre-suppose an ideal end-state but acknowledges that the city is an organic, unpredictable and dynamic entity.

DESIGN IMPERATIVES

* Support and accommodate the proposed vision in all design frameworks and strategies
* Demonstrate confidence in the city with all proposals



THE NEED FOR A VISION

Jhb CBD report

THE ABUNDANCE OF BARRIERS IN THE CITY

Maki (33) argues: "linkage is simply the glue in the city. It is the act by which we unite all the layers of activity and resulting physical form in the city.... urban design is concerned with the question of making comprehensible links between discrete things. As a corollary, it is concerned with making an extremely large entity comprehensible by articulating its parts".

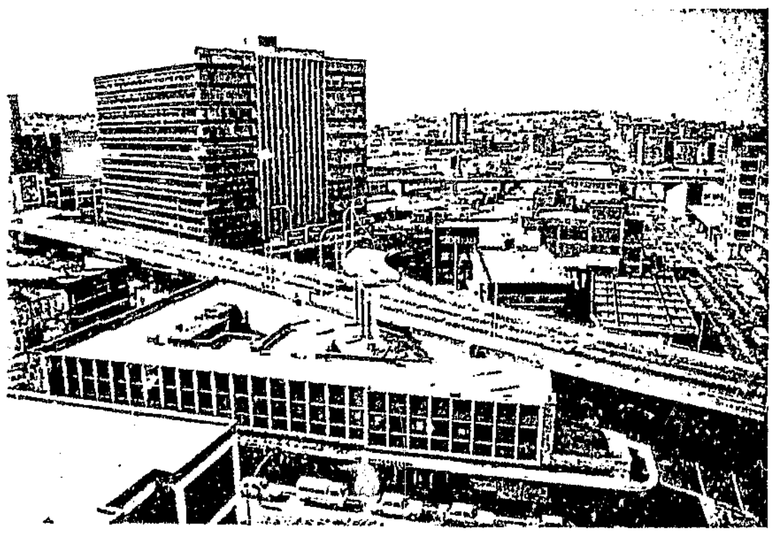
As discussed, the barriers in the city can be classified as either physical (railroad reserve, mining belt etc.) or non-physical (politi[illegible] cultural).

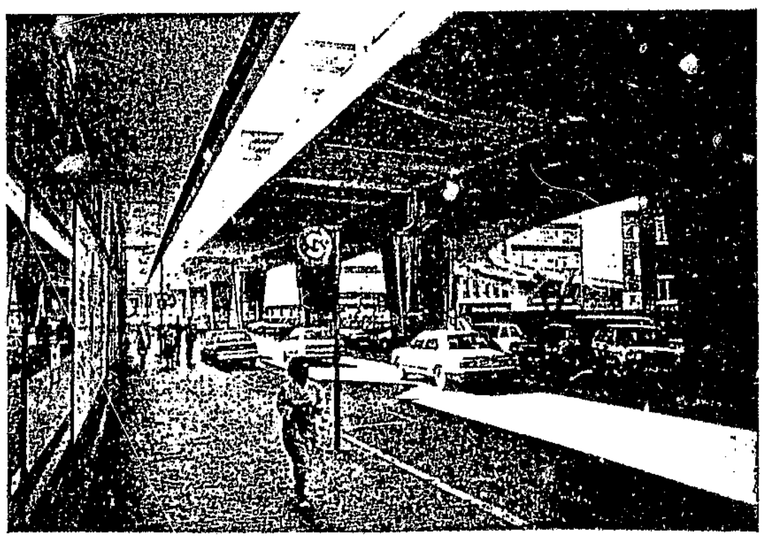
The physical barriers provide an opportunity for linkage, insertions or transformations to restore urban coherence and a means of guiding new development in desired directions. The resultant connections will increase access, choice and variety.

* Capital web installation - utilise barriers to achieve a comprehensive urban form
* Upgrade public transport to transcend barriers

The non-physical barriers are more complex to bridge. This can however be achieved by a well-designed public forum intended to nurture communication, responsibility, community determination, mutual respect and collective pride in an environment.

* Capital web as public interface forum
* Design for defensible space/sense of community
* Abolition of the Group Areas and Separat Amenities Acts
* Community involvement programmes





Planning 104, July 1989

Taking the fundamental "given" of the city as a dynamic, unpredictable and complex organism, it is obvious that no one action, regardless of scale, can be the cure-all. Nevertheless, although separate, the problems and suggested planning imperatives are all interrelated and interdependent and any one of the above interventions will generate spin-offs and have ramifications for related problems.

Author:Van Wyk Roos P
Name of thesis:Of honeypots and spider webs: The design of a major urban component as an element of extended capital Web

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